Drawing the Southwest to Scale Perspectives on Macroregional Relations

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THE SPANISH LEGEND OF THE SEVEN golden cities of Cíbola died with the return of the Coronado expedition to Culiacán, Mexico, in 1542. Thirty years later, new rumors circulated in the Chichimecan mining frontier of northern New Spain, tales of a *"nuevo México"* to

the north of the land of the Chichimecs, a country similar to the México of the Aztec. In 1581 nine Spanish soldiers and three Franciscan friars left the mining town of Santa Barbara, in what is now southern Chihuahua, to seek out this other México. For fifty days they trekked across the lands of the Chichimecs, arriving at last at a pueblo of forty-five houses set amidst fields of corn, beans, and squash (Hammond and Rey 1966:141). The Spaniards named this land *Nuevo México*.

The Spaniards engaged in a bit of hyperbole by calling the pueblos of the Rio Grande valley a Nuevo México, but their notion does give order to spatial differences in culture and adaptation. The numbers of people and the size of towns in the area paled in comparison to the great cities of the central highlands of Mexico, the *mesa central*. The region was, however, markedly unlike the Chichimeca, that land of barbarians that lay north of an east-west line from Culiacán to Monterrey. The Chichimeca was arid, and its people, the Chichimecs, moved from place to place, grew few if any crops, and lacked clothing and fine pottery. Nuevo México was better watered, and its people lived in fixed towns of large houses, intensively farmed well-established fields, and made fine cotton clothing and pottery (Beals 1932:134–35).

The Spanish notion of a Nuevo México created an entity quite different from Mesoamerica, yet more like Mesoamerica than the other cultural entities that ringed it. Today we place this region in the Southwest culture area, which modern scholars have extended far beyond the limits of the Spanish Nuevo México. The modern notion of the Southwest springs from the same types of comparisons that the Spaniards drew, and we still define the area in terms of houses, pots, and fields. As usually described, the Southwest culture area encompasses those regions north of Mesoamerica where people lived year-round in villages or towns, made pottery, and grew corn, beans, and squash. The limits of agriculture mark the edges of this area on all sides except the south, where the Southwest blends into Mesoamerica, the source of the triad of crops used to define the region.

The question of macroregional relations with the prehistoric Southwest has traditionally been answered by viewing some relations as internal to the Southwest and others as external. Such discussions typically concern how or where to draw a boundary around the Southwest as a culture area; that is, how to define what is in and what is out. In this paper, we propose instead a dynamic perspective that views the Southwest not as a spatial unit but as a set of social relations between cultural groups. This approach does away with the idea that some relations are internal and others external; instead, such social relations appear and work differently at different scales. The issue of the Mesoamerican connection in the Southwest requires us to look at relations at a macroscale that extends from the Valley of Mexico to Chaco Canyon. It also compels us to examine more local relations on a more restricted scale in order to understand specific aspects of this connection: for example, the katsina cult among the late prehistoric Pueblos (AD 1250-1500). At a continental scale, the western, northern, and eastern boundaries of the Southwest look sharp and clear, but when we examine each border in turn, it becomes fuzzy, ever fluctuating, and arbitrary.

INSIDE AND OUTSIDE THE SOUTHWEST

Whether we see the spatial variation in the past in terms of bounded units or of relations affects how we order, interpret, and write prehistory. For the last fifty years archaeologists have tended to study Southwestern prehistory in terms of bounded units, a notion that compels us to fill in all of the space on the map. But the cultural stuff we wish to study, such as adaptations, social groups, trade, and style, does not spread evenly or completely over the map. Drawing lines emphasizes the edges, where the things we wish to study are in fact the most indistinct. In giving cultural relations a hard edge they did not have, we work against a dynamic view of Southwestern prehistory, and by defining our object of study as a spatial unit, we project the Southwest as a culture area into time periods that long predate such a cultural pattern.

The idea of a Southwest culture area starts with the notion of a Pueblo Southwest much like the Spaniards' idea of a Nuevo México (Goddard 1913; Kidder 1924; Wissler 1917, 1938). During the first half of this century, scholars enlarged the Southwest to take in far more than the pueblos, but they never reached agreement on the extent and nature of the region (Beals 1932, 1944; Gladwin and Gladwin 1935; Haury 1936, 1962a; Jennings 1956; Kirchoff 1943, 1954; Kroeber 1939; Reed 1964; Sauer and Brand 1931; Willey 1966). Most authors seem to agree that the culture traits they use to define the area sprang from a climax, or hub, and then spread out over the region; some stress the study of this hub, and others emphasize the borders of the area. All envision the area as having both a cultural and an environmental basis, but they argue over the relative importance of these factors to the existence of the area.

Since the late 1960s most archaeologists have turned away from debates about cultural areas to ecological studies of resources and technology. They elevated the environmental aspect of the culture area notion to the main focus of research and primarily asked questions that could be answered in very small parts of the area. The "pochteca" theorists were the major exceptions to this trend (Di Peso 1968, 1974a, 1974b; Kelley and Kelley 1975; Weigand, Harbottle, and Sayre 1977; Riley and Hedrick 1978; Lister 1978; Reyman 1978; Pailes 1980).

The archaeological trends of the 1980s moved us away from the study of how people made a living in a local area to questions about how areas in the Southwest were linked and how these linkages helped shape the prehistory of the region (Altschul 1978; Upham 1982; F. Plog 1983b; Plog, Upham, and Weigand 1982; McGuire 1989; Schroeder 1981; Minnis 1989). These trends once again raise the issue of what was the nature and extent of a Southwestern culture area.

WORLD SYSTEMS THEORY

Much of the theory behind the new focus on the Southwest as a whole seems to be directly—or, more often, indirectly—inspired by the world systems perspective of Wallerstein (1974, 1980; see Whitecotten and Pailes 1986; Upham 1982; Wilcox 1986b; Plog, Upham, and Weigand 1982; Kohl 1987). Wallerstein leads us to ponder how the growth of cores stems from the creation of peripheries and nudges our focus from diffusion and adaptation to interaction and dependency. In world systems theory, core and periphery are not spaces but social relations, and societies are no longer bounded spaces but dynamic entities begotten and transformed by the unequal economic relationships of a larger system. Core areas dominate this system and forge the economic relationships that create the great diversity needed to link a region as a whole.

The strict use of world systems theory in our study of the prehistoric Southwest could be seriously misleading, as it is highly unlikely that the Southwest was ever as economically or politically integrated as this model assumes. The technology available to move bulk items, for example, would have allowed the regular circulation of foodstuffs over distances of only 50 to 60 kilometers (Lightfoot 1979; Hassig 1988:64). Using these distances as radii of movement suggests that food distribution networks could have covered areas of 7,800 to 11,232 square kilometers. The Chaco interaction sphere had an area of over 53,000 square kilometers (Altschul 1978) and lies over 1,500 kilometers north of the northernmost Mesoamerican center. The "alliances" proposed by Fred Plog (1983b) cover areas of 15,000 square kilometers or more. It would be a mistake to take these figures too literally, but they do give us some idea of how limited bulk commodity distribution networks could have been in the prehistoric Southwest. The cultural subareas of the Southwest must have been primarily self-provisioning. They were linked to other regions by a trade in preciosities. Trade in preciosities will link areas and can lead to cultural convergence and dependencies that can form the locus of cultural change. Such trade will not, however, lead to large-scale functional convergence and uniform peripheries because the local ecological relations remain primary.

PEER POLITY INTERACTIONS

A number of archaeologists working in Europe have proposed the notion of peer polity interaction as an alternative to a world systems approach (Renfrew 1986), and some archaeologists in the Southwest have recently applied this idea to Southwestern prehistory (Minnis 1989a). The model of peer polity interaction emphasizes a scale of analysis intermediate between the local and the interregional. The stress on interactions within a region assumes that these are of greater importance to cultural change than are the region's external links.

