

INTERREGIONAL INTERACTION ON THE OAXACA COAST

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Arthur A. Joyce

Department of Anthropology, American Museum of Natural History,
Central Park West at 79th St., New York, NY 10024-5192, USA

Abstract

This article provides a synthetic examination of the role of external relations in the social, cultural, and political development of the Oaxaca Coast. The article deals primarily with the lower Río Verde valley and the southern Isthmus since these two regions have been the focus of archaeological research on the Oaxaca Coast; other areas of the coast are discussed when data permit. The data from the coast indicate that interregional relations were dominated by elites in pursuit of exotic materials and ideas that served to symbolize and legitimize their special status in society. Evidence for contact with some of the most powerful political centers of pre-Hispanic Mexico are documented, including Monte Albán, Teotihuacan, Tenochtitlan, and possibly El Tajín and Tula among others. Despite contact with these powerful centers the Oaxaca Coast appears to have been politically autonomous for most of its pre-Hispanic history.

Beginning with the pioneering work of Alfonso Caso at Monte Albán in the 1930s, archaeological research in highland Oaxaca has provided one of the most detailed pictures of pre-Hispanic social development from anywhere in Mesoamerica (Figure 1). While research in the Pacific Coast region of Oaxaca has not been as intensive as in the highlands, recent work has shown that the coast experienced a diversity of settlement histories and sequences of social development (Brockington 1966, 1970; Brockington and Long 1974; Brockington et al. 1974; Fernández Dávila and Gómez Serafín 1989; Joyce 1991a, 1991b; Joyce and Winter 1989; J. Zeitlin 1978a; R. Zeitlin 1978, 1979:1, 1990). The southern Isthmus and the lower Río Verde valley were the most densely settled areas along the Oaxaca Coast (Brockington 1973; Grove 1988; Joyce 1991a; Joyce and Winter 1989; J. Zeitlin 1978a, 1978b). The southern Isthmus on the eastern coast of Oaxaca was a center of population by the Early Formative, while the lower Río Verde valley on the western coast supported large settlements by the Late Formative (Figure 2). Several large sites recorded in other coastal areas appear to date primarily to the Late Formative and Classic periods (Brockington 1973, 1974, 1987). Along some sections of the coast such as the Huatulco Bays area, settlement was sparse until the Postclassic, when virtually all areas were occupied (Brockington 1974; Fernández Dávila and Gómez Serafín 1989).

As this special section of *Ancient Mesoamerica* demonstrates, a central focus of research on the Oaxaca Coast has been the role of external contacts in the social development of the region (Ball and Brockington 1978; Brockington 1983; Joyce 1991a, 1991b; Joyce and Zeitlin 1992; J. Zeitlin 1978a; R. Zeitlin 1978, 1979:1, 1982, 1990; Zeitlin and Joyce 1992). This emphasis is not surprising given the resurgence of interest in the effects of interregional interaction on sociopolitical change (e.g., Renfrew and Cherry 1986; Schortman and Urban, eds. 1992). In Mesoamerica (Figure 3), research on interregional interaction

has increasingly stressed the importance of preciosities in long-distance exchange (Blanton and Feinman 1984; Flannery 1968; Grove and Gillespie 1992; Joyce 1991a; Sabloff 1986; Schortman and Nakamura 1991; Spencer 1982). In part, this focus on prestige items has emerged from the realization that the interregional exchange of subsistence goods would usually have been energetically inefficient (Blanton and Feinman 1984; Drennan 1984a, 1984b). However, a key factor in interregional interaction was undoubtedly the desire of elites for materials and knowledge derived from distant places. Helms (1979, 1987, 1988, 1991) has persuasively argued that the control of esoteric knowledge and exotic materials from distant sacred places is a crucial element in the maintenance of prestige and power in complex societies. In the political ideologies of chiefdoms and archaic states exotic goods and ideas were crucial to the maintenance of power since they symbolized and legitimized elite authority to control human and natural resources (Blanton and Feinman 1984; Earle 1987; Grove and Gillespie 1992; Helms 1979, 1988; Joyce 1991a). The mere fact that an idea or artifact was obtained from a geographically distant location gave it an aura of prestige and ritual potency (Helms 1988, 1991).

Despite this emerging consensus about the importance of preciosities, a key problem in interaction research continues to be the degree to which interregional relations were dominated by core regions (Schortman and Urban, eds. 1992). The study of interregional relations in Mesoamerican archaeology has been often been described as a series of horizon styles emanating from powerful political centers such as Olmec San Lorenzo and La Venta during the Early/Middle Formative, Teotihuacan during the Classic, and Tenochtitlan during the Late Postclassic (e.g., Lowe 1978; Pasztor, ed. 1978; Sanders 1989; Tolstoy 1978). Horizon styles are defined by widespread decorative motifs, symbols, and trade goods. The spread of horizon styles

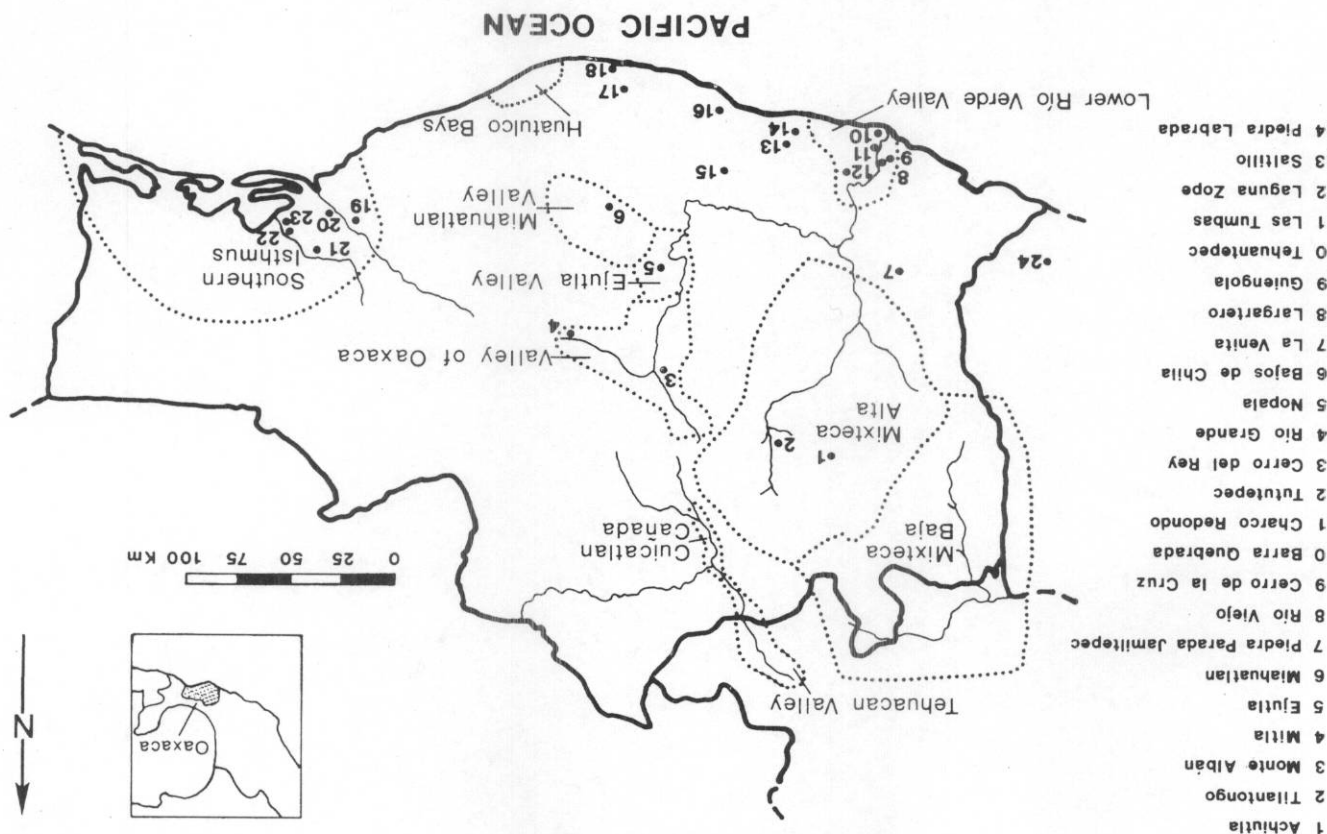


Figure 1. Map of the state of Oaxaca showing regions and sites mentioned in the text.

throughout Mesoamerica has often been explained as the result of aggressive trade policies, migration, and/or military conquest by these centers (Adams 1990:34-35; Parsons 1969; Sanders 1989; Santley 1983, 1989). This perspective views interregional relations as having been largely dictated by the material interests of core regions often at the expense of peripheries. It is becoming increasingly apparent, however, that there is a great deal of variability in the causes and local expressions of horizon styles. Horizon styles are not homogeneous and many of the stylistic and material markers once thought to have emanated from centers like San Lorenzo, Teotihuacan, and Teotihuacan actually are found earliest in other regions (Grove 1989; Grove and Gillespie 1992; Rattray 1990). Horizon styles seem to have originated and spread from numerous sites through a variety of processes including exchange, conflict, conquest, alliance formation, diffusion of religious and political ideas, migration, and intermarriage (Ball 1983; Berio 1984; Bove 1991; Demarest 1989; Grove 1989; Grove and Gillespie 1992; Marcus 1983a; Rice 1983; Santley 1983, 1989; Smith 1986, 1990; Smith and Heath-Smith 1980; Stone 1989).

