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Native Californian Persistence and Transformation in the Colonial Los Angeles Basin, Southern California

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Contrary to long-held perceptions of rapid upheaval of Native Californian lifeways instigated by the establishment of Spanish missions in coastal southern California, archaeological and ethnohistorical research in the greater Los Angeles basin highlights the persistence and autonomy, as well as the transformation, of Native Californians in a missionized socio-political and economic landscape. Mission-period Gabrieliño (Tongva) established post-contact communities that reinforced indigenous ideology, religion, and practice. At the same time, these communities also successfully navigated the environmental, social, and economic challenges created by colonial institutions. The successful persistence of many Gabrieliño (Tongva) cultural rituals and subsistence practices for approximately 40 years after the establishment of Mission San Gabriel was due to the continuance, and transformation, of these long-lived native communities. This study looks broadly at evidence from both La Ballona, located in what is now west Los Angeles, and from the greater Los Angeles basin.

WHEN THE SPANISH ARRIVED in the Los Angeles basin, it was occupied by the Gabrieliño (Tongva), a Takic-speaking group (Bean and Smith 1978; Johnston 1962; McCawley 1996). They were complex hunter-gatherers whose territory extended from the San Fernando Valley southward to beyond the Santa Ana River (encompassing portions of the Santa Monica and San Gabriel mountains), and included the southern Channel Islands (San Clemente, Santa Catalina, Santa Barbara, and San Nicholas; Fig.1). They were bounded on the northwest by the Chumash, probably the best-known of the region's complex hunter-gatherers (e.g., Gamble 2008). Bean and Smith (1978:538) noted that at the time of contact, "With the possible exception of the Chumash, the Gabrieliño were the wealthiest, most populous, and most powerful ethnic nationality in southern California...."

Villages were autonomous, had populations of up to 400 or 500 inhabitants, and were occupied year-round, with associated seasonal satellite camps. A village social and political hierarchy was institutionalized, primarily through the hereditary succession of leaders (Gamble and Russell 2002).

Our focus in this article is on the cultural persistence, as well as the transformation, of the Gabrieliño (Tongva) (hereafter Gabrieliño) during the Mission period (A.D. 1771–1834), as evidenced in recent archaeological and ethnohistorical investigations of a native community in an area known as La Ballona (referred to hereafter as the Ballona), in what is now west Los Angeles. We also draw data from recent excavations at San Gabriel Mission to compare and contrast the two very different Mission-period contexts for Native Americans outside