We would agree that the scale of analysis defined by the peer polity model is an important one for looking at cultural change. The processes that occur in local river valleys or basins are often too restricted, and those operating at the level of the whole of the Southwest or the Southwest and Mesoamerica are too grand to account for most of the changes in prehistory. In addition, we doubt that the Southwest was ever a single network of peer polity interaction, believing instead that at any given time multiple networks could have existed.

There are dangers, however, in framing our present concern with external relations in terms of an either/or choice between a peer polity or world systems model. When we look at the effect of external relations on Southwest societies, as we do with the late Pueblos, we need to do so in the context of relations and processes at the intermediate scale of the peer polity model, but this model gives us little or no guidance on how external relations articulate with or affect process at this scale. At the largest scale, the examination of Mesoamerican–Southwestern interactions, the model is useful because it dismisses simple theories of long-range domination of the Southwest by Mesoamerica. Beyond that point, however, the peer polity model runs the risk of being a new isolationism that frames research questions in a way that obscures any significant impacts long-range interactions may have had on the prehistory of the Southwest and gives us only the idea of "emulation"—a new term for the old notion of influence—to account for Mesoamerican traits in the Southwest.

BEYOND A THEORY OF INTERNAL AND EXTERNAL RELATIONSHIPS

If we think of the Southwest as a set of relations between social groups and admit that the boundaries of these relations are fuzzy, then it is no longer useful to frame our inquiry in terms of inside and outside. Instead we need to ask, What is the process of change in these relations? What makes some social groups central to

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this process, while others remain peripheral? And how does our study, and the nature of the relations we see, change as we vary the scale of our analysis?

We cannot assume that cultures will exist as bounded units, but we can look for a dynamic process of inclusion and exclusion within a complex web of social relations. The existence of distinct cultural boundaries is a phenomenon that requires explanation. We have to ask if and why distinct cultural boundaries came into existence, rather than simply assume they will exist. When the Spaniards arrived in the Southwest, they encountered a complex amalgam of languages, cultures, and adaptations that resisted their efforts to categorize Southwestern Indian people into distinct *provincias, reynos*, and *naciones* (Spicer 1962:8–10; Naylor 1983). As Spicer (1962) recounts, the fuzzy boundaries that the Spaniards encountered hardened into distinct bounded cultures in response to Spanish colonial policies.

The formation of alliances, or any form of bounded group, includes some people but at the same time excludes others. We have to ask, then, why some social groups become central to webs of relations and thereby delineate others as peripheral or external. Kroeber explained this phenomenon with a model of invention and diffusion: a central area was one in which many new traits were invented and from which they diffused. The model is inadequate because it only describes the process and does not tell us why invention occurs in the culture climax or why other groups should accept the traits generated in the climax. Furthermore, what we want to look at are complexes of behaviors, and such complexes do not tend to be nicely bounded in space. In world systems theory, a social group becomes "core" because of its functional position in the international division of labor; other groups are constituted as peripheral in this division. In both theories, centrality results from a single factor—tradition or economics—and all other aspects of the social group follow from this aspect.

We are uneasy with the idea that the various centers we see in prehistory always resulted from tradition or economic position. Centrality may be a product of a variety of factors. A social group may be central because of its position in a web of religious, economic, or political relations, and one group may be the center for one set of relations (e.g., religious), while a different group is the center for another set of relations (e.g., economic).

A more important problem with the core-periphery contrast is that it assumes that all groups and relations can be ranked. As the notion of peer polity interaction suggests, this is a questionable assumption. A great number of contrasts can be made between social groups based on linguistics, culture, adaptation, religion, and so on, and these distinctions may be ranked or not (Marquardt and Crumley 1987:11).

How we place a social group, as central or peripheral, depends in part on the scale at which we examine the web of social relations and what aspects of the social world we choose to look at. In the context of Southwestern prehistory, we may wish to speak of Chaco Canyon as a center, but in terms of the Southwest and Mesoamerica, the entire Southwest must be thought of as a periphery. In the Hohokam Classic period the Phoenix Basin was not a center for stylistic innovation, but it did have a more intensive agricultural system and greater social differentiation than surrounding areas (McGuire 1991).

Marquardt and Crumley (1987:2) speak of the "effective scale" of research: that being "any scale at which pattern may be recognized or meaning inferred." As we change the effective scale of our analysis, we frame a different web of relations. The unevenness in these relations will disappear at a different scale as a new pattern of unevenness appears. Social groups also live and act in a world of varying scales, and their position vis-à-vis others changes as their scale of reference changes. Our choice of an effective scale, therefore, brackets an area for study allowing us to view a particular set of social relations while denying us access to sets visible at other scales. Also, we will find that some theoretical models are more informative at one scale and others at a different scale, so that our choice of models in part depends on the scale of our analysis.

The prehistoric world we wish to understand was a complex product of the intersection of all these scales. The impact of different external relations was quite variable across time and space. Thus, our studies of prehistory need to be multi-scalar. As we change scales, the boundaries that seemed sharp at one level become fuzzy and disappear; what was external at one level becomes internal at another. At the highest scale, we need to look at the relationship between Mesoamerica and the Southwest, two regions that were not as tightly integrated as some have thought but whose historical processes of change were by no means unconnected. At a lower scale, we ask how long-range relations affected the development of the late prehistoric Pueblos. Here, important concepts and symbols drawn from Mesoamerica were reworked into a religious system that was and is distinctively Pueblo. Finally, we look at relations on the edges of the Southwest, where external relations appear much more localized in extent and importance.

THE MESOAMERICAN CONNECTION IN THE SOUTHWEST

The nature of the Mesoamerican connection in the Southwest lies at the heart of one of the basic issues in North American archaeology (fig. 11.1). It is clear that interaction occurred between the Southwest and Mesoamerica, but it is not clear to what extent the events and processes we see in the Southwest were determined by events and processes in Mesoamerica (Wilcox 1986b). Most previous discussions have treated this as an issue at the highest regional scale, with little regard to how these long-range relations would have been played out at different scales: that is, how relations at the highest scale would have connected with local relations to produce the patterns of change that we see. The highest scale is the level of a world system, and we must question if such a system existed and what the nature of the linkages in that system were. At the local or regional scale, we must ask how these higher-level linkages figured into the relations between cultural groups or polities that were situated close to one another in a single region.



Figure 11.1. Map of the Southwest and Mesoamerica.

SOUTHWESTERN-MESOAMERICAN RELATIONS

The debates about the nature of Southwestern–Mesoamerican relations have been polarized between scholars who see direct intervention in the Southwest by Mesoamerican agents (Kelley and Kelley 1975) and others who see less direct links and who consider relations within the Southwest to be primary (McGuire 1980; Schroeder 1981; Plog, Upham, and Weigand 1982; Mathien and McGuire 1986; Wilcox 1986b). As a result of this debate, few archaeologists now posit pochteca setting out from the Valley of Mexico with bags of trinkets designed to entice Southwestern peoples into reorganizing themselves at higher levels of sociopolitical integration. Some researchers, however, still argue that Mesoamerican-based groups or individuals entered the Southwest and directly affected the development of the region (Di Peso 1983; Foster 1986; Kelley 1986b; Weigand 1988). These direct intrusion models contain several essential ingredients that must be present for any account of such macroregional relations: appropriate geographic scale, an assessment of timing, and a postulation of mechanisms that could account for seemingly serial or synchronous changes in widely separated cultural groups. We present here an alternative model that also contains these ingredients, that fits the empirical evidence better, and that relates macroregional and local relationships.

The Southwestern farming traditions were the northernmost expressions of a change that began by 200 BC with the advent of the Chupícuaro tradition in the Bajio. This tradition was the basis for later distinctive developments in West Mexico and the Southwest (Braniff 1974; Florance 1985; Kelley 1976). Chupícuaro and its derivatives first spread westward along the Lerma-Santiago River basin and then northward into the piedmont zones and prominent drainages of interior Guanajuato, Jalisco, Zacatecas, and Durango, and later (leaping a gap of arid and rugged territory) into Arizona and New Mexico, edging finally into Utah, Colorado, Chihuahua, and Sonora. A simultaneous or possibly later set of transformations occurred along the coastal strip seaward of the Sierra Madre Occidental, involving parts of Jalisco, Nayarit, and Sinaloa.

