Militarism, Resistance, and Early State Development in Oaxaca, Mexico

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ABSTRACT
Recent research in Oaxaca, Mexico has revealed that the early Monte Albán state did not expand in a gradual, concentric fashion, but instead exhibited a non-uniform, mosaic pattern of territorial growth. Certain small regions outside the Valley of Oaxaca proper appear to have been subdued by Monte Albán before all areas within the Valley were incorporated into the early state polity. In this paper we consider some of the strategies of resistance that were pursued by certain polities that managed to withstand, for a time, the expansionist actions of the early Monte Albán state. These resistance strategies included the shifting of settlement to a more defensible location, the construction of fortifications, greater nucleation of population, and the development of a more hierarchical political organization. We then suggest how such resistance by non-compliant, or rival, polities may have helped to shape the developmental trajectory of the Monte Albán state itself.

INTRODUCTION
One of the first state-level polities to appear in Mesoamerica was the early Zapotec state, whose capital was the site of Monte Albán in the Oaxaca Valley (Blanton 1978; Marcus and Flannery 1996) (see Figures 1, 2). Although Monte Albań was founded as a regio-
nal center at the beginning of the Early Monte Albán I (Early MA I) phase (500–300 B.C.), it is the Late Monte Albán I (Late MA I) phase (300–100 B.C.) for which we have the earliest convincing evidence of state organization, including a regional settlement hierarchy of four levels and the appearance of key institutional building types, such as the palace and multiroom temple (Kowalewski et al. 1989: 125–138; Marcus and Flannery 1996: 162–164; Spencer and Redmond 2001a). By the Monte Albán II (MA II) phase (100 B.C. – A.D. 200), Monte Albán was the capital of a fully-developed state (Flannery and Marcus 1983a, 1990).

A number of scholars have argued that the Monte Albán polity was highly militarized, an interpretation that finds support in a diverse and growing body of data, from the many stone inscriptions at the capital that depict mutilated captives and subjugated territories, to the empirical record of conquest that archaeologists have recovered in places that were the targets of Monte Albán’s policies of militaristic expansion (Caso 1947; Marcus 1976; Marcus and Flannery 1996; Balkansky 1997; Spencer and Redmond 1997, 2001b). At the same time, recent research suggests that the Monte Albán state did not expand its domain in an incremental, concentric fashion, but instead exhibited a non-uniform, strikingly mosaic pattern of territorial growth. Certain small regions outside the Oaxaca Valley were evidently subjugated by Monte Albán before all areas within the Valley were incorporated into the state polity (Marcus 1992a; Spencer 1982: 256; Spencer and Redmond 2001a, 2001b). In this paper we consider the strategies of resistance that were pursued by one of these polities, the one focused on San Martín Tilcajete, which managed to withstand, for a considerable time, Monte Albán’s militaristic actions. Because we agree with Brown (1996) that the concept of ‘resistance’ has been used too widely (and too loosely) in recent anthropology, we endeavor to show that its applicability in the Oaxaca case is both appropriate and non-trivial. We conclude the paper by suggesting that such resistance had consequences that went far beyond mere reaction to Monte Albán’s expansionist designs; the resistance in this case was also a dynamic force that helped shaped the developmental trajectory of the Monte Albán state itself.
MONTE ALBÁN: A MILITARIZED POLITY

Few contemporary Oaxaca scholars would deny that violence and warfare are major themes on the roughly 350 inscribed stones at Monte Albán that date to Monte Albán I (MA I) and MA II. The famous danzantes inscriptions comprise approximately 310 of these stones. Flannery and Marcus (1983b) have argued that the danzantes stones were all originally set into the east face of Building L, an Early MA I construction on the southwest corner of Monte Albán’s Main Plaza. Although the danzantes have been variously interpreted as dancers, priests, swimmers, and medical anomalies, the most widely accepted interpretation is that they represent slain and mutilated captives. Some four decades ago, Coe (1962: 95) argued that: ‘The distorted pose of the limbs, the open mouth and closed eyes indicate that these are corpses, undoubtedly chiefs or kings slain by the earliest rulers of Monte Albán’.

Marcus has concurred with Coe’s interpretation, though she has suggested that not all the danzantes depict high-ranking people: ‘The majority of the danzantes probably portray lesser villagers taken in raids and skirmishes’ (Marcus 1976: 126–127). She has also drawn attention to the potential propaganda value of the danzantes, attributing special significance to the fact that they were probably all carved very early in Monte Albán’s history.

It is noteworthy that the 310 or more danzantes which appear during Monte Albán I constitute 80 % of the total monument record from that site. In other words, it was during the initial occupation of Monte Albán that the effort devoted to carving monumental figures was the greatest. This early effort probably coincides with the time when the rulers of Monte Albán would have felt the greatest need to legitimize their power and sanctify their position. Perhaps by creating a large gallery of prisoners, they were able to convince both their enemies and their own population of their power, although it was not yet institutionalized or completely effective (Marcus 1974: 90).

Marcus’s interpretation of the danzantes is consistent with an emerging view of MA I political organization in the Oaxaca Valley that we have termed the ‘Rival Polity Model’ (Spencer and Redmond 2001a). According to this model, Monte Albán’s political domain throughout MA I included the Etla/Central subregion but not the Ocotlan/Zimatlan and Tlacolula subregions (see also Feinman 1998: 128–129; Marcus and Flannery 1996: 163). The
boundaries we have proposed for the three subregions are shown in Figure 3 (Early MA I sites) and also in Figure 4 (Late MA I sites). Archaeological settlement pattern data from the three major subregions were subjected to an analysis of covariance (ANCOVA), which provided support for the Rival Polity Model for both Early MA I and Late MA I political organization, and indicated that it was not until MA II that all three subregions were unified under the control of Monte Albán (Spencer and Redmond 2001a). Excavation and survey at San Martin Tilcajete, the first-order center of the Ocotlan/Zimatlan subregion (Figure 2), has revealed that the inhabitants defended themselves successfully against attacks throughout Early MA I and Late MA I, until they were finally vanquished at the beginning of MA II (Spencer and Redmond 2001a).

