

HINTERLANDS and
Regional Dynamics in the Ancient Southwest

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Papaguerian Perspectives on Economy and Society in the Sonoran Desert

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The Papageria in Sonora, Mexico, and southern Arizona is an “open space” (*sensu* Upham 1992) in the archaeology of northwest Mexico and the southwest United States. Although numerous archaeological sites have been discovered in this area, ancient public architecture is largely absent and its heterogeneous ceramic assemblages are *not* uniformly dominated by any particular cultural tradition. This lack of a clear-cut technological or social affiliation (according to the culture-historical frameworks of conventional archaeology) should not be unexpected because this territory was surrounded by three major traditions: the Patayan, Hohokam, and Trincheras (fig. 7.1).¹

Ancient Papageria was likely a cohesive region of local populations with identities that cannot be interpreted easily using the paradigm of culture-historical archaeology (see McGuire 2002 for a relevant discussion). Spanish explorers in the Early Contact period referred to this territory as the “Papageria,” which in English translates to the “area of the Papago Indians.” The Papago Indians (now called “Tohono O’odham”) resided in this locale when ethnographers first arrived in the late nineteenth century, and this area remains their homeland today.

The Papageria is located between the Gulf of California, the Lower Colorado River, the Lower Gila River, and the Baboquivari Mountains, west of the Tucson Basin. Unlike the river valleys along its borders, the Papageria lacks perennial streams, and it is not surprising that early ethnographers witnessed some degree of residential mobility among its inhabitants (Casterter and Underhill 1935). Archaeologists have often invoked this Historic period lifeway to interpret the local archaeological record (e.g., Haury 1975:4–5; Masse 1980b; McGuire 1991:350).

