especially, to the men of Dolores, Guatemala, whose knowledge of the forest and the archaeology of the Petén made this work possible. Finally, I would like to thank George Cowgill, Amy Kovak, René Muñoz, Robert Sharer, David Webster, and an anonymous reviewer for their constructive commentary on earlier versions of this chapter.

1. In addition to the most exhalted title of *k'uhul ajaw* ("holy lord"), Late Classic texts make reference to persons bearing titles such as *ajaw* ("lord"), *ch'ok ajaw* ("young lord"), *sajal* (perhaps "he who fears"), *a-k'uh-hu:n* (a scribal title), and *y-ajaw-k'ak* ("the fire's lord"), as well as others. For a more thorough understanding of these and other Classic period Maya titles, see Houston and Stuart (2000).

2. *Sajal* were members of the nonroyal nobility who sometimes served as members of the royal courts or as governors of secondary centers within Maya polities. This title appears only in the inscriptions of the Late Classic period and is restricted largely to the western portions of the Maya lowlands. *Sajal* could apparently become *ajaw*, but in no recorded instance was an individual of *sajal* status advanced to the highest position of *k'uhul ajaw* (Houston 1993; Houston and Stuart 2001; Villela 1993).

3. Such monuments tend to depict Bird Jaguar IV, though in a few instances they do depict his successor, Shield Jaguar II, as well as his deceased father, Shield Jaguar I.

Chapter Four

Imperialism in Pre-Aztec Mesoamerica: Monte Albán, Teotihuacan, and the Lower Río Verde Valley

Arthur A. Joyce

The term *warfare* subsumes a wide range of social interactions (Fried et al. 1968; Keeley 1996; Ross 1986). Warfare is a form of conflict that usually refers to organized violent encounters between members of different sociopolitical groups but can range from sporadic raiding for ritual purposes to large-scale warfare for territorial conquest with thousands of casualties. The motivations and outcomes of specific historical instances of conflict also vary greatly. To address warfare in the archaeological record, we need to define more precisely the variation in potential forms of interaction along with their archaeological correlates.

This chapter considers a specific category of interpolity conflict, that of imperial conquest and control where a state comes to dominate a multiethnic hinterland. The best-known example of imperial conquest in Mesoamerica is the Aztec Empire of the fifteenth and early sixteenth centuries. The record of Aztec imperialism is strengthened by both the archaeological data and the ethnohistoric record of the Late Postclassic period (Berdan et al. 1996; Davies 1987; Hassig 1988, 1992b; Smith 1987, 1996; Smith and Berdan 1992). Despite the seemingly rich database for Aztec imperialism, however, the nature and

even the existence of the empire have been debated (Smith and Berdan 1992). Arguments for the presence of Mesoamerican empires prior to the Aztec Empire have had to rely primarily on archaeological evidence for imperial expansion, which, not surprisingly, has also triggered considerable debate (Cowgill 1997; R. Millon 1988; Smith and Montiel 2001; Zeitlin and Joyce 1999). Perhaps the two most controversial cases of Mesoamerican imperialism involve the highland Mexican polities of Monte Albán and Teotihuacan (figure 4.1).

In this chapter, I consider the impact of both Monte Albán and Teotihuacan on the lower Río Verde Valley on the Pacific Coast of Oaxaca. In particular, I examine the possibility that during the Terminal Formative (150 B.C.–A.D. 250), the lower Río Verde Valley was incorporated into an empire controlled by the rulers of Monte Albán in the Valley of Oaxaca. Marcus and Flannery (1996) have argued that the northern end of the lower Verde region was subjugated by Monte Albán. While Marcus and Flannery (1996) acknowledge various forms of imperial expansion, their model emphasizes direct territorial control either through military conquest or, in the case of weaker polities, through colonization under the threat of military action. As I will

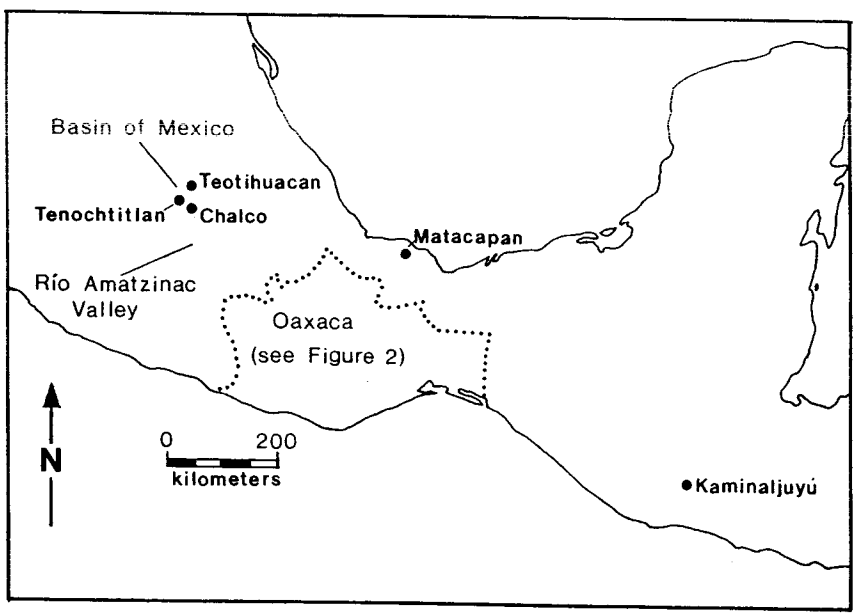

Figure 4.1 Map of Mesoamerica showing regions and sites mentioned in the text

show in this chapter, however, the Terminal Formative data from the lower Verde suggest continuity in regional sociopolitical developments and do not meet the criteria for subjugation due to territorial imperialism. Instead, the evidence suggests a major sociopolitical disruption of the lower Verde during the Early Classic period (A.D. 250–500) that meets more of the criteria for subjugation than do the Terminal Formative data. Preliminary results suggest that the powerful center of Teotihuaçan in the Basin of Mexico may have played a role in Early Classic sociopolitical change in the lower Verde. While the evidence for interaction between the lower Verde and Teotihuacan is intriguing, at present plausible models range from conquest to increased reciprocal exchange.

Archaeological Evidence for Imperial Conquest

Comparative research on ancient empires such as the Wari, Inka, Roman, Assyrian, Vijayanagara, and Aztec indicates that imperial elites usually pursued a variety of strategies to control or influence hinterlands (Algaze 1993; Berdan et al. 1996; Fulford 1992; Hassig 1988; Postgate 1992; Schreiber 1987, 1992; Sinopoli 1994; Smith and Montiel 2001; Stark 1990; Stein 1999). These strategies vary from territorial conquest and direct administration, such as is emphasized by Marcus and Flannery (1996), to indirect hegemonic control achieved largely through the cooperation of local elites in peripheral regions, as was the case for much of the Aztec Empire (Berdan et al. 1996; D'Altroy 1992; Hassig 1988, 1992b). In cases of indirect control, the cooperation of local elites is often achieved through military threats backed up by occasional raids. Finally, imperial control can be exerted through asymmetrical alliances with local elites, often cemented via intermarriage and gift exchange (Stark 1990), and may involve the presence of outposts to facilitate trade (Algaze 1993; Stein 1999). Archaeological correlates of imperialism vary according to the nature of imperial conquest and control.

