Journal of California and Great Basin Anthropology | Vol. 30, No. 1 (2010) | pp. 69–86

Spanish Missions in the Indigenous Landscape: A View from Mission Santa Catalina, Baja California

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Mission Santa Catalina was founded on the margins of the Spanish colonial frontier in northern Baja California, but over time it became an important place in the indigenous landscape of the region. Dominican friars established the mission at a crossroads of native interaction, and recent archaeological, archival, and ethnographic research suggests that indigenous mission neophytes continued to engage in dynamic social and economic relationships with other native groups throughout the colonial period. At the same time, however, the diverse native peoples who lived at Santa Catalina formed new bonds to each other and to the lands around the mission itself. Together, these two processes suggest that the mission's neophyte population was not isolated from the broader indigenous landscape, and that although it was marginal from the point of view of the Spanish, Santa Catalina was—and continues to be—an important place in native Baja California.

In 1797, Dominican friars founded Mission Santa Catalina along the western slope of the Sierra Juárez in northern Baja California, in what was then the far northeastern frontier of Spanish Baja California (Fig. 1). Although Santa Catalina remained peripheral to the Spanish and later Mexican colonization of the region, the mission was founded in an area that bordered the traditional territories of native groups speaking at least four languages: Paipai, Kumeyaay, Cucapá, and Kiliwa. Today, the mission is located in the Paipai Indian community of Santa Catarina, and recent collaborative research with the Paipai and the Mexican Instituto Nacional de Antropología e Historia has examined how the native peoples who lived and worked at the mission successfully re-articulated indigenous identity during the colonial period[1] (Panich 2009). Ongoing archaeological and ethnohistoric research at Mission Santa Catalina suggests that it was home to an ethnolinguistically-diverse indigenous population that maintained strong ties to the surrounding social and physical landscape—a pattern that contrasts sharply with the popular image of Spanish missions as bounded, colonial communities.

In this article I will discuss the role of Mission Santa Catalina in the native landscape—broadly conceived to include the physical landscape as well as the culturally meaningful natural resources and social relationships that occur within it—using a combination of historical, archaeological, and ethnographic evidence. Based on these diverse datasets, it appears that two distinct but simultaneous processes unfolded during the colonial period in the Sierra Juárez. First, the mission attracted indigenous people from throughout the region, who over time reinterpreted indigenous identity and pre-contact social organization in such a way that they formed a new and larger social group that was based on Santa Catalina and the adjacent lands. At the same time, however, the native people living at Santa Catalina maintained important trade and social relationships with groups outside of the mission and also likely continued to engage in certain aspects of their pre-contact hunting and gathering practices. These trends and other details of indigenous life in colonial-period northern Baja California challenge paradigms of isolation and marginality by suggesting that native people actively negotiated the Spanish colonial system through a re-articulation of

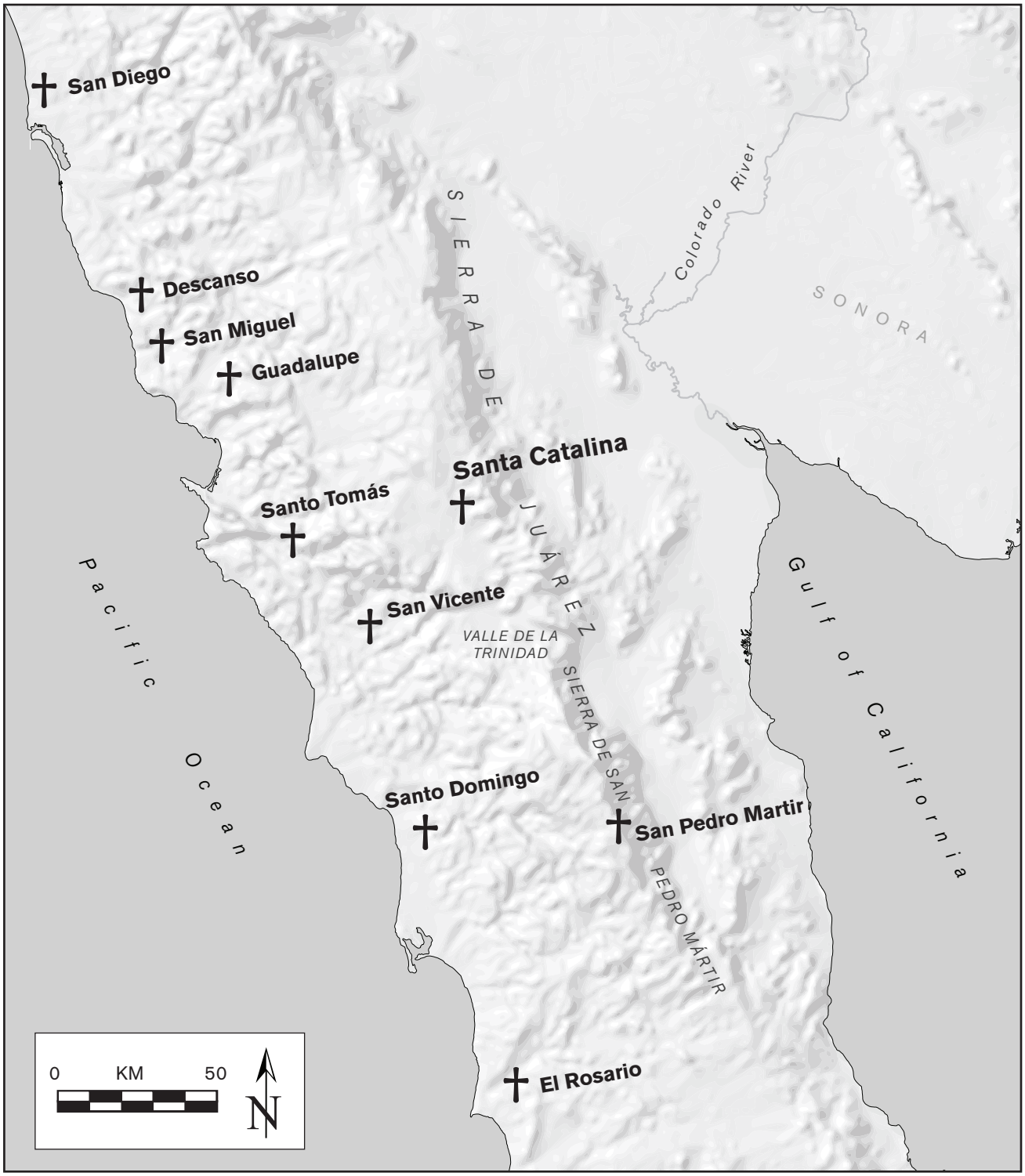

Figure 1. The Dominican Frontier of northern Baja California.

social practices that crosscut linguistic and geographic boundaries.