Indeed, archaeology confirms that residents of the Papageria never

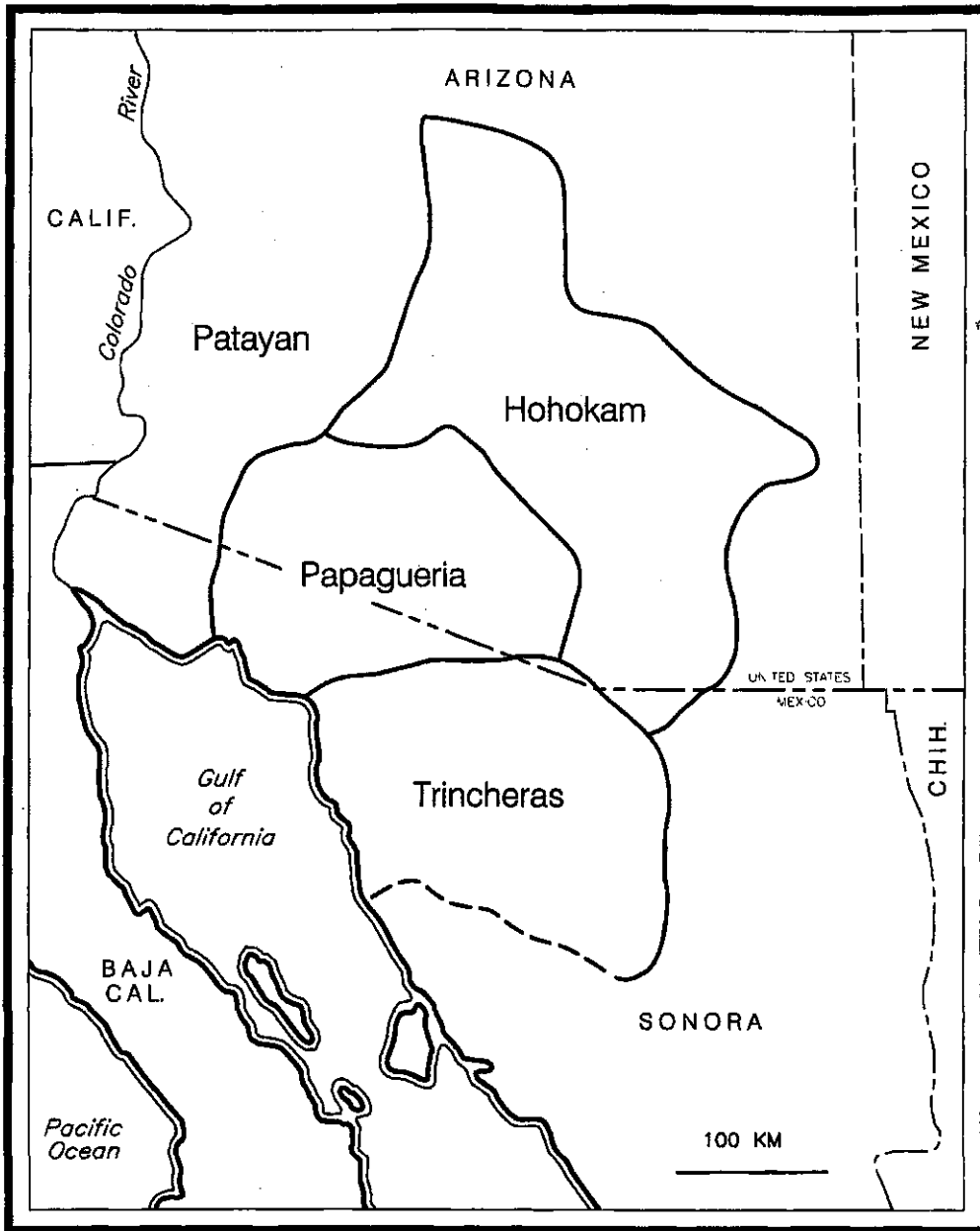


Figure 7.1 The Papaguera in southwest Arizona (U.S.) and northwest Sonora (Mexico).

practiced intensive floodwater farming or large-scale canal irrigation like their Patayan and Hohokam neighbors to the northwest and northeast did. Moreover, artifact assemblages in the Papagueria are often mixed and contain varying proportions of Patayan (i.e., Lower Colorado Buff Ware), Hohokam (i.e., Red-on-buff), and Trincheras (Sonoran Brown Ware) ceramics. For this and other reasons, the social identity of populations who traveled through, or resided in, the Papagueria is a confounding problem for the region, at least from the standpoint of conventional culture-historical archaeology.

Since the 1930s, many culture-historians have equated red-on-buff ceramics and marine-shell ornaments with an archaeological tradition they named "Hohokam" (W. Gladwin and Gladwin 1929a, 1929b; Haury 1976). Distributions of these materials and particular architectural technologies led many archaeologists to conclude that the confluence of the Salt and Gila River valleys was the "heartland" of Hohokam society and that outlying areas, such as the Papagueria, were colonized later in the chronological sequence (Haury 1975). This geographically restrictive focus was modified in the 1970s and 1980s, however, as archaeologists began to emphasize ecological, economic, and political dimensions of Hohokam society (e.g., Doyel 1974; P. Fish and Fish 1991; McGuire and Schiffer 1982; Teague 1984; Weaver 1972). This alternative perspective has focused on delineating the distributions of monumental architecture, such as ballcourts and platform mounds, to characterize "regional" and "macro-regional" systems (e.g., Crown 1991a; Doelle et al. 1995; Downum and Madsen 1993; Gregory 1991; Gregory and Nials 1985; Wilcox 1979, 1999; Wilcox and Sternberg 1983). Much like Chaco, the Hohokam regional system expanded incrementally with each new discovery of a ballcourt or a platform mound.

Regional distributions of Hohokam monuments were documented and sometimes interpreted using variants of world-system theory, as construed by Wallerstein (1974) and others (e.g., McGuire 1987). Strong contrasts were quickly drawn (and later refuted by some [e.g., S. Fish and Fish 2000; Lerner 1985]) between the so-called Hohokam "core" and its surrounding "periphery" or "hinterland." Although ballcourts and platform mounds have not been identified across most of the Papagueria, many archaeologists concluded that this area was a variant of the Hohokam tradition (e.g., Haury 1975) because red-on-buff ceramics and marine-shell artifacts are commonly recovered from archaeological sites there.

My intention in this discussion is not to offer yet another critique of this

core/periphery framework as it is applied to Southwestern archaeology. Rather, I critically evaluate the guiding premise that the Papagueria served only as a "hinterland" for the extraction of economic resources by a non-local population believed to have a Hohokam heritage. Instead, I argue that prior to AD 1200 the Papagueria was visited and utilized by members of multiple traditions, i.e., the Patayan, Hohokam, and Trincheras. The lack of ballcourts in the Papagueria during this period illustrates that this region was *not* ideologically dominated by the Hohokam tradition. Moreover, I conclude that this area was also the homeland of resident societies that had fluctuating ties and connections with Patayan, Hohokam, and Trincheras populations.