The Mesoamerican influences that archaeologists associate with this economic and social transformation range from the basic (maize, pottery) to the subtle (highly stylized and transformed iconographic elements). Kelley (1966) and Braniff (1974) have traced striking ceramic similarities from Chupícuaro through Morales, Malpaso, Chalchihuites, and Hohokam. Foster (1982) identifies a pattern of stylistic parallels in brown wares that he labels the Loma San Gabriel– Mogollon continuum. Wilcox (1986c) uses the distributions of languages and the Mesoamerican ball game to connect the northern periphery of Mesoamerica and the southern Southwest. Each of these continua suggests a somewhat independent set of links. There exists a general agreement that the strongest relationships occur in the Hohokam area (Brand 1943; Haury 1943, 1945b; Kelley 1966; Kelly 1943; McGuire 1980; Wilcox 1986b).

The above aspects of the "Mesoamerican connection" correlate with the advent of settled village life, a widespread and highly generalized process. Overlying that process is the appearance of regional centers in certain places at certain times. These regional centers are large towns (such as Casas Grandes) or clusters of towns (Chaco Canyon and the Phoenix Basin Hohokam) with public architecture, irrigation networks, and sometimes roads that suggest social organization on a supravillage level. The appearance of Southwestern regional centers was the northernmost echo of a process of changing relations within and among societies that began earlier and with greater intensity much farther to the south. In both Mesoamerica and the Southwest, however, major segments of the population lived outside the sway of such centers, and farmers and nomads were always present.

Ignoring the temporal dimension momentarily, we can examine the distribution of regional centers in Mesoamerica along the same corridors as the spread of the farming traditions. A dense concentration of regional centers organized as city states existed in the Basin of Mexico. Westward along the Lerma-Santiago drainage, the density of regional centers dropped, the level of social organization declined, and centers occurred primarily in the riverine and lake zones. Up the Juchipila-Malpaso and three parallel drainages, there was a decline in both the size and frequency of major centers as the terrain became more arid to the north and the streams diminished in size toward their headwaters. Such peripheral centers as La Quemada and Alta Vista were surrounded by tight clusters of associated secondary centers and villages, and then by large gaps with no evident sociopolitical complexity—presumably the territories of small-scale agriculturalists, hunter-gatherers, or both. Large portions of these intervening territories were in fact not arable and could only have served as hunting and gathering territories for the centers, or more likely as home ranges for other, more mobile societies.

The Southwestern regional centers appear as additional instances of a broad pattern in which centers diminished in frequency and scale toward the arid lands of the north. In the Southwest, as in several other areas of the northern Mesoamerican periphery (e.g., Chalchihuites), regional centers were relatively isolated from one another. Yet the Southwest was not just one more Mesoamerican island.

The degree of sociopolitical complexity in the Southwest was lower in both the horizontal and vertical dimensions. But in both dimensions the degree of development appears to have been considerably less than in peripheral Mesoamerica. Distinctions of rank, as expressed in personal adornment, domestic architecture, and possession of exotic items, were far less elaborated in the Southwest than in peripheral Mesoamerican societies. Also, overall community or polity size and rank-size variation within polity settlement systems appear much less developed in the Southwest than in the Mesoamerican periphery.

The differences in social organization were not simply differences of degree but appear more as differences of kind. The social systems of the two areas are analogous to two families of languages that had some cognates but different deep structures. We suspect that the Southwestern societies were fundamentally consensus based, while the Mesoamerican societies comprised definitive hierarchies. A good illustration of the contrast can be found in the organization of ceremonial facilities in Southwestern versus Mesoamerican sites. In Anasazi and Mogollon sites, kivas were usually located in public plazas, not in association with specific dwellings, or often, in the case of great kivas, away from habitation areas altogether. Mounds in the Hohokam and Casas Grandes areas also seem to have been separated from dwelling areas, although in the Classic period of the Phoenix Basin residences on top of platform mounds were most likely occupied by community leaders. In contrast, the more monumental altars, temples, and pyramids of peripheral Mesoamerican peoples were integral parts of elite residential compounds. These differences, we feel, may be indicative of very different patterns of access to sacred information and social surplus.

The social surroundings of regional centers also differed between the Southwest and peripheral Mesoamerica. Regional centers in the northern periphery of Mesoamerica were separated from one another by distances of 150 to 200 kilometers and often had only hunter-gatherers as neighbors. The series of polities that ran from Jalisco to Durango (Juchipila-Malpaso-Suchil-Guadiana-Zape) exemplifies this pattern. Each of these centers appears to have directed an independent polity that was a tight cluster of settlements surrounded by an area of very low population density. To one side of this string of polities was the Sierra Madre Occidental, a rugged and inhospitable zone; to the other side were the deserts of the Gran Chichimeca. We know less about the coastal centers of the "Mixteca-Puebla route" (Kelley 1985, 1986b), but we assume a similar pattern of isolated polities, based on the wide spacing of such sites in the narrow coastal plain. Along both the interior and coastal strips, marked gaps with little archaeological evidence of villages or towns separate those areas that are labeled Mesoamerican from those that are considered Southwestern. In the interior, the gap appears in far northern Durango and southern Chihuahua (Brooks 1971); along the coast, it occurred in northern Sinaloa and southern Sonora (Sauer and Brand 1931; McGuire and Villalpando 1989).

In contrast to the empty spaces in the northern Mesoamerican periphery, the gaps between the Southwestern regional centers were filled with an amalgam of culturally variable but fundamentally similar agriculturalists, mostly egalitarian but considerably more populous and sedentary than their counterparts in northern Mexico. Within that amalgam were rare nuclei of social elaboration. The major regional centers—Chaco Canyon, the Hohokam, Casas Grandes and the Pueblo IV towns—are heightened expressions of larger patterns that together made up the patchwork of ethnic and organizational variability that we call the Southwest. Most archaeologists have assumed that whatever external relations the Southwest had with Mesoamerica must have been mediated through those anomalous, organizationally variable regional centers.

The relative infrequency of regional centers in both the Southwest and the northern periphery is even clearer when we consider the temporal dimension. The history of events suggests that the formation of regional centers in the Southwest was part of a broad process that also included expansion of the Mesoamerican periphery.

The general pattern in the Mesoamerican periphery is one of an advance and retreat of regional centers from about AD 500 to 1350. In the northern periphery as well as in the Southwest, the isolated regional centers were not contemporary with one another but were associated with different waves of this advance and retreat. The La Quemada and Alta Vista polities, for example, were largely contemporary with one another, but the Guadiana branch of the Chalchihuites came

later (Kelley 1985). In the Southwest, Sedentary and Classic Hohokam were contemporary with Chaco and Casas Grandes, respectively, but the latter two did not overlap with one another. The Spaniards arrived during a period of retreat, when only mobile hunters and gatherers lived in many of the Classic and early Postclassic period northern Mesoamerican centers.

Direct intrusion theorists postulate that entrepreneurs caused the Mesoamericanization of the northern periphery and the Southwest. We prefer to see longdistance exchange as a correlate or consequence of social process rather than as a cause. The various Southwestern societies must have been self-sufficient and organizationally distinct from their counterparts in the Mesoamerican periphery. Even if exchange was an important part of the economy, the Southwestern societies would have had no apparent reason to reorganize themselves around production for distant polities. Such production could not have increased their subsistence base, nor could Mesoamerican polities have dispatched armies over the great distances separating the centers to collect tribute payments. We do not wish to ignore the role of long-distance exchange or to disavow evidence of ideological affinities among societies north of the Lerma-Santiago; rather, we seek to set economic variables alongside those of society and tradition in the hope of developing more holistic explanations.