Although the danzantes inscriptions of MA I are interpreted as depicting captives taken in ‘raids and skirmishes’, the ‘conquest slab’ inscriptions on Building J (dated to MA II) are thought to refer not to raiding but to a more complex form of warfare: the taking and holding of territory (Marcus 1980). Marcus (1976: 128) notes that the roughly 40 conquest slabs were first identified by Alfonso Caso (1947), who pointed out that they typically include the following elements: (1) an upside-down human head; (2) above the upside-down head, a ‘hill’ sign that signifies ‘place’; (3) a glyph or combination of glyphs that probably represents the specific name of the place, usually situated above the ‘hill’ glyph; and (4) sometimes an accompanying hieroglyphic text. Although Caso (1947) referred generally to ‘conquered places’, he did not attempt to identify any specific places that might have been conquered. More recently, Marcus (1976, 1980) sought to carry the analysis further by proposing several places to which the conquest inscriptions might actually be referring. One of her proposed places is the Canada de Cuicatlan, a canyon traditionally inhabited by Cuicatec-speakers, situated about 80 km north of Monte Albán (Figure 1). Making this reading, she noted the close resemblance between the toponym on a particular inscribed conquest slab and the glyph that refers to Cuicatlan as the ‘Place of Song’ in the Codex Mendoza, a 16th-century Aztec document recording places that were paying tribute to the Aztec (Marcus 1980: 59; 1992b: 396–400; Spencer and Redmond 1997: Figures 1.5, 1.6). She was careful to point out, however, that ‘such a correlation between a 16th-century Aztec codex and Zapotec glyphs of Period II implies some 1,500 years of
place-name continuity. Hence, my suggestion is no more than a hypothesis, subject to proof or disproof by future analysis' (Marcus 1980: 56). Marcus (1992b: 441) has proposed that the MA I danzantes and the MA II conquest slabs, by themselves, indicate a shift in the predominant warfare strategy pursued by Monte Albán, from a raiding pattern in the early part of MA I to outright territorial conquest by MA II. Obviously, such a proposition should be evaluated with reference to the archaeological record.

In 1977–1978, we carried out a program of archaeological survey and excavations in the Cañada de Cuicatlan, a central goal of which was to test Marcus's interpretation of the Building J conquest slabs (Spencer and Redmond 1997). We recovered substantial evidence that the Cañada was, in fact, conquered by Monte Albán at the onset of the Lomas phase (300 B.C.) and remained in a subordinate, probably tributary, relationship until the end of that phase (A.D. 200), a time span that corresponds to the Late MA I and MA II phases combined (Spencer and Redmond 2001b).

Prior to the Lomas phase, the Cañada was occupied by 12 Perdido phase (750–300 B.C.) villages, all located on high alluvial terraces or low piedmont spurs directly overlooking pockets of fertile low alluvium (Redmond 1983: 62–63). The proximity to low alluvium, combined with the lack of evidence of irrigation facilities associated with Perdido phase sites, suggest that farmers at this time used simple techniques of diversionary dam and floodwater farming, both of which have been practiced in parts of the low alluvium in recent times.

At the beginning of the Lomas phase, a major settlement pattern disruption occurred in the Cañada; all the Perdido phase sites were abandoned and new sites were founded nearby. In the Quio-tepec area at the northern end of the Cañada, the single small Perdido phase site was replaced by a 45-ha complex of seven sites that sprawled across both sides of the natural pass into the Cañada from Tehuacan to the north as well as occupying the strategic mountain ridges. Heavily fortified, the Quio-tepec sites were undoubtedly a military frontier installation, designed to control movement through the northern frontier of the Cañada (Redmond 1983: 91–120). The Quio-tepec installation also marks the northern limit of Lomas phase pottery, some of which is virtually identical to the pottery of the Late MA I and MA II phases.
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Our excavations at the site of Llano Perdido found that this Perdido phase village was burned to the ground, and upon the floor of a residence was the body of a woman who evidently perished when the community was destroyed (Spencer 1982: 212–220). At the onset of the Lomas phase, around 300 B.C., settlement in the locality was shifted to an adjacent ridge (Loma de La Coyotera), where we excavated evidence of major changes in local economic, social, and politico-religious organization that persisted throughout the Lomas phase (Spencer 1982: 215–242). Economic activities became more narrowly focused on agricultural production, which was greatly intensified through the introduction of canal irrigation (Spencer 1982: 221–231). Residential patterns changed from the multifamily compounds of the Perdido phase to a single-family form that was not only more like the Zapotec pattern at that time but may also reflect a Zapotec policy of rupturing the traditional Cañada kin ties (Spencer 1982: 231–234). The rich ceremonial life of the Perdido phase disappeared in the Lomas phase, replaced by the fearsome presence of the Zapotec state, as attested by the skull rack that we excavated in front of the main Lomas phase mound (Spencer 1982: 234–242).

Radiocarbon samples recovered from Perdido and Lomas phase deposits indicate that the Zapotec conquest of the Canada began around 300 B.C. (Spencer and Redmond – 2001b). This date corresponds to the onset of Late MA I in the Oaxaca Valley, an alignment that takes on considerable significance in view of the fact that Late MA I is also when we observe the earliest convincing evidence of state formation in the Oaxaca Valley. For example, Late MA I is the phase that exhibits the first unequivocal signs of a four-level settlement hierarchy in the Oaxaca Valley (Marcus and Flannery 1996: 162–164). Such four-level settlement hierarchies are generally associated with state systems (Wright 1977, 1986). Also, the earliest known examples of a royal palace and specialized multiroom temple in the Oaxaca Valley have been dated to Late MA I (Spencer 1999; Spencer and Redmond 2001a). Along with other specialized public buildings, such palaces and temples are known to represent key institutions of the Zapotec state (Flannery and Marcus 1976).

We have argued elsewhere that the data from the Canada and the Oaxaca Valley support the view that territorial expansion played an important role very early in the process of Zapotec primary state formation (Spencer and Redmond 2001b). We contend
that the successful pursuit of territorial conquest would have both
demanded and permitted an increase in the internal complexity of
administration at Monte Albán. The implementation of militaristic,
tributary, and other administrative actions at a distance of 80 km
from the Zapotec capital would have called for the dispatching of
specialized components of administration to manage the mobiliza-
tion and transfer of tribute, as well as to ensure the continued con-
trol of the subjugated territories. A more elaborate control hierar-
chy would have had to develop to coordinate the activities of the
specialized, far-flung administrators. At the same time, the success
of the conquest strategy would have made new resources available
to defray the costs of the administrative transformation. In short,
while the state made conquests, conquests made the state.