These data raise the question of the degree to which less complex regions in Mesoamerica were dominated peripheries or independent partners in largely reciprocal interactions. The problem is to determine whether core regions coerced and exploited peripheries or if interregional interaction was carried out between independent polities at different scales of complexity. In the former condition the spread of stylistic attributes would

LAGUNA ZONE AND EARLY/MIDDLE FORMATIVE EXCHANGE

The Early/Middle Formative (1500-400 B.C.) on the Oaxaca Coast is known primarily from the enormous site of Laguna Zope in the southern Isthmus (R. Zeitlin 1978, 1979:1). Current evidence suggests that before 500 B.C. the Oaxaca Coast west of the Isthmus was sparsely inhabited (Brockington 1970; Fernandez Dávila and Gómez Serafín 1988; Joyce 1991a). Stylistic comparisons of ceramics as well as obsidian source analyses by

have resulted from the imposition of the core's culture on its dominated periphery (e.g., Hirth 1978; Spencer 1982; Weigand 1992:228). In the latter instance the spread of horizon styles could have resulted from the emergence of a shared social identity among interacting elites that symbolized their special status within their own polities (Schortman 1989; Schortman and Urban 1987, 1992). Of course these two perspectives are not mutually exclusive, because cores might have dominated some areas while interacting reciprocally with others.

This article examines the evidence for external contacts among Oaxaca Coast populations throughout the pre-Hispanic sequence. The role of external relations in the social, cultural, and political development of various sections of the Oaxaca Coast is examined. In particular, I consider the degree to which coastal regions were dominated peripheries or independent polities participating in reciprocal interactions with other regions.

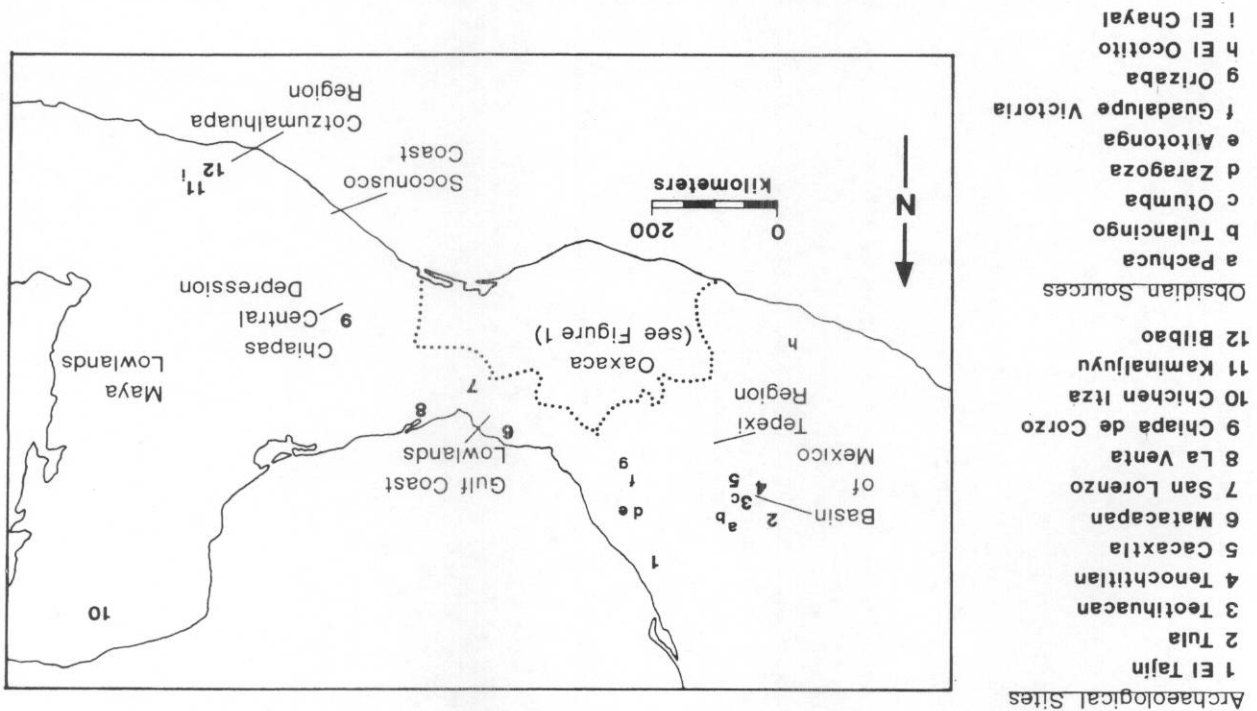


Figure 3. Map of Mesoamerica showing regions, sites, and obsidian-source locations mentioned in the text.

the Gulf Coast was not controlled entirely by La Venta. The Valley of Oaxaca appears less likely as an exchange route to the southern Isthmus as Middle Formative obsidian analyzed in the former region is primarily from Olumba, Tulancingo, and Guadalupe Victoria (Pires-Ferreira 1975). A possible Pacific Coast exchange route is suggested by the presence at Laguna Zope of obsidian from El Ocotillo in Guerrero. It should be noted, however, that the location of El Ocotillo has not been verified in the field so that the origin of obsidian attributed to this source is not definitively established (R. Zeitlin 1979:1:257). Finally, it continues to appear that little obsidian was transported east through the southern Isthmus to Chiapas or Guatemala.

During the Early/Middle Formative Laguna Zope was one of the largest sites in Mesoamerica, with settlement reaching 87.5 ha by the Middle Formative (J. Zeitlin 1978a:194). Curiously, only a single small site has been found in addition to Laguna Zope for this period in the 100-km² survey area along the Río de los Perros (J. Zeitlin 1978a:194), suggesting that Laguna Zope may have functioned as a primate center. The close proximity of productive agricultural lands as well as freshwater ponds and an enormous estuary would have made the area around Laguna Zope economically attractive. In addition, Robert Zeitlin (1978, 1979:1, 1982, 1993) has argued that Laguna Zope's unusually large size may have resulted from its preferential access to sources of marine shell. Throughout the Formative, Laguna Zope was a locus for the production of shell ornaments. Pacific Coast shell and evidence for shellworking has been found at Early/Middle Formative sites in the Valley of Oaxaca (Pires-Ferreira 1975; Winter 1984), though shell is unusual at sites in other regions such as the Mixteca Alta and the Cuicatlan Cañada until the very end of the Middle Formative.

The present evidence leaves little doubt that Laguna Zope was an important link in Early/Middle Formative exchange networks. Presumably, by the end of the Early Formative Laguna Zope was the center of a chiefdom, given its large size and assuming that some of the large public mounds at the site had already been built at that time. If Laguna Zope was the center of a chiefdom, the ornamental shell produced at the site probably served as a prestige item exchanged locally and interregionally primarily among chiefs. Obsidian may also have been a prestige item imported into the southern Isthmus. While obsidian artifacts generally did not require special skills for their production, these artifacts were transported from distant source locations, which presumably made them valued objects. Distributional studies from several regions of Oaxaca suggest that obsidian was preferentially controlled by elites from the Early Formative to at least the Late Classic (Blanton 1978:77; Drennan and Flannery 1983:70; Joyce 1991a:277; Spencer 1982:169; Whalen 1981:59; R. Zeitlin 1993). I see no evidence in the southern Isthmus, however, for a direct Olmec presence resulting from factors such as migration, warfare, or trading enclaves. The widely shared ceramic styles of the Early/Middle Formative that included southern Isthmian pottery were probably components of a shared elite identity transmitted through this network of prestige-good exchange (Grove and Gillespie 1992). The rapid expansion in the size of Laguna Zope during the Middle Formative (J. Zeitlin 1978a:194), as well as an increase in the overall importation of obsid-

ian and the production of shell ornaments, may be related to a rise in the size and complexity of interacting chiefdoms throughout western Mesoamerica leading to an increase in the demand for prestige goods.