CHALLENGING PARADIGMS OF ISOLATION AND MARGINALITY

I will address the issues of isolation and marginality in two interrelated ways. The first focuses on the indigenous inhabitants of Baja California and the question of whether the region represents fundamental isolation and cultural passivity, as suggested by some authors, or if it may instead be seen as a distinct yet complex geographical area that has been shaped by its own cultural and environmental forces. The location of Santa Catalina at the very northern extent of peninsular Baja California offered its population ample opportunities for external connections, and the rich ethnohistoric and ethnographic record for the Paipai and neighboring groups, coupled with a diverse assemblage of artifacts from native habitation contexts at Mission Santa Catalina, provide a unique window into the dynamic social relationships that extended throughout the northern region. The second issue is that of mission communities themselves. Long seen as bounded, moribund populations on the margins of a new colonial society, recent work in northwestern New Spain has instead considered the place of Spanish missions in the broader indigenous landscape. As the emerging picture of life at Santa Catalina suggests, missions were as much native places as they were colonial outposts; in the specific case of Santa Catalina, the mission—like the modern community in which it is located—was an important nexus of native life in the region.

The distinctive geographical setting of Baja California has long been seen as the key to the region's culture history. Although some prehistoric contact between Baja California and the mainland may have occurred via the Gulf of California and its islands, land access to the peninsula is limited to the area where the peninsula attaches to the North American continent. This "northern gateway," as it is often called, likely represents the region through which any substantive prehistoric migration(s) passed into Baja California. Accordingly, scholars argue that groups of native people living on the peninsula originated from the north, and that successive migrations pushing south created the layered pattern of ethnolinguistic distribution on the peninsula that is often referred to as the "layer cake" or "stratigraphic" model of Baja California prehistory (Hyland 1997; Kirchoff 1942; Kowta 1984; Laylander 1987; Massey 1966; Moriarty 1970; Price 1971). In this model, the groups living near Mission Santa Catalina at the time of its founding represent the most recent arrivals to the area, and their geographical location atop the Baja California layer cake would have afforded them unique opportunities for interaction with other groups.

Indeed, the indigenous cultures living in the northern gateway were at the crossroads of southwestern, Californian, Great Basin, and Peninsular innovations and influences. The groups living in the area at the time of European contact can generally be understood as the descendants of the prehistoric Patayan, a somewhat poorly-defined culture-historical group that was centered on the Lower Colorado River and the surrounding areas, extending from northwestern Arizona through southwestern Arizona and southern California and into northern Baja California (Hildebrand and Hagstrum 1995; Shackley 1998). While the exact origins of the Patayan are unclear, most scholars agree that significant interactions—including the spread of pottery—took place between the Patayan and the Hohokam, and it is possible that such patterns represent an in-migration of Hohokam into the region sometime between A.D. 600 and 900 (Beck and Neff 2007; Schroeder 1979:102; Shackley 2004; Shaul and Andresen 1989; Shaul and Hill 1998; Waters 1982).

The native peoples who lived and worked at Mission Santa Catalina spoke Yuman languages, including Paipai, Kumeyaay, and Cucapá (Fig. 2). Today, scholars classify the Yuman languages into four distinct branches, including the Pai, River, Delta-California, and Kiliwa branches (Kendall 1983:6; Laylander 1997:61), although the earlier classification devised by Kroeber (1943:21), which included Delta, River, Upland, and California, perhaps corresponds more closely to the cultural—if not necessarily linguistic—subgroups of Yuman peoples (Stewart 1983:1). Of the languages spoken at Mission Santa Catalina, Paipai is a Pai language closely related to Havasupai, Walapai, and Yavapai, although in Kroeber's groupings the latter three comprise the Upland Yumans while Paipai is included in the California Yuman category. The Diegueño languages (Kumeyaay, Tipai, and Ipai) are placed in the Delta-California classification, as is Cucapá, which was considered a Delta language by Kroeber. Although the two language groups are

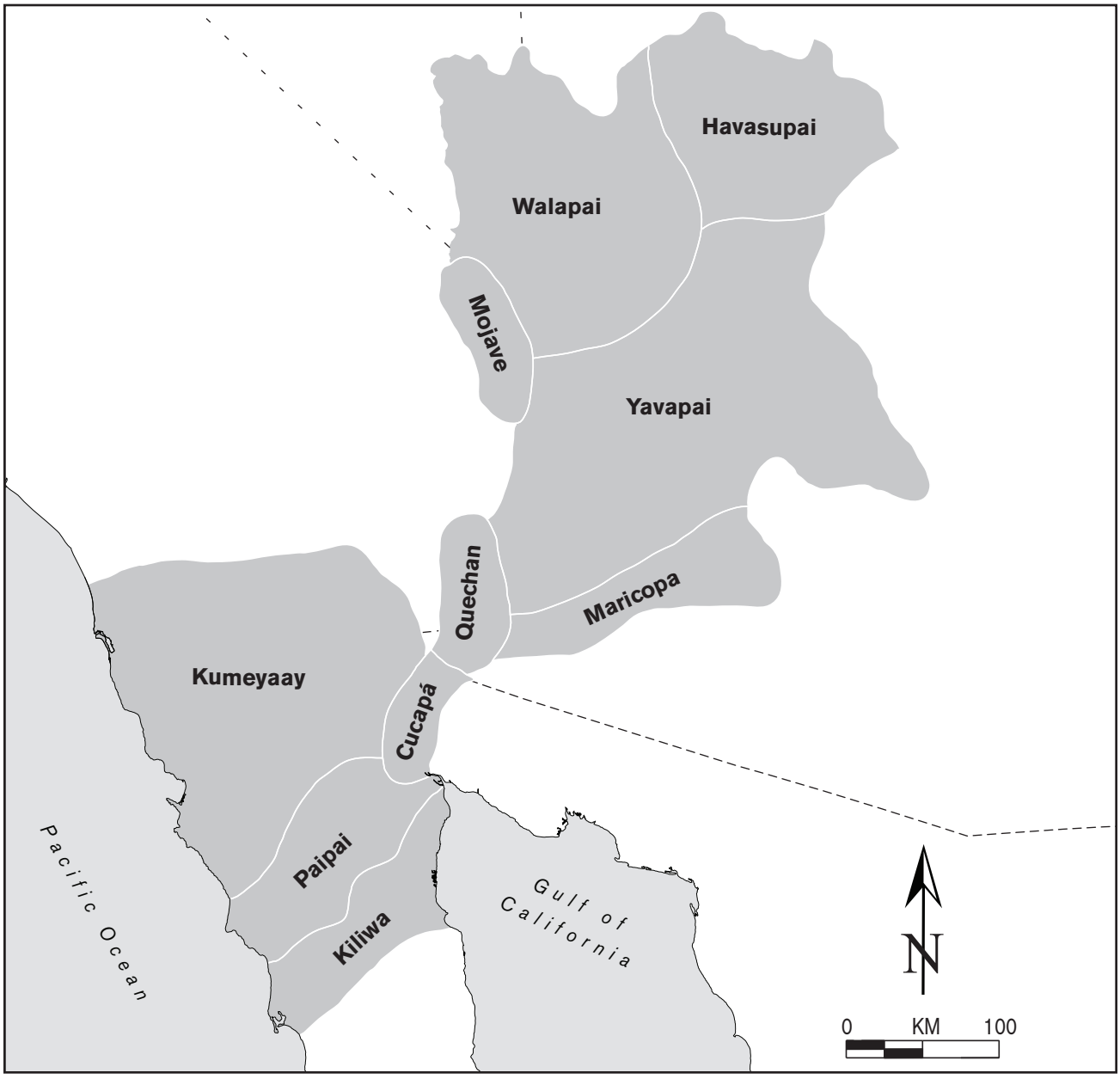

Figure 2. Distribution of Yuman language groups (after Hinton and Watahomigie 1984).