The discovery that Monte Albán conquered the Cañada at the
onset of Late MA I is also significant in view of the aforemen-
tioned Rival Polity Model of political organization in the Oaxaca
Valley during Early and Late MA I (Spencer and Redmond 2001a).
If we acknowledge that Monte Albán had conquered the Cañada de
Cuicatlán by the onset of Late MA I, and yet did not incorporate
the much nearer Ocotlan/Zimatlán and Tlacolula subregions
(within the Oaxaca Valley) into its domain until MA II, then we
are faced with a salient question: how were the polities in Ocot-
lán/Zimatlán and Tlacolula able to resist domination by Monte Al-
bán throughout Late MA I? Recent research at San Martin Tilca-
jeté, the first-order center of the Ocotlan/Zimatlán subregion, has
yielded information on the changing strategies of resistance pur-
sued by that subregional polity over the course of Early and Late
MA I.

SAN MARTIN TILCAJETE:
STRATEGIES OF RESISTANCE

Between 1993 and 2000 the authors conducted 8 seasons of exca-
vation and survey at San Martin Tilcajete, in the Ocotlán-Zimatlán
subregion of the Oaxaca Valley (Figure 2). Our fieldwork has fo-
cused on three different, but closely related, archaeological sites:
El Mogote (SMT–11a), El Palenque (SMT-11b), and Los Mogotes
(SMT–23) (Figure 5). The sites were located in 1978 by the Oaxa-
ca Settlement Pattern Project (Blanton et al. 1982). During 1993–
1994, members of our Tilcajete Project conducted mapping and
controlled, intensive surface collecting at all three sites. At El
Mogote (SMT–11a) and El Palenque (SMT–11b), we used a plane table and alidade to produce maps at 1:1000 scale and with a contour interval of 1 m. Our surface collections usually consisted of 10 m by 10 m units, within which we collected all the artifacts by hand. Schematic renderings of the site maps with the surface collections and major architectural features are shown in Figures 6 and 7. Between 1995 and 2000, we conducted three excavation seasons at El Mogote and four excavation seasons at El Palenque. At Los Mogotes (SMT-23), three seasons of excavation (1999–2001) have been directed by Christina Elson (Elson 1999; Elson and Marcus 2000). The analysis phase of our research at San Martin Tilcajete is still in progress, but we can offer some preliminary results that are germane to the present discussion.

Rosario Phase (700–500 B.C.)

During the Rosario phase, Monte Albán had not yet been founded and researchers generally agree that the entire Oaxaca Valley was not politically unified; it appears that three independent chiefly polities existed in the Valley, one situated in each of the three major subregions of the Valley: Etla, Tlacolula, and Ocotlán/Zimatlán (Blanton et al. 1993: 66–69; Marcus and Flannery 1996: 123–126; Spencer and Redmond 2001a). Marcus and Flannery (1996: 123–124) have argued that the relationships among these polities were often hostile. The relatively uninhabited central zone of the Valley, they have suggested, was a ‘no-man’s-land’ or buffer zone between these warring chiefdoms (Marcus and Flannery 1996: 124). Regional survey data show that Rosario phase village sites tend to have relatively high frequencies of burnt clay daub, probably resulting from the burning of wattle-and-daub structures during raids (Kowalewski et al. 1989: 70). Excavation data pointing to warfare include a burned wattle-and-daub temple on Structure 28 at San Jose Mogote and Monument 3 at the same site, the carving on which depicts a sacrificed captive (Marcus and Flannery 1996: 128–129).

At the El Mogote site (SMT–11a) in the San Martin Tilcajete locality, our surface collections enabled us to define a 25-ha occupation dating to the Rosario phase, which represents a 285 % increase over an earlier 6.5-ha Early Formative occupation, evidenced largely by ceramics of the San José phase (1150–850 B.C.) (Marcus and Flannery 1996: Table 3). Our survey results mean that
El Mogote was larger than any other Rosario phase site in the Ocotlán/Zimatlán subregion (Kowalewski 1989: 69–83), which supports the widely-held view that Tilcajete served as the political center for the subregion at that time (Blanton et al. 1999: 42; Kowalewski et al. 1989: 80; Marcus and Flannery 1996: 126). However, it is notable that El Mogote in Rosario times was not quite half the size of San José Mogote, which covered 60–65 ha and had an estimated population of 1,000 (Marcus and Flannery 1996: 125). Marcus and Flannery (1996: 125–126) have suggested that the total Rosario phase population of the Etla subregion was about 2,000, while the Tlacolula and Ocotlán/Zimatlán subregions each had about half that number. In spite of this size difference, we have recovered no evidence of abandonment, violence, or burning at El Mogote that could indicate a major defeat by the San José Mogote chiefdom during Rosario phase. To the contrary, not only is there occupational continuity at El Mogote but there is also, as we shall see, substantial growth and development from the Rosario phase through Early MA I. We suggest that the defensive capabilities of El Mogote were enhanced by the increasing nucleation of population in the Rosario phase. In addition, the El Mogote polity may have engaged in hostile actions against the Etla subregion polity, as evidenced by the unoccupied buffer zone in the Valley center, and the evidence of raiding at San José Mogote itself.

**Early Monte Albán I Phase (500–300 B.C.)**

Marcus and Flannery (1996: 139–140) have proposed that the founders of Monte Albán came from San José Mogote and other Etla subregion towns and villages, because most of the sites that were abandoned at the end of the Rosario phase are in the central and southern Etla areas. In their excavations at San José Mogote, Marcus and Flannery found evidence of Rosario phase public buildings and some 60 hectares of Rosario phase occupation representing both elite and nonelite inhabitants; however, there is very little evidence of Early Monte Albán I architecture here, and no evidence at all of Late Monte Albán I construction (Flannery and Marcus 1990).

We have previously argued, in line with the Rival Polity Model, that Monte Albán served during Early MA I as the first-order center for a chiefly (i.e., a centralized, but non-state) polity that occupied the Etla/Central subregion (Spencer and Redmond...
2001a) (see Figure 3). What lines of evidence support our suggestion that the Early MA I polity was a chiefdom and not a state? Unfortunately, the public architecture evidence at Monte Albán itself ‘is so fragmentary as to be ambiguous’ (Flannery and Marcus 1983a: 80). While pottery and other artifacts of MA I have been found in abundance, the buildings from that period are largely covered (or obliterated) by later constructions (Marcus and Flannery 1996: 165). Flannery and Marcus (1983b: 87–91) have identified only three buildings on the Monte Albán’s Main Plaza that may date to Early MA I.