EXTERNAL CONTACTS AND THE RISE OF CHIEFDOMS ON THE WESTERN COAST

During the Late Formative (400-100 B.C.) Laguna Zope continued as the focus of settlement in the southern Isthmus (J. Zeitlin 1978a). However, the lower Rio Verde valley on the western coast (Figure 4) also emerged as an area of increasing population size and social complexity (Joyce 1991a, 1991b; Joyce and Winter 1989). Survey and excavation in the lower Rio Verde region have recorded 20 sites dating to this period (Joyce 1991a:426), including Charco Redondo, which may have been as large as 100 ha (Gillespie 1987). Evidence for a two-tiered settlement hierarchy, ascribed status differences, elite control of prestige goods, and large-scale construction activities suggest that one or more relatively small-scale chiefdoms existed in both the lower Rio Verde and the southern Isthmus at this time (Joyce 1991a, 1991b; Zeitlin and Joyce 1992). Along other sections of the coast the Late Formative marks the earliest period of any known settlement (Brockington 1969, 1970; Brockington et al. 1974), though some areas, such as the Huatulco Bays region, were probably still unoccupied (Fernández Davila and Gómez Serafín 1989). Excavations at sites in the lower Rio Verde valley and at Laguna Zope indicate that the exchange of prestige goods continued to be important to Oaxaca Coast elites during the Late Formative. Research throughout southern Mexico suggests that the network of interelite exchange of prestige goods was feeding the political economies of increasingly complex chiefdoms (Joyce 1991a, 1991b; Redmond 1983; Spencer 1982; Winter 1984, 1989a, 1989b:63; R. Zeitlin 1978, 1979:1, 1990). Material also exchanged through this network included elite ceramics, obsidian, marine and freshwater shell, greenstone, and possibly dried fish, shrimp, salt, and tropical fruits and nuts (see Voortgies 1989). Data from the lower Rio Verde valley indicate exchange relations with at least two distinct regions during the Late Formative (Joyce 1991a, 1991b). Excavations at the sites of Cerro de la Cruz and Rio Viejo have recovered several hundred sherds imported from the Valley of Oaxaca and one other region as yet unidentified. Sherds from both types of imported pottery were almost exclusively from decorated serving vessels. While the

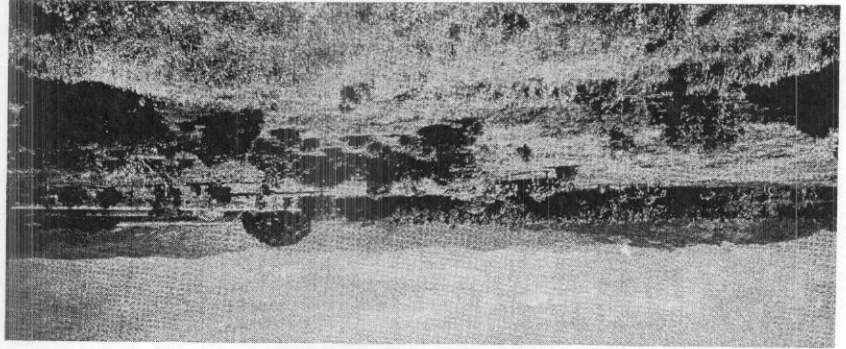


Figure 4. The lower Rio Verde floodplain on the western coast of Oaxaca.

total number of sherds seems small, a distributional analysis of the imported pottery revealed a strong association between these sherds and contexts where independent evidence indicated high-status and/or ritual functions (Joyce 1991a). These data are consistent with the hypothesis that the imported pottery functioned as a prestige item that was preferentially controlled and distributed by elites. Obsidian artifacts were also imported into the lower Rio Verde valley, possibly as a prestige item, although obsidian seems to have been more widely available than imported pottery (source studies are currently in progress). In the southern Isthmus the quantity of imported obsidian at Laguna Zope appears to have remained constant relative to the Middle Formative (R. Zeitlin 1978). During the Late Formative obsidian at Laguna Zope was primarily from Guadalupe Victoria (33%) and Unknown Source 2 (42%), while El Chayal obsidian declined to only 9% of the sample. These data suggest that the highland Oaxaca exchange route and the Gulf Coast lowland route could have continued at this time. Several items have been recovered in Late Formative deposits that might represent prestige goods that were transported from the coast to other regions. The shellworking industry at Laguna Zope experienced an eightfold increase in production during the Late Formative (R. Zeitlin 1979a). Worked and unworked shell has been recovered as offerings in Late Formative burials in the lower Rio Verde region, although there is currently no evidence for the existence of large-scale local shellworking (Joyce 1991a). Both worked and unworked Pacific Coast shell have been found in elite burials and residences at sites in the Valley of Oaxaca (Drennan 1976:273; Whalen 1981:103; Winter 1984:204-205), the Mixteca Alta (Spores 1984:24; Winter 1984:206-207), and the Cuicatlan Cañada (Spencer 1982:171). These data suggest that marine shell may have been traded as a prestige item from Laguna Zope and possibly other areas of the Oaxaca Coast to interior regions. Charred remains of coyol palm nut (*Acrocomia mexicana*) and possibly zapote (Sapotaceae) have been recovered in Late Formative contexts in the lower Rio Verde valley (Woodard 1991). Spencer (1982) argues that tropical fruits and nuts may have been a prestige item traded from lowland regions to the Oaxacan highlands (cf. Lenz 1991). However, little evidence is available to show that these fruit and nut crops were actually brought into the highlands (Spencer 1982:155). It is also possible that salt, fish, *pindura* dye, cotton, and cacao could have been traded from the coast to other regions, although evidence for the exchange of these items in Late Formative Oaxaca has not yet been recognized.

ried out by the hilltop center of Monte Albán in the Valley of Oaxaca (Flannery 1983a; Marcus 1983a; Redmond 1983; Spencer 1982). The most compelling evidence for conquest by Monte Albán comes from the Cuicatlan Cañada region north of the Valley of Oaxaca (Redmond 1983; Spencer 1982). Archaeological data from the region indicate a disruption of settlement patterns and social organization, a burned site, and the apparent establishment of a military garrison from the Valley of Oaxaca. It has been argued that this expansionistic strategy was carried out by Monte Albán to gain control over the production of prestige goods in peripheral regions such as the Cañada (Feinman and Nicholas 1993; Spencer 1982).

Much of the recent research on the Oaxaca Coast has focused on determining the impact of Monte Albán on Terminal Formative society (Joyce 1990, 1991a, 1991b; Joyce and Winter 1989; Joyce et al. 1988; R. Zeitlin 1978, 1979:1, 1990). This research was in part stimulated by Joyce Marcus's (1976, 1983a) iconographic study of the Terminal Formative "conquest slabs" in the main plaza at Monte Albán. The conquest slabs consist of approximately 50 carved stones that have been interpreted as places conquered by and/or paying tribute to Monte Albán during the Terminal Formative (Caso 1938, 1947; Marcus 1976, 1983a). Marcus (1983a) compared the place signs on the conquest slabs to place signs of known provenience from the *Codex Mendoza*, a sixteenth-century Aztec document, and found similarities in four cases. One of these was identified as Tututepec, located in the foothills above the lower Río Verde floodplain. Marcus (1988) argues that these place signs are named hills representing regions rather than specific sites, suggesting that that the lower Río Verde valley may also have been subjugated by Monte Albán.

At present, however, archaeological research in both the lower Río Verde and the southern Isthmus has recovered no evidence of conflict or conquest such as has been found in the Oaxacan interior (Joyce 1991a, 1991b; R. Zeitlin 1990, 1993). There is no evidence for defensive walls, burned sites, or battle scars with traumatic wounds that would signal conflict; nor are there significant changes in settlement patterns and social organization that might represent indirect evidence for conflict. It is possible that Monte Albán may have made occasional military raids on the coast or formed alliances with coastal elites, but at present there are no indications of conquest or long-term political domination.

While the Oaxaca Coast does not appear to have been conquered by Monte Albán, there is evidence for a disruption in exchange patterns that may have resulted from interregional conflict in the interior. In the lower Río Verde valley the data suggest that long-distance exchange decreased since few nonlocal ceramics have been identified in Terminal Formative deposits and the density of obsidian artifacts appears to have declined (Joyce 1991a:524-534). Data from the southern Isthmus are also consistent with a breakdown in exchange with the Oaxacan highlands. The majority of obsidian imported into the southern Isthmus during the Terminal Formative was from Guadalupe Victoria and El Chayal (R. Zeitlin 1978, 1979:1). The Guadalupe Victoria obsidian could have reached the southern Isthmus either through highland Oaxaca or via the Gulf Coast lowlands. However, obsidian procurement patterns suggest that the Guadalupe Victoria obsidian reached the southern Isthmus via the lowland route. First, green obsidian from the Pachuca sources in the Basin of Mexico, common in Late/Terminal For-

The involvement of Oaxaca Coast chiefs in an extensive network of prestige-goods exchange appears to have had somewhat variable effects on aspects of local culture along the coast. In the lower Río Verde valley there appears to have been little effect on aspects of indigenous culture such as ceramic styles, architectural patterns, and mortuary practices, as these cultural patterns remain distinct relative to other regions (Joyce 1991a, 1991b). In the southern Isthmus, Late Formative ceramic styles were affiliated primarily with regions to the east, including the Chiapas Central Depression and parts of the Maya Lowlands (R. Zeitlin 1978, 1979:1). Ceramics in the southern Isthmus experienced a distinctive shift toward hard, lustrous-slip decorated and lusturan-decorated pottery styles in the southern Isthmus may simply reflect the emulation of decorative styles from powerful chiefdoms emerging at sites to the east such as Chiapa de Corzo and Kaminaljuyu (Demarest 1988). During the Late Formative the nature of interregional exchange and its role in Oaxaca Coast society does not appear to have changed significantly. Coastal chiefs appear to have been involved in a network of prestige-goods exchange involving elites in several regions. However, the establishment of exchange relations between the lower Río Verde and the Valley of Oaxaca, as well as the probable continuation of interaction between the latter region and the southern Isthmus, set the stage for a significant shift in interregional relations during the Terminal Formative. This shift in interregional interaction appears to have been triggered by social changes in the Valley of Oaxaca involving the rise of what was probably Mesoamerica's first state, with its capital at the site of Monte Albán (see Joyce 1991a).