culturally distinct, linguistic data demonstrate a strong similarity between Kumeyaay and Cucapá, a view that is also held by residents of Santa Catarina, who were interviewed as part of this research (Laylander 1997; Panich 2009). Kiliwa, which is another language group that bordered the lands of Santa Catalina, was considered a California Yuman group by Kroeber, but it has since been classified as a highly divergent Yuman language (Laylander 1997:62; Mixco 2006). No Kiliwa speakers are known to have lived at Mission Santa Catalina, although several residents of the modern community of Santa Catarina do have Kiliwa ancestry.

While the details of the linguistic or cultural classification of the groups of northern Baja California are outside the scope of this article, the region's sometimes contradictory cultural and linguistic classifications are indicative of a varied ethnographic landscape that included kinship, social, and trade relations that crosscut the greater Lower Colorado River region, the Peninsular Ranges, and the Pacific Coast. Adding to the complexity

of the situation is the fact that language groups were not united politically or socially in pre-contact times; instead, the basic unit of social organization was the patrilineal clan. Each clan—called *shimul* in the native languages—was generally autonomous and localized, controlling a territory that included important food resources (Hicks 1963:43; Meigs 1939:16; Owen 1965:677; Wilken-Robertson and Laylander 2006:77). Such clans were also exogamous, and through intermarriage between members of *shimuls* speaking different languages, it is likely that cultural diversity and bilingualism were relatively common within a particular clan or community (Owen 1965). Taken together, the prehistoric and ethnographic information on the native peoples of northern Baja California suggests that the Spanish missionaries and soldiers who came to the region in the late eighteenth century entered a complex cultural landscape—one that would be fundamentally altered by the founding of Santa Catalina, but not necessarily in the ways the Spanish authorities intended.

Spanish colonial missions play an important role in the historical narrative of the Californias. Mission sites often represent the first permanent Euro-American settlement in a particular locality, and as such they capture the public and scholarly imagination. Many traditional investigations of mission sites in Alta and Baja California have tended to focus on ecclesiastical histories or structural aspects of particular missions, and while scholars—particularly in Alta California—have indeed considered the indigenous populations of Spanish missions, such work has often centered on studies of forced relocation and acculturation or the effects of epidemic disease upon native peoples living at Spanish missions (e.g., Cook 1976; Farnsworth 1989; Hoover 1989; Jackson 1994). Given these constraints to native agency, it is understandable that scholars interested in the dramatic changes to tribal communities that took place in the colonial period have interpreted the entrance of California Indian groups into the mission system as a process of profound alienation from their pre-contact polities and traditions (Milliken 1995). Although few today would question that native experiences in the mission system varied considerably through time and across space, a common perception of native life in Spanish missions has nonetheless been one of near-enslavement, in which outlying villages were eliminated, neophytes were kept under close confinement, escapees were relentlessly hunted down, and indigenous cultures became extinct (e.g., Castillo 1978; Chartkoff and Chartkoff 1984:268–270; Kroeber 1925:887–888).

Without discounting the very real violence of the mission period, it may be possible to expand historical and archaeological studies of mission sites to include a consideration of missions as places within the native landscape. From the tip of the California Peninsula at San José del Cabo to San Diego to Sonoma, Native Californians constructed mission compounds, worked mission fields, and tended mission stock. Yet indigenous peoples were not simply incorporated into the mission system; in important ways, Spanish missions were incorporated into the indigenous world.

Recent work in northwestern New Spain has re-centered scholarly attention on the native inhabitants of the mission system, and challenged the idea of missions as closed communities isolated from their indigenous neighbors (e.g., Anderson 1999; Deeds 2003; Lightfoot 2005; Newell 2009; Radding 1997; Schneider 2010; Skowronek 1998; and see Aschmann 1959). Such research has shown that many mission neophytes maintained important ties to their native territories while others created new social relationships in the ever-changing colonial landscape. Scholars are also reevaluating the many connections that the missions had to the rest of colonial society. In many cases, neophyte laborers were entangled in local, regional, and imperial economies, particularly in areas outside of the Californias where colonial settlements as well as mining and other economic interests often preceded missionary activity or developed parallel to it (Costello 1989; Crosby 1994; Deeds 2003; Farnsworth and Jackson 1995; Radding 1997). This renewed focus on the indigenous aspects of mission life has laid the groundwork for ethnohistorical and archaeological studies of Spanish missions that offer a better understanding of the role of Spanish missions in the broader native landscape.

MISSION SANTA CATALINA VIRGEN Y MÁRTIR

The Dominican mission of Santa Catalina Virgen y Mártir was founded in 1797, one century after the first permanent European settlement in Baja California—Mission Nuestra Señora de Loreto—was established by

Jesuit missionaries. Although European interest in the peninsula extended back to the 1530s, the region was not permanently occupied until the arrival of the Jesuits, who were able to create a nearly theocratic colony free of major secular or military interests. During their tenure in the region, they established a chain of missions that stretched across the southern two-thirds of the peninsula, but the lack of forage and arable land hindered their efforts to implement a widespread system of *reducción* in which native peoples from the surrounding area would be amalgamated at mission sites. Instead, many Native Californians were allowed to continue to live in their traditional homelands, though often a mission *visita* would be assigned to outlying *rancherías* (Aschmann 1959; Wade 2008). After the Jesuits were expelled from New Spain in 1767, the Franciscans briefly took over missionary operations in Baja California, founding one mission—San Fernando Velicatá—before moving north to Alta California.

The Dominicans were the last missionary order to work in Baja California in the colonial period. Although they were forced to compete with secular and military interests for resources, the Dominicans approached the work of converting native peoples with a determination equal to that of the Franciscans in Alta California. Like their contemporaries to the north, the Dominicans instituted strict forms of social control for the neophytes, keeping men and women separate whenever possible (Nieser 1960; Sales 1956). The policy of *reducción* appears to have been the ideal, although individual missionaries likely varied in the extent to which they mandated forced relocation of native peoples to the missions. Nevertheless, the ultimate aim of each mission was essentially the same: to remake the Indians of Baja California in the mold of the European peasantry through daily practices including labor, religious indoctrination, and forced adoption of Euro-American lifeways.