In fact, it is not until MA II that we have solid evidence at Monte Alba of ‘a whole series of clearly recognizable and functionally distinct public buildings’ (Flannery and Marcus 1976: 221), including the multiroom temple, the royal palace, the ball-court, buildings with a special military purpose, and others: Flannery and Marcus (1976: 221) point out that ‘the activities carried on in these buildings must have been very different, presumably reflecting different sociopolitical institutions and different sets of personnel’. Such institutional diversity is a hallmark of the state as defined by Wright (1977: 383):

a cultural development with a centralized decision-making process which is both externally specialized with regard to the local processes which it regulates, and internally specialized in that the central process is divisible into separate activities which can be performed at different places at different times.

By contrast, a chiefdom is a cultural development with an administrative organization that is externally specialized (or centralized) but at the same time is not internally specialized (Wright 1977: 381).

Another manifestation of state organization is a four-level site-size hierarchy (Wright 1977, 1986). Drawing upon the regional survey data presented in Kowalewski et al. (1989), we have constructed a histogram and a frequency polygon of Early MA I site size in the Etla/Central subregion, the area that was probably part of the Monte Albán polity at this time (see endnote 1 for an explanation of our methodology). Two modes are clearly visible in each of these Early MA I graphs (Figure 8). By contrast, the histogram and frequency polygon for the Etla/Central subregion in Late MA I (Figure 9) show four modes; this pattern suggests a four-level site-
Meanwhile, at the El Mogote site (SMT–11a), our intensive surface collections have found evidence of a 52.8-ha settlement for Early MA I, representing more than a doubling of the occupation area over the Rosario phase. The excavations we carried out at Mound A, Mound K, and elsewhere in the plaza area of El Mogote revealed that the plaza was most likely laid out at the beginning of Early MA I; it appears that the entirety of this 2.2-ha plaza was in use throughout that phase. Oriented 17 degrees east of magnetic north (or 25 degrees east of true north), the plaza contained two mounds in its center and other mounds arranged around all four sides (Figure 6). In view of the substantial occupation and large plaza, it seems clear that El Mogote continued to be the first-order center of the Ocotlán/Zimatlán subregion throughout Early MA I (Marcus and Flannery 1996: 163; Spencer and Redmond 2001a). The increase in population nucleation at El Mogote between Rosario phase and Early MA I undoubtedly contributed to the Tilcajete polity's ability to withstand any raids emanating from Monte Albán. And, a substantial degree of centralization of authority is certainly implied by the construction of the 2.2-ha plaza, which was fully one-third the size of the Main Plaza at Monte Albán itself during MA II and later periods. In agreement with the Rival Polity Model (Spencer and Redmond 2001a) is our observation that neither the orientation nor the configuration of the Early Monte Albán I mounds at El Mogote is similar to what is known of Monte Albán's Main Plaza at this time (Flannery and Marcus 1983b), a difference in architectural style and site layout that probably underscored the political distance between El Mogote and Monte Albán. On the level of subregional settlement patterns, both the histogram and frequency polygon of Early MA I site size in the Ocotlán/Zimatlán subregion show three clear modes, a pattern consistent with a chiefly— but not a state—form of political organization (Figure 10).

Given the large Early MA I occupation at the El Mogote site and its sizable plaza, it is notable that we found relatively few examples of the most elaborate Early MA I ceramics known for Monte Albán itself (Caso et al. 1967; Kowalewski et al. 1978), a paucity that was also reported by Blanton et al. (1982: 57). In particular, we found relatively few of the common Early Monte Albán
I cremas, such as Types C 2 and C. 4, which Feinman (1982: 188–191) concluded were produced close to Monte Albán itself (in contrast to cafe and gris wares, which were produced throughout much of the Valley). Most of the Early MA I ceramic assemblage at Tilcajete appears to consist of locally-made wares, generically similar but not identical to contemporaneous ceramics at Monte Albán. These ceramic differences, we suggest, are consistent with the proposition that the Tilcajete polity maintained a definite social, political, and economic distance and autonomy from Monte Albán throughout Early MA I.

There is much excavated evidence that the El Mogote plaza area was abandoned in a conflagration at the interface between Early MA I and Late MA I. Throughout our excavations on the northern and eastern sides of the plaza we observed that the uppermost floors of the plaza and adjacent buildings were littered with charcoal as well as burned earth, adobe, and stone. Within this layer of charcoal and burned stone we found a few sherds of Type G. 12, a grayware bowl with combed designs on the interior of its base. The occurrence of Type G. 12 (combed bottom) in these contexts of abandonment is chronologically significant. Caso et al. (1967: 25–26) reported that they first found G. 12 sherds in their Monte Albán lb deposits, although they were much more frequent in Monte Albán Ic. Marcus and Flannery (1996: 144) suggest that Monte Albán la and Monte Albán Ic should be considered discrete phases (corresponding to our Early Monte Albán I and Late Monte Albán I phases, respectively), with Monte Albán lb ‘serving as the transition between them’. The first appearance of Type G. 12 (combed bottom), therefore, probably dates to what we would call the Early MA I/Late MA 1 interface. Lending support to the proposition that the El Mogote plaza area was burned at the end of Early MA I is a radiocarbon sample (Beta–147541) taken from a charcoal-laden, burned deposit on the ancient plaza surface at the southeastern base of Mound A. This sample yielded a conventional radiocarbon age of 2280 ± 40 B.P. (conventional radiocarbon date of 330 B.C. ± 40), which falls near the end of Early MA I.

In Table 1, we have summarized the strategies that we suggest the Tilcajete polity pursued in order to resist the aggressive actions of Monte Alban during Early MA I. These strategies of resistance include: population growth and nucleation, a more centralized
community organization with a sizable public plaza, a three-level settlement-size hierarchy in the Ocotlán/Zimatlán subregion, and restricted interaction with Monte Albán as shown in low frequency of ‘fancy’ Early MA I ceramics. We suggest that these strategies helped Tilcajete resist Monte Albán’s aggressions throughout Early MA I, including the major attack that came at the interface between Early MA I and Late MA I.

Late Monte Albán I Phase (300–100 B.C.)

During the succeeding Late Monte Albán I phase, the El Mogote plaza does not appear to have been in use. A new plaza was built at El Palenque (SMT-1 lb), which lies across a barranca and about 800 m west and upslope from the El Mogote site (Figure 7). The absolute vertical difference between the two plazas is 30 m. Our intensive collections and excavations here have produced primary deposits of ceramics as well as several radiocarbon samples. Taken together, the ceramic and radiocarbon data indicate that El Palenque was first inhabited at the onset of Late MA I and was abandoned by the very early years of MA II.