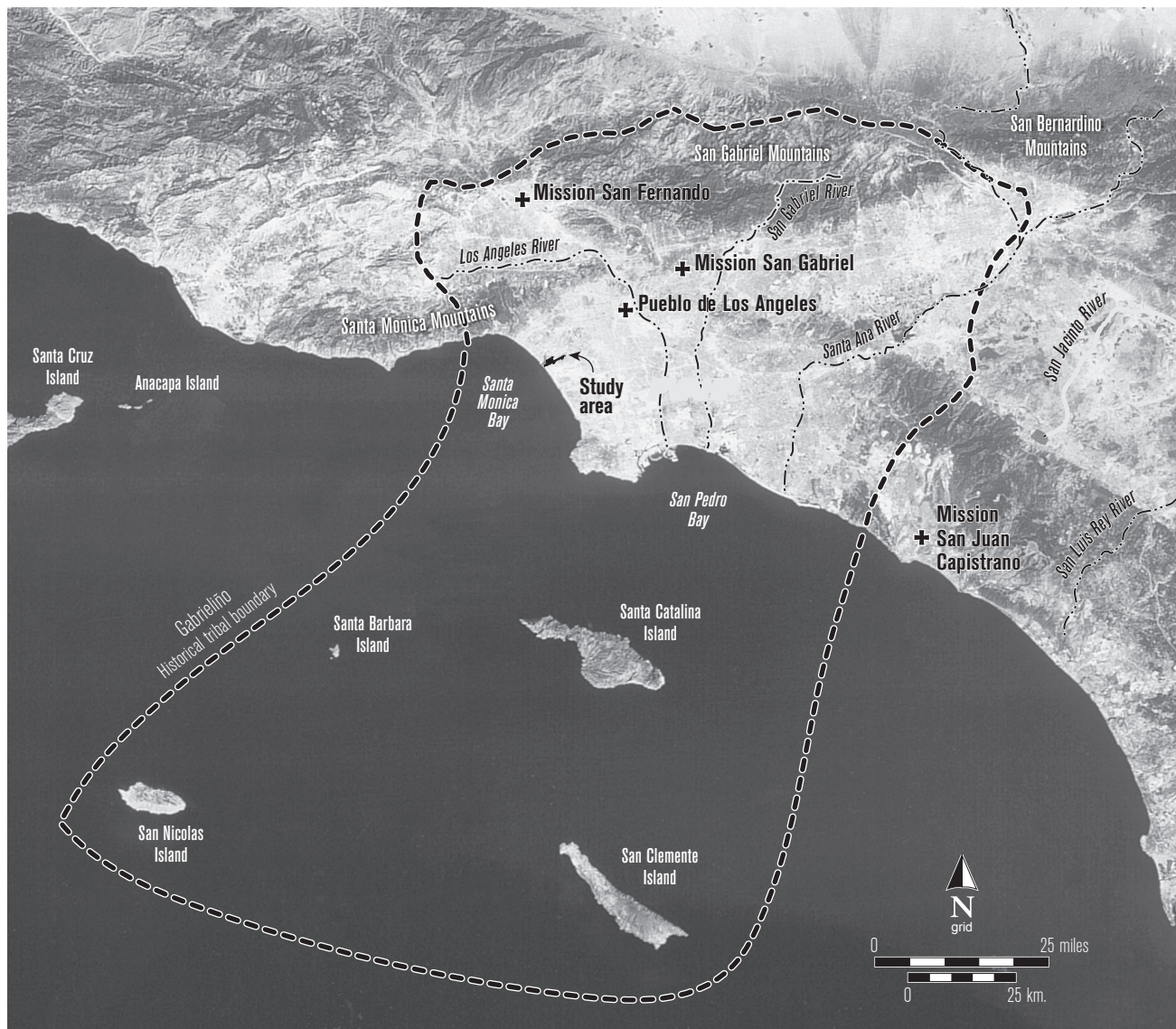


Figure 1. Overview map showing location of study area in coastal southern California (courtesy of Statistical Research, Inc.).

and inside the mission walls (Dietler et al. 2015a). Numerous scholars have noted that the Mission period in southern California was a transformational time for Native Californians (Engelhardt 1927; Hackel 2005; Lightfoot 2005; Mason 1998, 2004; Reddy 2015). Within a generation after the arrival of the Spanish into the Los Angeles basin, indigenous lifeways were disrupted, in many cases permanently. Soon after Mission San Gabriel was established in 1771, *ranchos* began to be created on lands previously used by the Gabrieliño. King (1994) has documented how recruitment to Mission San Gabriel from native villages expanded outward

in roughly concentric circles from the Mission. Soon after the establishment of Mission San Gabriel, early, informal *ranchos* established by colonists, as well as the subsequent pueblo of Los Angeles (founded in 1781), served as links between the colonial economy and the colonists and Native Californians. Through time, social networks between these colonial establishments also played an important role in recruitment as well. Colonists living and working in the pueblo or on nearby *ranchos* needed increased Native Californian labor, while padres at the Mission wanted “souls” to save (e.g., Hackel 2005). Native Californians, faced with these demands, as well

as with increased encroachment on and destruction of their indigenous lands and hunting grounds, had four main options: (1) stay on indigenous lands increasingly controlled by *ranchos* and find work there; (2) move to the pueblo of Los Angeles to work; (3) be recruited into the Mission; or (4) leave the area entirely for refuge areas to the east.