Archaeological correlates of territorial imperialism include evidence for military conquest or colonization and the direct administration of the province (Berdan et al. 1996; Fulford 1992; Postgate 1992; Schreiber 1987, 1992; Smith and Montiel 2001; Stark 1990; Stein 1999). Direct evidence for conquest warfare includes burials with traumatic war wounds, burned and/or intentionally destroyed buildings (see

Brown and Garber, chapter 6 in this volume), and the construction of defensive walls. Indirect evidence for war includes sites that have been suddenly abandoned, settlement shifts to defensible locations, and buffer zones between competing polities. Direct control over subjugated regions is often manifest in evidence of architectural remains, mortuary practices, or aspects of elite culture that reflect the presence of imperial administrators. The wholesale replacement of indigenous cultural patterns, such as ritual practices and styles of architecture and ceramics, would probably occur only with large-scale imperial colonization. The imperial reorganization of local political and economic systems would be suggested by changes in settlement hierarchy along with the presence of colonies, garrisons, and trading enclaves. Systems of craft or subsistence production would be expected to intensify as tribute was mobilized to the imperial core. Evidence for imperial storage facilities would be expected. Military conquest and imperial administration of a region may also be visible in iconographic and epigraphic data, especially at the capital of the empire.

Evidence for indirect hegemonic control is more difficult to identify archaeologically than territorial conquest and direct administration (Berdan et al. 1996; Schreiber 1992:32–34; Smith 1987; Smith and Montiel 2001; Stark 1990; Stein 1999). If conflict is sufficiently intense and protracted, defensive features and settlement shifts to defensible locations might occur in subject regions, although with politically weak polities even the threat of warfare can be sufficient for imperial elites to gain compliance (Hassig 1988:112–33). Imperial administrative facilities will not be as extensive under indirect control, and if local elites are left intact, there may not be any evidence of an imperial administrative presence. Even in the absence of imperial administrators, however, local elites often adopt imperial symbols of prestige and gain access to prestige goods from the core. Some degree of economic reorganization often occurs under indirect rule as tribute is mobilized for transport to the core (Stark 1990:257–58). Evidence of economic reorganization includes intensification in subsistence and craft production for tribute, a lowered living standard, and some counterflow of trade goods from the imperial core to the provinces (Smith 1987; Stark 1990).

Unfortunately, most of the potential indicators of imperial conquest and control, whether direct or indirect, can also result from other factors (see Schreiber 1992; Smith and Heath-Smith 1994; Stark 1990; Zeitlin 1993). For example, changes in settlement, economy, and sociopolitical organization can occur because of a multitude of factors,

both internal and external. The diffusion of ideas and practices from core regions can result from emulation independent of conflict with that region (Renfrew 1986:8). The causes of the diffusion of elements of ceramic and architectural style from the imperial core are often extremely difficult to interpret (Cowgill 1997; Pasztory 1993; Stark 1990; Yarborough 1992). Burned structures can be the result of accidental fires or reverential termination rituals (see Pagliaro et al., chapter 5 in this volume). Finally, iconographic and epigraphic indications of imperialism must be viewed with caution since they reflect the viewpoint of core elites and can represent propaganda with little historical veracity (Marcus 1992b:401). These problems of equifinality require that researchers use multiple lines of evidence to support an imperialism argument. In addition, other factors that affect the probability of direct territorial control need to be considered, such as the relative size and complexity of core and peripheral polities, their distance from one another, the difficulty of travel, their relative military prowess, and the potential benefits to the core of subjugating the periphery (Stein 1999).

Monte Albán Imperialism

The interregional impact of Monte Albán during the Terminal Formative, from about 150 B.C. to A.D. 250, has become a topic of debate among Oaxaca archaeologists (Balkansky 1997; Feinman and Nicholas 1990, 1991; Finsten 1996; Flannery 1983b; Joyce 1991a, 1993a, 1994a; Joyce and Winter 1996; Joyce et al. 2000; Marcus 1983; Marcus and Flannery 1996; Redmond 1983; Spencer 1982; Workinger 2002; Zeitlin 1990, 1993; Zeitlin and Joyce 1999). Most researchers, including myself, agree that Monte Albán influenced many areas during the Terminal Formative. Evidence for contact with Monte Albán varies greatly, and this has led to a variety of perspectives as to the nature and effects of core–periphery relations in Terminal Formative Oaxaca. The most pervasive evidence of Monte Albán's interregional influence is the spread of certain gray-ware ceramic styles from the Valley of Oaxaca to the Mixteca Alta, Mixteca Baja, Ejutla Valley, Miahuatlán Valley, Sola Valley, Cuicatlán Cañada, lower Río Verde Valley, and southern Isthmus of Tehuantepec (figure 4.2). In addition, people in the Mixteca Alta and Mixteca Baja adopted a number of elements of Oaxaca Valley elite culture, including hieroglyphic writing and a distinctive style of anthropomorphic urn (Joyce and Winter 1996).