The Late MA I plaza at El Palenque has precisely the same orientation, and is strikingly similar in configuration to, the Early MA I plaza at El Mogote (Figures 6 and 7). Like the earlier plaza, the El Palenque plaza is oriented 17 degrees east of magnetic north and has two mounds in the middle and other mounds around all four sides. We suggest that the slightly smaller area of the El Palenque plaza (1.6 ha vs. 2.2 ha at El Mogote) is best understood as a practical response to the challenge of building on a narrower piedmont ridge in the higher location.

We contend that the architectural continuity from El Mogote to El Palenque reflects the persistence of a local tradition of plaza construction from Early MA I to Late MA I. It is likely that the El Mogote plaza was abandoned after being attacked and burned in a raid, at which point a decision was made to rebuild the plaza in a higher, more defensible location. Notably, the El Palenque site is protected by stone walls that traverse the site along its gradual southern flank (Figure 7). An excavated cross-section of one of these walls has confirmed that it dates to Late MA I. The continuation of the traditional plaza layout in a new, more defensible
location probably indicates that the inhabitants of Tilcajete withstood the raid, although they apparently considered it serious enough to justify moving the ceremonial plaza of their center to the new uphill location. The fortifications plus the more defensible location made a critical contribution to the Tilcajete polity’s ability to resist Monte Albán (Table 1).

The human occupation at Tilcajete appears to have grown substantially between Early MA I and Late MA I. Although the El Mogote plaza was apparently no longer in use in Late MA I, we found evidence of Late MA I residential occupation over 43.5 ha of the El Mogote site. Because we also recorded 28 hectares of Late MA I occupation at the El Palenque site, the total habitation area at San Martin Tilcajete during Late MA I would add up to 71.5 ha, a 35.4% increase over the Early MA I occupation area. Thus, the occupation of Tilcajete, the center of the Ocotlán/Zimatlán subregion, grew from 25 ha in the Rosario phase, to 52.8 ha in Early MA I, and then to 71.5 ha in Late MA I, a process of progressive demographic increase and nucleation that surely enhanced the subregional center’s defensive capabilities (Table 1).

The Late MA I occupation centered at El Palenque continued to show signs of independence from Monte Albán. Although G.12 (combed bottom) bowls and other Late MA I diagnostic types on gris paste are common at El Palenque, our excavations there have found only trace amounts of the thin-walled, well-burnished cremas (such as Types C. 6, C.7, and C.20) that begin during Late MA I at Monte Albán itself (Caso et al. 1967: 46–47). In view of the aforementioned likelihood that this crema ware was produced only in the vicinity of Monte Albán (in contrast to the gris ware), the lack of Late MA I cremas at Tilcajete probably means that ceramic exchanges between Monte Albán and the Etla/Central subregion, on the one hand, and Tilcajete and the Ocotlán/Zimatlán subregion, on the other, were substantially restricted at this time. Consistent with this interpretation of limited exchange between these subregions is the fact that we have recovered much locally-available chert but remarkably little obsidian in our El Palenque excavations, in spite of the fact that we have excavated extensively in ceremonial contexts as well as in elite and non-elite residential contexts. Because the center of Monte Albán lay between Tilcajete and the important obsidian sources of Central Mexico, we suspect that Monte Albán’s leadership was preventing the flow of imported
obsidian from reaching El Palenque. We suggest that the barriers that prevented Late MA I cremas and obsidian from reaching El Palenque were primarily political in nature.

Our excavations at El Palenque have recovered evidence indicating that hostilities were even more intense in Late MA I phase than in Early MA I. Although El Palenque was in a defensible location and fortified with stone walls, the site appears to have been the target of an attack that resulted in a major conflagration and the complete abandonment of the community. In our excavation Area I – on the north side of El Palenque’s plaza – we excavated a palatial residence (Structure 7) that was completely burned upon abandonment. Carbonized roof beams rested where they had fallen in rooms and corridors. Whole vessels lay upon floors, smashed by fallen debris. Moreover, in contrast to the partial site abandonment (mainly of the plaza area) that occurred at El Mogote at the end of Early MA I, when the El Palenque plaza was burned and abandoned, the entire Late MA I residential zone was abandoned as well. The abandonment of the residential zone is documented not only by our surface collections, but also by our excavations of a residential structure in Area P, located 50 m west of the south-western corner of the El Palenque plaza (Figure 7). During MA II, occupation in the Tilcajete area had shifted to the hilltop site of Los Mogotes (SMT – 23). Christina Elson is conducting excavations that are designed, in part, to assess the hypothesis that Los Mogotes functioned as a secondary center of the Monte Albán state during MA II (Elson 1999; Elson and Marcus 2000).

We have proposed that by Late MA I the political organization centered at Monte Albán was beginning to engage in the kinds of regulatory interventions on the local level in the Etla/Central subregion, and perhaps elsewhere, that required the delegation of authority to specialized administrators (Spencer and Redmond 2001a). Such delegation of authority is compatible with an administration that is both centralized and also internally specialized, i.e., one organized along the lines of a state (Spencer 1990, 1998, 2000; Wright 1977). In line with this proposition, we should expect to find evidence of key Zapotec state institutions appearing by Late MA I. Flannery and Marcus have argued that among the most important of these institutions were the palace and the multiroom temple (Flannery 1983, 1998; Flannery and Marcus 1976, 1990; Marcus and Flannery 1996: 180–182). Although we would expect
these new institutions to be most evident at the Monte Alban site itself, construction activities dating to MA II and the Classic Period (Monte Albán III) have made it impossible to determine whether the palace or the multiroom temple existed at Monte Albán during Late MA I (Flannery and Marcus 1990: 60; Marcus and Flannery 1996: 165). We can, however, examine the Late MA I occupation at Tilcajete, the first-order center of what we believe to be an autonomous, rival polity. If the polity centered at Monte Albán was, in fact, beginning to develop state institutions by Late MA I phase, the leaders of a rival polity such as Tilcajete might well have responded to Monte Albán's institutional development by developing their own state institutions, in order to help them resist Monte Albán's aggressions more effectively.

