

CONTENTS

LIST OF ILLUSTRATIONS	vii
FOREWORD	xi
PREFACE	xv
1. CHANGING PERCEPTIONS OF REGIONAL INTERACTION IN THE PREHISTORIC SOUTHWEST <i>Michelle Hegmon, Kelley Hays-Gilpin, Randall H. McGuire, Alison E. Rautman, Sarah H. Schlanger</i>	1
PART 1: REGIONAL ISSUES AND REGIONAL SYSTEMS	
2. WHAT IS A REGIONAL SYSTEM? ISSUES OF SCALE AND INTERAC- TION IN THE PREHISTORIC SOUTHWEST <i>Jill E. Neitzel</i>	25
3. REGIONAL INTERACTION AND WARFARE IN THE LATE PREHIS- TORIC SOUTHWEST <i>Steven A. LeBlanc</i>	41
4. SCALE, INTERACTION, AND REGIONAL ANALYSIS IN LATE PUEBLO PREHISTORY <i>Andrew I. Duff</i>	71
5. REGIONAL INTERACTIONS AND REGIONAL SYSTEMS IN THE PROTOHISTORIC RIO GRANDE <i>Winifred Creamer</i>	99
6. REGIONAL APPROACHES WITH UNBOUNDED SYSTEMS: THE RECORD OF FOLSOM LAND USE IN NEW MEXICO AND WEST TEXAS <i>Daniel S. Amick</i>	119
PART 2: INTERREGIONAL ECONOMIES AND EXCHANGE	
7. THEORIZING THE POLITICAL ECONOMY OF SOUTHWESTERN EX- CHANGE <i>Dean J. Saitta</i>	151
8. NETWORKS OF SHELL ORNAMENT EXCHANGE: A CRITICAL AS- SESSMENT OF PRESTIGE ECONOMIES IN THE NORTH AMERICAN SOUTHWEST <i>Ronna J. Bradley</i>	167
9. EXCHANGES, ASSUMPTIONS, AND MORTUARY GOODS IN PRE- PAQUIMÉ CHIHUAHUA, MEXICO <i>John E. Douglas</i>	189

10. POTTERY, FOOD, HIDES, AND WOMEN: LABOR, PRODUCTION, AND EXCHANGE ACROSS THE PROTOHISTORIC PLAINS-PUEBLO FRONTIER <i>Judith A. Habicht-Mauche</i>	209
PART 3: BEYOND THE BORDERS OF THE TRADITIONAL SOUTHWEST	235
11. SCALE, INNOVATION, AND CHANGE IN THE DESERT WEST: A MACROREGIONAL APPROACH <i>Steadman Upham</i>	
12. LIFE AT THE EDGE: PUEBLO SETTLEMENTS IN SOUTHERN NE- VADA <i>Margaret M. Lyneis</i>	257
13. FREMONT FARMERS: THE SEARCH FOR CONTEXT <i>Richard K. Talbot</i>	275
14. PREHISTORIC MOVEMENTS OF NORTHERN UTO-AZTECAN PEOPLES ALONG THE NORTHWESTERN EDGE OF THE SOUTH- WEST: IMPACT ON SOUTHWESTERN POPULATIONS <i>Mark Q. Sutton</i>	295
15. AGGREGATION, WARFARE, AND THE SPREAD OF THE MESOAMERICAN TRADITION <i>Ben A. Nelson</i>	317
PART 4: THE SPREAD OF RELIGIOUS SYSTEMS	
16. KATSINAS AND KIVA ABANDONMENT AT HOMOL'ОВI: A DE- POSIT-ORIENTED PERSPECTIVE ON RELIGION IN SOUTHWEST PREHISTORY <i>William H. Walker, Vincent M. LaMotta, E. Charles Adams</i>	341
17. NAVAJO RITUAL HISTORIES, ORGANIZATION, AND ARCHITEC- TURE: IMPLICATIONS FOR ARCHAEOLOGY <i>David M. Brugge, Dennis Gilpin</i>	361
18. CULTURAL COLLAPSE AND REORGANIZATION: ORIGIN AND SPREAD OF PUEBLO RITUAL SODALITIES <i>John A. Ware, Eric Blinman</i>	381
19. THE FLOWER WORLD IN PREHISTORIC SOUTHWEST MATE- RIAL CULTURE <i>Kelley Hays-Gilpin, Jane H. Hill</i>	411
20. OUTWARD AND VISIBLE SIGNS: TEXTILES IN CEREMONIAL CONTEXTS <i>Lynn S. Teague</i>	429
INDEX	451

1

CHANGING PERCEPTIONS OF REGIONAL INTERACTION IN THE PREHISTORIC SOUTHWEST

Michelle Hegmon
Kelley Hays-Gilpin
Randall H. McGuire
Alison E. Rautman
Sarah H. Schlanger

Research at a regional scale and interest in regional interaction have a long, though uneven, history in the study of southwestern prehistory. Early exploratory work mostly investigated particular sites and localities, but it also raised questions about large-scale interaction, such as Fewkes's (1896) recognition of the distribution of Pacific shell on sites in north-east Arizona and speculations regarding Mesoamerican influence in (or intrusion into) Chaco Canyon (see summary in Schroeder 1979). This work set the stage for regional and larger-scale syntheses in the 1920s and 1930s (e.g., Gladwin and Gladwin 1934; Kidder 1962). Although the perspectives provided by this work were regional or interregional in scope, these authors expressed relatively little interest in interaction at those scales. Instead, they generally assumed that diffusion was a natural process (see Schortman and Urban 1987) and often emphasized the importance of independent development, with only a "germ" of influence from the outside (e.g., Kidder 1962: 326). One important exception was Harold Colton (1939, 1941), who specifically considered trade in his synthesis of Southwest cultural units.

By mid-century, as archaeologists concentrated on establishing chronological sequences and reconstructing events at particular sites and localities, regional interaction (other than diffusion) was increasingly ignored or even rejected as a factor to be reckoned with. The classic case is the work of Anna Shepard. Today, archaeologists have little doubt

that specialized pottery production and exchange were organized at large scales in late northern Rio Grande prehistory. But when Shepard (1936, 1942) first presented her “heretical” (Cordell 1991) evidence for this regional interaction her work was mostly ignored—possibly because she was a woman, possibly because she did not have an academic position, possibly because her conclusions did not fit with the prevailing paradigm (see Cordell 1991; Plog 1989). In the next decade Gordon Willey’s (1956) work on settlement patterns helped to move archaeologists away from a sometimes overly narrow focus on classification; however—at least in the Southwest—settlement pattern studies prompted little interest in regional interaction but rather led to more work on environmental adaptations (Haury 1956). Emil Haury (1945) identified a need to better understand contacts between the Southwest and Mesoamerica (at that time he attributed the origins of the Hohokam to migration from the south), but this kind of regional or interregional interaction did not become a focus of research.