The social and economic rules for managing this joint-use territory were institutionalized by local populations *and* visiting practitioners of Patayan, Hohokam, and Trincheras technological traditions. Although the nature of the social and economic institutions that governed the Papagueria remains to be clarified, the archaeological record indicates that this territory functioned as a common-pool resource (CPR) system (*sensu* Ostrom 1990; Ostrom et al. 1994), at least before AD 1200. The region contained resources that both local and non-local groups used, and it embodied a buffer zone between the most archaeologically robust traditions (i.e., Patayan, Hohokam, and Trincheras). CPR systems have been documented in the Great Basin archaeological record (e.g., Eerkens 1999), and their discovery in other regions of the Greater Southwest should not be surprising.

Common-Pool Resources and Joint-Use Territories

A common-pool resource is "a natural or man-made resource system that is sufficiently large as to make it costly (but not impossible) to exclude potential beneficiaries from obtaining benefits from its use" (Ostrom 1990:30). Examples of common-pool resources may include (but are not limited to) oceanic fishing grounds, terrestrial foraging domains (e.g., forests and mountains), and potable waters (e.g., lakes and aquifers). Common-pool resources are generally used by different populations, such as individuals, families, tribes, or larger-scale societies (Eerkens 1999:298). Although groups in a CPR system may harvest resources without gaining prior permission, they must adhere to mutually-agreed-upon rules established and practiced by all joint users (Eerkens 1999:298).

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Varying social and ecological conditions determine the degree to which a CPR system is actively managed. Theories for the emergence of such joint-use territories are generally tied to several concerns: (1) environmental buffering, (2) the reduction of social conflict, and/or (3) the cost and benefits of defending a territory (Eerkens 1999:307). Although ecological and geographic factors are certainly relevant to the development of CPR systems, history and politics are no less significant (*sensu* Pauketat 2001a). Climatic variability, demographic pressure, and political incentives offer different advantages and drawbacks to groups who seek to colonize or acquire resources from such territories (Dean 2000).

The Papagueria offers an exceptional opportunity to evaluate the utility and empirical validity of CPR theory to archaeological interpretation in the American Southwest. This portion of the Sonoran Desert contains valued marine and terrestrial resources—including shell, salt, and high-quality obsidian—that were vital to many ancient Southwestern societies. The region also contained large game (such as bighorn sheep), edible and non-edible plant resources, and arable land for non-intensive agriculture, and yet it was too large for any one population or society to control access.

The economic and social incentives for acquiring such resources were a potential source of competition and conflict among groups who resided in, or utilized, the Papagueria. In fact, a wealth of new information confirms that local populations in the Papagueria had fluctuating social and economic ties with non-local populations that archaeologists know as the Patayan, Hohokam, and Trincheras traditions (Ahlstrom and Roberts 2002:113). Archaeological evidence of the intensive use of local resources by multiple populations indicates that a socially constructed solution was achieved in the Papagueria for several centuries.

The Papaguerian Archaeological Record

Archaeological research in the Papagueria has intensified greatly over the last two decades, under the aegis of cultural resource management (Bayman 2001; fig. 7.2). Archaeological correlates of common-pool resource use are clearly illustrated in the character of water management and subsistence economies, craft economies and technological organization, and ideologies and worldview in the Papagueria. The discussion below focuses on key findings that are especially germane to the application of CPR theory in archaeology.