This line of reasoning would lead us to expect evidence of at least some state institutions in the Late MA I occupation at Tilcajete. In this light, let us consider Structure 7, the aforementioned palatial residence in Area I (Mound I), on the north side of the El Palenque plaza (Figure 7). Its stone foundations measured 16 m by 16 m and comprised eight rooms arranged around an interior patio; on the western side of the patio was a two-chambered hearth. The stone foundations of the structure originally supported walls made of adobe bricks, some of which were preserved by the fire that coincided with the site's abandonment. Structure 7 is actually part of a larger construction, the Area I palace complex, which comprised nine structures and associated features, including two paved courtyard areas (Figure 11). Using the associated ceramics as well as a series of associated radiocarbon dates, Structure 7 and the entire Area I palace complex can be firmly dated to Late MA I, possibly persisting into the early years of MA II. The earliest radiocarbon date came from a chunk of charcoal that was found in mud mortar between the second and the third courses of foundation stones on the east wall of Room 3 of Structure 7. While the radiocarbon analysis obviously dates the death of the tree or bush from which the sample derived, we think it is likely that the charcoal resulted from the clearing activities (including brush burning) on the previously unoccupied hillslope that must have just preceded the construction of Structure 7. The chunk of charcoal in question was presumably added to the mud mortar during the building process. This sample (Beta – 147540) yielded a conventional radiocarbon age of 2300 ± 80 B.P. (conventional radiocarbon date of 350 B.C.}
We would therefore propose that Structure 7 was built at approximately the interface of Early MA I and Late MA I, an interpretation that is consistent with our observation of abundant Late MA I diagnostic ceramics (but not those of Early MA I) at El Palenque.

In addition to the sample that probably dates the initial construction of Structure 7, we recovered several more samples of charcoal from Structure 7 that date to later points in its occupation, three of which have been submitted for radiocarbon analysis. Beta-1433 54 was a piece of charcoal lying on the floor of Room 6 of Structure 7; it yielded a conventional radiocarbon age of 2110 ± 60 B.P. (conventional radiocarbon date of 160 B.C. ± 60). Beta-143351 was a chunk of charcoal on the corridor surface between Structure 7 and Structure 8; it produced a conventional radiocarbon age of 2080 ± 60 B.P. (conventional radiocarbon date of 130 B.C. ± 60). Beta – 143355 was a piece of charcoal in the patio of Structure 7; it yielded a conventional radiocarbon age of 1970 ± 60 B.P. (conventional radiocarbon date of 20 B.C. ± 60). This latest radiocarbon sample was charcoal from a large deposit of charcoal, ash, and burned adobes and earth in the patio of Structure 7; this deposit is similar to several other areas of charcoal and burned earth and adobe in the Area I palace. The abundant evidence of burning is evidence of a major conflagration that accompanied the abandonment of the Area I palace, which, according to the latest radiocarbon date, occurred in the first century B.C. Although Structure 7 is very similar in size and complexity to later Classic period Zapotec palaces at Monte Albán (Flannery 1983, 1998; Marcus and Flannery 1996: 208–211), the associated Late MA I ceramics and the series of radiocarbon dates with midpoints ranging from 350–20 B.C. make Structure 7 the earliest example of a palatial residence thus far excavated in Oaxaca.

In Area G (Mound G) – on the eastern side of the El Palenque plaza – we excavated Structure 16, which consisted of two large contiguous rooms (one measuring 12.8 m by 2.35 m, and the other 9.8 m by 2.2 m), and two smaller rooms (measuring 3.4 m by 2.2 m and 2.75 m by 2.2 m), one at either end of the major rooms (Figure 12). All four rooms of Structure 16 (like those of Structure 7) had well-preserved stone foundations. Although Structure 16 is somewhat similar to the multiroom temples that have been excavated in MA II (and later) contexts at San Jose Mogote and Monte
Alban (Flannery and Marcus 1976; Marcus and Flannery 1996: 182), Structure 16 is associated with Late MA I ceramics. Thus far, we have run one radiocarbon sample (Beta–143353) from Structure 16; it came from an ashy deposit that was probably created when the structure was abandoned in the conflagration that marked the end of occupation at the El Palenque site. Beta–143353 yielded a conventional radiocarbon age of 1980 ± 70 B.P. (conventional radiocarbon date of 30 B.C. ± 70), almost identical to the latest date from Structure 7. Thus, Structure 16 was undoubtedly in use during the Late MA I occupation of El Palenque and, like the Area I palace complex, was burned and abandoned in the first century B.C., in the very early years of MA II. The associated ceramics and the radiocarbon date show Structure 16 to be one of the oldest excavated examples of a multiroom temple in the Oaxaca Valley.

Despite the overall similarity between the plaza layouts at El Palenque and El Mogote, it is notable that only El Palenque contained examples of a multiroom temple and a palace. At El Mogote, our excavations exposed a three-room high-status residence at Mound A (Excavation Area A), on the plaza’s northern side, and a one-room temple structure at Mound K (Excavation Area B), on the plaza’s eastern side. Both structures date to Early MA I, and neither corresponds to the architectural forms that have been linked to the key institutions of the later Zapotec state (Flannery 1983, 1998; Flannery and Marcus 1976). The Tilcajete data therefore provide evidence of the appearance of state institutions during the Late MA I phase, but not earlier.

To sum up, our results indicate that the Tilcajete polity used various strategies to withstand the expansionist actions of Monte Alban during Late MA I (see Table 1). These strategies of resistance included a shifting of settlement to a more defensible location, the construction of defensive walls, and greater nucleation of population. Also, the Tilcajete polity shows signs of becoming organizationally more complex during Late MA I; our discoveries of a royal palace and multiroom temple at the Late MA I occupation indicate that the Tilcajete polity was adopting state-level institutions at this time. It is significant, we think, that these new institutional buildings were incorporated into a plaza that continued to conform to the traditional layout for the locality, which suggests that the Tilcajete polity adopted state-level institutions and contin-
ued to maintain its political autonomy. We also see evidence of a more hierarchical organization for the Tilcajete polity as a whole in the settlement pattern data for the Ocotlán-Zimatlán subregion. The histogram and frequency polygon of site sizes provide evidence of a shift from a three-level settlement hierarchy in Early MA I (Figure 10) to a four-level settlement hierarchy in Late MA I (Figure 13). We conclude that the Tilcajete polity developed a state organization during Late MA I as a way of reorganizing its resistance to the predatory actions of the Monte Albán state.

Looking eastward to the Tlacolula subregion, we find it intriguing that the settlement pattern data from that subregion also appear to show an increase in hierarchical structure between Early MA I (Figure 14) and Late MA I (Figure 15). We suggest that the Tlacolula subregion, and the Yegiiih site in particular, would be an ideal setting for further research on the topic of resistance and early state development in Oaxaca.