A significant shift in interregional relations occurred on the Oaxaca Coast and throughout much of southern Mexico during the Terminal Formative (100 B.C.-A.D. 250). At this time, a variety of cultural patterns including hieroglyphic writing, calendrics, and ceramic styles diffused from the Valley of Oaxaca to regions throughout the interior of Oaxaca and southeastern Puebla (Gaxiola 1984; Joyce 1991a; Spencer and Redmond 1982; Winter 1984). In addition, these regions appear to have experienced increases in interregional conflict as suggested by settlement shifts to defensible hilltop locations, the presence of probable defensive walls around some hilltop sites, apparent trophy skulls from several sites, sites that may have been burned and/or rapidly abandoned, and iconographic representations of conflict and conquest (Caso 1938, 1947; Flannery 1983a; Joyce 1991a; Marcus 1983a; Redmond 1983; Spencer 1982; Winter 1989b:37-38). Not surprisingly, a decline appears to have occurred in the interregional exchange of prestige goods (Joyce 1991a:579-592).

Several researchers have argued that this evidence reflects a policy of interregional conquest and political domination car-

MONTE ALBÁN AND THE OAXACA COAST

In addition to disrupting interregional exchange, conflict in the Oaxacan interior may have led indirectly to the diffusion of ceramic styles to the coast (Joyce 1991b). That is, during the Late Formative elites in the lower Rio Verde obtained fancy pottery, obsidian, and probably other prestige items through long-distance exchange. The decline in interregional exchange during the Terminal Formative would have disrupted the local political economy and possibly forced elites to look elsewhere for prestige items. To solve this problem elites in the lower Rio Verde valley may have developed special relationships with certain local artisans, especially potters, and enlisted them to manufacture items such as fancy pottery to take the place of nonlocal products as prestige goods. Gray wares in the lower Rio Verde constituted the most elaborately decorated serving bowls during the Terminal Formative (Joyce 1991a). The restriction of elaborate pottery to gray wares suggests that these vessels signaled relatively high status. Since actual highland gray wares were no longer available, it may have been advantageous for coastal elites to mimic those vessels, at least in a general fashion. The increasing political importance of Monte Alban could also have encouraged elites to appropriate cultural attributes linked to that site, such as pottery styles.

At Laguna Zope in the southern Isthmus the shellworking industry shifted from a broad communitywide basis to the

restricted manufacture of shell ornaments by elites or artisans linked to elite households (R. Zeitlin 1993). As discussed above, it was also at this time that highland gray-ware styles began to spread to the southern Isthmus (R. Zeitlin 1978, 1979:1, 1990). It is possible that the disruption of long-distance exchange forced elites at Laguna Zope both to mimic highland gray-ware pottery styles and appropriate shell-ornament production to replace the prestige items formerly obtained from other regions.

Evidence from the Ejutla site in the Ejutla Valley also suggests a shift in the nature of coastal-highland exchange during the Terminal Formative (Feinman and Nicholas 1993; Feinman et al. 1991). Prior to the Terminal Formative, the data from the Oaxacan interior suggest that finished shell ornaments were primarily imported from the coast to the highlands. Presumably, some of the ornaments were manufactured at Laguna Zope. However, at the Ejutla site a large-scale shellworking industry was developed during the Terminal Formative and continued into the Classic. The data from Ejutla indicate that unworked shell was imported from the Pacific Coast and then worked into ornaments and probably exchanged to other highland regions. Therefore, during the Terminal Formative there appears to have been a shift in the nature of shell imported into the highlands, from finished ornaments to raw material. These data too are consistent with a disruption in the previous mode of exchange between the highlands and the coast.

While the southern Isthmus and the lower Rio Verde valley do not appear to have been conquered, it is possible that other less densely settled areas of the coast were dominated by Monte Alban. An intriguing clue that the central coast may have had a different relationship with the highlands comes from the Bajos de Chila site complex as well as the sites of Largarero and La Venita (Figure 1). At these sites, Brockington and his colleagues recovered pottery that appears to have been imported to the Valley of Oaxaca during the Terminal Formative (Brockington 1970, 1983; Houston 1974). These are the graphitic-and-red painted pottery of the Gralisa Ceramic Group defined by Mar-

mative deposits in the Valley of Oaxaca (Elam et al. 1992; Joyce 1991a:584), is not found at Laguna Zope until the Postclassic (R. Zeitlin 1978, 1982). In addition, preliminary source studies from the Valley of Oaxaca indicate that Guadalupe Victoria and El Chayal obsidian is rare in Late Formative-Classic period contexts (Elam et al. 1992). Toward the end of the Terminal Formative both Guadalupe Victoria and El Chayal obsidian declined in frequency in the southern Isthmus, concurrent with an increase in obsidian probably imported from Zaragoza, Puebla (R. Zeitlin 1979:1, 1982). Since a similar increase in Zaragoza obsidian is observed at the same time at Matcacapan on the Gulf Coast (Robert Santley, personal communication 1992), it is reasonable to assume that this obsidian reached the southern Isthmus via the lowland route. Finally, obsidian recovered in late Terminal Formative Niti phase contexts at Laguna Zope originated from 11 source locations (R. Zeitlin 1979:1:77), which was the maximum number for any period. People in the southern Isthmus may have frequently switched from one source to another as transportation routes opened and closed with shifting patterns of conflict in the highlands.

Despite the apparent disruption in exchange relations with highland Oaxaca, ceramic styles on the coast were influenced by the Valley of Oaxaca as they were in many regions of southern Mexico. In both the lower Rio Verde valley and the southern Isthmus people began to manufacture incised gray-ware ceramics whose styles resembled to varying degrees those from the Valley of Oaxaca. In the lower Rio Verde valley this shift in pottery styles involved the first known local production of gray wares during the Terminal Formative (Joyce 1991a). In the southern Isthmus, medium-paste gray wares were manufactured in small quantities during the Late Formative (R. Zeitlin 1979:II:392-395). However, by the Terminal Formative, fine-paste incised gray wares with affiliations to Valley of Oaxaca pottery became a dominant ware in the southern Isthmus (R. Zeitlin 1979:II). The diffusion of this "gray-ware horizon" from the Valley of Oaxaca to the lower Rio Verde and the southern Isthmus shows that heightened conflict in highland Oaxaca did not impede the transfer of information on ceramic designs to the coast.

In the lower Rio Verde and the southern Isthmus, however, gray wares were locally manufactured and were not exact imitations of Valley of Oaxaca pottery. In both regions, many gray-ware vessels had regionally distinctive formal and especially decorative attributes (Joyce 1991a). For example, the most elaborate Terminal Formative gray wares in the lower Rio Verde were decorated thin-walled composite-silhouette bowls that bear little resemblance to pottery from other regions. If the lower Rio Verde had been subjugated by Monte Alban, it seems likely that local potters would have been compelled to produce prestigious ceramics consistent with highland Zapotec cultural templates as has been suggested for the Cuicatlan Catanda (Redmond 1983:116-117). These data suggest diffusion of ideas concerning ceramic production and design from other regions to the Oaxaca Coast but not the exact imitation of those vessels. The gray-ware ceramic horizon appears to have originated in the Valley of Oaxaca (Winter 1984:203-204), but because gray-ware styles were spreading throughout Oaxaca by the Terminal Formative (Gaxiola 1984; Joyce 1991a; Spencer and Redmond 1982; Spores 1972; R. Zeitlin 1979:II), coastal potters could have adopted ideas on producing these ceramics from several regions.

architecture, and numerous carved and uncarved stelae (Joyce 1991a; Joyce and Winter 1989; Winter 1987). The apparent scale and density of settlement at Río Viejo during the Classic suggest that it became a small urban center and probably dominated the region politically. At this time several other sites in the lower Río Verde contain large public mounds as well as carved and/or plain stelae. Other large Classic-period sites with monumental architecture and stelae on the western coast include Río Grande, Piedra Parada Jamiltepec, and probably Nopala (Brockington 1973, 1987; Decicco and Brockington 1956).

Data from the Oaxaca Coast indicate a realignment of inter-regional relations by the Classic period. Stylistic ties to highland Oaxaca declined by the late Terminal Formative (A.D. 100–250) in the lower Río Verde valley and by the Early Classic (A.D. 250–550) in the southern Isthmus. During the Early Classic, other regions that had been influenced by Monte Albán during the Terminal Formative such as the Mixteca Alta, Mixteca Baja, and the Cuicatlan Cañada also experienced a decline in evidence for interaction with the Valley of Oaxaca. In part, this contraction in Monte Albán's interregional importance was almost certainly related to the emergence of the urban center of Teotihuacan in the Basin of Mexico.