There is evidence for increased interpolity conflict during the

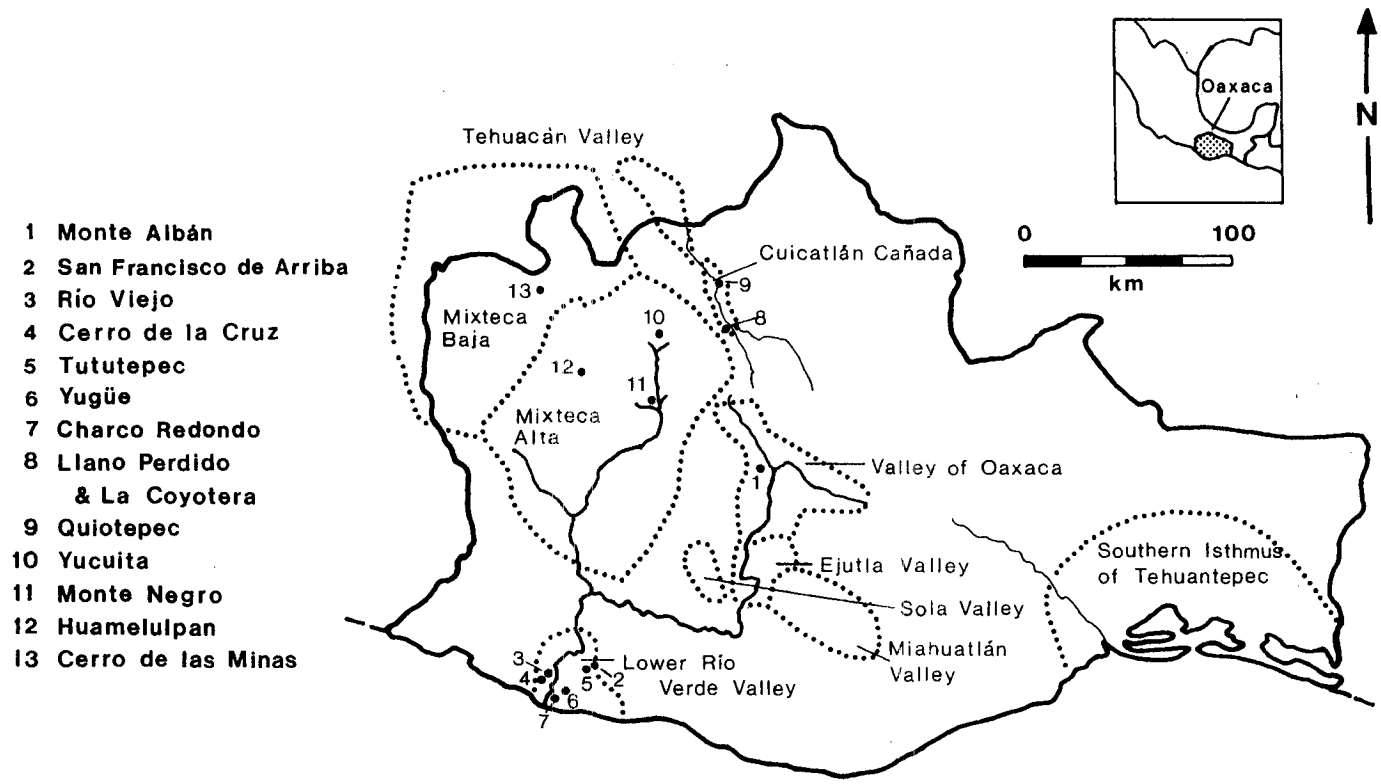

Figure 4.2 Map of Oaxaca showing regions and sites mentioned in the text

Terminal Formative (150 B.C.–A.D. 250) throughout the Oaxacan highlands and in the lowland Cuicatlán Cañada region (Feinman and Nicholas 1990; Joyce 1994a; Spencer 1982; Winter 1989). Evidence for conflict includes a shift in settlement locations to defensible hilltops. In many of the highland valleys of Oaxaca, early urban centers developed, all of which were located on hilltops or ridges. Urban centers often had defensive walls, such as at Monte Albán, Cerro de las Minas, and Yucuita. There are indications of warfare, such as the apparent burning and partial abandonment of Yucuita at approximately A.D. 200 and the abandonment of Monte Negro at about the same time. Probable trophy skulls have also been recovered at Huamelulpan, Yucuita, and Monte Negro (Winter 1989:37).

Marcus and Flannery (1996:206–7) argue that the Terminal Formative data from Oaxaca indicate that Monte Albán expanded beyond the Valley of Oaxaca through imperial conquest and colonization. According to their model, by the Terminal Formative, Monte Albán's empire covered an area of 20,000 square kilometers, stretching from the Cuicatlán Cañada in the north to the Pacific coast in the south (see Marcus and Flannery 1996:fig. 242). Imperial subjugation of these regions would have allowed Monte Albán's rulers to gain control over exotic goods and trade routes from the Pacific coast to Central Mexico.

Marcus (1983, 1992a:394–400) supports the imperialism argument through her study of the Terminal Formative "conquest slabs" from Building J in the Main Plaza at Monte Albán. The conquest slabs consist of over fifty carved stones that have been interpreted as representations of places conquered by and/or paying tribute to Monte Albán (Caso 1938, 1947; Marcus 1976, 1983, 1992a). Each slab contain two distinct elements: 1) a standardized "hill" glyph signifying a place and 2) a glyph or series of glyphs directly above the "hill" glyph, differing for each stone and signifying the name of a particular place (figure 4.3a). Many of the slabs contain an upside-down human head directly beneath the "hill" glyph, each with a distinctive headdress and interpreted as the dead ruler of a conquered locality. Marcus and Flannery (1996:197) suggest that the difference between the slabs that include effigy heads and those that do not is that the former refer to places incorporated into the Zapotec Empire by conquest with the latter subjugated by colonization. Some conquest slabs also exhibit a hieroglyphic text that in its most complete form includes a calendar date that may represent the date of conquest of the locality. By comparing the toponyms carved on the Building J slabs to those found in the Codex Mendoza, a sixteenth-century Aztec tribute list, Marcus

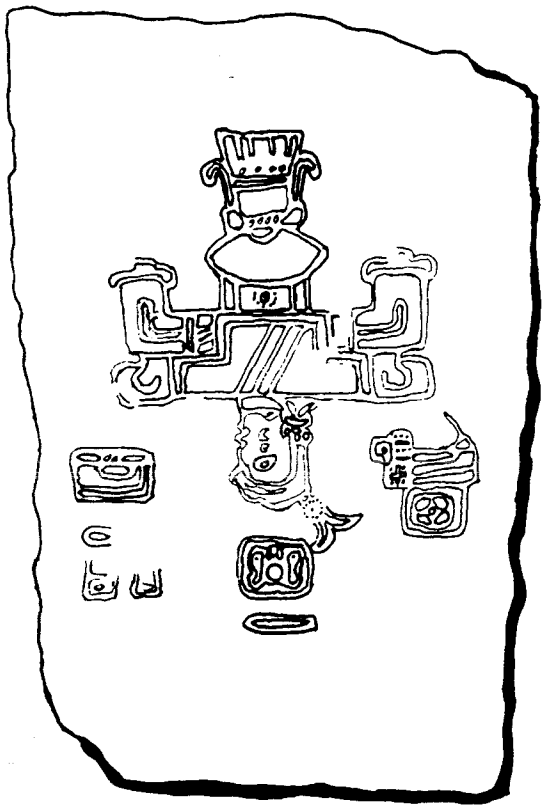

Figure 4.3a Building J "conquest slab" from Monte Albán: slab 15

(1992a:395–96) argues that the specific location of seven of the localities can be identified.

One of the regions identified on the conquest slabs by Marcus (1983:108) was the Cuicatlán Cañada, located about 100 kilometers northwest of the Oaxaca Valley. Archaeological research in the Cuicatlán Cañada by Charles Spencer and Elsa Redmond (Redmond 1983; Spencer 1982; Spencer and Redmond 1997) has provided the strongest direct evidence for conquest by Monte Albán. Their data suggest military conquest followed by the imperial administration of the region by Monte Albán. Evidence for the conquest and subjugation of the region includes the following:

1. The surface survey showed a dramatic shift in settlement patterns from the high alluvium to defensible piedmont locations.

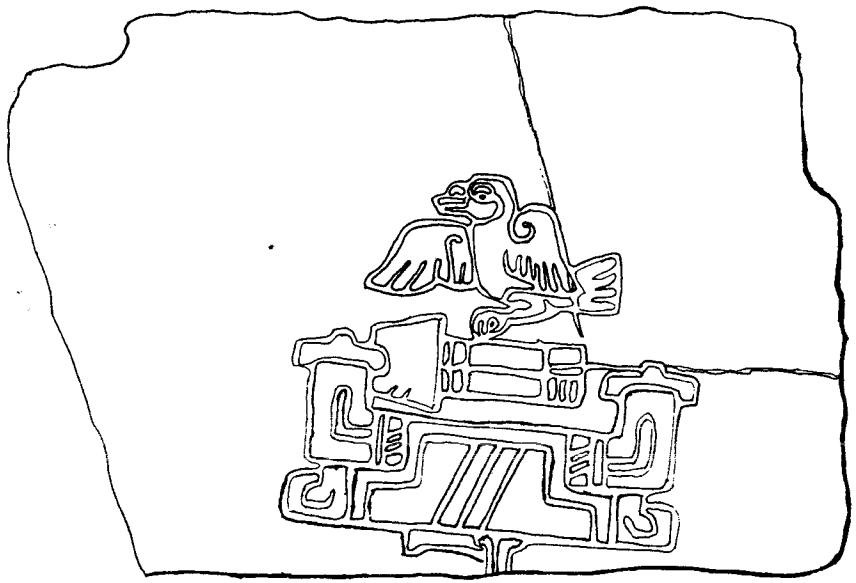

Figure 4.3b Building J "conquest slab" from Monte Albán: slab 57

2. There was a decrease in the settlement hierarchy from three to two levels.
3. Terminal Formative ceramics showed a close stylistic affinity with those from the Valley of Oaxaca.
4. Evidence from excavations indicated that the Llano Perdido site was burned and suddenly abandoned.
5. Excavations at the site of La Coyotera exposed the remains of a *tzompantli*, or skull rack, possibly exhibiting victims of warfare or sacrifice.
6. The apparent establishment of a Zapotec administrative outpost and fortress at Quiotepec was inferred from a Oaxaca Valley–style tomb eroding from the surface.
7. An unoccupied buffer zone was indicated by survey data between the Cañada and the Tehuacán Valley to the north.
8. New forms of political organization were inferred from changes in public architecture.
9. A major economic reorganization was suggested, perhaps designed to produce surpluses in the form of tropical crops for tribute payments to Monte Albán. Economic changes included the development of irrigation systems as well as a decline in evidence for exchange and craft production.