In addition to these general goals of the Spanish mission system, Mission Santa Catalina was founded as part of an attempt to push the frontier of colonial control east from the Pacific coast of Baja California into the interior mountain ranges and eventually on to the Colorado River (Mason 1978; Meigs 1935). These dual objectives informed the choice of Santa Catalina as a strategic location and also the ways in which the Dominicans and associated colonial soldiers interacted with the local native populations. Large numbers of soldiers and artillery were stationed at the mission at the time of its founding, and letters between colonial officials speak of several conflicts between colonial soldiers and local native peoples during Santa Catalina's early years (Arrillaga 1797a, 1797b, 1804). The Spanish eventually gave up on their plan to expand east to the Colorado River, and Santa Catalina was left without a missionary of its own for much of its occupation. From 1819 onward, for example, one missionary—Fr. Felix Caballero—administered both Santa Catalina and Mission San Miguel; two other missions, Guadalupe and Descanso, were added to his charge in the 1830s (Nieser 1960:280). During this period, Santa Catalina was left under the control of the colonial guards for much of the year (Engelhardt 1929:631). As a frontier mission Santa Catalina was designed to exist on the margins of colonial Baja California, but the lack of a full-time missionary for almost half of its existence isolated it even further from the religious, military, and secular interests of the region.

Yet Santa Catalina remained an important—albeit contested—place in the native landscape of northern Baja California. Despite the establishment of several missions in the frontier region, the sierras remained home to large numbers of native peoples living free of colonial control throughout the colonial period (Rodríguez Tomp 2002:250). In 1808 neophytes from Santa Catalina and Mission San Pedro Mártir joined their un-missionized neighbors, including the Cucapá as well as groups from the Pacific Coast, in a rebellion against the missions of the Dominican Frontier (Rojo 2000:88). Another major uprising took place in 1834 and again involved neophytes from Mission Santa Catalina and their un-missionized Cucapá allies (Rojo 1972:57–60). The fighting spread throughout the region, including the Sierra Juárez, Mission San Vicente, and the Guadalupe Valley. The broad coalitions of native people comprised of neophytes and gentiles of multiple language groups mentioned in these accounts underscore the large number of un-missionized groups in the region, as well as the wide-ranging relationships that native people maintained during the colonial period.

Not all of the relationships among local groups were friendly, however, and it is likely that the decision of some native people to join the mission created tension

in the area. As detailed by a Paipai elder I interviewed in Santa Catarina (Panich 2009), the native inhabitants of the region were generally split into two factions during the mission period: those who supported the mission and those who rejected it. This notion can be seen in the accounts of the destruction of Mission Santa Catalina in 1840. Various versions of the events exist, but one intriguing possibility is that the attack and ensuing conflagration that put an end to the mission may have been directed at the neophyte population rather than at the missionaries themselves. Mixco (1983:225–232) indicates his Paipai and Kiliwa consultants stated that the attack was in retribution for several witchcraft killings and that tension between local native groups motivated the attacks. This account corresponds well to that offered by Meigs (1935:122–123), who states that the destruction of the mission occurred amidst tension between the neophytes and un-missionized Kiliwa groups.

After the mission was destroyed, some families may have left, but others stayed on the former mission lands, and documents from the immediate post-mission period refer to the "tribe of Santa Catalina" (Castro 1852). In 1870, thirty years after the destruction of the mission, roughly 80 Indians called Catarineños continued to live near the site of Santa Catalina (Shipek 1965:27). While local Native Californians maintained several other communities, including La Huerta and San Isidoro, throughout the colonial period and beyond, Santa Catarina—as it came to be known—was one of the only native settlements in the region to be located at the site of a former Spanish mission. Its inhabitants continued many aspects of hunter-gatherer lifeways into modern times, and today Santa Catarina remains one of the largest indigenous communities in Baja California, serving as a hub of social life for the native inhabitants of the region (Garduño Ruiz 1994; Hicks 1963; Joël 1976; Owen 1962; Wilken 1987). In sum, Mission Santa Catalina was not a success from the standpoint of the colonial authorities, nor was it apparently held in high esteem by certain native peoples, but it nonetheless remained an important place in the native landscape. The evidence discussed below provides further details about the ties that mission neophytes maintained to groups outside of the mission while at the same time they formed new bonds based on the landscape of Santa Catalina itself.

Ethnohistorical Evidence

Despite its isolation from the centers of colonial society, Mission Santa Catalina maintained an annual neophyte population of roughly 250 individuals well into the 1830s (Meigs 1935; Nieser 1960). Recent analysis of a mission census from Santa Catalina dating to the year 1834 has offered new insight into the ethnolinguistic composition of that population (Anonymous 1934; Panich 2009, 2010). The document lists individuals with a given name and a surname; although the given names are nearly all Hispanic in origin, many of the surnames are Hispanicized versions of indigenous clan names, providing a unique glimpse into the ancestry of Santa Catalina's neophyte population. Accounting for variant spellings, the document lists 26 surnames, at least 18 of which are likely indigenous words and/or names of different clans. Through a comparison of these names with ethnographic information from northern Baja California and southern Alta California, a total of twelve distinct clans or *shimuls* have been identified.

All of the most prevalent surnames from the mission census correspond to separate *shimuls* from the Paipai, Kumeyaay, and Cucapá that were documented by Hohenthal (2001), Meigs (1939), and other ethnographers in the early and mid twentieth century (e.g., Gifford and Lowie 1928; Hicks 1963; Kelly 1942; Michelsen 1977; Owen 1962, 1965). Many of the names also refer to clans that are today still present in Santa Catarina and other indigenous communities in the region. These clans include Jat'am, Jamsulch, Ko'al (or Kwatl), Kwal-xwat, Miyewka, Qshaqsh, and Xwa:t'. Additional names that were recorded ethnographically, but that were no longer remembered by my consultants in Santa Catarina, include Kuwepai, Kekur, Quinoh, and Metesepa.[2] Other surnames listed in the census, such as Jamau, are place-names still in use today and may have been *shimul* names in the past.