The influence of Teotihuacan throughout Mesoamerica during the Early Classic has been well documented (Berio 1984; Brown 1977; Pasztory, ed. 1978; Sanders and Michels 1977; Santley 1983; Clark 1986). Teotihuacan appears to have participated in a wide-ranging trade network that extended from central Mexico to the Maya area. Obsidian and probably other items produced in the Basin of Mexico were exchanged for a variety of products including shell, cacao, cotton, and pottery. In addition, many ceramic and architectural styles as well as iconographic elements appear to have spread throughout Mesoamerica probably via this exchange network. It has often been argued that these widespread decorative motifs and symbols define a horizon style emanating from Teotihuacan (Pasztory, ed. 1978; Santley 1983, 1989).

Some scholars view the exchange of materials and ideas during the Early Classic as having been controlled in large part by an expansionist trading empire ruled by Teotihuacan (Brown 1977; Million 1988; Santley 1983, 1989). Proponents of this view argue that Teotihuacan's mercantile interests were advanced through a multifaceted strategy involving conquest, colonization, alliance, and trade. However, other researchers dispute the degree to which Teotihuacan controlled interregional exchange (Ball 1983; Clark 1986). Purported evidence for contact with Teotihuacan varies greatly from region to region and at times from site to site (Million 1988; Santley 1983, 1989; Stark 1989:145; J. Zeitlin 1987). On the Oaxaca Coast, evidence usually seen as markers of "Teotihuacan influence" are abundant in the lower Río Verde valley but rare in the southern Isthmus (see below).

Thus far, the Early Classic in the lower Río Verde region is known primarily from excavations at the sites of Río Viejo and Barra Quebrada (Joyce and Winter 1989). While the analysis of Early Classic contexts at these sites is not yet completed, the available data on ceramic styles and imported lithics suggest possible contacts with the Basin of Mexico. Early Classic Coyuche-phase orange wares resemble central Mexican Thin Orange pottery (Joyce 1991a:168). Other presumed central Mexican diagnostics found in ceramics of the lower Río Verde valley

garret Houston (1974). Visually, the Gralísa ceramics are very similar to pottery type K.5 from the Valley of Oaxaca (compare Houston [1974:Figures 1–4] to Caso et al. [1967:lámina Xe–f]), which appears to have been imported into that region (Caso et al. 1967:51–52; Kowalewski et al. 1978:191). If the central coast of Oaxaca was dominated by Monte Albán, products such as unworked marine shell and fancy pottery may have been exported as tribute and transported to the highlands. However, without additional research in the central-coast region these suggestions will remain speculative.

To summarize, at present the data from the Oaxaca Coast do not suggest conquest and long-term domination by Monte Albán during the Terminal Formative, although conflict in the highlands may have disrupted coastal exchange patterns. It is possible that Monte Albán may have occasionally raided the coast, extracting small amounts of tribute, and even forging temporary alliances with local elites. This type of interaction would account both for a disruption in exchange and for the kind of diffusion apparent between the highlands and the coast. Elites on the coast may have responded to the disruption of exchange with the highlands by establishing stronger ties with local artisans and enlisting some of them to manufacture fancy pottery and shell ornaments to take the place of imported items as prestige goods. Since the fancy local pottery took on "foreign" stylistic elements (i.e., gray paste and certain decorations like combed bases) it would have retained its exotic, prestigious character (see Helms 1979, 1988, 1991). Greater control of locally made prestige goods would also have allowed elites to consolidate power during a time of increasing interpolity competition. Regardless of the precise process that led to the diffusion of ceramic styles and the disruption of exchange, it is clear that the reciprocal relations of the preceding centuries had broken down and there was at least some recognition by coastal peoples of the political ascendancy of Monte Albán. The disruption of exchange between the Oaxaca Coast and highlands may also have encouraged coastal elites to look to more distant regions to obtain prestige items. As discussed in the next section, by the Early Classic the Oaxaca Coast had established exchange ties with central Mexico, notably the immense urban center of Teotihuacan.

CENTRAL MEXICO AND CLASSIC-PERIOD INTERACTION

By the Classic period (A.D. 250–900) the size and complexity of politics on the western coast clearly exceeded those of the eastern coast. In the southern Isthmus, Laguna Zope was abandoned by the beginning of the Classic period, and a new regional center emerged at Saltillo (J. Zeitlin 1978a, 1978b). While settlement at Saltillo reached 150 ha by the end of the Classic, the site has few large mounds, and only a single carved stone monument has been recorded there (J. Zeitlin 1978a:66). No other large Classic-period sites have been located on the eastern coast, although several sites have small mounds and settlement possibly reaching a few dozen hectares (Brockington 1974; J. Zeitlin 1978a). In contrast, the lower Río Verde valley experienced a nucleation in settlement relative to the Formative as well as the emergence of a three-tiered settlement hierarchy (Joyce 1991a:431–434). Río Viejo became the dominant center for the region with settlement over approximately 300 ha, massive public ar-

In contrast to the lower Río Verde valley, the southern Isthmus lacks the so-called central Mexican ceramic markers (J. Zeitlin 1978a) as well as green obsidian (R. Zeitlin 1982). In their report on the lithics from the Oaxaca Coast Project, Long and Brockington (1974) found that green obsidian was most frequent in the central portion of the survey area and was entirely absent from sites east of Huatulco. These data suggest that elites did not engage in exchange or a shared social identity with Teotihuacan. Instead of obsidian from the Basin of Mexico, nearly all Early Classic obsidian sampled in the southern Isthmus was from the Veracruz sources of Zaragoza (78%) and Altolonga (17%). Robert Zeitlin (1982) suggests that the Zaragoza and Altolonga sources may have been controlled by El Tajin in the lowlands of central Veracruz (Figure 3). However, the Early Classic is poorly documented at El Tajin (Brueggemann and Ortega Guevara 1989), and it is difficult to determine whether the site could have controlled these obsidian sources. Early Classic pottery in the southern Isthmus, especially fine-paste kaolin white wares often with resist painting, suggest Gulf Coast ties, although detailed comparisons have not yet been completed (J. Zeitlin 1978a:92-95).

During the Late Classic (A.D. 550-900) evidence for interaction with the Basin of Mexico declines while ties to the Gulf Coast lowlands continue and may intensify. In the lower Río Verde valley green Pachuca obsidian decreases to only 8% of the Late Classic sample, while preliminary comparative studies of pottery from this period reveal few cross-ties with other regions (Joyce 1991a:169-171). In the southern Isthmus, white-ware ceramics with general affiliations to the Gulf Coast lowlands continue during the Late Classic (J. Zeitlin 1978a). Late Classic deposits at the site of Saltillo also included imported pottery from regions to the north including Tuxtla Polychrome from the Gulf Coast lowlands and a Tepu Polychrome vase probably from the western Maya Lowlands as well as material tentatively identified as imports from the Río Chachalacas area in the lowlands of central Veracruz (J. Zeitlin 1978a:94). Analysis of obsidian from the southern Isthmus also suggests a Gulf Coast connection since the Zaragoza and Altolonga sources account for 78-96% of the Late Classic material (R. Zeitlin 1979:1:77). Control of these source locations by El Tajin is more likely during the Late Classic since the site was clearly a powerful center by this time (Brueggemann and Ortega Guevara 1989; Raesfeld 1990; Wilkerson 1980). These data suggest that the southern Isthmus may have been involved in exchange relations with El Tajin during the Late Classic (R. Zeitlin 1982). Iconographic evidence from Oaxaca Coast carved-stone monuments can also be interpreted as evidence for contact with Teotihuacan and El Tajin during the Classic period. To date, approximately 70 carved monuments as well as numerous plain stelae have been recorded along the western coast and into eastern Guerrero (Jorin 1974; Joyce and Winter 1989; Piña Chan 1960; Winter 1987; J. Zeitlin 1993). However, along the eastern coast of Oaxaca carved and plain stelae are rare. Most of the carved monuments on the coast appear to be Classic in date, dated precisely. The majority of the stelae are large monoliths carved in low relief using the local granite and depict person-ages shown in full figure, occasionally accompanied by one or two glyphs. Less frequent are partially three-dimensional monuments as well as several full-round sculptures.

Include locally made gray-ware cylindrical tripod vases with slab feet, bowls with annular bases, and coffee-bean appliques. While presumed central Mexican ceramic traits were present in the Early Classic assemblage, most pottery was purely local in style. Brockington (1987:231) noted "thin-orange" ceramics at other sites along the western coast including Piedra Parada Jamiltepec and Bajos de Chila.

Exchange between Teotihuacan and the lower Río Verde is indicated by the importation of green obsidian from the Pachuca source complex in the northern Basin of Mexico (Elam et al. 1992). At Río Viejo, 80% of the obsidian artifacts recovered in Early Classic contexts were green, and all of these consisted of blade fragments (several Classic-period contexts from Río Viejo have yet to be analyzed in detail and are not included in this calculation; preliminary study indicates that they promise similar results). The high proportion of green obsidian in Early Classic deposits reflects a dramatic change in exchange patterns since no green obsidian was recovered from earlier deposits. Early Classic deposits at Barra Quebrada also yielded green-obsidian blades. While the relatively small volume of excavated deposits from this period may have created a sampling bias, the proportion of green-obsidian artifacts at present is one of the highest for regions outside the Basin of Mexico. For example, in contemporaneous deposits at Matlacapan only 6% of the obsidian was from Pachuca, even though Santley (1989:140) views the site as a Teotihuacan enclave, permanently colonized by Teotihuacan merchants.