While the data for Monte Albán's subjugation of the Cuicatlán Cañada are compelling, direct evidence for Zapotec conquest of other

regions is thus far rare. Evidence for warfare is present in much of the Oaxacan highlands; however, the data are more consistent with a model involving conflict among multiple competing polities rather than defense solely against Zapotec imperialism (Joyce 1994a). Outside the Cuicatlán Cañada, Marcus and Flannery (1996) rely on indirect evidence of a Monte Albán presence to argue for imperial subjugation. In particular, they argue that the spread of Terminal Formative gray-ware ceramic styles from the Valley of Oaxaca is one of the best lines of circumstantial evidence for a Monte Albán takeover, either through conquest or colonization. They argue that subjugation is demonstrated in "those regions whose previously autonomous ceramics are literally swamped or replaced by Monte Albán gray wares" (Marcus and Flannery 1996:199). The lower Río Verde Valley is one of the regions with evidence for the diffusion of Monte Albán–style gray-ware ceramics.

Monte Albán and the Lower Río Verde Valley

The argument that the lower Verde was incorporated into a territorial empire ruled by Monte Albán is based on two lines of evidence: epigraphic interpretations and similarities in ceramic styles (Marcus and Flannery 1996:201–2). Among the places identified by Marcus (1983) on the conquest slabs was Tututepec in the northern part of the lower Verde region. Marcus and Flannery (1996:201) also cite ceramic evidence from a brief survey by DeCicco and Brockington (1956:59) at the site of San Francisco de Arriba, located 3 kilometers east of Tututepec. DeCicco and Brockington (1956:59) suggest that the ceramics from San Francisco de Arriba bear a strong resemblance to Late/Terminal Formative pottery from Monte Albán, although Brockington (1983:29) concluded that "Monte Albán never dominated the Coast at any time." According to Marcus and Flannery (1996:201–2), the conquest of the area around Tututepec and San Francisco de Arriba would have placed the northern part of the lower Verde region at the southern boundary of Monte Albán's empire (Workinger 2002).[1] They also suggest that the floodplain of the lower Verde "was so sparsely populated that the Zapotec would hardly have needed an army to subdue them" (Marcus and Flannery 1996:202). Balkansky (1997:222) is more specific in suggesting that San Francisco de Arriba may have been a Zapotec outpost from which local resources could have been exploited.[2] Imperial control over the Tututepec/San Francisco de Arriba area could have given Monte Albán's rulers access to exotic coastal items, such as ornamental shell, cacao, cotton, fish, *púrpura* dye, tropical fruit, and textiles. Archaeological research has shown that Pacific coast shell was reaching the Oaxacan highlands during the Terminal Formative (Feinman and Nicholas 1993; Winter 1984:204–7).

Archaeological research in the lower Río Verde Valley since 1986 has investigated the possibility of an imperial conquest by Monte Albán (Joyce 1991a, 1991b, 1993a; Joyce and Winter 1989; Joyce et al. 1995, 1998; Workinger 2002; Workinger and Colby 1997; Zeitlin and Joyce 1999). This research has included excavations at seventeen sites, a regional site reconnaissance, and a full-coverage survey over 152 square kilometers. The regional survey, reconnaissance, and excavation data do not indicate a shift to defensible piedmont locations or a disruption in sociopolitical organization suggestive of a Zapotec takeover during the Terminal Formative.[3] Population appears to have grown through this period based on occupational areas calculated from the surface survey. The area occupied in the 152-square-kilometer survey zone increases from 297 hectares in the Late Formative (400–150 B.C.) to 446 hectares in the early Terminal Formative (150 B.C.–A.D. 100) and to 699 hectares by the late Terminal Formative (A.D. 100–250). The settlement hierarchy, based on site size and volume of monumental architecture, increases from three tiers in the Late Formative to five by the Terminal Formative. The percentage of the occupational area in the piedmont fluctuates through this period, ranging from 43 percent in the Late Formative to 20 percent during the early Terminal Formative and 38 percent by the late Terminal Formative, so there is no evidence of a shift to defensible piedmont locations. In fact, the early Terminal Formative period, when piedmont settlement is at it lowest proportionally, is precisely when Marcus and Flannery (1996:202) claim that the lower Verde region was conquered. Defensive walls have not been identified. Survey and excavation data have yielded no evidence for burned sites or burials with traumatic wounds that would signal conflict. There are no indications of the presence of Zapotec administrators, such as elaborate pottery, tombs, or monumental architecture, in Oaxaca Valley style.

The primary center in the lower Verde by the early Terminal Formative was the site of Río Viejo, which reached 225 hectares. Since Monte Albán was only 416 hectares at this time, the lower Verde cannot be considered a sparsely settled and underdeveloped region but instead would have been a formidable opponent to Zapotec expansion.

In addition, the lower Verde lies 150 kilometers southwest and about a week's hard travel through the mountains by foot from Monte Albán, which would have created great logistical difficulties for imperial armies or administrators (Zeitlin and Joyce 1999).

Evidence for exchange between the Oaxaca Valley and the lower Verde declines during the Terminal Formative. Excavated Late Formative contexts at the sites of Río Viejo, Cerro de la Cruz, San Francisco de Arriba, and Yugüe have yielded several hundred examples of Oaxaca Valley pottery as well as exotic nonlocal ceramics from other areas (Joyce 1991a; Workinger 2002). By the Terminal Formative, however, few examples of imported pottery from the Oaxacan highlands have been recovered, and there also seems to be a decline in the importation of obsidian (Joyce et al. 1995; Workinger 2002). The decline in exchange may have resulted from the more competitive political landscape of the Terminal Formative, especially in the Oaxacan highlands (Joyce 1993a:73). There is no evidence, however, linking the decline in exchange to conquest by Monte Albán. Warfare in the highlands may have disrupted exchange routes to the coast even if coastal polities were not directly threatened.

The only evidence from the lower Verde that might suggest interaction with Monte Albán during the Terminal Formative is the diffusion of highland ceramic styles (Joyce 1991a, 1993b; Zeitlin and Joyce 1999).[4] Lower Verde gray-ware ceramics show stylistic cross ties with the highlands during the Terminal Formative, but the overall assemblage remains regionally distinct.[5] The only ceramics that bear a strong resemblance to Oaxaca Valley pottery are a category of conical bowls decorated with two incised lines on the interior rim and occasionally a combed base. This ceramic category is similar to type G.12 from the Oaxaca Valley (Caso et al. 1967). This vessel type, however, is found throughout much of Terminal Formative Oaxaca (Joyce 1993b), including regions with evidence for Monte Albán conquest, such as the Cuicatlán Cañada, as well as areas with no indications of Zapotec conquest, such as the Mixteca Baja (figure 4.4). The technology of manufacturing gray-ware pottery in a reducing firing environment appears to have originated in the Valley of Oaxaca (Winter 1984:203–4), but because the G.12 style bowl was being manufactured throughout Oaxaca by the Terminal Formative (Caso et al. 1967; Gaxiola 1984; Joyce 1991a; Spencer and Redmond 1982; Spores 1972; Zeitlin 1979), coastal potters could have adopted the technology to produce these ceramics from many regions. In addition, focusing solely on the Oaxaca Valley as the source area for the spread of gray-ware styles