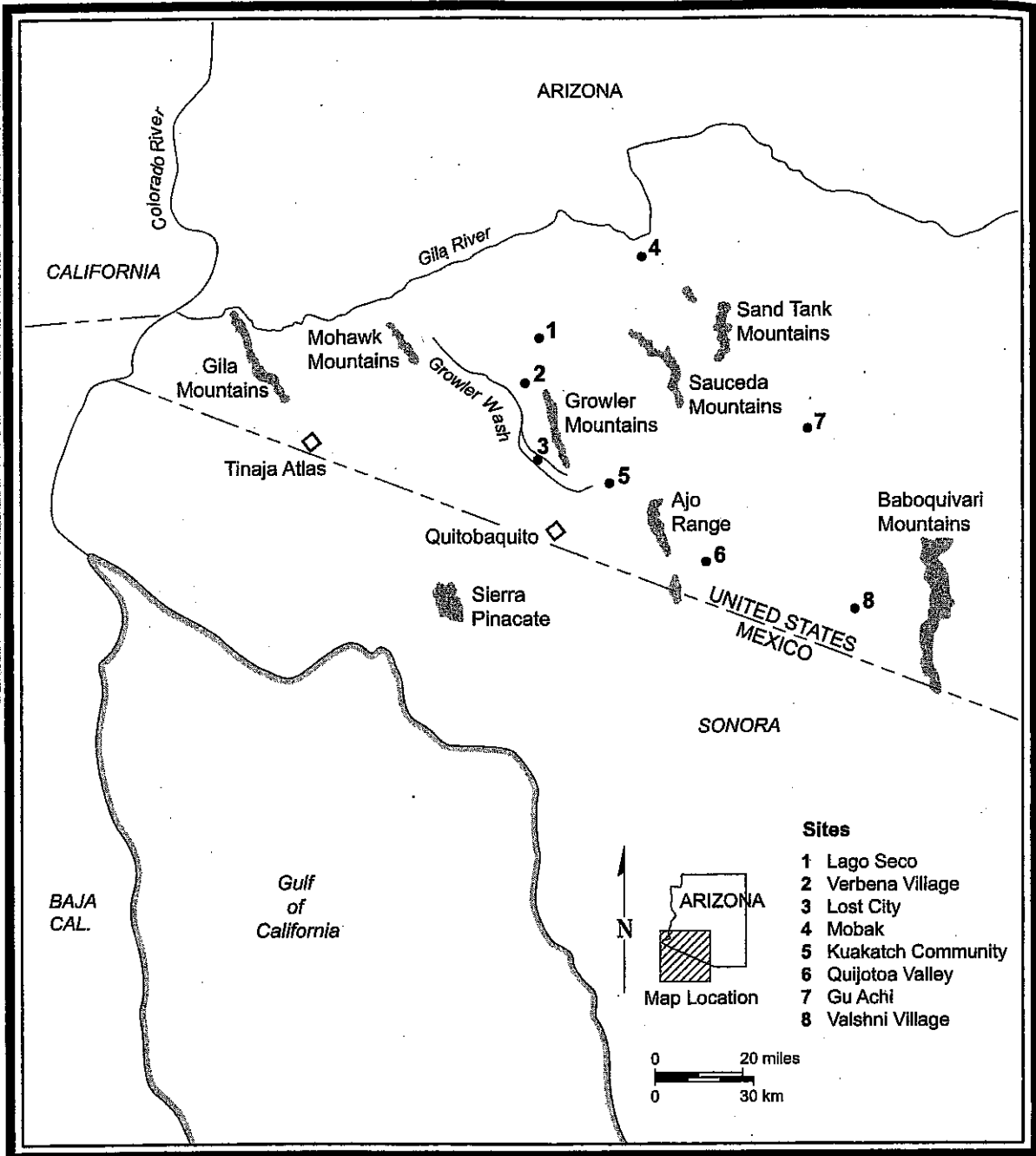


Figure 7.2 Papaguerian landscape features and archaeological sites mentioned in the text.

Water Management and Subsistence Economies

Archaeological work in the Papagueria confirms the practice of innovative technologies for harvesting and storing surface runoff, as well as the recovery of subsurface ground water. Reservoirs and potential walk-in wells have been increasingly documented across southwestern Arizona (Ahlstrom et al. 2000:106; Bayman 1993; Raab 1975). The remains of aquatic plants and animals—including cattail, ostracodes, *phragmite* reeds, and mud turtles—confirms that reservoirs in the Papagueria and Sonoran Desert were highly effective water storage devices (Bayman 1997; Bayman et al. 2004). Walk-in wells—which were once documented only in the Phoenix and Tucson basins—have now been hypothesized to exist at Verbena Village (AZ Y:8:11 [ASM]) in western Papagueria (Ahlstrom et al. 2000:106) (fig. 7.2; table 7.1). Together, such facilities enabled human populations to inhabit areas far beyond the distribution of natural water sources such as Quitobaquito Springs (fig. 7.2; table 7.1) or the numerous *tinajas* (e.g., Tinajas Altas) and playas (Broyles 1996) of western Papagueria.