The high proportion of green obsidian in the lower Río Verde probably indicates direct exchange with Teotihuacan. Obsidian may have been sent to the lower Río Verde in exchange for marine shell, cacao, and cotton, all of which were apparently sought from other regions by the rulers of Teotihuacan (Ball 1983; Berio 1984; Kolb 1987; Santley 1989). However, apart from Pachuca obsidian, it is difficult to determine the processes through which other "Teotihuacanoid" elements reached the lower Río Verde. At present there are no indications of an imperial presence by Teotihuacan or a trading enclave such as has been suggested for Matlacapan on the Gulf Coast. Ceramic markers like imitation thin orange and cylindrical tripods are found throughout much of Mesoamerica at this time so that people in the lower Río Verde region could have adopted these styles from areas other than the Basin of Mexico. In fact, Rattray (1990) has now demonstrated that thin-orange pottery found at Teotihuacan originated in the Tepexi region of Puebla. In Oaxaca, locally produced imitations of thin-orange and other widely distributed Early Classic ceramics are relatively common in the Mixteca Alta (Gaxiola 1984; Spores 1972, 1974) and Mixteca Baja (Winter 1989b:68) as well as in the lower Río Verde region. In the Valley of Oaxaca (Caso et al. 1967) and the southern Isthmus (see below) these ceramic markers are rare. These data suggest that the Mixteca Alta and Baja regions were part of a corridor of communication and exchange linking, at least indirectly, the western Oaxaca Coast to the central Mexican highlands. Elites in these regions may have participated in a shared social identity involving elites in the Basin of Mexico and other regions of Mesoamerica that facilitated exchange and differentiated them from nonelites (see Schortman and Urban 1987). However, additional research is necessary throughout Mesoamerica to determine the processes through which these "markers" spread and what link they had to economic or military expansion by Teotihuacan.

along the coast may be related to differences in social complexity (see later). It is likely that during the Classic period the more powerful elites of the western coast were in a better position to establish contacts with rulers of distant polities such as Teotihuacan and El Tajin. As I argue in the next section, the western coast continued to exceed the eastern coast in terms of social complexity and interregional influence during the Postclassic.

INTERACTION AMONG POSTCLASSIC CITY-STATES

Archaeological data for the Postclassic (A.D. 900–1521) on the Oaxaca Coast are augmented by pre-Hispanic codices as well as a variety of early colonial documents and legendary histories. The ethnohistorical record shows that the lower Río Verde was the locus of the city-state of Tututepec, one of the most powerful independent polities of the Postclassic (Spores 1993). A key figure mentioned in many of the Mixtec codices was 8 Deer "Jaguar Claw," who consolidated coastal and highland polities for a time early in the twelfth century A.D. by simultaneously becoming the ruler of Tlilantongo in the Mixteca Alta and Tututepec (Marcus and Flannery 1983:218; Pohl and Byland 1990:127; Rabin 1981; Smith 1973; Spores 1993). The codices indicate that after a series of important military conquests 8 Deer received the honor of having an ornament placed in his nose, signifying that he was a great lord (Figure 5). The place where this ceremony occurred has been interpreted by some scholars to be Tula, the Toltec capital in the northern Valley of Mexico (Caso 1960; Marcus and Flannery 1983:219), although Smith (1973:70–75) disagrees, arguing that it was held at one of several sites in the Mixteca.

Tututepec continued to be a powerful city-state during the Late Postclassic and was raiding towns as distant as Mitla, Miahuatlán, and Achíutla in the highlands, as well as Tehuantepec on the coast (Davies 1968; Smith 1973:84–85). The area controlled by Tututepec reached from the Guerrero border 100 km west to Huatulco 140 km east, and extended as much as 75 km north into the interior. Its residents resisted Aztec attempts at conquest and were apparently expanding their polity's borders to the north and east at the time of the Spanish Conquest.

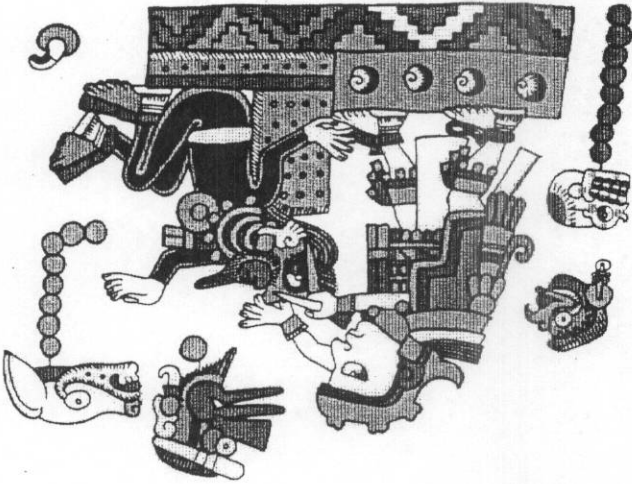


Figure 5. The nose-piercing ceremony of 8 Deer "Jaguar Claw" from the Codex Nuttall (courtesy Dover Publications).

In general, the carved monuments from the coast are distinct

in style relative to those of other regions (Jorin 1974; Urcid 1993; Winter 1987; J. Zeitlin 1993). However, several elements on coastal stelae suggest external connections. Hieroglyphic inscriptions on stelae are mostly in Classic-period highland Zapotec style (Jorin 1974; Urcid 1993). Coastal monuments with symbols that are often linked to Early Classic Teotihuacan (Aveni et al. 1978; Berto 1984; Parsons 1969; Pasztory, ed. 1978) include Monument 1 from Cerro del Rey, which contains the RE Glyph; Monument 1 from Nopala, which shows an individual holding a treble-scroll symbol; and a carved stone displaying a pecked-cross symbol from Río Grande (Zarate 1986). A series of relatively small and simple stone sculptures depicting crossed-arm personages found at several coastal sites are similar to stone monuments from many regions of southern Mexico and Guatemala (Feinman 1985:63–64; Feron 1953; Jorin 1974:77; Parsons 1969:119–120).

Judith Zeitlin (1987, 1993) argues that iconographic elements on coastal stelae, small stone sculptures, and pottery reflect participation in Parsons's (1969, 1978) "Peripheral Coastal Lowland Co-Tradition." Briefly, this "co-tradition" appears to have been largely defined by the spread of a sacrificial cult involving the Mesoamerican ballgame that symbolically linked fertility to human sacrifice (Pasztory 1972, 1978). In its clearest manifestation, at sites including El Tajin, Chichen Itza, and Bilbao, the cult involves reliefs depicting decapitation sacrifice of ball players at times beneath awaiting celestial deities. The complex ritual and symbolism behind Late Classic human sacrifice and the ballgame apparently served to affirm elite rulership (Demarest 1984; Wilkerson 1984; J. Zeitlin 1993).

A variety of artifacts and iconographic elements linked to the Late Classic sacrificial cult are found along the Oaxaca Coast including ballcourts, stone *hachas*, possible carved stone death's heads, stone-yoke fragments, and stone monuments depicting individuals with closed eyes and crossed arms, some of which appear to be in the jaws of celestial jaguar or reptilian deities (see Brockington 1973, 1974; Jorin 1974; Joyce and Winter 1989; Joyce and Zeitlin 1992; J. Zeitlin 1978a, 1987, 1993). Several carved-stone monuments along the coast appear to depict individuals wearing ballgame paraphernalia or participating in sacrificial acts (J. Zeitlin 1993). Excavation at the Classic-period site of Saltillo in the southern Isthmus has also yielded an elaborate urn burial of 10 beheaded adult males (J. Zeitlin 1978a:71). These elements seem to reflect participation in the Late Classic sacrificial cult of the Peripheral Coastal Lowlands (J. Zeitlin 1993). However, few of the relevant artifacts have been securely dated and the representations of sacrifice and the ballgame are not nearly as overt as on stone sculptures at sites such as El Tajin and Bilbao. In addition, the distribution of these elements at present is not entirely contiguous as the *hachas* and stone-yoke fragments were found along the eastern coast, while the stone monuments were concentrated on the western coast. While the available data suggest that aspects of the Late Classic sacrificial cult spread to the Oaxaca Coast, perhaps as the result of a shared elite identity, additional research is necessary to define its local expression and role in society.

Overall, evidence for far-reaching external contacts during the Classic period appears to be more abundant on the western coast. The available data do not allow for detailed explanations of the different patterns of Classic-period interaction. However, variation in the nature and intensity of interregional contacts

lands, possibly including exchange and even migration into the region by Putun Maya populations. However, recent research in the Huatulco Bays area found no evidence for these western Maya associations (Fernández Dávila and Gómez Serafín 1988:147-148). In the southern Isthmus, Judith Zeitlin (1978a) observed only vague decorative similarities with western Maya ceramics. Detailed ceramic comparisons are needed to clarify the ceramic affiliations for the Early Postclassic on the Oaxaca Coast.