There are empirical as well as theoretical reasons for continuing to question the direct intrusion interpretations. New evidence from La Quemada, a peripheral center that figures prominently in these scenarios, raises doubts about some of the postulated links in the trade system. Weigand (1978, 1982) portrays La Quemada as a Toltec'outpost designed to aid turquoise trade with the Southwest, arguing that the site must have been constructed rapidly by foreign sponsors because the local labor supply would have been inadequate to construct the massive ramparts, defensive walls, and road system. Weigand proposes that La Quemada linked the Toltec capitol of Tula with Chaco Canyon, in an imperial network of rare resource trade dating from about AD 900 to 1100.

Recent excavations at La Quemada (Jiménez Betts 1989; Nelson 1990), however, revealed no Toltec material. Nor does the chronological evidence from ceramic vessels and figurines support the idea that Toltecs founded the site. Rather than having been built in a burst of foreign-sponsored construction activity around AD 900, the site seems to have been built over hundreds of years, beginning perhaps in the late 400s. The excavations recovered no turquoise from the site, although Weigand, Harbottle, and Sayre (1977) trace turquoise recovered earlier from La Quemada to the Cerrillos source in New Mexico.

These new data do not rule out a role for La Quemada in a grand Toltec system of rare resource acquisition; nor do they rule out political dependency of the site upon the Toltecs. They do, however, raise questions about direct Toltec intervention as a force in the founding of La Quemada and about the existence of an imperially organized exchange network involving Chaco Canyon.

If we reject direct intrusion models of Southwest-Mesoamerican relations,

what kinds of models are more appropriate? We do not wish to deny the importance of economic ties based on preciosities, even though we may not accord them explanatory primacy. It is undeniable that certain rare items were moving very long distances, and with them symbols that seem to have been prominent in some Southwestern and Mesoamerican cultures.

World systems theory (Wallerstein 1974) avoids conceiving of societies as bounded entities and allows for the simultaneous possibilities of autonomy and relatedness. An especially intriguing aspect of world systems theory is the notion of "structural underdevelopment." This notion holds that because the core-periphery relationship is one of exploitation, the economy of the periphery is depressed while the core grows. Growth of the periphery may actually be inversely related to that of the core, accelerating positively only after the periphery is released from the dependency relationship.

The notion of structural underdevelopment may have implications for the growth of regional centers in the Mesoamerican periphery and the Southwest. Nelson (1993) has suggested that the growth of regional centers in the northern Mesoamerican periphery during the period AD 650 to 1100 was related to the disintegration of Teotihuacán and its replacement by a number of smaller centers. That disintegration, which had ended by about AD 750, may have left behind a series of low-visibility systems of rare resource extraction (Weigand 1982), which local peoples gained more control over with Teotihuacán's decline. Once free of tribute obligations, peripheral polities could have used surpluses for local growth, underwriting what we think to be an advance of Mesoamerica's northern "frontier."

We do not mean to imply that Teotihuacán itself was directly involved in resource extraction in the Southwest, and we are quite certain that it was not. Rather we suggest that the appearance of regional centers in the Southwest could have been part of a broad process that began with the liberation of peripheral Mesoamerican polities from core control. As more peripheral centers developed, they in turn created conditions in which other small-scale, independent polities could arise, possibly in part to serve the adjacent southern center's demands for exotic goods. In each case these processes worked themselves out at a local level with interregional relations existing between proximate centers and not necessarily across the entire chain of centers. The Southwestern regional centers would then be the ripples that remained from a wave that began centuries earlier and two thousand kilometers away.

To accept such an explanation, we must assume a larger investment by Teotihuacán in the procurement of prestige goods than some archaeologists would allow (Sanders, Parsons, and Santley 1979; Blanton and Feinman 1984). Another prerequisite is the demonstration that each area where complex societies appeared had something to contribute to a world economy. The outstanding case for such an argument is Chalchihuites, where an extensive system of mines cannot be accounted for by local demand (Weigand 1968, 1982). Other possibilities come to mind: Chacoan turquoise (but the source is not close to Chaco), Hohokam shell (again the source is distant from the ostensible production center), and so on. At present we do not have adequate data to evaluate either how important prestige goods were to core societies or the role of peripheral societies in making them.

Another possible explanation, again related to the demise of the core policy of Teotihuacán, is that the elites and craft guild members of that center dispersed to the peripheries when the Teotihuacán elite began to lose its hold (Stark 1986). Although Toltec legend records such a dispersal from Teotihuacán, no clear evidence shows that it could have affected areas as distant as the Southwest. Such an explanation also does not fit with the fact that the various regional centers in the Southwest appear over a period of several centuries. Our attempts to relate developments in the Southwest to those in Teotihuacán must deal with distances of up to two thousand kilometers and periods of up to three hundred years.

The most plausible approach seems to be to assume that some common, replicable process occurred repeatedly in the whole chain of societies. Each instance may have facilitated another, though each instance was largely independent and generated by local actors. If we accept that changes in social relations do not necessarily have only economic determinants, that social and ideological variables also have a role to play, then our explanations can have both uniformitarian and idiosyncratic elements.

The conditions for the transmission of Mesoamerican cultural elements to the Southwest were probably set up when agriculture made possible the accumulation of social surplus; that is, production beyond the subsistence needs of the producer that is appropriated by individuals or social groups (Gledhill 1978; cf. Bender 1985; McGuire 1989; Saitta 1988). The manipulation of that surplus to create social obligations and dependencies, however, revolved around local personalities, the appropriate timing and severity of local crises, and local moves to adopt hierarchy as opposed to other solutions to social problems.

Once social differentiation existed, those in leadership roles would naturally seek ways of legitimizing their authority (Flannery 1968). Such legitimization would come primarily from the leaders' ability to handle recurring problems (food shortages, threats from other groups), which would be achieved by calling upon stored wealth and the obligations of protégés (McGuire 1989). A secondary but important source of legitimization might have come from the adoption of the symbolic canons of existing systems of authority (Helms 1979).

In the case of the Southwest, the established systems of rank and authority were to the south, and their trappings were certain styles of adornment, architecture, exotic raw materials, and sacred knowledge of agricultural cycles, rain, astronomy, and warfare. The meaning of these symbols was often transformed in the Southwest, but even if the meanings differed, the symbols retained power because of their connection to the south. Such symbols and esoteric knowledge also existed in the Southwest, but leaders could enlarge their images by increasing their store of them, while simultaneously expressing their identification with other leaders. Yet these leaders would not be well served by clothing themselves entirely in symbols of foreign extraction; it was important to express a commitment to the local community and to maintain local group identity. To adopt Mesoamerican symbolism wholesale would be to betray that local commitment. Also working against wholesale adoption was the fact that the local system of authority was only vaguely like that of Mesoamerican societies. Too, there were symbolic dialogues to be conducted with societies in the Plains, the Great Basin, and beyond the Colorado River.

We feel that an accounting along these lines is more satisfactory than direct intrusion models because it does not overburden exchange as an explanatory variable. Pochteca, if they existed prior to Aztec times and traveled as far as the Southwest, were simply conduits for a flow of information and goods that aided processes of maintenance and change in social relations within and among Southwestern societies. We suggest that macroregional "external relations" can best be understood by reference to those local social relations, their traditions and ideologies, and their active uses of material culture for legitimization and reinforcement.

THE LATE PREHISTORIC PERIOD

As we shift our scale downward and look at the late prehistoric period, circa AD 1250 to 1500, of the upper Southwest we see changes in Pueblo society that reflect influences from Mesoamerica. In this context the assumptions of core-periphery appear fallible, however, and instead we see roughly equivalent social groups interacting within a geographic region. Social relations were fluid, and contacts and borrowing were extensive and extended. There is no question that the source of much of this borrowing lay to the south of the traditional Pueblo area, but the things that were borrowed were reworked and used to transform Pueblo society on a local level.

At about AD 1300, Pueblo people abandoned the seven-hundred-year-old Anasazi tradition of decorating white ceramics with black designs and began producing yellow, red, and orange wares. People from northern Chihuahua to the central Rio Grande valley to the Hopi Mesas began adding reds and whites to the traditional black designs. Dynamic asymmetric forms emphasizing birds—especially parrots and raptors—and snakes replaced the tight geometry and symmetry of earlier Pueblo ceramic decorations (Carlson 1970, 1982).