Up until fairly recently, discussion of Euro-American colonialization of the New World has tended to stress the tremendous disruptions and negative impacts on indigenous populations that occurred, thus effectively creating a narrative of cultural and demographic demise and disappearance. More recently, archaeologists have begun to highlight and explore the multifaceted ways that native cultures persisted, often through transformation (e.g., Douglass et al. 2018; Lightfoot 2005; Panich 2013; Panich and Schneider 2014, 2015; Schneider 2015; Silliman 2004, 2005; Voss 2008). Panich (2013) notably has explored the nuanced ways in which indigenous communities altered and transformed themselves to facilitate survival. In doing so, Panich states:

Persistence, then, acknowledges the physical and symbolic violence of colonialism but also allows for a continuum of processes that encapsulates various forms of perseverance, ranging from intentional resistance or ethnogenesis to more subtle shifts in political organization and group identity that draw on and are structured by dynamic cultural values and practices. The key to understanding this definition as applied to the archaeology of native North America is the recognition that persistence can accommodate change—indeed, it may often require it [Panich 2013:107].

This theoretical recognition of persistence as a complex set of elements is explored further by Panich (2013), who stresses the importance of identity and how it is constructed socially and transmitted across generations, the role of practice in revealing how the social fabric is maintained through daily activities, and the importance of context in appreciating spatial and temporal settings in which persistence occurs. Silliman notes (2005:62) that “colonialism is...about processes of cultural entanglement, whether voluntary or not, in a broader world economy and system of labor, religious conversion, exploitation, material value, settlement, and sometimes imperialism.” Panich (2013) sees the results of those entanglements on indigenous peoples’ and

colonists’ lives as a constant process of “becoming.” One outcome of this process can be the creation of new identities by both indigenous peoples and colonists, as a result of the ‘push and pull’ of changes in everyday life and of creeping colonialism (Ferris 2009:168–170). At the same time, these new identities emerge under the rubric of continuity of traditions, perhaps in new, novel ways and fashions; these changes may simply be an adaptation of daily practices to allow the persistence of long-term cultural traditions. The changes and continuities in native identity and transformation, as seen, for example, through material goods, are part of this same process of ‘becoming’ while these traditions are still kept alive (see, for example, Lightfoot 2012 and Panich 2013).

This study aims to highlight such persistence in native Gabrieliño material culture and behavior at a Mission-period native community, while recognizing that transformation was also occurring during this period of dynamic upheaval; in short, transformation was an important aspect of native persistence. A variety of data sources make it clear that native inhabitants of the Ballona during the Mission period were not only trying to continue their indigenous lifeways and ritual practices, they were also incorporating new and novel items and foods into their everyday life as a Gabrieliño. Major transformations of native life, such as dressing in a non-native fashion, eating and incorporating non-native foods or material goods into daily life, or instituting new mortuary practices, can be viewed not as signs of acculturation, but rather as evidence of persistence (e.g., Douglass and Reddy 2016; Douglass et al. 2018). In part, our focus here is to study the indigenous and local histories of the Gabrieliño (see Rubertone 2012:269–272) within the context of the Mission period. We wonder how transformative behaviors could relate to native actions stemming from their worldview as they negotiated the new colonial reality (see Mitchell and Scheiber 2010:18). Cultural traditions, both past and present, change due to a variety of phenomena and are part of the constant “process of becoming” (Panich 2013:109). As Lightfoot (2012) and Silliman (2009, 2010) have recently argued, neither change nor continuity in cultural traditions necessarily involves an “either/or” choice; both instead are parts of the same process of responding and adapting to newly emerging and evolving colonial surroundings.