Using the ethnographic information about the language affiliation and ancestral homelands of these 12 clans, it is clear that the mission likely incorporated people from a wide geographic area and included speakers of multiple languages (Fig. 3). The clans listed on the census are thought to have come from throughout the region, from the coast south of Ensenada, to San Isidoro, to La Huerta, and possibly to the Colorado River Delta. Based on this analysis, there is also ample evidence

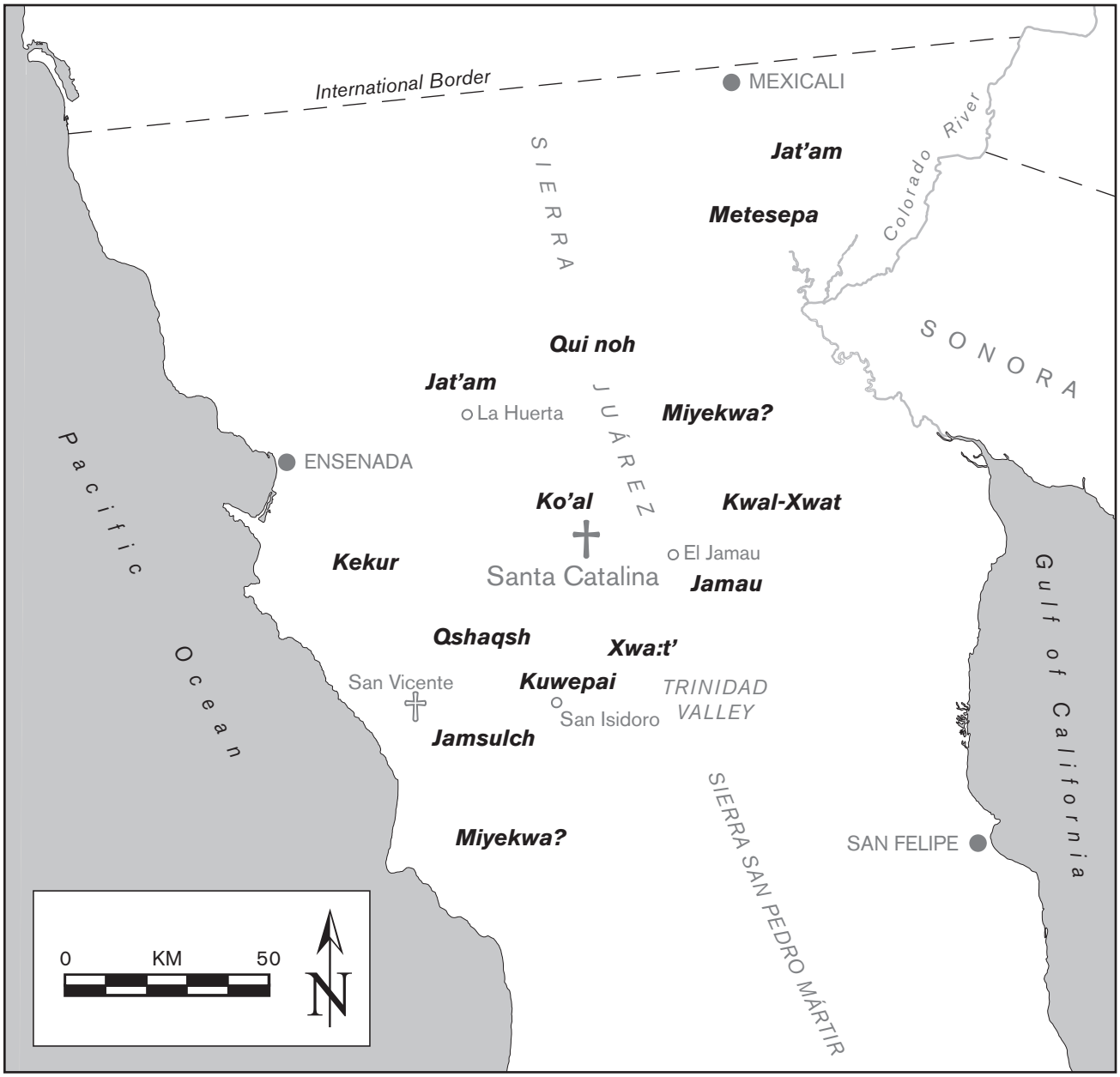

Figure 3. Geographic areas associated with clans listed on the Santa Catalina mission census of 1834.

that the neophytes at Mission Santa Catarina certainly included both Paipai and Kumeyaay speakers, and likely speakers of Cucapá as well. Overall, the mission's neophyte population was comprised of individuals and families of diverse ethnolinguistic origins, at least in the final years of the mission's occupation.

The clans listed on the mission census, moreover, do not appear to represent entire lineages. Hicks (1963) estimates that *shimuls* in the region would have numbered between 70 and 100 individuals in pre-contact times; the census of 1834 lists 27 individuals for the most prevalent surname—Jatam—while many other identifiable *shimuls* listed in the document contain less than ten individuals each (Panich 2010:248). Most of the clans in question were recorded by early ethnographers as living in multiple communities in the region (Hohenthal 2001; Meigs 1939), and given the large number of indigenous groups in northern Baja California who were not brought under direct colonial control, it is likely that members of many *shimuls* remained outside of the

mission system. Those who did make the choice to move to Santa Catalina or other missions in the area probably maintained important ties to their relatives living in the hinterlands. At the same time, an examination of married couples listed on the mission census indicates that the traditional predisposition for exogamy at the level of the *shimul* continued within the neophyte community at Santa Catalina. Such practices may have facilitated the formation of new social relationships, as well as the formation of a larger and perhaps stronger social group based on the mission itself.

Archaeological Evidence

From 2005 to 2007, archaeological fieldwork at Mission Santa Catalina focused on two midden deposits located directly adjacent to the northeastern and southeastern walls of the mission compound (see Panich 2009:137–177). These middens do not appear to contain substantive pre- or post-mission deposits, but instead likely represent the remains of neophyte habitation areas. Artifacts recovered from these excavations comprise a diverse range of materials including indigenous ceramics, lithics, and artifacts of colonial manufacture, as well as faunal and botanical remains.[3] This assemblage speaks to the external social and trade relationships that indigenous people living at the mission engaged in during the colonial period, as well as to the fact that the mission was the site of a distinct coalescence of native peoples from throughout the region.