The buff-, tan-, yellow-, red-, or orange-based polychromes with bird motifs occurred in a variety of types: Ramos Polychrome at Casas Grandes, El Paso Polychrome along the lower Rio Grande, Gila Polychrome in the Salado area, Fourmile Polychrome above the Mogollon Rim in east-central Arizona, Matsaki Polychrome in the Zuni area, and Sikyatki Polychrome in the Hopi region. The common parrot motif (Hays 1989), along with macaw and parrot remains found in many post-1300 pueblos above and below the Mogollon Rim, further suggests connections beyond the "regional" level. Many local groups used a distinct set of symbols that crosscut the conventional boundaries Southwestern archaeologists draw around ethnic groups. The ultimate origins of the bird/snake iconography lie deep in

Mesoamerica, but they marked distinctive regions in the Mogollon and Anasazi traditions.

The symbolism of this new iconography clearly sprang from a new belief system, but conquerors did not force these beliefs onto an unwilling, subject people (McGuire 1980; Schroeder 1981). Rather, local peoples took up these ideas or beliefs, interwove them with their existing cosmology and in so doing remade their religion and social organization. In Chihuahua or points south the roots of this system may have lain in Quetzalcoatl or Chac, but in the Pueblo world, the belief system became the katsina cult (Adams 1991).

Thus from about AD 1250 to 1400, or the fall of Casas Grandes, an extensive system of exchange transferred items and ideas from the sedentary cultures of Chihuahua north to Hopi and the central Rio Grande. Pueblo settlements became quite large and surprisingly similar in layout. This network of interaction spanning tens of thousands of square miles was seemingly at a more intensive level than during any other prehistoric period, with relations that crosscut archaeological traditions and included Chihuahuan, Salado, "Western Pueblo," and remnants of the Anasazi traditions. This new set of social relations introduced ideas and artifacts into the traditional Pueblo (Anasazi) heartland and laid the cultural foundation for what we today call Pueblo Indians.

The key to this change was not, however, that "southern" ideas were moving north. This had almost always been the case. Nor did the northern people merely layer the new information on top of existing patterns. In reality, much more happened. The Southwestern peoples absorbed the new information and transformed their culture—not in the image of the south, but in a uniquely Puebloan fashion. Although connections and influence were certainly external, the mechanisms fostering and finally accomplishing change were internal. The late thirteenth century witnessed a transformation in Pueblo settlement and society that forever altered traditional Anasazi patterns and replaced them with patterns that were still in place at the Spanish conquest and remain in place, albeit altered by European contact, to the present.

Watson Smith (1971) noted a strong stylistic influence from both the north and the south on the thirteenth-century ceramics from the western mound at Awatovi. Although the center of Anasazi population had been north and east, first in Chaco and later in Mesa Verde during the eleventh through thirteenth centuries, a gradual shift was occurring. Depopulation of the Four Corners region began in the twelfth century as many groups moved south into already-peopled areas (Eddy, Kane, and Nickens 1983; Lekson 1986; Steen 1966). As population shifted, as new contacts developed between groups, and as adjustments were made, the internal dynamics of Anasazi tradition began to change.

This population movement extended across much of the Southwest. Haury (1958) has documented a migration to Point of Pines from the Kayenta Anasazi area in the late thirteenth century. Di Peso (1958) noted a similar migration as far south as the San Pedro River valley south of Tucson at about the same time. Carlson (1970, 1982) detected the effect of northern polychromes (Kayenta Anasazi)

on upper Little Colorado River polychromes (White Mountain Red Ware) in the late 1200s. Clearly, not only ideas, but also people, were moving southward as part of the great depopulation of the Four Corners in the late 1200s.

The cause of movement was probably resource based. The drought and erosion cycle that began in the late 1200s reduced the subsistence resource base in the highly populated Four Corners area (Euler et al. 1979; Dean et al. 1985). This depleted base could not support a population already at or near carrying capacity, and at least some people were forced to leave.

As populations moved into better-watered *refugia*—such as the Little Colorado River valley, the Mogollon Rim, and the Rio Grande valley—village size and layout changed markedly. Before AD 1250–1300, settlements were generally small (less than 50 rooms) and lacked a formal plaza area. By AD 1350, people lived in pueblos with more than 200 rooms and with one or more plazas totally enclosed by rooms.

Great kivas frequently were associated with the larger thirteenth-century settlements along the Mogollon Rim and in the upper Little Colorado River valley. These structures probably integrated the several social segments of the local community or even social segments of nearby communities. As settlements increased in size, however, the enclosed plaza replaced the great kiva and became the integrative structure used to serve the enlarged population of the aggregated settlements of the fourteenth century and later (Haury 1950).

These developments were primarily internal. Population aggregation was a product of the internal dynamics of Pueblo society and the changing physical environment. An evolving social organization sought to integrate the diverse segments of a community into cooperative rather than competitive systems that sustained aggregation. Moieties and sodalities crosscut the small-society social organization based around lineage and clan. Vivian (1990) traces the roots of the Eastern Pueblo moieties to Chaco Canyon before AD 1000, and the moiety system undoubtedly evolved in the context of sustained aggregation along the Rio Grande valley. Thus, according to Vivian and other scholars, the moiety system clearly developed locally.

We now call the socially integrative system developed in the upper Little Colorado River area between AD 1275 and 1325 the katsina cult (Adams 1991). Its evolution during a time of transition in population size and makeup, village size, and village layout suggests that these elements were all linked. According to Adams, the cult acted to integrate Western Pueblo society, allowing it to cope with immigrants and potential conflict for limited resources (Adams 1989, 1991). The cult plays the same role in modern and historic Western Pueblo society, where it is the only sodality that crosscuts all social groups of a pueblo.

Although the katsina cult developed in the upper Little Colorado River area at about AD 1300, the elements comprising the cult did not originate in that area. In fact, the cult contains a rich body of iconography and associated artifacts suggesting southern sources of contact and influence.

Cult icons appear on rock art, pottery, and kiva murals over much of the





Southwest (fig. 11.2). Common motifs appearing on pottery in the AD 1300s include parrot/macaw and snake/serpent motifs. Abstract representations of these motifs appear in ceramics from northern Mexico (Casas Grandes and Chihuahuan polychromes) through southern New Mexico, central Arizona, and northeastern Arizona. These ceramics not only are decorated with similar motifs, but also use polychrome designs on buff or brown backgrounds (Carlson 1982; Adams 1991). Similarly, the late AD 1200s saw images of parrots on rock art and live birds traded from northern Mexico, probably Casas Grandes. The kiva murals of the time also have designs with a distinct Mexican flavor, used as background features to typical Puebloan elements and figures.

Artifacts that appear in the thirteenth and fourteenth centuries with northern Mexican/southern Arizona origins include stone or ceramic griddles (*comales* or *piki* stones), the loaf-shaped shaft smoother, shoe-form ceramics, and possibly rectangular ceremonial vessels and stone paint palettes (Adams 1991:90–94). As with the iconography, this artifactual assemblage points to substantial influence from northern Mexico.

Thus the thirteenth and fourteenth centuries saw drastic population shifts in the Anasazi world, along with changes in settlement pattern, land use, and village layout. These new patterns characterized Pueblo people prior to Spanish contact, and some survive today. The populations that moved to the southern and eastern edges of the Anasazi world established new contacts and even new alliances. For the Eastern Pueblos, these contacts were primarily with the Plains tribes to the east (Riley 1987). The Western Pueblos focused southward, whence came new religious ideas and symbols via Salado peoples (Adams 1991)—ideas and symbols that were compatible with the agrarian cultures of the Pueblo peoples and carried with them the luster of foreign authority. When the stresses of the late 1200s and early 1300s beset the Pueblos, they drew on these ideas and reworked them to form the katsina cult.