MISSION PERIOD PERSISTENCE IN THE BALLONA

The Ballona is an interesting area for studying cultural persistence and transformation. During the early portion of the Mission period, this area was relatively remote from both the pueblo and the mission (Fig. 1). As a result, ethnohistoric documents and archaeological data suggest that for approximately 40 years after the establishment of Mission San Gabriel, the area was relatively removed from much of the cultural upheaval experienced by the Gabrieliño closer to colonial institutions (King 1994; King and Johnson 1999; Stoll et al. 2016). However, archival research suggests that by the early 1800s, the Ballona was being ranched by the Quinto Zuniga family from the pueblo of Los Angeles, and there was increased interaction between colonists and native inhabitants (Stoll et al. 2016).

The Ballona study area is less than three miles from the Pacific Ocean in what is today the city of Los Angeles, and it includes several sites with a span of occupation from 8,000 cal B.P. through the Mission period (Douglass et al. 2005; Homburg et al. 2014; Lengyel et al. 2016a; Vargas et al. 2016). The sites are clustered along the Ballona Lagoon—which is a drowned river valley and low-lying estuary/wetland area in the Los Angeles basin—and on the bluff tops overlooking the Lagoon.

Large-scale excavations have been conducted by Statistical Research Inc. (SRI) at several sites located along the Ballona Lagoon, including two sites discussed in this paper (CA-LAN-62/H and CA-LAN-211/H; hereafter referred to as LAN-62 and LAN-211; Douglass et al. 2016; Homburg et al. 2014; Reddy and Douglass 2016; Stanton et al. 2016; Vargas et al. 2016). As discussed above, our work focuses on the final native use of the Ballona during the Mission period. Extensive archival research by various scholars over the past 30 years has demonstrated that the ethnographically-known village of Guaspét or Guasna was located in the Ballona and was likely associated with these two sites, if not corresponding to the sites themselves (Douglass and Reddy 2016; Douglass et al. 2018; King and Johnson 1999; Stoll et al. 2016). Between 1788 and 1815, over 90 inhabitants of this village were recruited to missions San Gabriel and San Fernando Rey (Stoll et al. 2016). The Ballona was likely no longer used intensively by

the Gabrieliño by A.D. 1816, a conclusion based in part on the paucity of rough disk beads (indicative of the terminal Mission period—A.D. 1816–1834) from LAN-62 and LAN-211 (Cannon 2016), and the glass bead chronology for sites in the Ballona (Ross et al. 2016). Sites LAN-62 and LAN-211 are adjacent to each other and represent complementary aspects of a single Mission-period Native American settlement complex occupied from approximately the early 1770s to the mid-1810s (Fig. 2). Archaeological data indicate these sites represent a relatively sedentary Native American settlement inhabited by Gabrieliño who had not yet been fully incorporated into the Spanish mission and colonial economic systems (Douglass et al. 2018; Reddy and Douglass 2016; Vargas et al. 2016). The Gabrieliño continued to emphasize native practices during mortuary events, mourning ceremonies, and feasting at this village complex alongside the Ballona wetlands well into post-contact times.

We specifically focus here on data from mourning ceremonies and feasting events at the two sites in the Ballona in order to discuss persistence, autonomy, and the transformation of Native Californians. There is rich mortuary data from Mission-period burials at LAN-62 that clearly demonstrate persistence in cultural identity; however, that is not the focus of our paper here (interested readers should see Douglass et al. 2016; Reddy and Douglass 2016; Reddy et al. 2016a; and Stanton et al. 2016). Mourning ceremony and feasting contexts are consistent contexts where societies will continue to express indigenous practices, ideology, and aspects of religion even when they are struggling with socio-economic and political changes and challenges. Material culture is used in mourning contexts to illustrate the complex interplay of social identity, emotions, assessment of social relationships, and creation of social memory (Bloch 1982; Bloch and Parry 1982; George 1996; Kan 1989; Schiller 1997; Weiner 1976). There is good documentation in the form of ethnohistoric and ethnographic evidence for funeral feasting and mourning ceremonialism in native southern California cultures. Perhaps the example that is most often discussed involves Chumash funeral feasts or *fiestas* (see Merriam 1962), although a number of scholars have documented mourning and feasting ceremonies among several southern California coastal and desert communities (e.g., Bean 2017; Benedict 1924;