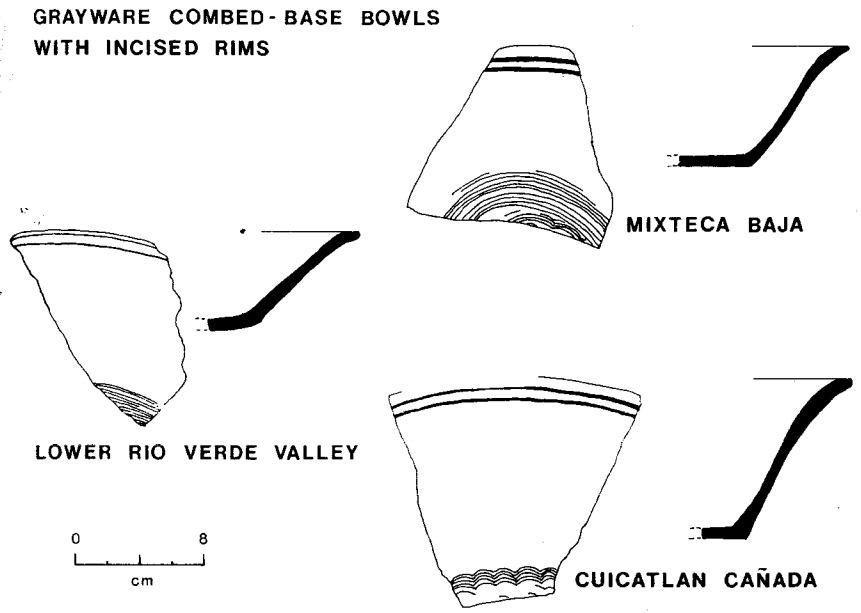

Figure 4.4 Terminal Formative gray-ware combed-base bowls

ignores other potential patterns of ceramic similarity that might be important for understanding Terminal Formative interaction (Joyce 1993b). For example, thin-walled composite silhouette bowls (figure 4.5) found at both Huamelulpan in the Mixteca Alta and Cerro de las Minas in the Mixteca Baja are almost identical to one another in technology, form, and style.

The overall distinctiveness of the lower Verde pottery is in sharp contrast to areas of the highlands such as the Ejutla, Miahuatlán, and Sola Valleys, whose pottery is so similar to the Valley of Oaxaca that an independent ceramic typology is not needed (Balkansky 1997; Feinman and Nicholas 1990; Markman 1981). The Oaxaca data are consistent with comparative studies of ancient empires indicating that general similarities in ceramic styles are a poor indicator of conquest (Bey, chapter 2 in this volume; Lind 1987:97–98; Schreiber 1992:263; Stark 1990).

A recent archaeological project at San Francisco de Arriba, the site supposedly conquered and administered by Monte Albán, has also failed to yield evidence of warfare or conquest (Workinger 2002; Workinger and Colby 1997). Survey, mapping, and excavation by Andrew

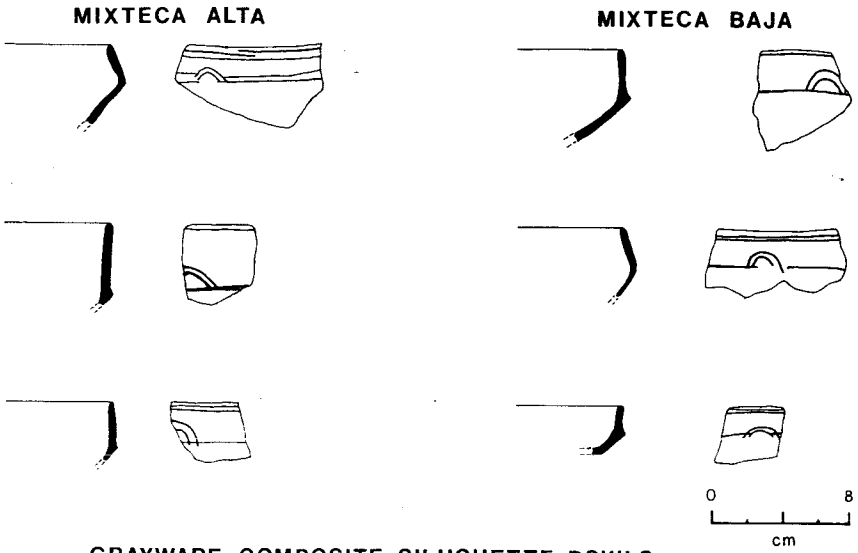

Figure 4.5 Terminal Formative gray-ware composite silhouette bowls

Workinger (2002) in and around San Francisco de Arriba has not recovered evidence of defensive works, Zapotec administrative facilities, site destruction, or economic reorganization during the Terminal Formative. A study of the ceramic assemblage at San Francisco de Arriba (Workinger 2002) indicates that the proportion of gray-ware ceramics at the site is lower than for sites studied in the lower Verde's floodplain (Joyce 1991a:694). These data argue against San Francisco de Arriba having been conquered by Monte Albán or having been the location of a Zapotec administrative outpost (Workinger 2002).

At this point, the only evidence for the conquest of the lower Verde by Monte Albán is the epigraphic data. Marcus (1976, 1992a) argues that Building J Slab 57, depicting the conquest of a "Hill of the Bird," refers to the coastal town of Tututepec, which was an important Postclassic polity (figure 4.3b). There are, however, many hills known by indigenous people in Oaxaca as "Hill of the Bird," and there is no reason to assume that the one on Building J should refer to coastal Tututepec. In addition, Whittaker (1980:92–106) questions Marcus's (1976) methodology for identifying the localities on the conquest slabs and especially critiques the reading of Slab 57 as the coastal town of Tututepec (also see Workinger 2002). As I have suggested elsewhere (Joyce 1993a), many of the "conquests" referred to on Building J may

have involved nothing more than raiding. The nature, intensity, and goals of warfare in ancient Mesoamerica varied considerably across time and space (Hassig 1988, 1992a), so it is difficult to know what type of conquest is referred to on the Building J slabs. Given the potential importance of political propaganda (see Marcus 1992a, 1992b), regions that were occasionally raided might have been represented on the conquest slabs in an equivalent fashion to areas that were conquered.

The evidence from the lower Río Verde Valley does not support a model of military conquest and territorial control by Monte Albán. Except for the diffusion of some highland gray-ware pottery styles, there is little evidence that can be interpreted as resulting from interaction between the Oaxaca Valley and the lower Río Verde Valley during the Terminal Formative. If Monte Albán threatened the lower Verde militarily, it appears that those threats were not sufficient to motivate settlement shifts to defensible locations. The data at present leave open the possibility of a form of indirect control, perhaps via asymmetrical alliances with local elites, which left little evidence in the archaeological record, although even this form of interaction seems unlikely.