The advent of the New Archaeology in the 1960s prompted great changes in the kinds of questions asked about Southwest prehistory (Longacre 1970), but regional interaction was not yet a major part of the new repertoire. Instead, villages and communities were thought to have been relatively autonomous, an assumption that facilitated analysis of them as systems (see Doyel and Lekson 1992: 15). The exchange of pottery was little considered, since “autonomous” villages were thought to have produced their own pottery (see Plog 1980). Even links between Chaco Canyon and the many sites we now call outliers were generally ignored or denied (see Judge 1991: 14). One exception involved theories regarding Mesoamerican influence in the Southwest, although the nature of the debate (either developments such as Chaco were caused by Mesoamerican traders or they were not) probably did not help archaeologists to think about alternative and more subtle forms of interaction (see summary in Wilcox 1986).

Regional interaction in the prehistoric Southwest finally became an important issue in the 1970s when archaeologists came to realize that even the least-complex societies could not exist in isolation (Wobst 1974) and the study of exchange became a major research topic (Earle and Ericson 1977; Ford 1972). In the Southwest, widespread pottery exchange was documented in many instances (e.g., Deutchman 1980; Doyel 1979; Plog 1980; Toll, Windes, and McKenna 1980 [see summary in Toll 1991]; Warren 1969). Chaco and the Hohokam came to be seen as regional systems (Judge and Schelberg 1984; Wilcox 1979; see Neitzel, Chapter 2, this volume) composed of a number of interacting but

geographically separate communities that exchanged goods and services and perhaps participated in a common ritual system. In addition, exchange as well as other kinds of political linkages became a central component of many explanatory and synthetic models (e.g., Cordell and Plog 1979; Di Peso 1974; Plog 1983; Upham 1982). Techniques of regional analysis, derived primarily from geography (see Johnson 1977; Smith 1976), were applied in various areas of the Southwest (e.g., Jewett 1989; Lightfoot 1984; Upham 1982).

Most studies of regional interaction in the Southwest focused on later and larger-scale manifestations, and to some extent studies of large-scale interaction became linked to arguments regarding sociopolitical complexity (Upham, Lightfoot, and Jewett 1989). Especially in recent years, however, extensive and complicated forms of interaction have been documented for systems that do not necessarily involve sociopolitical hierarchies, such as the spread of Salado Polychrome and Plains-Pueblo exchange (Crown 1994; Spielmann 1991a). Earlier and less complex forms of regional interaction are also receiving growing attention (e.g., Amick, Chapter 6, this volume; Blinman and Wilson 1992; Hegmon et al. 1997; Plog 1986; Rautman 1993; Wills 1988). Although debate about the nature of regional interaction and its relationship to various organizational forms continues, there is probably little doubt today that regional interaction is a factor that must be reckoned with and considered for almost all times and places in the prehistoric Southwest. There may have been some autonomous communities that produced all of their own pottery and did not participate in exchange, but their existence must be demonstrated empirically (Kojo 1996).

Since the 1980s, regional approaches to the study of southwestern prehistory have taken a new approach that perhaps reflects the underlying prevalence of concern with regional interaction. Although textbooks and popular summaries have long covered large areas of the Southwest, this large-scale approach is increasingly becoming a part of recent professional literature as well. Specifically, a general synthesis (Cordell and Gumerman 1989) and a synthesis of the Pueblo III period (Adler 1996) both include chapters covering most parts of the Southwest. In a different vein, authors familiar with various areas of the Southwest combined efforts to address a number of themes from a pan-southwestern perspective (Gumerman 1994). Also, at a recent conference on engendering southwestern prehistory (Crown 1997), researchers focused on a variety of issues, drawing data from across the Southwest and comparing and contrasting different regions. Not all of this recent work focuses on interaction per se, although interaction is a specific focus of some chapters

(e.g., Cordell, Doyel, and Kintigh 1994; McGuire et al. 1994; Spielmann 1997; Upham, Crown, and Plog 1994). Rather, recent approaches are underlain by the assumption that regional interaction is always a potential factor; we cannot understand developments in one area without knowing something about other areas.

In a recent synthesis, Hegmon and Plog (1996) identified four dimensions of regional interaction in the prehistoric Southwest—the exchange of information, the exchange of material goods, sociopolitical relations, and the movement of people. In preparation for this volume and the 1996 Southwest Symposium, authors and session organizers were asked to focus on problems and gaps identified by Hegmon and Plog. These are primarily issues relating—in various ways—to the first two dimensions—that is, to the spread, distribution, and exchange of information (including styles as well as ideational systems) and material.

The third dimension—sociopolitical relations—can obviously never be ignored, since such relations underlie interactions of all sorts. Sociopolitical relations, however, receive little explicit focus here because they have been discussed extensively in recent literature, including debates about prehistoric complexity (see summary in Hegmon and Plog 1996; also Upham, Lightfoot, and Jewett 1989) and explorations of the Chaco and Hohokam regional systems (Crown and Judge 1991; Doyel 1992). One exception is warfare and violence as a form of regional sociopolitical interaction. Although evidence for violence in various areas of the prehistoric Southwest has been accumulating in recent years (see summary in Wilcox and Haas 1994; also Sutton, Chapter 14, this volume), Steven LeBlanc (Chapter 3, this volume) is probably the first to consider warfare as a form of regional and interregional interaction at a pan-southwestern scale.

The fourth dimension—the movement of people—is not typically classified as a type of regional interaction, although it (particularly the depopulation of large areas) has been subject to a large amount of recent research in a manner compatible with understanding such movements to be a form of regional and interregional interaction (e.g., Cameron 1995; Fish et al. 1994; Hegmon, Nelson, and Ruth 1998). Specifically, consideration of large (regional or interregional) scales contributes to an understanding of “pull” as well as “push” factors and focuses attention on relations between the people who leave an area and people already living in the areas where they settled (see Lipe 1995).

Research on the first two dimensions (the exchange of information and material) has not been lacking in the prehistoric Southwest. However, the Hegmon and Plog (1996) summary, as well as a number of

other statements (e.g., Schortman and Urban 1987) suggest that although archaeologists are increasingly able to trace and document the movement of material and the spread of styles and other kinds of information, we often know little about the nature of the underlying social interactions. One basic question has to do with the term *exchange*. Authors were asked to consider whether goods actually moved through exchange or by other means. In this volume and in the literature in general, researchers working in areas or periods characterized by a high degree of mobility tend to be the most cautious about assuming that goods moved through exchange (e.g., Amick, Upham, Lyneis, Talbot, Chapters 6, 11, 12, 13, this volume), and we suggest that some of these same cautions should be applied much more widely. Furthermore, even if we can be sure that goods moved between populations (i.e., that they were not carried by migrating populations [see Zedeño 1994]), can we be sure they were actually *exchanged*? Exchanged for what? What kinds of social relations are involved in the exchanges? These questions are explored primarily in the chapters in Part 2.