Although Tilcajete is closer to Monte Albán than the Cañada de Cuicatlan (Figures 1 and 2), the Canada shows much evidence of having been subjugated by Monte Albán by the onset of Late MA I, while Tilcajete appears to have maintained its political autonomy until the early years of MA II. We have suggested elsewhere that the Canada was an easier target for Monte Albán than the Tilcajete polity, primarily because the former region was far less populous (Spencer and Redmond 2001a). We have recently conducted a comparative analysis of imported crema ceramics in Late MA I deposits from the Cañada and Tilcajete that reinforces our contention that the two areas had different relationships with Monte Albán during that phase. In Table 2 and Figure 16 we present data on the distribution of various kinds of thin-walled cremas in Feature 14 at El Palenque (SMT – 11b), drawn from our Tilcajete project database, and Feature 4 at the Cañada site of La Coyoter, (Cs 25), with data taken from Spencer and Redmond (1997: Table 9.4). The features are contemporaneous and functionally similar in that they both represent midden deposits adjacent to domestic structures. As Table 2 indicates, Feature 4 from La Coyoter has more examples of crema types (including C. 2, C. 5, C. 6, C. 7, and C. 20) than does Feature 14 at El Palenque (only C. 2, C. 5, and C. 20 are present, and the overall frequency of crema wares is much lower than at La Coyoter). This contrast (see Figure 16) takes on particular significance in view of the fact that La
Coyotera is more than twice as distant from Monte Albán as El Palenque. Our data support the proposition that the Canada was more tightly linked (socially, politically, and/or economically) to Monte Albán during Late MA I than was the Tilcajete polity.

**CONCLUSION**

Although the concept of ‘resistance’ has been used by a number of archaeologists and anthropologists, it is fair to say that these researchers have tended to emphasize the reactive aspects of resistance, that is, the range of responses made by target polities to the expansionist designs of aggressor states (e.g., Gailey 1987; Gunawardana 1992; Morrison 2001; Patterson 1986, 1987; Skalnik 1989). By contrast, we interpret the resistance shown by the Tilcajete polity in Ocotlán/Zimatlán (and perhaps also by the Yegiiih polity in Tlacolula) not only as a reaction to Monte Albán’s aggression, but also as a dynamic force that had profound consequences for the evolutionary trajectory of the Monte Albán state itself. Faced with stiff resistance in both Early MA I and Late MA I from such close-at-hand Oaxaca Valley polities, Monte Albán (not surprisingly) looked toward other, less formidable, regions as potential targets for its expansionist activities. Although future field projects will be required to establish the full spatial extent and timing of Monte Albán’s conquest campaign, it seems reasonably certain that the Canada de Cuicatlan (Spencer and Redmond 1997) was one of these target regions, and Balkansky’s (1997, 1998) recent research indicates that the Sola Valley, some 75 km southwest of Monte Alban, was another region that fell under Monte Albán’s control by Late MA I. These regions both had relatively low populations at the onset of Late MA I and would have been less capable of resisting an attacking force than the Tilcajete or Yegiiih polities. Nevertheless, the conversion of the Canada and the Sola Valley into tributary provinces would still have posed significant organizational challenges for Monte Alban. Most importantly, the Monte Albán leadership would have had to carry out sustained military and administrative actions at 75–80 km (minimally a two-day trip by foot) from the capital, which in turn would have required Monte Albán to develop internal administrative specialization and the concomitant capacity to delegate authority effectively (Spencer 1998, 2000); these features are highly diagnostic of state societies (Wright 1977). Monte Albán clearly responded to the challenge
and developed a more complex political and military organization – an administrative transformation that was undoubtedly financed, in part, by tribute exacted from the conquered provinces. It is important to recognize, moreover, that the Canada and Sola were probably not the only regions subjugated by Monte Alban in Late MA I; some 40 conquest inscriptions are known to be associated with Structure J (built at Monte Alban in MA II), although additional field research will be required to determine which regions are being referred to by the inscriptions and just when they fell under Monte Alban’s control. For the present, it seems undeniable that Monte Alban became a dramatically more powerful polity over the course of Late MA I. Monte Alban then aimed its expansionist designs at the Ocotlán-Zimatlán and Tlacolula subregions, which were finally incorporated into the Monte Alban state by the early years of MA II. Ironically, by initially withstanding Monte Alban’s advances, the Tilcajete and Yegiiih polities may well have contributed – however unwittingly – to the eventual loss of their own political autonomy. Their stubborn resistance compelled Monte Alban to go much farther afield in the pursuit of its military campaigns. Significant changes in Monte Alban’s administration were necessary for these campaigns to be successful, and the result was the development of a powerful, interregional conquest state during Late MA I.

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We followed the same procedure in generating all the site-size histograms and frequency polygons in this paper. First, we recorded the data on site size (in hectares) for Early MA I and Late MA I in Kowalewski et al. (1989: Appendix I). We followed their guidelines for combining Late MA I sites (Kowalewski et al. 1989: Appendix IV), and we also sorted the sites into three groups according to the three subregions that we defined in Spencer and Redmond (2001a): Etla/Central, Tlacolula, and Ocotlan/Zimatlan. We then corrected the Early MA I and Late MA 1 occupation areas of two sites, San Martin Tilcajete and San Jose Mogote, using the results of intensive survey and excavation projects carried out by Spencer and Redmond (2001a) and Marcus and Flannery (1996), respectively. We used SYSTAT 8.0 (SPSS 1998) to produce histograms and frequency polygons of the natural logarithm of site size; the same logarithmic transformation was used in every case. We also used the same number of bars (N=13) in all histograms and polygons to ensure comparability of results.

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TABLE 1
A SUMMARY OF RESISTANCE STRATEGIES
AT SAN MARTIN TILCAJETE

Early Monte Albán I phase:
1. Nucleation – population growth from Rosario-Early I at the El Mogote center, from 25 to 52.8 ha.
2. More centralized organization - plaza construction, dates to the beginning of Early MA I, but follows a design distinct from that at Monte Albán.
3. Three-level settlement hierarchy for Early MA I in the Ocotlán/Zimatlan subregion.
4. Tilcajete’s independence reinforced by restricted interaction between Monte Albán and El Mogote during Early MA I, as shown in the ceramics.
5. These strategies were successful throughout Early MA I, and helped Tilcajete resist a major attack at the end of Early MA I.