During the Late Postclassic elaborate polychrome ceramics are found along the entire Oaxaca Coast and are clearly part of the "Mixtec" polychrome tradition that has been documented throughout much of central and southern Mexico (Brookington 1973; Lind 1967; Spores 1972; Winter 1989b). However, polychrome pottery varied considerably from region to region, and their widespread distribution is probably related to a shared elite identity that linked many areas of Mesoamerica through alliance, intermarriage, trade, and competitive emulation (Brookington 1973:83-85; Smith and Heath-Smith 1980; Whitecotton 1992).

Ethnohistoric records suggest that during the Late Postclassic the eastern coast of Oaxaca was subjected to military incursions not only from the Mixtecs of Tututepec, but by highland Zapotec and Aztec armies as well. Zapotec narrative history describes a highland Zapotec invasion of the southern Isthmus sometime during the fourteenth century (Burgos 1934:328; J. Zeitlin 1978a, 1978b). This Zapotec intrusion is borne out by linguistic evidence suggesting the divergence of Isthmus and Valley Zapotec dialects at about A.D. 1300 (Marcus 1983b:7).

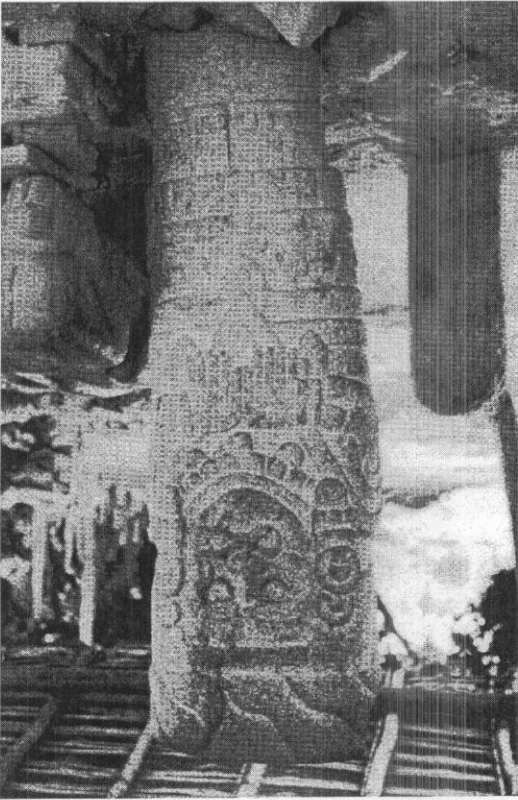


Figure 6. Tututepec Monument 6.

While there is a rich ethnohistoric record for Tututepec, de-

bates over the historical accuracy of these records underscores the importance of checking the written and oral accounts against archaeological data (Jansen 1990; Pohl and Byland 1990; Smith 1973). The archaeology of the Postclassic in the lower Río Verde region, however, is not well known. Most of the archaeological data for the Postclassic are from surface survey and only a few excavated contexts (Gillespie 1987; Grove 1988; Joyce and Winter 1989; O'Mack 1986). The data suggest that a significant shift in settlement patterns occurred in the lower Río Verde valley at this time. The number of sites in the Verde floodplain declined, while settlement in the piedmont and secondary valleys increased. It is possible that the shift in settlement towards the piedmont resulted from the selection of defensible locations. The codices document frequent episodes of warfare between Mixtec Tututepec and other polities during the Postclassic (Berlin 1947; Greenberg 1981; Smith 1973; Spores 1984, 1993).

The rise of the Tututepec city-state may also have been related to the expansion of Mixtec people into the lower Río Verde. Josseland et al. (1984:154) have argued that the coastal Mixtec dialect probably originated in the highland region of San Juan Mixtepec, becoming a separate coastal dialect by about A.D. 900-1000. The linguistic data suggesting that Mixtecs moved into the coast during the Postclassic are supported by archaeological evidence. Before the Postclassic relatively few cultural similarities are apparent between the lower Río Verde valley and the Mixteca Alta and Baja (Joyce 1991a; Joyce and Winter 1989; Winter 1989b). This has led Joyce and Winter (1989; Winter 1989b:99) to suggest that before the Postclassic the lower Río Verde was not inhabited by Mixtecs, but may

While the location of ancient Tututepec has long been in question (Spores 1983), recent survey work by O'Mack (1986) indicates that the modern town of Tututepec was built over and largely destroyed the archaeological remains of the pre-Hispanic center. Today only a single intact pre-Hispanic mound remains at the site. The colonial church at Tututepec was built on top of this mound, and a group of carved-stone monuments lays in the churchyard (O'Mack 1986; Piña Chan 1960). The original provenience of these stone monuments is uncertain, although some were observed there as early as the 1830s while at least one was recently moved to the churchyard from a nearby village (O'Mack 1986:5). The most distinctive piece is Tututepec Monument 6 (Figure 6), a stela carved in full round and depicting an elaborately dressed individual, which has been likened to the Atlanteans from Pyramid B at Tutula (Jorin 1974:68; Piña Chan 1960:72). Full-round carvings are rare on the Oaxaca Coast, and the stiff pose as well as the large *tezcatlilli* back mirror worn by the figure on Monument 6 resemble the Tutula Atlanteans. However, Monument 6 seems to be a female or a female impersonator since the personage is shown wearing a *quechque-mil*. While Monument 6 is intriguing in regard to Toltec influence, at present there is little archaeological data available to test the historical accuracy of the documentary claims of Tututepec-Tutula connections.

Further east on the Oaxaca Coast, Brookington (1970, 1972, 1975) observed "Maya-like" pottery dating to the Early Postclassic (Brookington 1966, 1970, 1972, 1975; also see Long 1974) has argued that pottery on the eastern one-third of the coast included local examples of Slateware, Fine Orange Ware, and Fine Black Ware, suggesting strong ties with the western Maya Low-

ditional economic motives may be the result of sampling bias or problems of archaeological visibility. However, the data suggest strongly that Oaxaca Coast elites sought out ties with elites of other regions during virtually the entire pre-Hispanic sequence.

The data suggest that the Oaxaca Coast was in contact with some of the most powerful political centers of pre-Hispanic Mexico, including Monte Albán, Teotihuacan, Tenochtitlan, and possibly El Tajín and Tula among others. The Oaxaca Coast participated in most of the far-reaching horizon styles of pre-Hispanic Mesoamerica. However, the evidence suggests that the region was largely independent of powerful centers such as Monte Albán and Teotihuacan. Except for the very end of the pre-Hispanic sequence, there is little evidence suggesting that such distant centers conquered or directly coerced the Oaxaca Coast. Similarly, there is at present no clear evidence for the establishment of foreign trading outposts along the coast. The distance and relative difficulty of reaching the Oaxaca Coast may have insulated the region from long-term meddling by distant political centers. Only during the Postclassic, when the Tututepec polity became a core region in its own right, was there evidence that other sections of the coast may have become dominated peripheries. The participation of the Oaxaca Coast in horizon styles was probably most often due to the establishment of shared identities with elites from other regions (see Schortman 1989; Schortman and Nakamura 1991; Schortman and Urban 1987).

The Oaxaca Coast data demonstrate the variability in both the causes and local expressions of horizon styles. A conservative approach would argue that unless independent evidence can be found for factors such as conflict, migration, or "foreign" trading enclaves, it can be assumed that the spread of decorative motifs, symbols, and trade goods was driven by the thirst of local elites for exotic materials and ideas. It is likely that many elements of pre-Hispanic horizon styles originated or were funneled through powerful centers like Teotihuacan and Tenochtitlan since these sites would have represented distant sacred places for much of Mesoamerica. However, it is important to empirically demonstrate the place of origin and subsequent distribution of decorative motifs, symbols, and trade goods, rather than assuming that these elements spread due to the dominating political and economic policies of powerful centers (see Grove and Gillespie 1992).

The independence of the Oaxaca Coast does not mean, however, that the nature of external relations were invariable throughout pre-Hispanic times. The data suggest that during certain periods such as the Middle/Late Formative interregional interaction was primarily cooperative and reciprocal, involving the exchange of materials, ideas, and possibly mates among elites. At other times, interregional relations may have turned more competitive. During the Terminal Formative conflict in the highlands may have been sufficiently intense to have disrupted long-distance exchange, while Postclassic warfare seems to have forced settlement shifts to defensible positions along the coast. At times powerful centers like Monte Albán and Teotihuacan may have played a dominant role in defining what goods and ideas were considered to be prestigious. However, before the rise and after the decline of these centers interregional relations appear to have been carried out between relatively equivalent polities in peer-polity fashion (see Renfrew and Cherry 1986).

CONCLUSIONS

The data from the Oaxaca Coast are consistent with the view that interregional relations in Mesoamerica were generally dominated by elites in pursuit of exotic goods and ideas (e.g., Blanton and Feinman 1984; Flannery 1968; Freidel 1986; Schortman and Nakamura 1991). Evidence for interregional interaction on the Oaxaca Coast seems to have primarily involved high-status goods, whether it was the importation of obsidian and fancy pottery, or the adoption of nonlocal decorative styles and iconography. The lack of evidence for interaction at the nonelite level as well as the exchange of productive goods for more trade items suggests that the Oaxaca Coast region was not a major center of exchange.