Problems regarding the nature of interactions are even more complicated for nonmaterial distributions. How do archaeologically identified regions or other spatial divisions relate to prehistoric cultural identity and social boundaries? How might boundaries change over time? Is a shared style simply an indication of a general cultural tradition (isochrestic variation [Sackett 1982]), or might it be an expression of a political alliance (Plog 1983)? We know material differences (even when they do correspond to ethnic differences) do not preclude interaction (e.g., Hodder 1982; Spielmann 1991b), but what is the nature of interaction within and across boundaries? When we observe simultaneous developments or the “diffusion” of a style or ideational system, what kinds of processes or mechanisms were involved (see McGuire et al. 1994: 246)? What is the role of language in these processes? These issues are explored in various ways throughout the volume. Boundaries and the definition of regions are given explicit focus in the first part, which is on the concept of regions and regional systems, and in the third, which reaches beyond the borders of the traditional Southwest. Chapters in these sections also address macroregional processes and changes. Finally, the fourth section explores the spread of a particular kind of information—religion—and the associated processes of regional interaction.

Finally, several issues need to be addressed before we briefly summarize the volume. The first is the meaning of “region” or “regional” (see also Duff, Chapter 4, this volume). The term *region* lacks a precise

definition in Southwest archaeology (Fish et al. 1994: 137). It almost always means something larger than a single valley or locality, and it most often refers to a major topographic and also often ceramic division. Thus region is generally synonymous with Colton's (1939) "branches," although different from the Gladwins' (1934) branches. In addition, regional is sometimes used to mean the large-scale (Pueblo, Mogollon, Hohokam) divisions (e.g., Hegmon and Plog 1996) or, alternatively, the Southwest as a whole (e.g., Dean, Doelle, and Orcutt 1994). In general, regional is used here to refer to a scale corresponding to major geographic subdivisions (e.g., Kayenta, Virgin, Mimbres, Tucson Basin) that are smaller than the largest-scale (Pueblo, Mogollon, Hohokam) divisions of the Southwest. The interpretation of regions (Are they merely geographic divisions, or do they represent cultural entities or systems of interaction?) is considered in more detail in Part 1.

The second issue has to do with scale. It is probably always good for archaeologists to have the big—regional, interregional, pan-southwestern, macroregional—picture in mind. This big-picture approach is a major unifying theme of this volume and of other recent work, as discussed previously. An important concept in this regard is what Marquardt and Crumley (1987: 2) call the "effective scale" of research—that is, "any scale at which pattern may be recognized or meaning inferred" (see McGuire et al. 1994: 244). We would argue that for more and more issues of interest in southwestern prehistory *one* very effective scale is regional or larger. This is not to say that all meaningful analyses must be regional but rather that many issues—such as abandonment or the appearance of a new style—gain new meaning when viewed at a large geographic scale and that consideration of multiple scales may be particularly meaningful. For example, in a sweeping analysis Dean and colleagues (1994: 77) concluded that there was poor correspondence between population levels and environmental variability at a large (pan-Southwest) scale and that "demographic responses to environmental factors take place primarily on the local . . . level." Similarly, Varien's (1999) analyses of households, communities, and the central Mesa Verde region was enhanced by his simultaneous consideration of all three scales—for example, his conclusion that household mobility took place in the context of community stability and regional packing.

Finally, the chapters in this volume—and archaeological work on regional interaction in general—address myriad topics and include some considerations of cultural meanings. Despite the emphasis on understanding interaction across space, however, these archaeological approaches pay little heed to the concept of *place* as used by many social-cultural

geographers and growing numbers of ethnographers (e.g., Appadurai 1988; Feld and Basso 1996; Rodman 1992; Soja 1989). “Places are constructed and experienced as material and ecological artefacts and intricate networks of social relations. . . . They are an intense focus of discursive activity, filled with symbolic and representational meanings, and they are a distinctive product of institutionalized social and political-economic power” (Harvey 1996: 316). Archaeologists may have a great deal to gain by considering the extent to which space is socially constructed, the links between social and spatial relations, and the ways in which certain places—where certain structures were erected or significant events occurred—become imbued with special meaning and thus affect the use of the landscape for generations to come. Although not all nuances of meaning and social constructs will be accessible to archaeological analysis, a number of Southwest archaeologists have made important insights regarding the meaning of certain places, the structure of landscapes, and the relationship between social and spatial structures (e.g., Ferguson 1996; Stein and Fowler 1992; Varien 1999). Our point here is simply that these kinds of approaches should be applied at a larger spatial-regional scale, and we hope the chapters that follow will provide some material that can be considered in this way.

OVERVIEW OF THE VOLUME

Part I focuses on two interrelated questions. The first involves understanding the kinds of actions and processes that create the patterning in material remains archaeologists recognize as regions or regional systems (Neitzel, LeBlanc, Duff, Creamer, Chapters 2, 3, 4, 5). The second expands the scope of analysis to consider developments at a much larger pan-southwestern scale (LeBlanc, Amick, Chapters 3, 6). An underlying theme, especially of Amick’s analysis of Folsom Paleoindian remains, is the interactive relationship between culture and the “natural” environment (see Crumley 1994). People classify and categorize landscape features, creating their own cultural landscape even as they alter their physical environment to fit their needs.

Neitzel begins with a general discussion of the concept of regional systems. She argues that although the concept originally directed archaeologists’ attention toward understanding diversity and social interaction, it is now applied so widely that it is losing its meaning. We need to move beyond the concept and focus on understanding the kinds of interactions that produced what have come to be called regions and regional systems. Specifically, Neitzel suggests that

we begin by examining the differential distributions of the various styles and artifacts classes that characterize a region, suggestions that are applied in later chapters.

LeBlanc sets the stage for these analyses, and for many of the chapters that follow, by considering the impact of warfare across the Southwest, particularly in the late (post-A.D. 1300) prehistoric period. Evidence of warfare includes the clustered distribution of settlements separated by unoccupied territories, as well as more direct evidence of violence including burning and skeletal remains. Thus warfare may have contributed to the distributions we recognize as regions. The warfare documented by LeBlanc and others is, of course, a kind of regional interaction. In addition, LeBlanc's discussion of warfare contributes to our understanding of other kinds of regional interaction—including the spread of religious systems and iconography, as well as apparently asymmetrical trade—that seem more explicable when set in the context of warfare.