Even if Monte Albán did not conquer the lower Verde, the highland polity may still have had an effect on social developments on the Oaxaca coast (Joyce 1991a, 1991b, 1993a, 1994a; Joyce et al. 1995, 1998; Zeitlin 1990; Zeitlin and Joyce 1999). Exchange between the lower Verde and the Oaxaca Valley declined during the Terminal Formative, perhaps because of competition and conflict in the highlands. Monte Albán's rulers may have tried to coerce coastal elites into compliance by withholding crucial goods (Zeitlin and Joyce 1999). To replace the prestige items that had previously been obtained from the Oaxacan highlands, lower Verde elites probably forged new ties with elites from other regions and enlisted local artisans to manufacture exotic goods (Joyce 1991a, 1993a; Joyce et al. 1995). To the extent that the lower Verde was subject to raids by Monte Albán, the threat might have provided a rationale for elites to consolidate power, thereby contributing to political centralization, as appears to have happened in the Oaxacan highlands (Joyce 1991a:658–63, 1994a; Joyce and Winter 1996). Politicoreligious ideas and practices developed at Monte Albán appear to have been emulated by people in many parts of the Oaxacan highlands (Joyce 1991a, 1994a; Joyce and Winter 1996) and perhaps in more distant regions (Joyce 2000). It is possible that people in the

lower Verde also adopted some of these ideas and practices, although present evidence is insufficient to assess this possibility.

Teotihuacan and the Lower Río Verde Valley

While the Terminal Formative data from the lower Verde do not suggest conquest, there is evidence from the Early Classic (A.D. 250–500) indicative of a disruption of settlement and social organization perhaps related to a foreign incursion (Joyce 1993a; Joyce 1999). The systematic survey data show an increase in regional settlement from 699 hectares in the late Terminal Formative to 807 hectares during the Early Classic. The percentage of the occupational area located in the piedmont increased from 38 percent in the late Terminal Formative to 63 percent in the Early Classic, suggesting a shift to defensible locations. There was a reduction in the settlement hierarchy from five to four levels. The full-coverage survey data indicate that during the Early Classic, the lower Verde region contained multiple first-order centers with perhaps as many as eight sites of roughly equivalent size. Río Viejo experienced a major decrease in size, going from 200 hectares in the late Terminal Formative to 75 hectares in the Early Classic. The construction of monumental buildings at Río Viejo appears to have declined.

Evidence from Río Viejo suggests the possible destruction of the main temple at the site. Large-scale excavations in the eastern end of the acropolis at Río Viejo show that a fourteen-meter-high adobe platform was constructed here during the late Terminal Formative (A.D. 100–250). The platform supported a probable public building made from adobe blocks covered in places by stucco. At about A.D. 250, this structure was abandoned and was not reoccupied until the Late Classic (A.D. 500–800). Burned adobes and floor areas suggest that the structure may have been destroyed by fire. The summit of the platform lay exposed to the elements for perhaps 250 years, resulting in erosion and disintegration of most of the building. Two AMS dates have been obtained from the remains of the adobe structure. A date of 1573 ± 40, or A.D. 377 (AA40036), was obtained from charcoal associated with adobe building materials. A second date of 1696 ± 43, or A.D. 254 (AA40037), was recovered from charcoal lying directly on a section of burned floor and sealed by overlying adobes. The latter sample appears to be more reliable in dating the abandonment and possible destruction of the building.

Several other large Terminal Formative floodplain sites with mounded architecture declined significantly in size or were abandoned. For example, during the Terminal Formative, Yugüe was a third-order site of 9.75 hectares. Most of the site was artificially elevated above the floodplain by a huge platform that supported at least one probable public building. During the Early Classic, Yugüe was virtually abandoned.

The decline of Río Viejo and other floodplain sites, the changes in the regional settlement hierarchy, and the dramatic settlement shift into the piedmont together suggest a major sociopolitical reorganization relative to the Terminal Formative. The sociopolitical disruption of the Early Classic is underscored by the Late Classic (A.D. 500–800) recovery of settlement patterns and sociopolitical organization to conditions similar to those of the Terminal Formative. The survey data show that, in the Late Classic, people left the defensible piedmont sites and returned to the floodplain. In the full-coverage survey zone, the percentage of settlement in the floodplain increases from its Early Classic level of 22 percent to 56 percent by the Late Classic. Settlement at Río Viejo grew to 250 hectares, and the regional settlement hierarchy increased from four to seven levels.

Excavation data indicate that the Early Classic disruption in settlement patterns and sociopolitical organization may have had something to do with the powerful central Mexican polity of Teotihuacan located about 400 kilometers northwest of the lower Verde (Joyce 1993a). Excavations at Río Viejo in 1988 exposed two high-status Early Classic burials with elaborate offerings, including green obsidian from the Pachuca source, controlled by Teotihuacan, and probable local imitations of thin-orange vessels, suggesting interaction with Central Mexico and probably Teotihuacan (Joyce 1991a:app. 1). Both burials were interred in simple graves in the eastern part of the site, which was probably the civic-ceremonial core during the Early Classic (Joyce 1999). Burial 7 was an adult male interred with twenty-two ceramic vessels, eleven greenstone beads, two shell ear flares, and a conch shell. Burial 15 was an adult female with twenty-nine ceramic vessels and two green obsidian blades.

A small proportion of Early Classic ceramics in the lower Verde exhibit formal and decorative attributes often linked to Teotihuacan, including thin-orange pottery, cylindrical tripod vessels with slab feet, coffee-bean appliqués, and *candeleros*. Pottery with Central Mexican attributes appears to be more common in high-status contexts, such as with Burials 7 and 15 from Río Viejo. Most of these ceramic cross

ties seem to be with late Tlamimilolpa and Xolalpan pottery from Teotihuacan (Sejourné 1966a). The vast majority of lower Verde pottery, however, was purely local in style. Other ceramic types often linked to Classic period interaction with the Basin of Mexico, such as Teotihuacan-style *floreros* and *incensarios* (Berlo 1984; Santley 1983; Yarborough 1992), have not been recovered in the lower Verde.

While ceramic styles from the lower Verde provide ambiguous data on interaction with Central Mexico, the frequency of Pachuca obsidian suggests some type of intensive exchange (Joyce et al. 1995; Workinger 2002). Obsidian studies, including neutron activation analyses, have shown that Pachuca obsidian made up 61 percent of the seventy-one pieces of obsidian excavated from Early Classic contexts in sites on the lower Verde floodplain. This is the highest proportion known for a region outside the Central Mexican highlands. For example, in contemporaneous deposits at Matacapan in southern Veracruz, only 6 percent of the obsidian is from Pachuca, even though Santley (1989:140) views the site as an enclave permanently colonized by Teotihuacan merchants. The focus on Pachuca obsidian during the Early Classic continues a pattern of reliance on Basin of Mexican obsidian sources in the lower Verde that began in the Late Formative (Joyce et al. 1995; Workinger 2002). Several sherds from Early Classic contexts at Río Viejo are also likely imports from Teotihuacan, although sourcing studies have not been conducted.

Data from Workinger's (2002) recent project at San Francisco de Arriba, another first-order Early Classic site, reinforce the view that the lower Verde had a significant exchange relationship with Teotihuacan. Excavations at San Francisco de Arriba exposed a midden containing dense deposits of obsidian dating to the Early Classic. Of the 285 pieces of obsidian recovered from this deposit, 243, or 85 percent, were from Pachuca.

All the Early Classic Pachuca obsidian thus far excavated in the lower Verde region has been from the first-order sites of Río Viejo and San Francisco de Arriba. Test excavations at two lower-order Early Classic sites recovered eight obsidian artifacts, but none were green. These data suggest that elites may have controlled access to Pachuca obsidian.

The significance of the high percentage of Pachuca obsidian in the lower Verde is underscored by archaeological evidence from the eastern coast of Oaxaca that has yielded almost no Pachuca obsidian and few stylistic cross ties with Central Mexican pottery (Brockington 1987:231; Long and Brockington 1974:88; Zeitlin 1982). These patterns

suggest that the nature of interaction with Central Mexico was different in the eastern versus the western coast of Oaxaca.