Late Monte Albán I phase:
1. Even more nucleation – population growth at the El Palenque center from 52.8 ha to 71.5 ha.
2. Shift of plaza to a more defensible location.
3. Construction of fortifications.
4. Continuation of traditional plaza layout.
5. Development of state institutions – palace, multiroom temple- but built in the context of the traditional plaza layout for the Tilcajete locality.
6. More hierarchical settlement pattern on the subregional level – a shift from three to four levels. Although the population size of the subregional center was not keeping pace with Monte Albán, the Ocotlán/Zimatlán subregion was matching the Etla/Central subregion in terms of levels in the subregional settlement hierarchy.
7. Ceramic data from Tilcajete show less interaction between El Palenque and Monte Albán during Late MA I than is seen in contemporary deposits at the more distant site of La Coyotera in the Canada de Cuicatlan.
### TABLE 2

**COMPARATIVE ANALYSIS OF FEATURE 4, LA COYOTERA, AND FEATURE 14, EL PALENQUE**

<table>
<thead>
<tr>
<th>Feature #</th>
<th>Proveniences</th>
<th>Diagnostics</th>
<th>C.2</th>
<th>C.5</th>
<th>C.6</th>
<th>C.7</th>
<th>C.20</th>
<th>All cremas</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>F. 4</td>
<td>11</td>
<td>424</td>
<td>2</td>
<td>1</td>
<td>6</td>
<td>3</td>
<td>14</td>
<td>26</td>
<td>6.1</td>
</tr>
<tr>
<td>F. 14</td>
<td>13</td>
<td>649</td>
<td>110</td>
<td>0</td>
<td>3</td>
<td>5</td>
<td></td>
<td>0.8</td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**

1. The total number of diagnostics provides an approximation of the overall amount of midden debris contained in each sample.
2. The percentage of cremas is computed by dividing all cremas by the number of diagnostics and then multiplying by 100.
3. Descriptions of the crema types can be found in *La Cerámica de Monte Albán* by Caso, A., Bernal, I., and Acosta, J. (1967), Memorias of the Instituto Nacional de Antropología e Historia, 13 (Mexico).
4. Radiocarbon dates for Feature 4, La Coyotera:
   - Beta – 143349 (Level9):
     - 2 – Sigma calibrated date of 390–40 B.C.
   - Beta – 147537 (Level8):
     - 2 – Sigma calibrated date of A.D. 10–250
   - Beta – 147536 (Level7):
     - 2 – Sigma calibrated date of 100 B.C. – A.D. 250
5. Radiocarbon date for Feature 14, El Palenque:
   - Beta-160901 (Level 5):
     - 2 – Sigma calibrated date of 420–170 B.C.
FIGURES

Figure 1. The Oaxaca Valley, its subregions, and surrounding regions.

Figure 2. The Valley of Oaxaca, showing key archaeological sites (inset adapted from Flannery 1986: Fig. 3.1).

Figure 3. Early Monte Albán I (500–300 B.C.) sites in the Oaxaca Valley, showing boundaries of proposed subregions (redrawn from Blanton et al. 1993: Fig. 3.9).

Figure 4. Late Monte Albán I (300–100 B.C.) sites in the Oaxaca Valley, showing boundaries of proposed subregions (redrawn from Blanton et al. 1993: Fig. 3.12).

Figure 5. The archaeological sites of El Mogote (SMT-1 la), El Palenque (SMT-1 lb), and Los Mogotes (SMT-23), situated about 2 km north of the modern town of San Martin Tilcajete, Ocotlan, Oaxaca.

Figure 6. El Mogote (SMT-11a), showing the plaza, the major mounds, and the shaded surface collection units (schematic map, based on a detailed alidade and plane table map made by the authors in 1993).

Figure 7. El Palenque (SMT-11b), showing the plaza, the major mounds, the stone walls, and the shaded surface collection units (schematic map, based on a detailed alidade and plane table map made by the authors in 1994).

Figure 8. Histogram (a) and frequency polygon (b) of Early MA I site size in the Etla/Central subregion (LOGSIZE is the natural logarithm of site size in hectares); original data from Kowalewski et al. (1989: Appendix I).

Figure 9. Histogram (a) and frequency polygon (b) of Late MA I site size in the Etla/Central subregion (LOGSIZE is the natural logarithm of site size in hectares); original data from Kowalewski et al. (1989: Appendix I).

Figure 10. Histogram (a) and frequency polygon (b) of Early MA I site size in the Ocotlán/Zimatlán subregion (LOGSIZE is the natural logarithm of site size in hectares); original data from Kowalewski et al. (1989: Appendix I).
Figure 11. Schematic drawing of the Area I palace complex, El Palenque (SMT-11b), which dates to the Late Monte Alban I phase.

Figure 12. Schematic drawing of Structure 16, Area G, El Palenque (SMT-11b), a multiroom temple which dates to the Late Monte Alban I phase.

Figure 13. Histogram (a) and frequency polygon (b) of Late MA I site size in the Ocotlan/Zimatlan subregion (LOGSIZE is the natural logarithm of site size in hectares); original data from Kowalewski et al. (1989: Appendix I).

Figure 14. Histogram (a) and frequency polygon (b) of Early MA I site size in the Tlacolula subregion (LOGSIZE is the natural logarithm of site size in hectares); original data from Kowalewski et al. (1989: Appendix I).

Figure 15. Histogram (a) and frequency polygon (b) of Late MA I site size in the Tlacolula subregion (LOGSIZE is the natural logarithm of site size in hectares); original data from Kowalewski et al. (1989: Appendix I).

Figure 16. Bar graph comparing the relative frequency of crema wares in two Late MA I midden deposits: Feature 4 at Loma de La Coyotera (Cs25) in the Canada de Cuicatlan (Spencer and Redmond 1997: Table 9.4); and Feature 14 at the El Palenque site (SMT-11b), at San Martin Tilcajete in the Valley of Oaxaca (unpublished data, Tilcajete Project archives). Percentages were computed by dividing the total number of crema sherds by the total number of diagnostic sherds and multiplying by 100.
Figure 1
Figure 3
Figure 4
Figure 5
Figure 6
Figure 7
Early Monte Albán I Phase
Etlá/Central Subregion

Figure 8
Figure 9

Late Monte Albán I Phase
Etla/Central Subregion

(a) [Histogram showing distribution of LogSize]

(b) [Line graph showing distribution of LogSize]

Figure 9
Figure 10

Early Monte Albán I Phase
Ocotlán/Zimatlán Subregion

(a) Proportion per Bar

(b) Count
Figure 13
Figure 14
Figure 15
Figure 16