The data suggest that during the Late Postclassic the eastern coast was a periphery dominated at various times by Mixtec, Aztec, and Tenochtitlan, and by highland Zapotec colonies (J. Zeitlin 1978a, 1978b). During the last few decades before the Spanish Conquest, the coastal Zapotecs fought several campaigns against Aztec armies including the famous battle of Cuicuilco where a combined Zapotec and Mixtec army successfully survived an Aztec siege (Flannery 1983b; Marcus 1983c). Following the battle of Cuicuilco a brief and unstable alliance was forged between Tenochtitlan and the Zapotecs. The alliance was solidified by the marriage of Coyoilcatzin, daughter of Ahuitzotl the Aztec ruler, to the Zapotec ruler Cocijocza (Marcus 1983d:302-303). In 1522, the Oaxaca Coast region was conquered by a Spanish army under Pedro de Alvarado.

Furthermore, Late Postclassic ceramics in much of the southern Isthmus exhibit stylistic affiliations with the Valley of Oaxaca (J. Zeitlin 1978a). Population in the Rio de los Perros survey area experienced a dramatic decline during the Late Postclassic, possibly associated with the Zapotec military invasion (J. Zeitlin 1978a, 1978b). Several sites such as Las Tumbas and the hilltop center of Cuicuilco had ceramic assemblages virtually identical to the Valley of Oaxaca along with Zapotec-style architecture and stone-lined tombs (Flannery 1983b; Peterson and MacDougall 1974; Zeitlin and Zeitlin 1988). These sites may have been Zapotec enclaves.

In addition, the various coastal regions exhibited considerable variation in evidence for external contacts. Except for during the Terminal Formative, patterns of external interaction are very different in the lower Río Verde valley and the southern Isthmus even though they are separated by only 300 km, and travel along the coast should have been relatively easy.

One factor that may account in part for the different patterns of interregional interaction among coastal populations involves geographical differences along the Oaxaca Coast. The geographically central location of the southern Isthmus placed the region in an advantageous position with respect to routes of interregional commerce. This locational advantage may account for the early development of a large settlement at Laguna Zope (R. Zeitlin 1978, 1979:1) as well as a greater diversity of exchange partners relative to the lower Río Verde valley. In addition, the absence of mountain barriers facilitated communication between the southern Isthmus and the Gulf Coast lowlands during the entire pre-Hispanic sequence. In contrast, coastal populations west of the Isthmus were constrained by the Sierra Madre range and their access to highland regions was probably limited to a series of mountain trails. This may have made the lower Río Verde more vulnerable to political developments that affected these exchange routes, including possibly conflict in the highlands and manipulation by Monte Albán during the Terminal Formative (Zeitlin and Joyce 1992).

The ecological complementarity between the coast and highlands also undoubtedly facilitated exchange and other forms of interregional communication. Ethnohistorical data suggest that there was a diverse set of resources being exchanged between the highlands and coast. Items such as shells, cacao, cotton, feathers, salt, and *pudpura* dye were sent to the interior while cochineal, obsidian, and pulque were transported to the coast (Paso y Troncoso 1981; Spores 1993; Whitecotton 1992). While most of these items are not preserved archaeologically, it is clear that marine shell was sought in the highlands while obsidian and at times fancy pottery were procured by coastal peoples (Feinman and Nicholas 1993; Joyce 1991a; R. Zeitlin 1978, 1979:1, 1993). Undoubtedly, these data represent only a small proportion of those items moving between the coast and highlands. However, the Oaxaca Coast should not be viewed as an ecologically homogeneous region. There are great differences in the availability of agriculturally productive lands along the coast as well as in access to estuarine and marine habitats (Joyce 1991a: 41–42). It is unclear at present how this ecological diversity may have affected the availability of items involved in interregional commerce. However, the inventories of marine and estuarine shell recovered from the lower Río Verde region, the Huatulco Bays, and the southern Isthmus vary significantly (see Fernández-Dávila and Gómez-Serafin 1988:119; Quitmyer 1991; J. Zeitlin 1978a:110–111). Further research is necessary to determine whether these differences in shell assemblages are the result of economic choices or ecological factors affecting species composition. It is worth noting, however, that the assemblage from the shell-ornament-production site at Ejutla (Feinman and Nicholas 1993) most closely resembles that from the southern Isthmus. Another factor possibly related to differences in interregional relations involves the ethnic diversity of coastal populations. Throughout the pre-Hispanic period there appear to have been great differences in ceramic and architectural styles, mortuary customs, settlement patterns, and sociopolitical organization

among the various coastal regions. At the time of the Spanish Conquest, the Oaxaca Coast was inhabited by people of eight distinct ethnolinguistic groups: Amuzgo, Mixtec, Chatino, Nahuatl, Chontal, Zapotec, Huave, and Zoque. Differences in patterns of exchange and settlement as well as ceramic styles during the Postclassic seem to correlate spatially with contact-era ethnic boundaries (Brockington 1982, 1987; J. Zeitlin 1978a, 1978b). If a similar correlation between material culture and ethnicity is assumed for earlier periods, then the eastern and western coastal regions may have been occupied by distinct ethnic groups as early as the Late Formative (see Andrews 1990). It is possible that the various ethnic groups on the coast established long-distance relationships in different ways. In this regard, it is especially interesting that until the Postclassic there is little evidence for interaction along the coast itself. If interethnic competition was a feature of interpolity interaction, then part of the ethnic identification of these groups may have involved the establishment of different types of long-distance ties. The period when ceramic styles along the coast seem to have been most homogeneous was during the Postclassic, when ethnohistorical sources suggest that much of the region was under the hegemony of Tututepec (Spores 1993).

Variation in social complexity among coastal polities may be another factor linked to differences in the nature of external contacts. For example, interaction between the western coast and the Basin of Mexico during the Early Classic may have been linked to the relatively greater complexity of lower Río Verde society. The lower Río Verde may have been contacted by elites from the Basin of Mexico as they pursued some desired trade item such as marine shell (see Santley 1983, 1989) with the resultant interaction leading to settlement nucleation and the emergence of a powerful local elite. Alternatively, the relative power and prestige of the lower Río Verde elite may have allowed them to pursue contacts and establish shared identities with elites of the powerful, distant, and prestigious center of Teotihuacan, whereas elites in other sections of the Oaxaca Coast may not have had the resources or status to pursue similar contacts. Similar issues may account for the apparent variation in the expression of the Late Classic sacrificial cult along the coast as well as differences in the nature of interaction with the Aztec empire during the Late Postclassic.

Archaeological research on the Oaxaca Coast has produced a complex changing picture of interregional interaction. The data at present suggest that for most of its pre-Hispanic history, the Oaxaca Coast was politically autonomous. There is also little evidence to suggest that the coast was an economic dependency of other regions. However, elites on the Oaxaca Coast participated in the exchange of materials and ideas with other areas of Mesoamerica and were often affected by the rise of powerful centers in core regions such as the Valley of Oaxaca and the Basin of Mexico. The data suggest that coastal elites frequently participated in shared identities with rulers of other regions which facilitated the exchange of precosmetics and which possibly also involved intermarriage and alliance formation. At other times the coast was probably affected at least indirectly by the coercive policies of core regions. It is clear, however, that local factors, especially elite interests, had as much to do with the variable patterns of interregional interaction on the coast as did the expansionistic policies of distant centers like Monte Albán and Teotihuacan.

RESUMEN

Este artículo ofrece una investigación sintética de la importancia de relaciones interregionales para el desarrollo social, cultural y político de la costa de Oaxaca. El artículo enfoca principalmente sobre la cuenca del Río Verde inferior y el istmo sur porque estas dos regiones han sido el enfoque de investigaciones arqueológicas en la costa de Oaxaca; se tratan otras áreas de la costa cuando permiten los datos.

Los datos de la costa de Oaxaca indican que durante toda la secuencia pre-hispánica las poblaciones costeras adoptaban elementos estilísticos de otras regiones y los incorporaban dentro de las tradiciones locales. También, materiales como cerámica de lujo y obsidiana estaban importados de regiones lejanas. Se presenta la evidencia para relaciones con algunos de los centros políticos más poderosos del México prehispánico, como Monte Albán, Teotihuacán, Tenochtitlán y posiblemente El Tajín y Tula entre otros. Los datos de la costa de Oaxaca indican que la región participaba en la mayoría de los estilos horizontales extensivos de Mesoamérica pre-hispánica.

Sin embargo, con la excepción de la época postclásica tardía, hay poca evidencia que los centros distantes conquistaban la costa de Oaxaca. Asimismo, se carece de evidencia clara para el establecimiento de puestos avanzados de mercaderes extranjeros a lo largo de la costa. Parece que muchos del contacto que las sociedades de la costa de Oaxaca tenían con otras regiones estaba impulsado por la necesidad de artículos e ideas prestigiosos. La evidencia para el intercambio interregional en la costa de Oaxaca parece consistir principalmente en artículos de estatus alto, como se ve de la importación de cerámica de lujo, o la adopción de iconografías o estilos decorativos del extranjero. Los datos sugieren fuertemente que la élite de la costa de Oaxaca buscaban relaciones con la élite de otras regiones durante todos los periodos pre-hispánicos. La

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