Faunal Remains and Shell. Faunal remains constitute one of the largest categories of archaeological materials collected from the site and hint at the continuation of certain hunting practices at Santa Catalina. Provisional field identifications of a sample of diagnostic bones conducted during excavations in the extramural neophyte habitation areas included bones belonging to both domestic and wild animals, such as domesticated cow (*Bos taurus*), domesticated sheep (*Ovis aries*), mule deer (*Odocoileus hemionus*), desert cottontail (*Sylvilagus audubonii*), and black-tailed jackrabbit (*Lepus californicus*). These remains correspond well to what is known about the livestock kept at Mission Santa Catalina as well as ethnographic-period Paipai animal consumption. Figures for the early years of the mission (1797–1805) indicate that the mission herds contained cattle, horses, mules, sheep, and goats numbering in the hundreds (Anonymous n.d.; Meigs 1935:167). The mission was reported to have 1,000 head of cattle and 600 sheep in 1834 (Lassepas 1859), although the account of James Ohio Pattie, an American fur trapper who visited the mission in the spring of 1828, would appear to contradict these latter figures. Pattie declared Santa Catalina "destitute of stock" due to the plundering of the mission herds by un-missionized native peoples, a situation that is also attested to by the accounts of Spanish officials (Pattie 1988:124; Ruiz 1799)

While relatively little marine shell was recovered at the site (n=41), the presence of shell material including nine *Olivella* shell beads is noteworthy considering the location of Santa Catalina roughly halfway between the Pacific and Gulf of California coasts. The 32 non-bead shells in the sample fall evenly into three main categories: abalone (*Haliotis* sp.), clam (class Bivalvia) and cockle (family Cardiidae). The shell data provide interesting evidence for external connections based on the geographic distribution of different mollusks on the Pacific and Gulf of California coasts of Baja California. Abalone, for example, is not found in the Gulf and thus the abalone shell fragments found at the mission site undoubtedly originated on the Pacific Coast. Most of the shell beads are likely either *Olivella baetica* or *Olivella biplicata* (as opposed to *Olivella dama*), both of which are also native only to the Pacific Coast (Morris 1966). Cockles and clams may be found on either coast, and without species or even genus designation, it is impossible to assign a provenance to the shells in these two categories.

Shell beads also attest to the continuation of native trade networks that extended throughout northern Baja California and southern Alta California. Using the bead typology outlined by Bennyhoff and Hughes (1987), the nine *Olivella* shell beads collected from Santa Catalina can be separated into three categories: spire-lopped, barrel beads, and a disk bead. Four beads from the mission site are small spire-lopped beads (Type A1a) (Bennyhoff and Hughes 1987:117-119). These are essentially complete *Olivella baetica* shells that have had the spire removed so that they may be strung. Four other beads are small barrel beads (Type B3a). These beads have had the spire and most of the aperture ground away to create a squat, cylindrical shape. Small barrel beads—made from *Olivella biplicata*

shells—were common in Southern California and their production extended into protohistoric times (Bennyhoff and Hughes 1987:121–122). One other bead is a semi-ground disk (Type H1b) with a maximum diameter of 6.2 mm. This type of bead is circular, with only a shallow concavity, and has a small (~1 mm.) central perforation that appears to have been made with a metal needle. Such beads were traded widely during the historic period in Southern California (Bennyhoff and Hughes 1987; Gamble and Zepeda 2002).

Botanical Remains. As with the faunal remains, archaeobotanicals from Santa Catalina offer new insights into the continuation of traditional subsistence practices at the mission. A pilot study of flotation samples systematically collected from the northeastern neophyte occupation area demonstrated the presence of both domestic and wild species.

Domesticated maize (*Zea mays*) was the most prevalent domesticated plant in the sample, and maize remains such as kernels and cobs were also identified during excavation in the extramural middens. There were several seeds of domesticated wheat (*Triticum* sp.) present in the flotation samples, which also included two fragments identified as domesticated beans (*Phaseolus* sp.). Beans, however, may be underrepresented due to the fact that they are typically unidentifiable after burning. An entire pit from a peach (*Prunus persica*) was additionally found during excavation. Taken together, the presence of these domesticates (maize, wheat, and beans) correspond well to what is known historically about the crops grown at Mission Santa Catalina. Although good data only exist for three years—1800, 1801, and 1834—maize appears to have been the most important food crop, with a yield of 65 bushels in 1800, 16 in 1801, and 78 in 1834. Wheat is the only other domesticated crop recorded for those years at the mission, which produced 16 bushels in 1800 and 52 in 1801 (Meigs 1935:167). Beans and barley were apparently also grown at Santa Catalina, although in smaller quantities (Anonymous n.d.). Accounts of peach cultivation in colonial Baja California could not be found, but peach remains were relatively common among the botanical remains collected from Mission Santa Cruz in Alta California (Allen 1998:46).

Several species of wild plants were also identified in the flotation samples, including a number of cactus and other desert plants. The seeds of prickly pear cactus (*Opuntia* sp.) were relatively common, and the pulpy fruits of this cactus were an important food resource for the indigenous peoples of the region (Hicks 1963:124; Hohenthal 2001:138; Joël 1976:61; Meigs 1939:9). A small number of agave (*Agave* sp.) or yucca (*Yucca* sp.) seeds were also found in the flotation samples. Agave was one of the principal wild plant foods for the region around Mission Santa Catalina, and their heads—the inner part of the basal rosette—were typically roasted in large pits, often several dozen at a time (Hicks 1963:106–109; Meigs 1939:22). Various yucca species were also eaten, some of which were prepared in the same way as agave (Hicks 1963). Several other cactus seeds were also recovered but could only be identified to the family level (Cactaceae). The area around the mission site is home to many cactus plants, including barrel cactus or *biznaga* (*Ferocactus* sp.), cholla (*Cylindropuntia* sp.), and various hedgehog cacti or *pitayita* (*Echinocereus* sp.), all of which are valuable food plants (Lightfoot et al. 2009:357).

The most numerous wild plant remains were from juniper (*Juniperus* sp.), which is common in the area of the mission site. While juniper is often used for the construction of traditional dwellings, it has important dietary and medicinal uses as well (Hicks 1963:144; Meigs 1939:9; Owen 1962:109). Several seeds from sedges were also noted (Family Cyperaceae, *Scirpus* sp., and *Carex* sp.). Sedges may have been collected from streambeds near the mission site, and the roots of these wetland plants could be eaten after they were roasted in hot coals. Tule or bulrush in particular was also commonly used for mats and house thatching, and it is possible that sedges were used for basketry in earlier times (Hohenthal 2001:139; Meigs 1939:11). Many seeds from the grass family Poaceae were noted, although identification to the genus or species level was not possible. One member of the Poaceae family, deergrass (*Muhlenbergia rigens*), was an important source of material for basketry in the region (Hohenthal 2001:163). Small amounts of manzanita (*Arctostaphylos* sp.) as well as either goosefoot (*Chenopodium* sp.) or pigweed (*Amaranthus* sp.) were also noted. The seeds of these plants were commonly parched and ground to make mush or cakes (Hicks 1963:150, 153; Hohenthal 2001:135; Meigs 1939:9).

Ceramics. Indigenous ceramics can also shed light on the connections mission neophytes may have had to the world outside of Santa Catalina. In order to learn more

about the potential variability of the raw materials used to make the largely undecorated brown ware ceramics recovered from the mission site, EDXRF geochemical analysis was conducted on a sample of 239 diagnostic sherds that were collected as part of this research. The sample included 220 rim sherds as well as an additional 19 fragments of vessel bodies or other objects, which included perforated disks, bow pipe fragments, scoop handles, and loop handles. Care was taken to include only those artifacts that represented unique vessels on the basis of form, rim diameter, thickness, decoration, and/or evidence of charring. As a control, the ceramic provenance study also included samples of raw material from the clay source now in use by modern Paipai potters—a source of clay that is located less than half a kilometer from the mission site—as well as modern ceramic vessels made with clay from that source. The study also included raw material samples from an ethnographically documented clay source that is no longer used by potters in Santa Catarina and that is located about five kilometers east of the mission (Michelsen 1972; Wilken 1987). A full discussion of the methods and implications of this study are provided elsewhere (see Panich 2009), but a general summary of the findings serves to illuminate the processes examined in this article.