Ongoing archaeological work has also yielded solid evidence for agriculture and resource extraction across western Papagueria. The discovery of carbonized maize cobs at Lago Seco (AZ Y:8:3 [ASM]), a large shell-production site with Patayan ceramics (fig. 7.2; table 7.1), offers tantalizing evidence of agriculture in this non-riverine area (Huckell 1979:96). Burned cupules of maize and maize phytoliths have been recently reported from two pithouses at the Mobak site (fig. 7.2; table 7.1) in western Papagueria (M. Hill and Bruder 2000:17-10–17-11). The high frequencies of maize pollen aggregates, as well as maize husk and cob phytoliths, indicate that fresh corn was being stored or processed at this interior desert settlement (M. Hill and Bruder 2000:17-11). Formal trough metates and manos at this site further substantiate the practice of corn agriculture at this desert locale (Lewenstein and Bonet 2000:12-4). This site also yielded squash pollen. These tangible signatures of floodwater farming illustrate the subtle pervasiveness of non-riverine farming in the Sonoran Desert and in western Papagueria.

Geomorphic evidence of stream-channel modification implies that ancient communities in the Growler Valley sometimes “dredged” tributaries of large washes to deliver water to their fields (Pearthree et al. 2000). Although the geomorphic evidence of this irrigation activity is not entirely conclusive (Pearthree et al. 2000:468), the discovery of two grains of *Zea mays* pollen in a nearby (presumed) field is intriguing (Pearthree et al. 2000:474–480). If

Table 7.1 Selected archaeological sites in the Papaguera with evidence of habitation; ceramic wares are listed in descending order of relative abundance.

Name/State/Number	Location		Characteristics and Inferred Functions	Span of Occupation and Major Ceramic Wares	References
	on fig. 7.2	Area/Size			
Growler Valley and Environs					
Lago Seco, AZ Y:8:3(ASM)	1	100+ ha	Playa, abundant marine-shell debris, lithic tools	AD 1050-1535; Patayan Buff Ware and Sonoran Brown Ware	Huckell (1979)
Verbena Village, AZ Y:8:11 (ASM)	2	263 ha	Possible walk-in well, roasting features, and shell debris	AD 1100-1300; Hohokam Buff Ware, Sonoran Brown Ware, and Patayan Buff Ware	Olszewski et al. (1996)
Lost City, AZ Y:16:1 (ASM)	3	Several ha	Trash mounds, multiple reservoirs, inhumation burial	AD 900-1450; Sonoran Brown Ware and Hohokam Buff Ware, Salado Polychrome	Bayman (1989:96); Ezell (1955); Fontana (1965:62-64); Masse (1980b:230-234)
Mobak, AZ Z:1:29(ASM)	4	131.5 ha	Ephemeral structures, maize and squash pollen, maize cupules and phytoliths, trough metates and manos	AD 1025-1218, AD 1247-1406, and AD 1850-1920; Patayan Buff Ware, Hohokam Buff Ware, historic "Padre" beads (two)	M. Hill and Bruder (2000); Lewenstein and Bonet(2000); Miksa (2000)

Kuakatch Community

AZ Z:13:1 (ASM)	5	105.2 ha	Pithouses, reservoir, spindle whorls, polishing stones, obsidian, shell, and turquoise	AD 975–1400; Hohokam Buff Ware, Sonoran Brown Ware and Salado Polychrome, San Carlos Red Ware	Rankin (1995); Bayman et al. (2004)
AZ Z:13:2 (ASM)	5	7.6 ha	High artifact diversity	AD 1150–1400; Sonoran Brown Ware, Hohokam Buff Ware, Trincheras Purple-on-red	Rankin (1995)
AZ Z:13:8 (ASM)	5	5.5 ha	High artifact diversity	AD 1150–1400; Hohokam Buff Ware and Sonoran Brown Ware	Rankin (1995)
AZ Z:13:27 (ASM)	5	Not reported	Farmstead	Not reported	Rankin (1995:115)
Dos Lomitas (two sites)	5	Not reported	Pithouses, roasting features	Not reported	Rankin (1995:115)