Duff and Creamer then detail the evidence of various kinds of interactions in specific areas during this late prehistoric period; in essence, both carry out the kinds of analysis Neitzel calls for. Duff, working in the Western Pueblo area, suggests that demographically large regions such as Hopi and Zuni were characterized by mostly internal interactions, whereas interactions in smaller regions were more various and more often external. He also questions the general equation of regions with either sociopolitical entities or spheres of interaction, such as regional systems or alliances. His detailed data from the Upper Little Colorado region demonstrate that although this region was characterized by homogeneity in some technological characteristics, different parts of the region apparently participated in very different spheres of interaction (a pattern suggested by LeBlanc). Thus Duff reminds us of the varieties of processes that can be classified as regional interaction and of the various ways in which regions may have been organized.

Extensive and intensive regional interaction is well documented across the northern Rio Grande. As Creamer notes, however, this interaction—indicated by patterns of ceramic and lithic distribution, settlement clusters, and historical languages—occurred at a variety of cross-cutting scales. These various forms of interaction do not appear to have constituted a regional system, although Creamer suggests a nascent system may have been emerging centered around the Glaze Ware area surrounding Albuquerque, a system that was truncated by the establishment of early Spanish camps in that area. Creamer demonstrates that detailed consideration of various kinds of regional interactions may be

more useful that debates regarding the presence or absence of “a regional system.”

Finally, Amick returns to the very broad scale considered by LeBlanc but in a much earlier (Paleoindian) period. Regional (or pan-southwestern) interaction at this time consisted primarily of extensive mobility and the flow of information, with no apparent boundaries. Differences did exist, however, and Amick’s analysis of the distribution of Folsom sites and characteristics across much of New Mexico and west Texas and Oklahoma demonstrates that the pattern we label *Folsom* comprises a complex series of adaptations to various environments. Over the course of millennia, as the population gradually increased and the climate changed, these different adaptations eventually resulted in the kinds of differences we recognize archaeologically as regions.

The prehistory of the Southwest is characterized by great diversity but also by key interregional similarities and broad patterns of regional development. Part 2 focuses on understanding the role of large-scale interregional economies in these developments and examining theories of large-scale interaction. The chapters build on our growing understanding of exchange systems in and beyond the Southwest (e.g., Ericson and Baugh 1992) to consider the kinds of social interactions involved in or underlying the exchanges. Although they analyze different lines of evidence and work within various theoretical perspectives, most authors express a lack of enthusiasm for formal models of exchange and economic interaction such as World Systems Theory and peer polity interaction, largely because these models do not account for the various and variable economic interactions of the past. In general, an understanding of macroscale economic processes seems to be best enhanced by a complementary understanding of a local-scale production, distribution, and use. As Judith Habicht-Mauche (this volume, p. 225) asks, “How did this interregional economy result from strategic choices made by individual kin groups and households in response to specific ecological and historical circumstances?”

Saitta provides a general overview of archaeological approaches to political economy, particularly the prestige goods economy model, which he rejects in part because it cannot account for patterns in various parts of prehistoric North America. Using an example from Chaco, he argues that prestige-based exchange need not have been orchestrated by individualistic elites but instead could have been a collective strategy in which valuables functioned as communal social entitlements. Thus elite organizers may have been behind the massive constructions, but the production and consumption of turquoise—found in many contexts in small

sites and large—may have been organized differently and less exclusively. Thus Saitta (and Douglas in a following chapter) argues that even complex economic transactions may be underlain by variable and flexible kinds of social interactions at multiple levels.

Analyses of the distribution of shell allowed Bradley previously to identify two broad groups of sites participating in different exchange networks. In this volume she focuses on the group that includes Paquimé (with its huge quantities of shell), as well as Western Pueblo and Mogollon sites, to consider the social processes underlying the shell exchange. Bradley argues that the spatial distribution of the shell is consistent with a prestige goods economy model and suggests that this distribution was linked to the development of the Katsina and southwestern regional religions. Thus she provides a link between this set of chapters and their focus on economic processes and the chapters on religion in Part 4. Bradley does not seem to disagree with Saitta's and Douglas's concerns regarding formal economic models, but her analysis indicates that at least some processes in the prehistoric Southwest can be illuminated by these models, and we should not necessarily reject them out of hand.

Douglas uses mortuary and other data from the Convento site, a small village near Casas Grandes (Paquimé), to evaluate models of regional economic interaction. Although they predate the massive Medio-period construction, the Convento site graves have large quantities of imported materials from a variety of sources. Douglas argues that World Systems Theory, peer polity interaction, and prestige goods economy models all fail to account for this kind of patterning, and he advocates a more open-ended approach that views exchange as a search for power, contested within and between societies.

In a chapter that could fit equally well in Parts 2 and 3, Habicht-Mauche examines the social context of exchange between Plains peoples (both hunter-gatherers and villagers) and the Pueblos. She argues that Pueblo women were living on Plains sites where they made Pueblo-style pottery out of local materials and contributed much-needed labor in the processing of bison hides. These women—who might have been from lower-status Pueblo households that migrated to the Plains or married into Plains groups—would have created valuable links through which exchanges could flow and alliances could be built. Thus Habicht-Mauche demonstrates that regional (or interregional) interaction involves a variety of processes that can be illuminated by consideration of the local social context and gender relations.

Part 3 examines issues of regional interaction from a broad perspective that looks beyond the borders of the traditional Southwest. These

chapters share several interrelated goals. One is to remind us that even though much research focus is on the triangle formed by the Four Corners, the Rio Grande, and the greater Tucson-Phoenix metropolplex, the greater Southwest extends *at least* from Las Vegas, Nevada, to Las Vegas, New Mexico, from Durango, Colorado, to Durango, Mexico (Reed 1964: 175). Many developments in the heavily researched triangle can be better understood by considering them as part of larger interregional processes. A second goal is to investigate the nature of regional boundaries and interaction across them, issues that harken back to Parts 1 and 2. Finally, the chapters by Upham and Nelson put the Southwest—even the Greater Southwest—in a larger perspective that considers developments in central Mexico and across the Desert West. Because much of the recently published work on interaction at the edges of the Southwest and beyond has focused on Mesoamerica and the Plains (see summary in McGuire et al. 1994), the focus in Part 3 is on areas to the north and west, including the Virgin and Fremont regions. Mesoamerica is not ignored, however (Nelson), and chapters in Part 2 also consider interaction to the south and east.