In sum, about 80% (n=190) of the archaeological ceramics cluster with pots and raw material samples from the modern clay source and as such, it appears that the majority of the ceramics in use at the mission were made from clay easily obtainable from an area directly adjacent to the mission. Another 15% (n=38) of the ceramic artifacts clustered with the raw material samples from the ethnographically documented clay source and thus may have been constructed from clay found relatively close to Santa Catalina. The remaining 5% (n=11) appear to have been constructed from non-local clays and were likely brought to the mission from somewhere else. These figures suggest a primary reliance on locally available raw clay materials for use in ceramic production. In the Southern California ceramic provenance study by Hildebrand et al. (2002), for comparison, up to 20% of the ceramics collected from prehistoric and early historic period Kumeyaay sites in the Peninsular Ranges were from non-local sources. While the ceramic provenance data from Santa Catalina suggest a lower percentage of non-local ceramics were in use at the mission, the ceramics from the secondary source suggest that mission neophytes had access to places on the landscape outside of the mission proper, and the non-local ceramics point to relationships further afield.

In particular, the ceramic data hint at ties to the northern Sierra Juárez and to the Colorado River area—where some of the clans are thought to have originated. Buff wares were rare in the ceramic assemblage from Santa Catalina, but at least one of the non-local ceramics identified in the EDXRF study appears to be made from alluvial clays. Other ceramic artifacts reflect decorative motifs not typically associated with the southern Sierra Juárez. For instance, an effigy scoop handle exhibiting the classic "coffee bean eye" motif was found in a neophyte habitation context at the mission site and appears to be made from local clays on the basis of XRF analysis (Fig. 4). Scoops with effigy handles, however, are rarely made from the residual clays common to the Peninsular Ranges, and known examples are clustered in three distinct geographical areas: the Lower Colorado River, the western margins of the Salton Sea, and eastern San Diego County and adjacent areas of Baja California (Hedges 1973:8). Figurines displaying coffee bean eyes have also been documented archaeologically and ethnographically throughout southern California, although even those found near the coast have been tentatively linked to the Lower Colorado, based on paste analysis. The style itself is thought to originate with the Hohokam (Hedges 1973; Koerper and Hedges 1996).

Figure 4. Effigy scoop handle recovered from excavations at Mission Santa Catalina.

Lithic Artifacts. The lithic artifacts collected from Mission Santa Catalina suggest both the continued engagement of neophytes with regional trade networks as well as a reliance on raw materials available within a short walk of the mission site. The obsidian from the site, for example, has been linked through EDXRF provenance analysis to an as yet unknown obsidian source that is likely derived from the same magma group as the "San Felipe" and Puerto El Parral obsidian sources, which are located roughly 100 kilometers southeast of the mission. Interestingly, the geological source of the obsidian used at Santa Catalina was probably located in the territories of Kiliwa-speaking clans. No clans listed in the mission census of 1834 are known to have spoken the Kiliwa language, although some Paipai-speaking clans from the southern edge of Paipai territory are thought to have strong ties to the Kiliwa (Owen 1963). This pattern indicates that mission neophytes either continued to have direct access to distant obsidian sources or they maintained relationships with native peoples not associated with Santa Catalina and who were living beyond the control of the Spanish colonial system.

Nearly 92% (n=444) of the flaked stone artifacts recovered from excavations at Santa Catalina, however, were made from materials such as quartz, quartzite, and crypto-crystalline silicates that occur naturally within ten kilometers of the mission site. Un-retouched flakes and angular shatter made of these local materials predominate within the assemblage. Obsidian projectile points and re-worked gunflints—the only clearly non-local raw materials noted in the assemblage—comprise 9 out of the 11 formal tools, which included scrapers and seven Desert Side-Notched projectile points. While the presence of obsidian artifacts indicates that mission neophytes did indeed maintain access to obsidian sources and/or trade relations with native groups living outside of direct colonial control, the relatively high proportions of flakes and shatter suggest that mission neophytes employed a lithic reduction strategy aimed at the production of expedient and usable cutting surfaces rather than formal tools. This pattern generally correlates with sedentism in hunter-gatherer contexts (Andrefsky 1994), and in this case may suggest that mission neophytes remained at the mission for much of the year.

Colonial Artifacts. The missionaries and soldiers who were stationed at Mission Santa Catalina brought with them material items of colonial manufacture, some of which were intended for their own use, while others were to be given to local native peoples. On the whole, these items were relatively scarce in the excavations conducted in the neophyte habitation areas. Santa Catalina was far removed from El Camino Real and established supply lines, and as the evidence for native ceramic and lithic technologies suggests, mission neophytes did not need to rely on colonial authorities for their basic material resources. Relatively small amounts of colonial ceramics—including Chinese export porcelain, Mexican majolica, and British whiteware—were collected at the site. Such wares, however, totaled just 157 sherds with a combined weight of only 251 grams; these figures can be compared to the 12,972 indigenous ceramic sherds collected from the site with a combined weight of over 47,200 grams. A total of fourteen glass beads were recovered, as were small amounts of colonial glass, some of which—including a Desert Side-Notched projectile point—was intentionally flaked. Both ferrous and cuprous metal artifacts were relatively abundant in the neophyte habitation areas, although aside from buttons, tacks, and other hardware pieces, few diagnostic artifacts were noted.

Without the benefit of excavation data from domestic contexts within the mission walls—either those of colonial soldiers, high ranking neophytes, or the missionaries themselves—the actual extent or accessibility of introduced materials such as metal goods or colonial ceramics is unknown. Yet the types of items apparently used by neophytes indicate that they did not have to rely on the mission for supplies of utilitarian objects, although they may have readily incorporated nails, bottle glass, or even adobe bricks into some aspects of daily life, such as tool making or house construction. Glass beads and metal buttons were also used by the mission's native population and may have been used to augment traditional jewelry or dress, though again native forms were equally abundant at the site. These observations, combined with the data from the lithic and indigenous ceramic artifacts, support the idea that native people continued to have ready access to the material resources found in the landscape beyond the mission walls, but that the resources of the immediate area may have become more important as the indigenous people who came to the mission created stronger ties to the area around Santa Catalina itself.