Born in the upper Little Colorado River area, the katsina cult spread rapidly into neighboring regions—from the Rio Grande–Galisteo area on the east to the Homol'ovi–Hopi area on the west. After seven centuries of change, the cult still plays an active and interactive role in Pueblo culture. The cult facilitated the redefinition of social relations between groups, allowing them to merge effectively into large villages, and helped enforce relations with groups to the south. Although those relations were severed by AD 1500, their influence on Pueblo society is still visible in the twentieth century.

ON THE BORDERS OF THE SOUTHWEST

Topographic and vegetational changes can be used to define the eastern and western edges of the Southwest, but these factors are of little use in delineating a northern border to the region. On the east, the Plains end with the Pecos Basin and the Raton Plateau, whose shortgrass vegetation is in marked contrast to the piñon-juniper woodlands and montane forests of the southern Rockies, Glorieta Mesa, and Sacramento Mountains (Fenneman 1931; Shelford 1963; Williams and McAllister 1979:6–7). On the west, the Colorado River marks the boundary between the Sonoran and Mojave deserts and sets a convenient western limit to the Southwest (McGuire and Schiffer 1982:14; Warren 1984:340). On the north, the boundary between the Southwest and the Great Basin cuts across the Colorado Plateau with no clear environmental break or change (Cordell 1984:23).

Although the ecological borders of the Southwest are fairly easy to define on the west and east, the cultural borders remain fuzzy in all directions. At various times in prehistory no border appears to exist, and biologically as well as culturally the Southwest grades into adjacent areas. During other periods, ethnic groups and adaptations in these two areas are quite distinct, but even then, defining borders is risky because of the great amount of exchange of people and social relations across these boundaries. As we have said, the boundaries that looked so clear at a continental scale simply fade away when viewed on a regional scale.

THE ARCHAIC

Even at a continental scale, however, such boundaries do not exist during all time periods. Jennings (1964) speaks of an archaic Desert culture that extended from the Great Basin south across the whole of the Southwest. Irwin-Williams (1979) argues for the existence, by 3000 BC, of four interactive traditions in Arizona and

New Mexico: the Pinto Basin, Cochise, Oshara, and an eastern tradition. She refers to these four traditions collectively as the Picosa and contrasts them with the Archaic of the eastern United States, northern California, and the Columbia Plateau. During the Archaic period, no cultural boundary existed along the Colorado River: the Pinto Basin tradition extended from the Pacific halfway across Arizona, where it merged into the Cochise and Oshara traditions (McGuire and Schiffer 1982:176–79; Cordell 1984:157–79). The eastern tradition extended into central Texas, where it met with the eastern Archaic, and the Oshara tradition extended northward almost to the Columbia Plateau. In the Archaic, then, the physical space that would later hold the Southwest was not a distinct entity but part of a much larger network of cultural relations that extended from the Pacific coast on the west to central Texas on the east, and from the Columbia Plateau on the north to an indeterminate point in the Bajio of Mexico on the south. Some two thousand years after the appearance of these traditions, patterns of interaction shifted and the Southwest came into being as a cultural area.

PLAINS-PUEBLO INTERACTIONS

In the Southwest–Plains border area of eastern New Mexico, adaptations have fluctuated between an emphasis on horticulture and reliance on pure hunting and gathering. Eastern New Mexico archaeology is often considered neither Puebloan (because physiographically it is Plains) nor Plains (because the material culture was often Puebloan). Although the data from this area remain spotty (Stuart and Gauthier 1981), we can tentatively reconstruct the flux in adaptations.

From around AD 900 to 1400/1450, scattered populations practicing a mixed hunter-gatherer and horticultural subsistence strategy lived in eastern New Mexico (Glassow 1980; Jelinek 1967; J. H. Kelley 1984; Rocek and Speth 1986; Stuart and Gauthier 1981). Wendorf and Reed (1955) have argued that these horticulturalists were Puebloan farmers who moved onto the Plains, but other researchers suggest that they were indigenous populations who took up agriculture, adopted some of the technology of their Pueblo neighbors, and traded with them for certain items (Snow 1981, 1984; Rocek and Speth 1986).

At the same time as these farmers were dwelling on the plains of eastern New Mexico, small, dispersed horticultural populations, known as the Panhandle Aspect, lived along the Canadian River drainage in western Texas and Oklahoma. The Puebloan pottery, Jemez Mountain obsidian, and small quantities of turquoise and shell beads that occur on Panhandle Aspect sites confirm interaction between west Texas and eastern New Mexico. Tools of Alibates dolomite from the Texas Panhandle and pieces of bison bone from the Plains also occur in small quantities at contemporaneous Rio Grande pueblos (Spielmann 1983; Lintz 1991). Plains–Southwestern interaction during this time period appears fairly diffuse, and Lintz (1991) interprets it as a strategy of alliance formation among individual trade partners, perhaps to offset variations in local food production.

By AD 1350 this interaction intensified. Lintz (1991) argues that the southern

Plains became drier, causing Panhandle Aspect peoples to focus more on hunting and gathering and less on agriculture. Trade with Southwestern populations is thought to be another means these people used to acquire food under increasingly difficult climatic conditions. In the end, however, agriculture ceased to be viable, and farming ended in the Texas Panhandle.

At the same time that farming ends in west Texas, farming sites also disappear from the archaeological record of eastern New Mexico. Jelinek (1967) has proposed that Puebloan farmers in the middle Pecos Valley moved onto the Plains and became bison hunters in response to an increase in bison herd size in the fourteenth century; he postulated, moreover, that the historic Kiowa were the descendants of these hunters. The Kiowa language is related to Tanoan, the language group of many Rio Grande pueblos. More recently, Speth and Parry (1980) have used data from the Garnsey site, a fifteenth-century bison kill in southeastern New Mexico, to argue that bison herds on the southern Plains were not as attractive or reliable a resource as Jelinek thought. They do not dispute the transition from horticulture to hunting and gathering in the area, however, though the transition may have occurred later than originally thought, perhaps in the fifteenth century (Rocek and Speth 1986).

Snow (1984) has pondered the fate of the northeastern New Mexican farmers. He revives an argument once made by Hawley (1937) and Trager (1967) that the Tanoans may have been non-Anasazi part-time horticulturalists on the western edge of the Plains, some of whom moved westward in the fourteenth and fifteenth centuries to become part of Puebloan society, while others remained on the Plains and became the present-day Kiowa.

Although none of these scenarios is supported by enough data to make a strong case, all illustrate the lack of a discrete border between Plains and Pueblo cultural systems in the late prehistoric period. Populations in the eastern South-west/western Plains share similar cultural inventories and adaptations. Moreover, there appears to be clinal variation in biological characteristics from the eastern Southwest into the western Plains (Rocek and Speth 1986). The only clear difference in the material culture of these groups appears to be that "Plains" sites contain cord-marked, paddle-and-anvil ceramics while "Pueblo" sites yield coil-and-scraped brown wares and black-on-white ceramics. Much has been made of stylistic signaling through pottery design, but we question the wisdom of drawing boundaries based on a single trait.

A watershed of sorts in Plains–Southwest relations occurs in AD 1450. Prior to this date, fairly dispersed populations living by a mixture of hunting, gathering, and horticulture occupied both the Plains and the Eastern Pueblo areas. After this time, the Pueblo people lived in large, aggregated pueblos with an emphasis on farming, and only hunters and gatherers resided on the Plains. These huntergatherers may include both the descendants of former horticultural populations and the ancestors of modern southern Athapaskan peoples who moved into the void left by the horticulturalists (Brugge 1983); the Athapaskans were to some degree specialized bison hunters who developed trading relations with the Pueblos (Spielmann 1983, 1991a).

With the arrival of hunter-gatherer populations at the eastern border of Southwestern farming populations, the intensity of Pueblo interaction with Plains groups increased dramatically and the interaction had a greater effect on the large pueblos of the Rio Grande area. Plains nomads annually exchanged quantities of bison meat, fat, and hides for Puebloan corn, cotton blankets, jewelry, and ceramics. This exchange took place at the eastern border pueblos of Taos, Picuris, Pecos, the Galisteo Basin, and Gran Quivira; it resulted from what Wilcox (1984) terms a multiethnic division of labor and what Spielmann (1986, 1989, 1991a) argues was a mutualistic system in which farmers and hunters benefited through the exchange of complementary staple resources from different ecozones. Plains–Pueblo exchange also provided the eastern border pueblos with bison hides, which they used to participate in the pan-Southwestern inter-pueblo trade network.