Upham looks at the Southwest as part of the much larger Desert West, across which farming villages with above-ground pueblo architecture emerged after A.D. 700. Upham argues that these kinds of simultaneous developments are indicative of extensive regional social connections. Increases in the movement of goods and the spread of ceramic styles, then, indicate that social and economic interaction increased across this vast macroregion, and Upham argues that nomads may have been the “engine” of this interaction, moving goods and ideas between villagers and across long distances. Upham (as well as Nelson in Chapter 15) contributes to an understanding of regional (and much larger-scale) interaction by considering mechanisms by which goods, ideas, and organizations spread across the western part of the continent.

Lyneis takes a more detailed look at some of these processes at the edge of the Virgin region in southern Nevada, examining the nature of interaction from the perspective of a Virgin pithouse community (the Bonelli site), and the interface zone (between the lowland Virgin area and Mojave Desert) around Las Vegas. Ample evidence is seen of extensive long-distance interaction in this area by at least A.D. 800, including the importation of pottery from the Colorado Plateau and shell from the Gulf of California (probably through the Hohokam area). Furthermore, interface sites have Pueblo-style pottery that was apparently locally made. Lyneis suggests the pottery represents the spread of technological traditions, although she does not rule out

production by Puebloan task groups that visited the area to gather wild resources. Such evidence is not unlike that found by Habicht-Mauche on the Plains, although the social context of the interface is quite different from that of late Plains-Pueblo interaction. Thus these chapters together demonstrate the importance of considering multiple scales of analysis and interaction.

Talbot examines developments in the neighboring Fremont region, which is seen as *the* border (not beyond the border) of the Southwest. He avoids the either-or debate about Fremont origins (either they developed in situ or as a result of large-scale migration) and argues that only interaction between peoples in the Fremont area and areas to the south can explain Fremont developments. Specifically, early Fremont adaptations—including farming and pithouse architecture—are best explained as a result of cross-cultural contacts and human mobility. Later stylistic and social changes were the result more of the complexities of cross-cultural exchange systems. At times, these various interactions may have cross-cut a fairly clear border; at other times they seem to have linked a vast unbounded area. Like many of the authors in this volume, Talbot demonstrates the importance of considering various kinds of regional definitions and interactions.

Sutton continues the focus on the Fremont and Virgin regions but from the perspective of a different line of evidence and a different kind of interaction: the spread of Uto-Aztecan languages, specifically the origins of Hopi and the movement of Numic (Southern Paiute-Ute) groups into the northern Southwest. At some point, Hopic spread into the Virgin region and later to the Hopi Mesas area, although data on the timing of these spreads and the nature of interaction (Did Hopic speakers migrate, or was the language adopted by resident populations?) are few. Better documented is the movement of Numic speakers into the northern San Juan region. Sutton suggests there is good reason to believe the Numic spread contributed to the residential abandonment of the region by Pueblo groups. Specifically, he argues that direct conflict between Numic and Pueblo groups should not be ruled out and that Numic competition for wild resources at times of resource stress could have been disastrous for the Puebloans. Furthermore, Sutton notes that even if the Numic entered the area after the Pueblo depopulation (the scenario generally accepted by Southwest archaeologists; see Lipe 1995), the Numic presence would have discouraged Puebloan reoccupation and thus might have been a key factor in transforming a migration into a near total abandonment. Sutton's consideration of the movement of languages and of violence and competition expands our

view of regional interaction and reminds us that interaction need not always involve cooperation or social ties.

Nelson looks beyond the borders in a different direction, to the south. Although archaeological interest in Southwest-Mesoamerica interactions has a long history, he brings both new data (from northwest Mexico) and a new theoretical perspective (agency) to bear on the issue. Nelson argues that the development of local aggregated polities in the Southwest can be seen as a distant reverberation of (often violent) frontier developments in northwest Mexico that, in turn, perhaps related to the collapse of Teotihuacan. More specifically, the reverberation may have involved the spread of disaffected factions that migrated to neighboring areas, established links to the local polity by offering military services, and maximized their own credibility through ritual and symbolism evocative of the Mesoamerican core. The timing of developments in the Southwest generally fits with Nelson's model; however, the distribution and timing of violence in the Southwest suggest that it was not only a response to Mesoamerican pressures. Overall, Nelson's contribution is important because he suggests a mechanism for the spread of Mesoamerican "influence," and he reminds us of the vast temporal and spatial scale over which regional interaction can take place.

Religion is central to the cultural identities and daily lives of traditional native peoples of the Southwest. Archaeological interest in religion has increased tremendously since the late 1980s (e.g., Adams 1991; Crown 1994; Lipe and Hegmon 1989; Plog and Solometo 1997; Schaafsma 1994), and religion is often considered in the context of pan-southwestern developments that necessarily involved large-scale regional interaction, especially the migrations and reorganization at the end of the thirteenth century (Adams 1991; Crown 1994; Lipe 1995). Part 4 expands upon these ideas and focuses specifically on examining religion in the context and as part of regional interaction. For the most part, the chapters do not attempt to reconstruct ancient beliefs; rather, they use various lines of evidence to explore the roles and context of religion in regional interaction and culture change. Some of the chapters focus on understanding how ritual practices and religion in general will be manifested archaeologically and the mechanisms by which religion might spread across the landscape (Chapters 16, 17, 18 by Walker and colleagues, Brugge and Gilpin, Ware and Blinman). Others trace the spread of religious beliefs and attempt to understand the context of that spread and why it might have occurred (Chapters 18, 19, 20 by Ware and Blinman, Hays-Gilpin, Hill and Teague). These chapters consider

the much studied Katsina religion (at the strong urging of Hegmon the potentially pejorative term *cult* is avoided) but investigate other aspects and manifestations of religion as well, including the Flower World, ritual textiles, and medicine societies and curing.

Walker and colleagues set the stage for the analysis of religion by developing a widely applicable methodology for identifying ritual and changes in ritual behavior. Using the rich data on early manifestations of Katsina ritual at the Homol'ovi sites, the authors describe a deposit-oriented method for identifying and interpreting ritual behaviors based largely on the analysis of object life histories. This method should allow archaeologists to identify ritual behaviors systematically—in ways that do not always depend on the recovery of rare ritual objects or exceptional preservation—and thus will facilitate comparisons between sites across regions.

Brugge and Gilpin draw on evidence of Navajo ritual to interpret aspects of the prehistoric record. Part-time ritual specialists in nonhierarchical (Navajo) communities organize large-scale rituals that result in the construction of complex specialized sites. The authors suggest that an analogous process might account for the construction, spread, and variability of Chacoan great houses in the area west of the Chuska Mountains. Specifically, existing communities could have sent apprentices to learn ceremonies from established practitioners, and neophyte ritual practitioners could have taken the rituals to new areas. Brugge and Gilpin do not equate Chacoan and Navajo ritual; rather, they note the importance of understanding the kinds of processes through which ritual architecture is created and is spread across the landscape.