To better understand the possible role of Teotihuacan in the lower Río Verde, the coastal data can be placed in the context of evidence for Teotihuacan imperialism in other parts of Mesoamerica. As with other examples of pre-Columbian imperialism (Hassig 1992a; Smith and Montiel 2001; Zeitlin and Joyce 1999), the nature and extent of Teotihuacan's empire has been debated (Ball 1983; Clark 1986; Cowgill 1997; R. Millon 1988; Smith and Montiel 2001; Stark 1990). Research in many areas of Mesoamerica increasingly indicates that the rulers of Teotihuacan may have controlled a far-reaching though discontinuous empire. Regions in close proximity sometimes exhibit great variation in evidence of contact with Teotihuacan (Hassig 1992a; Joyce 1993a; Yarborough 1992). Teotihuacan's rulers appear to have targeted areas where they could control key resources, such as marine shell, cacao, cotton, and obsidian (Bové 1991; Hirth 1980; R. Millon 1988; Santley 1983, 1989). With the exception of portions of the Central Mexican highlands that may have been directly administered (Hirth 1980), Teotihuacan's imperial strategy was largely hegemonic (Cowgill 1997:134; Hassig 1992a:45–61; Smith and Montiel 2001; Stark 1990) via contacts with local elites and possibly the establishment of trading enclaves at sites such as Kaminaljuyú and Matacapan (Sanders and Michels 1977; Santley 1983; Santley et al. 1987; however, for a critical perspective, see Arnold et al. 1993:186–87; Clark 1986; Cowgill 1997:135). Most areas with evidence for contact with Central Mexico were not conquered but interacted with Teotihuacan both directly and indirectly via exchange, alliance, intermarriage, and diffusion (Cowgill 1997; Laporte and Fialko 1990; Pasztory 1978, 1993; Santley 1983; Stone 1989). The nature and extent of Teotihuacan imperialism, however, is still far from being clearly established, and in most cases alternative explanations are possible (Arnold et al. 1993; Clark 1986; Cowgill 1997:134–35; Pasztory 1993; Stark 1990).

The data from the lower Verde are as equivocal as in other areas of Mesoamerica in regard to possible conquest and incorporation into a Teotihuacan empire. The data could be used to argue for a Teotihuacan imperial presence, perhaps even involving military conquest and territorial control, although other explanations not involving conquest would also be consistent with the evidence (see Joyce 1993a:74–75). For example, it is possible that exchange relations with Teotihuacan altered the political economy of the region such that the power of the rulers of Río Viejo was undermined in a way that contributed to the

decline of the polity. Further research is necessary to evaluate these alternatives.

Conclusions

To contribute to an understanding of warfare in ancient Mesoamerica, the data from the lower Verde must be viewed from a broader macroregional perspective on the nature of Mesoamerican empires. The evidence from the lower Río Verde Valley is consistent with the developing view that Mesoamerican empires pursued the type of multifaceted strategy for dealing with their hinterlands that is found in other ancient empires, or what Schreiber (1992) has termed a mosaic of control. Imperial rulers had a variety of strategies for dealing with hinterland regions, ranging from territorial conquest to political alliance.

The Mesoamerican data suggest that in most cases the only areas to be conquered and directly administered were politically weak polities near the imperial core. Examples of territorial conquest in ancient Mesoamerica include the Aztec conquest of the Chalca city-states (Berdan et al. 1996; Hassig 1988:171) and perhaps Monte Albán's conquest of the Cuicatlán Cañada (Redmond 1983; Spencer 1982; however, see Workinger 2002). Given the scale of pre-Columbian polities and the rugged terrain that characterizes much of Mesoamerica, it is not surprising that territorial conquest was relatively rare and limited to areas near imperial centers.

Rather than territorial conquest, the dominant strategy of Mesoamerican empires was that of indirect hegemonic control (Berdan et al. 1996; Hassig 1988, 1992a; Smith and Montiel 2001; Stark 1990). Regions were brought under imperial control through the threat of warfare, which could be realized if local elites did not comply. Evidence for imperial administrative facilities is rare, and the data suggest that local rulers usually remained in place. Indirect control was also achieved through alliances with the more powerful imperial rulers having greater influence over economic and political relations.

The rich ethnohistoric record of the Aztec provides a detailed view of the dynamics of hegemonic control during the century before the Spanish conquest (Berdan et al. 1996). Yet the Aztec Empire provides an important control for the examination of imperialism during earlier periods in Mesoamerica, such as for Teotihuacan and Monte Albán, where textual data are limited. In the Aztec case, even when ethnohistoric records verify that a region was controlled by Tenochtitlan, it is often difficult to identify the archaeological evidence for hegemonic imperialism (Berdan et al. 1996; Smith 1987; Smith and Berdan 1992; Smith and Montiel 2001).

In regions that interacted with the earlier polities of Monte Albán and Teotihuacan changes in settlement, social organization, trade, and architectural styles that have been proposed as the result of conquest often have alternative explanations (Cowgill 1997:134–35; Stark 1990; Zeitlin and Joyce 1999). Powerful polities greatly influence their hinterlands through military threats, trade, and the spread of political, religious, and economic ideas even in the absence of conquest (Stein 1999). Given the difficulty of identifying imperial conquest and control in the archaeological record, it is important to be careful not to fit ambiguous data into preconceived models (Cowgill 1997:134). Multiple lines of evidence and improved analytical tools, such as refined chronologies, can help identify the dynamic and often short-lived periods of imperial control (O'Brien and Lewarch 1992; Smith 1987; Smith and Montiel 2001).

The data from the lower Río Verde Valley highlight these problems with the archaeology of empires. In the case of Monte Albán, evidence from the lower Verde and other hinterland regions indicates that a model of territorial imperialism alone is not appropriate (Zeitlin and Joyce 1999). Given the distance, difficulty in travel, and relative size and complexity of lower Verde society, it seems improbable that Monte Albán could have conquered and directly administered the lower Verde region. At present, arguments for Monte Albán conquest of the lower Verde hang on the iconographic interpretation of Building J Slab 57. While it is not yet possible to eliminate some form of indirect control of the lower Verde by Monte Albán, it is also quite possible that Slab 57 does not refer to the conquest of the lower Verde. The weight of evidence argues against an imperial presence by Monte Albán in the lower Río Verde Valley, including at San Francisco de Arriba and Tututepec (Workinger 2002).

It is also not yet possible to say whether Teotihuacan conquered the lower Verde region or even if the Early Classic disruption in settlement and sociopolitical organization resulted from foreign intervention of any sort. Yet given the archaeological criteria for imperialism, it appears more likely that the lower Verde was disrupted by foreign incursions during the Early Classic than during the Terminal Formative. Early Classic Teotihuacan was a much larger and more powerful polity than Terminal Formative Monte Albán. Militarism was a major theme in Teotihuacan art, although it is not clear how the iconography

relates to the actual practice of warfare (Cowgill 1997:144–48; Headrick 1996 and chapter 9 in this volume; Taube 1992a). Archaeological research suggests that Teotihuacan may have achieved indirect hegemonic control over regions as distant as the Pacific coast and highlands of Guatemala (Berlo 1984; Bové 1991; Sanders and Michels 1977).

Further work is needed, however, to clarify the relationship between the lower Río Verde Valley and both Teotihuacan and Monte Albán. While this chapter has provided few definite answers regarding the impact of Monte Albán and Teotihuacan in the lower Río Verde Valley, it raises a number of questions that address the more general issue of ancient Mesoamerican imperialism. Long-term systematic research in core regions and especially in potential provinces will be necessary to tease apart and clarify the nature and extent of the putative empires of Teotihuacan and Monte Albán.