Table 7.1 *Continued*

Name/State/Number	Location		Area/Size	Characteristics and Inferred Functions	Span of Occupation and Major Ceramic Wares	References
	on fig. 7.2	7.2				
Quijotoa Valley						
Gu Vo Hiktani, AZ Z:14:33 (ASM)	6		365 m long	Trash mounds, hearths	AD 900–1300; Sonoran Brown Ware	Rosenthal et al. (1978:63–64, 95, table 7)
Shell Site, AZ Z:14:21 (ASM)	6		790 m long	Possible structure, abundant marine shell, hoe-like tools	AD 1100–1300?; Sonoran Brown Ware	Rosenthal et al. (1978:43–44)
Huihikiwani, AZ Z:11:5 (ASM)	6		61 m long	Pit house, inhumation and cremation burials	Unknown; Sonoran Brown Ware; Hohokam Buff Ware	Rosenthal et al. (1978:32–39)

Santa Rosa Wash

Gu Achi, AZ Z:12:12 (ASM)	7	101 ha	Pithouses, ramadas, trash mounds, reservoir	AD 550-1000 and AD 1200-1450; Sonoran Brown Ware, Hohokam Buff Ware, Patayan Buff Ware, and Trincheras Purple-on-red, etc.	Masse (1980b:188-191)
Valshni Village	8	Not reported	Houses, trash mounds, burial	AD 875-1150; Sonoran Brown Ware, Hohokam Buff Ware, Trincheras Purple-on-red	Withers (1973); Ahlstrom et al. (2000:67-135)

Note: Because of unresolved disagreements concerning the classification of Papaguerian ceramics (see McGuire and Villalpando 1993:42-43 for a detailed discussion), "Sonoran Brown Ware" includes a variety of potentially distinguishable types that have been proposed in Sonora, the Arizona Papagueria, and the Tucson Basin. The bewildering difficulty in classifying Papaguerian ceramics may be due, in part, to cultural and technological "fluidity" in regions with common-pool resources.

agriculture was practiced in this area, it was probably a substantial undertaking. Estimates of the area that was irrigated by these dredged tributaries range from 941 to 22,636 acres, if formulas developed by Ackerly (1991), Haury (1976), and others are applied (Pearthree et al. 2000:472).

Archaeological work in the Papaguera also indicates the sustained extraction and consumption of non-domesticated plant and animal resources. Fieldwork has documented abundant scatters of ceramics, ground-stone and chipped-stone artifacts, and fire-cracked-rock features (e.g., Doelle 1980; M. Hill and Bruder 2000; Lascaux and Tucker 2000). Some of these sites, such as Verbena Village (AZ Y:8:11 [ASM]) and Lost City (AZ Y:16:1 [ASM]), exceed 640 acres (or 1 sq mi) in area (Olszewski et al. 1996:79–93) (fig. 7.2; table 7.1). Notably, artifact scatters on these sites often include ceramics from bowls and jars (e.g., Lascaux and Tucker 2000:303, 325, 335, 339, 342, 345), suggesting food consumption in a residential context. Archaeological excavations will be required to substantiate the hypothesis that these and other large sites (i.e., Lago Seco) functioned as long-term habitation settlements in the Papaguera.

Other sites reflect much smaller and more ephemeral locations where foraging activities related to animal hunting and plant processing were undertaken (e.g., Bayman 1989; Doelle 1980). These activities are reflected by highly fragmented animal-bone and informal grinding implements (e.g., Lyon and Holloway 2000). Many (but not all) of these sites are located along playas and tinajas where water would collect after seasonal storms.

Craft Economies and Technological Organization

Land use and settlement along natural and human-developed water sources have striking implications for the organization of craft economies in the Papaguera. Many models of Papaguerian archaeology implicitly assume that residential mobility would have discouraged local craft production (e.g., Huckell 1979). The recovery of molded spindle whorls and perforated sherd disks at sites in western and central Papaguera offers evidence of local cotton- and agave-fiber textile manufacture in the non-riverine deserts (e.g., Rankin 1995:206; Rosenthal et al. 1978:129, fig. 39). There is not yet evidence that cotton and agave were cultivated in the deepest reaches of the interior desert; such materials were likely imported from settlements along the perennial rivers at the outer margins of the Papaguera.

Although chemical characterization techniques have been applied to ceramics from eastern Papaguera (e.g., P. Fish et al. 1992), none have yet been

completed on assemblages from central and western Papagueria. For theoretical and empirical reasons, local ceramic production will almost certainly be repeatedly documented in the Papagueria when appropriate characterization techniques are used. Recent studies in the Great Basin confirm that prehistoric foragers throughout the region produced between 60 to 70 percent of their ceramic vessels (Eerkens et al. 2002:220). Most foragers in the Great Basin were relatively mobile, perhaps even more so than most populations in southwestern Arizona. Thus, minimally comparable levels of local ceramic production should be expected for the Papagueria and are likely to be demonstrated once characterization techniques are applied to materials from the region.