The recovery of a prehistoric medicine society assemblage leads Ware and Blinman to investigate the origin, diffusion, and role of Pueblo ritual organization. Furthermore, the authors identify a specific mechanism for the spread of religion—syncretism, that is, ethnographically documented intertribal borrowing and copying of religious practices. An impressive body of ethnographic evidence supports their argument that many aspects of Pueblo religion—including medicine and clown sodalities, dual tribal sodalities, and hunting and warfare sodalities—originated in different areas and among different language groups and then spread unevenly across the Pueblo world, resulting in multiple and varying layers of sacred institutions among the Pueblos. The Katsina religion was part of this spread, but Ware and Blinman argue that it was a relative latecomer in all areas. Finally, the geographic distribution of the various institutions provides evidence for their relatively late (i.e., post-late thirteenth-century migration) origins.

Chapters 19 and 20 by Hays-Gilpin and Hill and by Teague focus on specific classes of evidence to consider developments at a large scale across time and space. Hays-Gilpin and Hill focus on cross-media representations of the Flower World, the land to which the dead go and where the living have their spiritual dimension. The Flower World is represented by flowers as well as birds, butterflies, and rainbows. In the Southwest, although some components of Flower World imagery are clearly present in a few contexts after about A.D. 1000, the full suite of the imagery is not regularly depicted until the fifteenth century, when it appears on kiva murals. Flower World imagery appeared much earlier in Mesoamerica; however, Hays-Gilpin and Hill argue that it did not simply spread north to the Southwest. Rather, the complex is very old and is widespread among Uto-Aztecan speakers and their neighbors. The authors suggest that the proliferation of Flower World imagery represents a shift from an emphasis on an individual's place in the spirit world to a more generalized and impersonal view of the dead, and it may also represent a case of the recruitment of female progenitive power to male ritual activity.

Teague draws on evidence from textiles to consider the development of religious and social institutions in the later prehistoric periods. Contemporary Western Pueblo and O'odham textiles have a common origin in a ritual textile tradition that developed after around A.D. 1100, although Western Pueblo textiles preserve much more of the complex textile traditions from prehistory. Teague argues that the maintenance of textile elaboration among the Western Pueblos is linked to the persistence of structural complexity in the socioreligious system; in contrast, O'odham textiles were simplified as the societies rejected centralized community authority and complex religious organization. Thus Teague presents important arguments about the nature of religious changes in the northern and southern Southwest and the material manifestations of those changes.

REFERENCES

- Adams, E. Charles. 1991. *The Origin and Development of the Pueblo Katsina Cult*. University of Arizona Press, Tucson.
- Adler, Michael A. (ed.). 1996. *The Prehistoric Pueblo World, A.D. 1150-1350*. University of Arizona Press, Tucson.
- Appadurai, Arjun. 1988. Introduction: Place and Voice in Anthropological Theory. *Cultural Anthropology* 3:16-20.
- Blinman, Eric, and C. Dean Wilson. 1992. Ceramic Perspectives on Northern Anasazi Exchange. In *The American Southwest and Mesoamerica*:

- Systems of Prehistoric Exchange*, ed. J. E. Ericson and T. G. Baugh, pp. 65–94. Plenum, New York.
- Cameron, Catherine M. (ed.). 1995. Special Issue: Migration and the Movement of Southwestern Peoples. *Journal of Anthropological Archaeology* 14(2).
- Colton, Harold S. 1941. Prehistoric Trade in the Southwest. *Scientific Monthly* 52:308–319.
- . 1939. *Prehistoric Culture Units and Their Relationships in Northern Arizona*. Bulletin No. 17, Museum of Northern Arizona, Flagstaff.
- Cordell, Linda S. 1991. Anna O. Shepard and Southwestern Archaeology: Ignoring a Cautious Heretic. In *The Ceramic Legacy of Anna O. Shepard*, ed. R. L. Bishop and F. W. Lange, pp. 132–153. University Press of Colorado, Niwot.
- Cordell, Linda S., David E. Doyel, and Keith W. Kintigh. 1994. Processes of Aggregation in the Prehistoric Southwest. In *Themes in Southwestern Prehistory*, ed. G. J. Gumerman, pp. 109–133. School of American Research Press, Santa Fe, N.M.
- Cordell, Linda S., and Fred Plog. 1979. Escaping the Confines of Normative Thought: A Reevaluation of Puebloan Prehistory. *American Antiquity* 44:405–429.
- Cordell, Linda S., and George J. Gumerman (eds.). 1989. *Dynamics of Southwest Prehistory*. Smithsonian Institution Press, Washington, D.C.
- Crown, Patricia L. 1994. *Ceramics and Ideology: Salado Polychrome Pottery*. University of New Mexico Press, Albuquerque.
- (organizer). 1997. Sex Roles and Gender Hierarchies in Middle Range Societies. Advanced Seminar, School of American Research, Santa Fe, N.M.
- Crown, Patricia L., and W. James Judge (eds.). 1991. *Chaco and Hohokam: Prehistoric Regional Systems in the American Southwest*. School of American Research Press, Santa Fe, N.M.
- Crumley, Carole L. (ed.). 1994. *Historical Ecology: Cultural Knowledge and Changing Landscapes*. School of American Research Press, Santa Fe, N.M.
- Dean, Jeffrey S., William H. Doelle, and Janet D. Orcutt. 1994. Adaptive Stress: Environment and Demography. In *Themes in Southwestern Prehistory*, ed. G. J. Gumerman, pp. 53–86. School of American Research Press, Santa Fe, N.M.
- Deutchman, Haree L. 1980. Chemical Evidence of Ceramic Exchange on Black Mesa. In *Models and Methods in Regional Exchange*, ed. R. E. Fry, pp. 119–134. SAA Papers 1, Society of American Archaeology, Washington, D.C.
- Di Peso, Charles C. 1974. *Casas Grandes: A Fallen Trading Center of the Gran Chichimeca* (Vols. 1–3). Amerind Foundation, Dragoon, Ariz.
- Doyel, David E. 1979. The Prehistoric Hohokam of the Arizona Desert.