CALIFORNIA-SOUTHWEST INTERACTIONS

Indian populations west of the lower Colorado River in the Mojave desert never adopted agriculture, but they did make pottery and lived in brush-and-*jacal* structures much like those found in the western Southwest. The lack of corn agriculture would place these peoples in the California cultural area, while the ceramics would place them in the Southwest. The placement of these people in a California culture area is in part an arbitrary decision that makes the cultural area congruous with the modern state.

During the period from about AD 500 to 1200, the first ceramic traditions appeared along the modern California-Arizona border. Anasazi populations lived in the lower Virgin River basin in southern Nevada, with their largest settlements, including Lost City, along the Muddy River (Rafferty 1989). To the south, Patayán peoples dwelt on both sides of the Colorado River and as far west as Lake Cahuilla (the modern Salton Sea) (Waters 1982).

The presence of the Anasazi in southern Nevada and possibly in eastern California has been linked to the establishment of long-distance trade networks (Lyneis 1984). There were large turquoise mines in the Mojave desert at Halloran Springs (Warren 1984:422), which some early authors thought resulted from Anasazi occupation in the Mojave (Rodgers 1929; McKinney, Hafner, and Gothold 1971). More recently, Warren (1984:422) has argued that local peoples lived in permanent villages near the turquoise mines. The Virgin River Anasazi traded the turquoise from these mines into Arizona, where it reached as far south as the Hohokam village at Snaketown during the Gila Butte phase (Sigleo 1975; McGuire and Downum 1982). From AD 700 to 1100, salt was mined in the Lost City area and presumably traded into Arizona (Fowler and Madsen 1986:180–81). Prehistoric peoples on the west side of the Mojave desert in Antelope Valley lived in permanent villages and traded heavily with coastal California groups. These people

lacked pottery and probably did not engage in agriculture (Hudson 1978; Hughes and Bennyhoff 1986).

Patayán ceramics and sites appeared in southern California and western Arizona at about AD 700. The center for this occupation appears to have been around Lake Cahuilla and along the lower Colorado River. There is limited evidence for trade and contact between these populations and the Hohokam of southern Arizona. Some of the small quantities of Pacific coast abalone shell found in Colonial (AD 700–1000) and Sedentary (AD 1000–1100) Hohokam sites may have passed through the Patayán, but only a handful of Hohokam sherds have been found in Patayán sites of this period and the shell could have reached the Hohokam through the same northern route as Nevada turquoise (McGuire and Howard 1987:123).

Major changes occur in the relations between the populations of the Mojave desert and western Arizona after AD 1200. Anasazi peoples abandoned southern Nevada in the late 1200s, and Anasazi pottery disappeared from the desert. The Patayán expanded their range and became involved in long-distance trade networks into both northern and southern Arizona.

From AD 1200 to 1450 Patayán ceramics spread over the Mojave desert. The villages in Antelope Valley thrived, but they had little pottery and seem to have been the eastern edge of a sphere of influence that originated on the western slopes of the Sierra Nevada (Warren 1984:426). Local populations established permanent villages along the upper Mojave River, and large quantities of Lower Colorado buff wares appear in these sites, suggesting that these peoples were passing California shell and perhaps turquoise to Patayán settlements. Patayán settlements extended as far north as the Providence and New York mountains (Warren 1984:426), but the major concentration of sites was still around Lake Cahuilla and along the Lower Colorado River (Waters 1982:288).

The Patayán tradition also spread eastward during this period. In southwestern Arizona, Patayán ceramics replaced Hohokam ceramics to the west of the modern Papago reservation and in the Gila Bend area (McGuire and Schiffer 1982:213–14); they also became far more common in Hohokam sites in the Phoenix Basin, and more Hohokam pottery occurred along the lower Colorado River (Waters 1982:290). The Patayán appear to have entered the Hohokam shell trade, bringing shell from the Gulf of California to Gila Bend for exchange into the Phoenix Basin (Huckell 1979).

The great freshwater Lake Cahuilla had been slowly drying up for several hundred years, and sometime between AD 1400 and 1500 it became too brackish to support life (Waters 1982). As the lake became spoiled, Patayán populations were forced eastward to the lower Colorado River. This population displacement sparked endemic warfare and strife between ethnically different Patayán populations, which continued into the 1800s.

GREAT BASIN–SOUTHWEST INTERACTIONS

The northern boundary of the Southwest is marked by no distinctive physiographic feature. On the Colorado Plateau, the growing season shortens and corn agriculture becomes more and more marginal, but the exact northern limit to corn agriculture varied over time with climatic fluctuations. Prehistoric cultures also pulsed within this region. An Anasazi artifact assemblage was found well into Utah from Basketmaker II times until the end of Pueblo III, when the northernmost extent of the Anasazi tradition receded to the Hopi Mesas. Beyond this northern bulge of the Anasazi lived the Fremont people, who had the pots, corn agriculture, and houses of the Southwest culture area.

The Fremont tradition dates from about AD 400 to 1300 and extended throughout Utah and as far north as Idaho (Madsen 1979). These people practiced corn horticulture, made gray ware pottery, lived in substantial pithouses with contiguous surface storage rooms, and developed a distinctive artistic expression in clay figurines and rock art. Marwitt (1986:161) describes Fremont culture as an oddity: in over ten thousand years of human occupation of the area, only during this nine-hundred-year period did agriculturalists appear in the Great Basin. The variation in material culture within the tradition is great, and some authors define more than one agricultural tradition in the region (Madsen and Lindsay 1977) though most retain the label Fremont for the entire region (Lohse 1980). Marwitt (1986) distinguishes five regional variants of the tradition, which he correlates with variations in environmental conditions. The Southwestern attributes associated with the culture—pottery, houses, and agriculture—declined in importance and in elaboration from south to north.

The relationship of the Fremont tradition to the Anasazi is problematic. Many scholars claim that Fremont represents a peripheral development of the Anasazi tradition that originated either with Basketmaker III or with the Anasazi's northern expansion at around AD 900 (Wormington 1955; Ambler 1966a, 1966b; Berry 1980). Marwitt (1986:161, 163) argues that Fremont is best seen as an indigenous development in the Great Basin, noting that the earliest Fremont sites predate Basketmaker III and appear in northern Utah. That the different Fremont traditions appear at different times suggests local developments. In marked contrast to east-west relations between southern California and the Anasazi, there is verv little evidence for interaction between the Fremont and the Anasazi. Ceramics from neither area occur with any regularity in the other, and the Fremont do not appear to have provided the Anasazi with any minerals or food products. It is possible that the people of southern Utah adopted agriculture as a strategy appropriate to their particular situations and that such an adoption brought with it a suite of technological assemblages (i.e., ceramic technology) that caused these populations to appear "Anasazi-ized."

The Fremont tradition ends sometime between AD 1250 and 1350 (Marwitt 1986:171). Currently, most scholars feel that Fremont populations were replaced throughout the region by Numic speakers ancestral to the historic Shoshone. The

Shoshone of the Great Basin were hunter-gatherers who lacked agriculture and substantial structures. Fremont peoples were absorbed into Numic groups, migrated to the Plains to form the Dismal River complex, or moved south with the Anasazi.

Despite the apparent lack of regular exchange relations between the Fremont and Anasazi traditions, the broad course of Fremont prehistory parallels that of the northern Anasazi. The Fremont tradition is most widespread at the time of the Anasazi northward expansion between AD 800 and 900, and its greatest elaboration occurs in the AD 1100s to 1200s when Anasazi developments peak in Mesa Verde. The demise of the Fremont tradition corresponds in time with the abandonment of the Four Corners area by the Anasazi in the late thirteenth century. The lack of material indicators of relations between the two traditions suggests that these similarities may reflect environmental shifts more than changes in the interaction between the traditions.