In fact, petrographic studies in Quijotoa Valley (in central Papagueria) imply that some plain-ware ceramics may have been manufactured locally (Rosenthal et al. 1978:131). The likelihood of local ceramic production is corroborated by ceramics from the site of Gu Achi (fig. 7.2; table 7.1). Large ceramic vessels at Gu Achi, with diameters in excess of 70 cm, suggest that on-site production would have been much more efficient, and far less costly, than acquiring ceramics through long-distance trade (Masse 1980b:142). Polishing stones recovered from Kuakatch Village in the Organ Pipe area (Rankin 1995: 600) also highlight the potential for local ceramic production (fig. 7.2; table 7.1). A similar mode of local production may well account for Patayan ceramics on archaeological sites in the Papaguerian deserts. In fact, petrographic studies of Lower Colorado Buff Ware from two sites (i.e., Mobak and Rainy Day) in the vicinity of the Saucedo Mountains (fig. 7.2; table 7.1) indicate that some of them were locally produced (Miksa 2000).

Whether or not Papaguerian populations always manufactured ceramics at habitation sites in the interior desert, such sites often yield mixed assemblages (Gregonis 2000:473). Some sites, for example, contain roughly equal proportions of Patayan and Hohokam ceramics (Lascaux and Tucker 2000: 311; Lyon and Gregonis 2000:662–663). This pattern continued into the Historic period, when some vessels exhibit a blend of shapes and decorations that are derived from both O'odham and Yuman traditions (Gregonis 2000: 473). Although different cultural groups may have met at these locales in ancient and Historic period times to exchange goods and/or information (Lascaux and Tucker 2000:317), it is equally possible that Papaguerian artisans simply incorporated facets of non-local ceramic traditions (e.g., Patayan and Hohokam).

The collection of marine shell from the Gulf of California and the manufacture of ornaments are well established in the Papaguerian archaeological

record (McGuire and Howard 1987). Although most studies have emphasized Hohokam involvement with shell-ornament production (e.g., Bayman 2002; McGuire and Howard 1987), strong evidence exists for participation by practitioners of the Trincheras and Patayan traditions as well (e.g., Huckell 1979; McGuire and Schiffer 1982; McGuire and Villalpando 1993; Villalpando 2000:243–245). Ceramics from each of these cultural traditions have been documented at marine-shell gathering sites along the Sea of Cortez, in Sonora, Mexico (Mitchell and Foster 2000). Interestingly, these three traditions practiced different technologies to manufacture marine-shell ornaments (Jernigan 1978:207).

High-quality obsidian is another resource that was available in the Papaguera. Unlike some regions of the Southwest, populations in the Papaguera emphasized the use of locally available sources (i.e., Saucedo and Los Vidrios) (Shackley 1995). However, the relative abundance of Papagueraian obsidian found in archaeological sites outside the region implies that local material was also exported to neighboring areas of the Sonoran Desert (Bayman and Shackley 1999). The social and economic mechanisms for this circulation remain unknown, and down-the-line exchange is only one of many possible behaviors.

Religious Ideologies and Worldview

The religious ideologies that integrated populations in the Papaguera are difficult to discern using current models in Southwestern archaeology. An apparent lack of public monuments, such as ballcourts and platform mounds, implies that this region harbored worldviews unlike those that dominated the better-known regional systems in the Sonoran Desert (i.e., Patayan, Hohokam, and Trincheras). Figurines and ritual caches are also lacking in the Papaguera (Masse 1980b:302), offering further evidence of ideological differences from the regional centers of Hohokam society. Cremation burial was, however, practiced by the Patayan, Hohokam, and Trincheras traditions, and cremations (and inhumations) have been documented in southwest Arizona. The occurrence of cremations and other burials (e.g., Fontana 1965; Rosenthal et al. 1978:34–39) illustrates that a resident population was present in some, if not all, areas of the Papaguera.