Notes

I would like to thank the Instituto Nacional de Antropología e Historia; especially the president of the Consejo de Arqueología, Joaquín García-Bárcena; and the directors of the Centro INAH Oaxaca, María de la Luz Topete, Ernesto González Licón, and Eduardo López Calzada, who have supported my research in Oaxaca. Funding for the field research in the lower Río Verde Valley has been provided by grants from the following organizations: National Science Foundation (grants SBR-9729763 and BNS-8716332), Foundation for the Advancement of Mesoamerican Studies (#99012), National Geographic Society (grant 3767–88), Wenner-Gren Foundation (GR. 4988), Vanderbilt University Research Council and Mellon Fund, Fulbright Foundation, H. John Heinz III Charitable Trust, Explorers Club, Sigma Xi, University of Colorado, and Rutgers University. Andrew Workinger kindly provided unpublished settlement data from his doctoral dissertation. The first draft of this chapter was completed while I was a Summer Fellow at Dumbarton Oaks, and I would like to thank that institution, especially Dr. Jeffrey Quilter, director of pre-Columbian studies. I would like to thank Cathy Cameron, Claudio Cioffi-Revilla, Steve Lekson, Jeffrey Quilter, Payson Sheets, Michael Smith, and Andrew Workinger for their comments on this chapter as well as Travis Stanton and Kat Brown for inviting me to participate in the volume.

1. Marcus and Flannery (1996:201) and Balkansky (1997:34) claim that the area of Tututepec and San Francisco de Arriba is too distant from the lower Río Verde Valley to "shed light" on each other's interactions with Monte Albán. The Tututepec and San Francisco de Arriba area, however, is located only 12 kilometers northeast of the lower Verde's floodplain and 16 kilometers east of the pre-Columbian regional center of Río Viejo. Since the mid-1980s, archaeological projects in the lower Verde have included Tututepec and San Francisco de Arriba as part of the Lower Río Verde region, and there is no reason to justify modeling them as separate regions (see Grove 1988).

2. An article by Balkansky (1998:469–72) contains numerous factual errors and appears to misrepresent the work of several scholars who work on the archaeology of coastal Oaxaca. While many of the errors are addressed in a subsequent commentary (Joyce et al. 2000), his response to this commentary (Balkansky 2001) further misrepresents our research. A significant error by Balkansky (2001) that bears on the present chapter is his argument that burials from Late Formative Structure 1 at Cerro de la Cruz represent a massacre. Balkansky (2001:560) states that "the still-articulated bodies, moreover, are piled together in rooms without apparent disturbance." The burials in Structure 1 at Cerro de la Cruz have been discussed, often with illustrations, in several publications (Joyce 1991a, 1991b, 1994b; Joyce et al. 1998). As these publications show, "burial activities in both Structure 1 and Op. U (a nearby area with several interments) apparently occurred over a period of several generations, as shown by the frequent instances of later burials having disturbed earlier ones" (Joyce 1994b:158). The burials were underneath floors, and an analysis from the southern half of Structure 1, where stratigraphic relationships among burials could be clearly discerned, indicates that there were between six and twenty-one separate burial events (Joyce 1991a:732–39). Osteological analyses of the Cerro de la Cruz material have failed to yield evidence of traumatic wounds (Alexander Christensen, personal communication, 2001; Joyce 1991a:app. 1). It is also puzzling as to why Balkansky (2001:560) finds it exceptional that no grave goods were associated with the interments of Structure 1 since Late Formative burials found in the lower Río Verde Valley have rarely had grave offerings. Likewise, I do not know why burial patterns in the lower Río Verde Valley should conform to Formative period practices in other regions of Oaxaca, as Balkansky (2001:560) argues. Balkansky (2001:560) is incorrect when he argues that the age profile of the Structure 1 burials differs from formal cemeteries (see Joyce 1991a:255).

3. At present, an area of 152 square kilometers has been covered by full-coverage survey methods in the lower Verde, while the remainder of the region has been investigated through nonsystematic surface reconnaissance (Grove 1988; Joyce 1991a, 1991b, 1993a, 1999; Workinger 2002; Workinger and Colby 1997). The combination of survey and reconnaissance, along with excavation data, should be more than adequate to recognize the kind of dramatic settlement shifts noted for conquered regions like the Cuicatlán Cañada (Redmond 1983; Spencer 1982). For comparison, Spencer and Redmond (1997:25) covered 52.1 square kilometers in their survey of the Cuicatlán Cañada.

4. Balkansky (1998:470) argues that "epigraphic and iconographic data suggest that ties between the highlands and coastal Oaxaca began in Late Formative times, coincident with the Zapotec expansion." Joyce et al. (2000), however, stress that the epigraphic data from the coast is still equivocal in

terms of chronological placements and that the only nonportable carvings that might date to the Late Formative–Early Classic do not resemble Zapotec conventions. In his rebuttal, Balkansky (2001:560) contends that Urcid repetitively states that "highland-coastal epigraphic ties on stone monoliths also began in the Late Formative." Indeed, in the cited article, Urcid (1993:161) concluded that "the earliest [epigraphic] data [from the coast] can be dated to the late Formative" but qualifies this in the subsequent phrase where he states that such a conclusion is based only on a portable object of uncertain origin. The object, while technically a monolith, is merely 7 centimeters tall (Javier Urcid, personal communication, 2002). The object was not discussed by Joyce et al. (2000) because the statuette is in a private collection and has only a provenance attributed to Pochutla, which is outside the lower Verde region. To use such scanty epigraphic data in support of "an emerging regional pattern" is highly problematic.

5. Balkansky (2001:560) is in error when he argues that "by the Late/Terminal Formative, gray wares plus imitations made up almost 90% of the ceramics from coastal Río Viejo (Joyce 1993b)." The report he cites examines only ceramics from the early Terminal Formative Miniyua phase (150 B.C.–A.D. 100) rather than from the Late/Terminal Formative as a whole. During the Late Formative Minizundo phase (400–150 B.C.), there are virtually no locally made gray wares or Oaxaca Valley imitations, although 1.3 percent of rim sherds from unmixed deposits excavated in 1988 are from Oaxaca Valley imports (Joyce 1991a:129–47). Miniyua phase gray wares and fine brown wares include sherds with ceramic cross ties to styles from highland regions, including the Oaxaca Valley, Mixteca Alta, Mixteca Baja, Cuicatlán Cañada, Ejutla Valley, and the Miahuatlán Valley. Taken together, gray wares and fine brown wares make up 89.4 percent of the lower Verde rim sherds ($N = 273$) analyzed by Joyce (1993b) from a single feature at Río Viejo, although only about half of these exhibit cross ties with highland styles. Other ceramic types are regionally distinct. By the late Terminal Formative Chacahua phase (A.D. 100–250), gray wares are the dominant paste category, although they exhibit few cross ties with highland pottery. Questions about the diffusion of firing technologies used to make reduced gray-ware paste pottery and the spread of some ceramic styles throughout much of Oaxaca continue to be important subjects of study (Levine 2002). I agree with other researchers, however, that the diffusion of ceramic styles is a very poor indicator of conquest in the absence of other categories of evidence (Schreiber 1992:263; Stark 1990), evidence that has yet to be found in the lower Verde.

Part II

WARFARE AND RITUAL

Ancient Mesoamerican Warfare

Edited by

M. Kathryn Brown

Travis W. Stanton

2003

ALTAMIRA PRESS
A Division of
ROWMAN & LITTLEFIELD PUBLISHERS, INC.
Walnut Creek • Lanham • New York • Oxford