- American Scientist* 67:544-554.
- Doyel, David E., and Stephen H. Lekson. 1992. Regional Organization in the American Southwest. In *Anasazi Regional Organization and the Chaco System*, ed. D. E. Doyel, pp. 15-21. Anthropological Papers No. 5, Maxwell Museum of Anthropology, Albuquerque.
- Doyel, David E. (ed.). 1992. *Anasazi Regional Organization and the Chaco System*. Anthropological Papers No. 5, Maxwell Museum of Anthropology, Albuquerque.
- Earle, Timothy K., and Jonathon E. Ericson (eds.). 1977. *Exchange Systems in Prehistory*. Academic Press, New York.
- Ericson, Jonathon E., and Timothy G. Baugh (eds.). 1992. *The American Southwest and Mesoamerica: Systems of Prehistoric Exchange*. Plenum, New York.
- Feld, Steven, and Keith H. Basso (eds.). 1996. *Senses of Place*. School of American Research Press, Santa Fe, N.M.
- Ferguson, T. J. 1996. *Historic Zuni Architecture and Society: An Archaeological Application of Space Syntax*. Anthropological Papers of the University of Arizona, No. 60, University of Arizona Press, Tucson.
- Fewkes, Jesse Walter. 1896. Pacific Coast Shells from Prehistoric Tusayan Pueblos. *American Anthropologist* 8(2):118-141.
- Fish, Paul R., Suzanne K. Fish, George J. Gumerman, and J. Jefferson Reid. 1994. Toward an Explanation for Southwestern "Abandonments." In *Themes in Southwestern Prehistory*, ed. G. J. Gumerman, pp. 135-164. School of American Research Press, Santa Fe, N.M.
- Ford, Richard I. 1972. Barter, Gift, or Violence: An Analysis of Tewa Intertribal Exchange. In *Social Exchange and Interaction*, ed. E. Wilmsen, pp. 21-45. Anthropological Papers of the Museum of Anthropology, No. 51, University of Michigan, Ann Arbor.
- Gladwin, Winifred, and Harold S. Gladwin. 1934. *A Method for Designation of Cultures and Their Variations*. Medallion Papers No. 15, Gila Pueblo, Globe, Ariz.
- Gumerman, George J. (ed.). 1994. *Themes in Southwestern Prehistory*. School of American Research Press, Santa Fe, N.M.
- Harvey, David. 1996. *Justice, Nature, and the Geography of Difference*. Blackwell, Cambridge.
- Haury, Emil W. 1956. Speculations on Prehistoric Settlement Patterns in the Southwest. In *Prehistoric Settlement Patterns in the New World*, ed. G. R. Willey, pp. 3-10. Viking Fund Publications in Anthropology No. 23, Wenner Gren Foundation, New York.
- . 1945. The Problem of Contacts Between the Southwestern United States and Mexico. *Southwestern Journal of Anthropology* 1:55-74.
- Hegmon, Michelle, James R. Allison, Hector Neff, and Michael D. Glascock. 1997. Production of San Juan Red Ware in the Northern Southwest:

- Insights Into Regional Interaction in Early Puebloan Prehistory. *American Antiquity* 62:449-463.
- Hegmon, Michelle, Margaret C. Nelson, and Susan M. Ruth. 1998. Abandonment and Reorganization in the Mimbres Region of the American Southwest. *American Anthropologist* 100:1-15.
- Hegmon, Michelle, and Stephen Plog. 1996. Regional Social Interaction in the Northern Southwest: Evidence and Issues. In *Interpreting Southwestern Diversity: Underlying Principles and Overarching Patterns*, ed. P. R. Fish and J. J. Reid, pp. 23-34. Anthropological Research Papers No. 48, Arizona State University, Tempe.
- Hodder, Ian. 1982. *Symbols in Action*. Cambridge University Press, Cambridge.
- Jewett, Roberta A. 1989. Distance, Interaction, and Complexity: The Spatial Organization of Pan-Regional Settlement Clusters in the American Southwest. In *The Sociopolitical Structure of Prehistoric Southwestern Societies*, ed. S. Upham, K. G. Lightfoot, and R. A. Jewett, pp. 363-388. Westview, Boulder.
- Johnson, Gregory A. 1977. Aspects of Regional Analysis in Archaeology. *Annual Review of Anthropology* 6:479-508.
- Judge, W. James. 1991. Chaco: Current Views of Prehistory and the Regional System. In *Chaco and Hohokam: Prehistoric Regional Systems in the American Southwest*, ed. W. J. Judge and P. L. Crown, pp. 11-30. School of American Research, Santa Fe, N.M.
- Judge, W. James, and J. Schelberg (eds.) 1984. *Recent Research on Chaco Prehistory*. Reports of the Chaco Center No. 8, National Park Service, Albuquerque.
- Kidder, Alfred V. 1962 [1924]. *An Introduction to the Study of Southwestern Archaeology*. Yale University Press, New Haven.
- Kojo, Yasushi. 1996. Production of Prehistoric Southwestern Ceramics: A Low-Technology Approach. *American Antiquity* 61:325-339.
- Lightfoot, Kent G. 1984. *Prehistoric Political Dynamics: A Case Study from the American Southwest*. Northern Illinois University Press, Dekalb.
- Lipe, W. D. 1995. The Depopulation of the Northern San Juan: Conditions in the Turbulent 1200s. *Journal of Anthropological Archaeology* 14:143-169.
- Lipe, W. D., and Michelle Hegmon (eds.). 1989. *The Architecture of Social Integration in Prehistoric Pueblos*. Occasional Papers No. 1, Crow Canyon Archaeological Center, Cortez, Colo.
- Longacre, William A. (ed.). 1970. *Reconstructing Prehistoric Pueblo Societies*. University of New Mexico Press, Albuquerque.
- Marquardt, William, and Carole R. Crumley. 1987. Theoretical Issues in the Analysis of Spatial Patterning. In *Regional Dynamics: Burgundian Landscapes in Historical Perspective*, ed. C. L. Crumley and W.