The discovery of offertory shrines comprised of stone mounds with ceramic sherds in western Papaguera (e.g., Rogers 1966:51–52, 75–76) indicates that distinctive rituals were also practiced in the region. One trail shrine was comprised of more than 50,000 stones, and Rogers (1966:76) speculated

that each item was deposited by individual travelers. Notably, some of the shrines contain Historic period Yuman ceramics that were (later) overlain by Hohokam sherds (Rogers 1966:76).

Moreover, alignments of boulders (some of which weigh 200 pounds) spanning distances of 600 ft have also been recorded across southwestern Arizona (Lyon and Gregonis 2000:638). In no case do these alignments exhibit the degree of stylistic elaboration or scale that are comparable to large intaglios in the California desert (Rogers 1966:76). Ceremonial functions for the Arizona alignments and rock art have been proposed by some archaeologists (Lyon and Gregonis 2000:638) who have worked in the Papagueria.

Food-animal cremations, which are rare in the Hohokam core, are well documented in the Papagueria (Hayden 1985; Lascaux and Tucker 2000:316). Species represented by such offerings include deer, antelope, bighorn sheep, badger, and jackrabbit. The possible role of these offerings in commemorating ancestral totems should be evaluated by recourse to oral histories and ethnographic accounts.

Historic period piles of horns from bighorn sheep illustrate yet another dimension of ritual practice in the Papagueria (especially in the Sierra Pinate) that was absent in other contemporary areas of the Sonoran Desert. The ritual meanings of these historic shrines are elusive, and yet it is clear that they served much smaller communities than those that were involved with pre-historic ceremonies held in ballcourts and at platform-mound settlements. These Historic period shrines may have ancient analogues that are not preserved in the archaeological record of the Papagueria.

Implications for the “Hinterlands” of Southwestern Archaeology

In closing, I argue that social and economic institutions emerged in the Papagueria that were quite different from those that developed in epicenters of regional traditions such as the Patayan, Hohokam, and Trincheras. The Papagueria did not function as a marginal periphery for a hegemonic Hohokam regional system or any other population; instead, its pluralistic population was comprised of multiple societies in the Southwest, at least prior to AD 1200.

The Papagueria may have enabled some degree of political autonomy and cultural independence for local resident populations. Indeed, it is likely that the loyalties and social identities of local populations shifted over time and

space as they interacted with visitors from neighboring heartlands (e.g., Patayan, Hohokam, Trincheras). Such independence was only one of many potential benefits of occupying a region with common-pool resources. The institutions that negotiated this dynamic pluralism also facilitated the use of local resources by outsiders.

After AD 1200, however, large *cerro de trincheras* sites were constructed on hilltops along the western margins of the Hohokam tradition in eastern Papagueria and in northwestern Sonora (e.g., Downum et al. 1993; Ives 1936; A. Johnson 1963; McGuire and Villalpando 1993; O'Donovan 2002; Sauer and Brand 1931; Stacy 1977). The potential use of these facilities in defensive warfare is hotly debated (e.g., Downum 2002; LeBlanc 1999:258–263; H. Wallace 1995c; H. Wallace and Doelle 2001; Wilcox 1989), although it is likely that they materialized a variety of meanings (O'Donovan 2002:80–81). Besides their potential use for defense, it is also possible that these monumental constructions were symbolically meaningful for establishing rights to land and territory (Downum 2002). Whether or not *cerro de trincheras* were used for defense, for agriculture, and/or for symbolically staking claims to landscapes, the institutional arrangements that once governed the use of common-pool resources in the Papagueria apparently unraveled. With increased demographic pressure in other regions of the Late Prehistoric Southwest (Dean et al. 1994), economic competition may have intensified among members of the Patayan, Hohokam, and Trincheras traditions.

Recent research compels us to revise our interpretations of the Papagueria and its role in the prehistoric Southwest. We still have a poorly developed understanding of the so-called “weak patterns” (*sensu* Tainter and Plog 1994) or “empty spaces” (*sensu* Upham 1992) of Southwestern archaeology. I argue that some of these territories were utilized as CPR systems. Of course, not all Southwestern hinterlands functioned as CPR systems. Yet such systems may have been far more common than archaeologists have thus far recognized. Investigating the organization and pervasiveness of such systems will provide a more textured understanding of the relationships among hinterlands and heartlands in Southwest prehistory.

Note

1. My reference to three major traditions does not presume that they were static entities. I use these terms gingerly, knowing that their cultural content was dynamic and variable (*sensu* McGuire 2002).