MAKING SENSE OF FUZZY BOUNDARIES

In comparison with Mesoamerican–Southwestern interaction, interactions along the other margins of the Southwest do not appear to have been as pan-regional or permeating an influence on Southwestern prehistory. At various times, interaction with Mesoamerica provided a number of Southwestern populations with material goods, iconography, and perhaps religious cults that were incorporated into or used throughout large portions of the Southwest. In contrast, California, Great Basin, and Plains influence—in the form of iconography, rituals, political alliance, and material culture—is more restricted in scope (Spielmann 1983; McGuire and Schiffer 1982; Marwitt 1986).

One might conclude, then, that interaction with these regions is indeed peripheral to Southwestern prehistory writ large, though highly significant to the prehistory of subregions within the Southwest. It would be incorrect, however, to use the term "peripheral" in the Wallersteinian (see Wallerstein 1974) sense to describe the articulations between these populations. In world systems models, more politically advanced core populations economically dominate the peripheries. In none of these cases, however, is there hard prehistoric data indicating that Southwestern populations were dominated by peripheral populations either politically, economically, or socially.

Nowhere is the inappropriateness of the world systems model for understanding Southwestern social relations at this scale more apparent than in the interaction of Plains and Pueblo populations (but see Baugh 1982, 1984 for an opposing viewpoint). From AD 1100 to 1300, the period of small Eastern Pueblo and Plains farming villages, interaction was diffuse. No group had primacy over another in terms of population size or density, military might, or the desirability of goods. Beginning in the fourteenth century, relations changed as the Rio Grande became more densely populated and this population aggregated into large pueblos. By the fifteenth century, mobile bison hunters moved onto the southern Plains; interaction between the Southwest and Plains increased; and interdependence seems to have grown.

We do not have a clear understanding of how dependent either Plains or Pueblo populations were on this interaction. We do not know the degree to which one group could manipulate or affect the activities of the other. Spielmann (1991a) has argued that the relatively high density of protohistoric Plains hunter-gatherer populations suggests that they depended in part on Pueblo corn for their survival. What remains unanswered, however, is the nature of this dependence. Did each band have multiple trading ties, so that if one trade partner or one Pueblo were unable or unwilling to trade, others were available in their stead? Was the requirement for Puebloan corn an annual one? Though the Spanish chronicles mention yearly visits by Plains nomads, it is not clear if the same bands came to the Pueblos each year.

The Pueblos also depended to some degree on Plains supplies, though again the degree of that dependence is at present unknown. Faunal data from Gran Quivira Pueblo suggest that overhunting of local game led to a decrease in the supply of meat to the pueblo. This deficit may have been offset through trade for bison meat (Spielmann 1988). Though bison meat most likely was consumed primarily by eastern border pueblo populations, these groups traded bison hides to Pueblo populations in the Rio Grande valley and farther west. Through trade, this Plains product may have given the eastern border Pueblos access to items such as glazed pottery, cotton cloth, and turquoise, which were manufactured by other protohistoric Pueblo groups.

Militarily, the Plains nomads may have had the upper hand over Puebloan groups. Pecos Pueblo inhabitants told Coronado of an attack on several pueblos that he had seen in ruins on his trip from the Albuquerque area to Pecos. The Teyas, a nomadic Plains group, had besieged Pecos a number of years prior to the Spanish arrival (Winship 1896). This is one of only a few references to pre-seventeenthcentury nomad hostilities, suggesting that overtly hostile interactions may not have been the norm in protohistoric Plains–Pueblo relations (Spielmann 1991b).

Politically, individual eastern border Pueblos may have used their relations with Plains nomads in their jockeying for power and access to goods within an increasingly populated Rio Grande world (Wilcox 1991b). Spanish chronicles document that various Pueblo and Plains groups in the sixteenth and seventeenth centuries were allied with one another in opposition to other such alliances (Hodge, Hammond, and Rey 1945; Hammond and Rey 1953:345; Schroeder 1984 and references therein).

What we propose, then, is that there was a dynamic balance of needs, goods, and power between protohistoric Plains hunter-gatherers and Puebloan farmers east of the Rio Grande. An economic division of labor existed, and the trade relations were predicated upon social ties such as the trade partnerships between individuals (see Ford 1972) and political alliances between particular Plains bands and particular pueblos.

Other researchers (Baugh 1982, 1984; and Wilcox 1981a, 1981b, 1984) argue

that an interactive system extended beyond Plains hunter-gatherer/Pueblo horticultural alliances to Caddo and Wichita farming populations to the east and north of the Plains nomads. They suggest that these farmers also interacted directly with Puebloan farming populations, perhaps through ambassadors. Thus, they see the Plains–Southwest system as politically and economically integrated over the entire southern and portions of the central Plains.

We question whether the economic division of labor that typifies Plains– Southwest relations was ever this socially or politically coherent. Instead, we suggest that like the Puebloan farmers, the protohistoric farmers of Oklahoma and Kansas were engaging in mutualistic exchange with Plains nomads. We doubt, however, that Puebloan, Plains Caddoan, and Wichita farmers monitored and made decisions based upon one another's exchange activities. Most likely, Plains nomads had obtained the occasional Puebloan goods showing up in central Kansas (Wedel 1942, 1950) and western Oklahoma (Baugh 1982) villages.

Making similar sense of the relations on the northern and western borders of the Southwest will require a set of data as detailed as what we have for the eastern edge. At the present time such data do not exist, and much more research is needed in both these regions.

CONCLUSION

Our discussions of external connections of the Southwest have been built around two basic ideas. First, if we define the Southwest in terms of social relations between human groups, then the boundaries of the Southwest are fuzzy. The space that these social relations occupies changes over time, so that the area of the Southwest is historically created and dynamic. Even the distinction between internal and external becomes vague and changeable. Second, our analyses of Southwestern prehistory should be multiscaler. As we move our scale of analysis, we frame different sets of relations; as we change scale, the patterns that we see also change. We need to consider different theoretical models to reveal and understand the patterns that we find at different scales. We question the use of theories that dictate a priori what the nature of relations was or that specify a single scale of analysis.

If the Southwest was not a hard-bounded entity, then archaeological scholarship needs to range more widely. Throughout our discussions of external relations to the Southwest we have been able to write what we have because we are personally well versed in the appropriate archaeological data on both sides of the "borders." We have worked in the Southwest and in these "external" areas and have focused specifically on interrelationships in our research. Moreover, we interact extensively with colleagues in the "external" areas so that we are aware in general of data that pertain to the issue of interrelationships.

At the broadest scale we have found that the Southwest and Mesoamerica share many commonalities, but that the two regions were distinctive in the structure of relations. The Southwest was neither strictly the northernmost edge of Mesoamerica nor an isolated cultural climax separate from surrounding culture areas. The degree of sociopolitical complexity and community or polity size and of rank-size differentiation within polities was less in the Southwest than in Mesoamerica. Along both the interior of northern Durango and southern Chihuahua and the narrow coastal plain of Sinaloa, a pronounced geographical gap separates the southernmost Southwestern sites from the northernmost Mesoamerican sites.

In the northern Southwest we find that the processes that restructured the Pueblo world in the early fourteenth century were part and parcel of that world, springing from the social relations within and between Pueblo social groups and from the relations between these groups and the environment. The people of the late prehistoric Pueblo world drew on beliefs, symbols, and items from the south to create the katsina cult, but they adapted the cult to local conditions as the regional relations that structured their lives changed.

At the lowest scale of analysis, the boundaries of the Southwest had little or no meaning for the prehistoric populations that lived along them. Generally, the interactions across these boundaries were as (or more) important to the Southwestern populations involved in them as were their relations with other Southwestern peoples. The issue of what was inside and outside the Southwest is not a simple one. Clearly, the Southwest was never truly the Nuevo México that the sixteenth-century Spanish looked for. It was also never the clearly defined culture area that many modern archaeologists have assumed.