- Marquardt, pp. 1–18. Academic Press, Orlando.
- McGuire, Randall H., E. Charles Adams, Ben A. Nelson, and Katherine Spielmann. 1994. Drawing the Southwest to Scale: Perspectives on Macroregional Relations. In *Themes in Southwestern Prehistory*, ed. G. J. Gumerman, pp. 239–266. School of American Research Press, Santa Fe, N.M.
- Plog, Fred. 1983. Political and Economic Alliances on the Colorado Plateaus, A.D. 400–1450. In *Advances in World Archaeology*, Vol. 2, ed. F. Wendorf and A. Close, pp. 289–330. Academic Press, New York.
- Plog, Stephen. 1989. The Sociopolitics of Exchange (and Archaeological Research) in the Northern Southwest. In *The Sociopolitical Structure of Prehistoric Southwestern Societies*, ed. S. Upham, K. G. Lightfoot, and R. A. Jewett, pp. 129–148. Westview, Boulder.
- (ed.). 1986. *Spatial Organization and Exchange: Archaeological Survey on Northern Black Mesa*. Southern Illinois University Press, Carbondale.
- . 1980. Village Autonomy in the American Southwest: An Evaluation of the Evidence. In *Models and Methods in Regional Exchange*, ed. R. E. Fry, pp. 135–146. SAA Papers No. 1, Society of American Archaeology, Washington, D.C.
- Plog, Stephen, and Julie Solometo. 1997. The Never-Changing and the Ever-Changing: The Evolution of Western Pueblo Ritual. *Cambridge Archaeological Journal* 7:161–182.
- (ed.). 1986. *Spatial Organization and Exchange: Archaeological Survey on Northern Black Mesa*. Center for Archaeological Investigations, Southern Illinois University Press, Carbondale.
- Rautman, Alison E. 1993. Resource Variability, Risk, and the Structure of Social Networks: An Example from the Prehistoric Southwest. *American Antiquity* 58:403–424.
- Reed, Erik K. 1964. The Greater Southwest. In *Prehistoric Man in the New World*, ed. J. D. Jennings and E. Norbeck, pp. 175–191. University of Chicago Press, Chicago.
- Rodman, Margaret. 1992. Empowering Place: Multilocality and Multivocality. *American Anthropologist* 94:640–656.
- Sackett, James R. 1982. Approaches to Style in Lithic Archaeology. *Journal of Anthropological Archaeology* 1:59–112.
- Schaafsma, Polly (ed.). 1994. *Kachinas in the Pueblo World*. University of New Mexico Press, Albuquerque.
- Schortman, Edward W., and Patricia A. Urban. 1987. Modeling Interregional Interaction in Prehistory. *Advances in Archaeological Method and Theory* 2:37–97.
- Schroeder, Albert H. 1979. History of Archaeological Research. In *Handbook of North American Indians*, Vol. 9, *Southwest*, ed. A. Ortiz, pp. 5–13. Smithsonian Institution Press, Washington, D.C.

- Shepard, Anna O. 1942. *Rio Grande Glaze Paint Ware: A Study Illustrating the Place of Ceramic Technological Analysis in Archaeological Research*. Contributions to American Anthropology and History No. 39, Carnegie Institution of Washington, Washington, D.C.
- . 1936. The Technology of Pecos Pottery. In *The Pottery of Pecos*, Vol. 2, by A. V. Kidder and A. O. Shepard, pp. 389–587. Papers of the Phillips Academy Southwestern Expedition No. 7. Yale University Press, New Haven.
- Smith, Carol A. (ed.). 1976. *Regional Analysis*, Vol. 1 and 2. Academic Press, New York.
- Soja, Edward W. 1989. *Postmodern Geographies: The Assertion of Space in Critical Social Theory*. Verso, London.
- Spielmann, Katherine A. 1997. Gender, Exchange, and Interaction. Paper presented at Sex Roles and Gender Hierarchies in Middle Range Societies. Advanced Seminar, School of American Research, Santa Fe, N.M.
- . 1991a. Coercion or Cooperation? Plains-Pueblo Interaction in the Protohistoric Period. In *Farmers, Hunters, and Colonists: Interaction Between the Southwest and the Southern Plains*, ed. K. A. Spielmann, pp. 36–50. University of Arizona Press, Tucson.
- (ed.). 1991b. *Farmers, Hunters, and Colonists: Interaction Between the Southwest and the Southern Plains*. University of Arizona Press, Tucson.
- Stein, John R., and Andrew P. Fowler. 1992. Anasazi Ritual Landscapes. In *Anasazi Regional Organization and the Chaco System*, ed. D. E. Doyel, pp. 87–100. Anthropological Papers No. 5, Maxwell Museum of Anthropology, Albuquerque.
- Toll, H. Wolcott. 1991. Material Distributions and Exchange in the Chaco System. In *Chaco and Hohokam: Prehistoric Regional Systems in the American Southwest*, ed. W. J. Judge and P. L. Crown, pp. 77–108. School of American Research, Santa Fe, N.M.
- Toll, H. Wolcott, Thomas C. Windes, and Peter J. McKenna. 1980. Late Ceramic Patterns in Chaco Canyon: The Pragmatics of Modeling Ceramic Exchange. In *Models and Methods in Regional Exchange*, ed. R. E. Fry, pp. 95–117. SAA Papers 1, Society of American Archaeology, Washington, D.C.
- Upham, Steadman. 1982. *Politics and Power: An Economic and Political History of the Western Pueblo*. Academic Press, New York.
- Upham, Steadman, Patricia L. Crown, and Stephen Plog. 1994. Alliance Formation and Cultural Identity in the American Southwest. In *Themes in Southwestern Prehistory*, ed. G. J. Gumerman, pp. 183–210. School of American Research Press, Santa Fe, N.M.
- Upham, Steadman, Kent G. Lightfoot, and Roberta A. Jewett (eds.). 1989. *The Sociopolitical Structure of Prehistoric Southwestern Societies*. Westview, Boulder.

- Varien, Mark D. 1999. *Sedentism and Mobility in a Soical Landscape: Mesa Verde and Beyond*. University of Arizona Press, Tucson.
- Warren, A. Helene. 1969. Tonque: One Pueblo's Glaze Pottery Industry Dominated Middle Rio Grande Commerce. *El Palacio* 76:36-42.
- Wilcox, David R. 1986. A Historical Analysis of the Problem of Southwestern-Mesoamerican Connections. In *Ripples in the Chichimec Sea: New Considerations of Mesoamerican-Southwestern Interactions*, ed. F. J. Mathien and R. H. McGuire, pp. 9-44. Southern Illinois University Press, Carbondale.
- . 1979. The Hohokam Regional System. In *An Archaeological Test of Sites in the Gila Butte-Santan Region*, ed. G. E. Rice, D. Wilcox, K. Rafferty, and J. Schoenwetter, pp. 77-116. Anthropological Research Paper 18, Arizona State University, Tempe.
- Wilcox, David R., and Jonathan Haas. 1994. The Scream of the Butterfly: Competition and Conflict in the Prehistoric Southwest. In *Themes in Southwestern Prehistory*, ed. G. J. Gumerman, pp. 211-238. School of American Research Press, Santa Fe, N.M.
- Willey, Gordon R. (ed.). 1956. *Prehistoric Settlement Patterns in the New World*. Viking Fund Publications in Anthropology No. 23, Wenner Gren Foundation, New York, N.Y.
- Wills, W. H. 1988. *Early Prehistoric Agriculture in the American Southwest*. School of American Research Press, Santa Fe, N.M.
- Wobst, H. Martin. 1974. Boundary Conditions for Paleolithic Social Systems: A Simulation Approach. *American Antiquity* 39:147-178.
- Zedeño, María Nieves. 1994. *Sourcing Prehistoric Ceramics at Chodistaas Pueblo, Arizona: The Circulation of People and Pots in the Grasshopper Region*. Anthropological Papers of the University of Arizona, No. 58, University of Arizona Press, Tucson.