DISCUSSION

Though the motivations of the native people who joined Mission Santa Catalina can never entirely be known, the diverse lines of evidence examined here can begin to illuminate how the mission was incorporated into the broader indigenous landscape. As the available historical information suggests, Santa Catalina was located on the Dominican Frontier but existed on the margins of the colonial system—in the midst of large numbers of un-missionized and occasionally hostile Indians and far away from colonial population and administrative centers. Yet the mission did maintain a relatively stable population, suggesting that at least some of the region's indigenous inhabitants came to view the mission and its surrounding lands as their home (Panich 2010). The great geographic and linguistic diversity of the mission's population, moreover, is underscored by linking surnames on the mission census with ethnographically documented native clans. Whole clans, however, do not appear to have moved to Santa Catalina, and mission neophytes thus likely maintained ties to their relatives living outside of the colonial system. The families and individuals who moved to the mission also continued to practice exogamy, which would have allowed for the social integration of people from different backgrounds and may in turn have led to the creation of a new level of social organization—what later observers referred to as the tribe of Santa Catalina.

Archaeological evidence can also help to illuminate these processes. While few of the faunal or botanical remains that have been identified to this point suggest hunting and gathering forays that would have required that mission neophytes leave the mission lands, the plant and animal remains do represent a wide variety of wild species. The shell data, moreover, indicate that marine resources were available to mission neophytes, either through direct access or trade. Yet the faunal and botanical data also support the idea that introduced food crops and meat from domesticated animals likely comprised a significant, if not always reliable, portion of the neophyte diet. This scenario may be indicative of the coalescence of native peoples at Santa Catalina where hunting and gathering was used to supplement the supply of food and raw materials available at the mission. Altogether, it appears that native peoples did not simply abandon their hunting and gathering practices once they entered the mission; whether they did so clandestinely or with the blessing of the missionaries, the evidence is clear that indigenous neophytes living at Santa Catalina continued to incorporate wild species into their diet and material culture.

The ceramic and lithic artifacts also point to outside connections, as well as to a primary reliance on the area around the mission itself. EDXRF provenance analysis, for example, suggests that native people at Santa Catalina obtained obsidian from a relatively distant source, and that ceramic objects made from non-local clays were present in modest numbers at the mission. Yet in both cases, the majority of artifacts were made from raw materials that were available in the immediate vicinity of the mission itself. The resources the mission neophytes sought out at Santa Catalina, though, were not necessarily the kinds of Euro-American items given to native people by missionaries and soldiers. Rather than use majolica, native people made their own pottery; rather than use metal knives, native people created flaked stone implements. While such choices may have been structured by the lack of imported goods at the mission or resistance to the colonial regime, the overall pattern nonetheless supports the notion that indigenous people at Santa Catalina continued to engage with the broader landscape on a regional as well as local scale.

Similar patterns have been noted in other mission contexts, particularly in Alta California, where some Franciscan missionaries granted furloughs to mission neophytes and where wild game and plants continued to comprise an important component of the neophyte diet at certain missions (Allen 1998; Farris 1991; Guest 1983: Hackel 2005:84–85; Hoover 1980:45; Johnson 2005:71; Kelsey 1985:505; Newell 2009; Timbrook, et al. 1993:133–134). In Baja California, Jesuit missionaries are known to have allowed many native people to reside in their traditional *rancherías* due to inadequate food supplies at the missions, and faunal analysis from nearby Dominican missions indicates some limited use of wild game (Aschmann 1959; Guía Ramírez 2008; Wade 2008). The native population of Mission Santa Catalina was not alone, then, in maintaining important ties to the physical geography of their homelands and to other native people, both those within the colonial system and groups living beyond its reach. While the colonial experiences of native people varied greatly, and had wide ranging outcomes in

terms of the persistence of native identity, the complexity of native interaction during the colonial period is a topic that warrants further scholarly consideration.

Taken together, the evidence suggests that indigenous people living at Mission Santa Catalina maintained important regional ties despite their involvement in the Spanish mission system. The archaeological evidence speaks to the continued engagement of native people with the lands beyond the mission walls, even as the mission neophytes became more dependent on the material resources near the mission itself. Similarly, the ethnohistoric evidence, in the form of a mission census dating to 1834, shows that the mission was home to a diverse group of native people, who likely continued to interact with their relatives living outside of the mission system. While it may have been a marginal colonial outpost in the eyes of Spanish and Mexican authorities, Santa Catalina became an important place in the indigenous landscape, a place where diverse native peoples forged new relationships and maintained old ones, a role that continues for the Paipai community of Santa Catarina today.

The case of Mission Santa Catalina corresponds well with other studies of indigenous populations at other Spanish missions in the Californias and elsewhere. Although the mission system brought with it severe constraints on native peoples' practices, health, and in many cases their very survival, missions became native places. Just as the motivations of individuals and families to join missions varied through time and across space, so too did the relationships that mission neophytes had to the broader, indigenous landscape. At Santa Catalina, the mission was at various times violently resisted and at other times devoid of a missionary; the native people who lived there likely had mixed relationships with their un-missionized neighbors, but the evidence is clear that as mission neophytes came together to form innovative social bonds, they nonetheless maintained important connections with other native communities outside of the mission. In the Californias, the mission system has long been seen by some as the epitome of isolation and marginalization for those native peoples who entered it, but as the case of Santa Catalina demonstrates, mission neophytes—like the native peoples of northern Baja California more generally—reinterpreted the flexible social organization, wide ranging social relationships, and cultural practices of pre-contact times to creatively negotiate the landscape of Spanish colonialism.

NOTES

[1]Mexico became independent of Spanish rule in 1821, but like many of the frontier missions, Santa Catalina continued to operate despite the secularization decrees of the early 1830s. For Mission Santa Catalina, then, the colonial period can be understood as the dates of its operation, 1797–1840. For the broader region of northern Baja California, the colonial period generally extends from the founding of the first Dominican mission at El Rosario in 1774 to the closing of the frontier missions, ca. 1832–1849.

[2]The spellings used here represent the most common spellings of the clan names in the ethnographic literature. See Panich (2009) for variants and the spellings used in the mission census.

[3]Several analyses are ongoing; for the sake of brevity, the reader is referred to Panich (2009) for a full explication of the methods employed.

ACKNOWLEDGEMENTS

The research on which this article is based could not have been accomplished without the generosity of Julia Bendímez Patterson, David Cohen, Rob Cuthrell, Lucy Diekmann, Esteban Gomez, Kent Lightfoot, Tsim Schneider, Mike Wilken, and the community of Santa Catarina, among numerous others. A Dissertation Grant from the University of California Institute for Mexico and the United States and a National Science Foundation Doctoral Dissertation Improvement Grant provided funding for field and laboratory research, which was authorized by the Instituto Nacional de Antropología e Historia. Thanks are also due to Don Laylander and an anonymous reviewer for their careful reading of the manuscript, and to the editors of this issue for inviting me to participate.

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