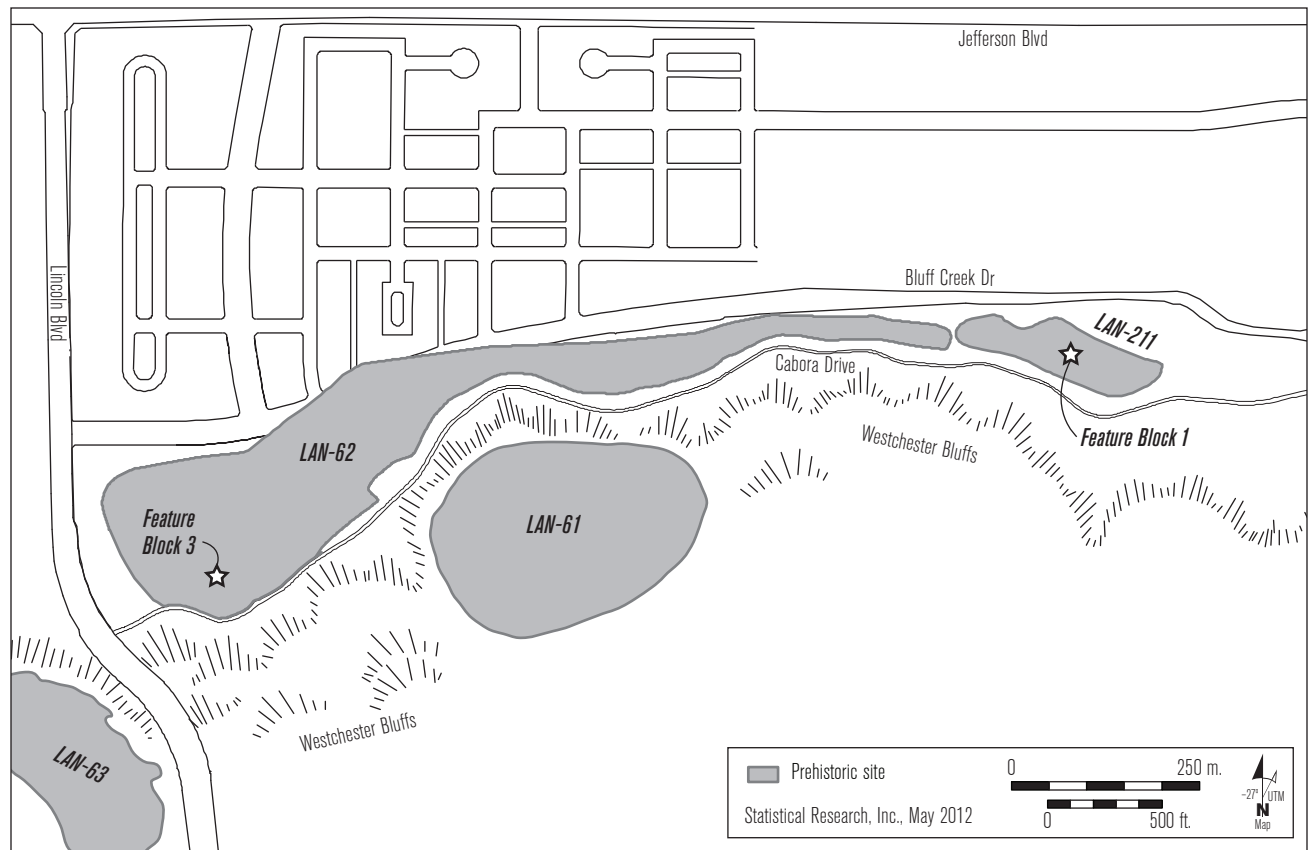


Figure 2. Map showing locations of Mission-period Native American settlement complex at LAN-62 and LAN-211 in the Ballona, coastal southern California (from Douglass et al. 2016:Fig. 131, courtesy of Statistical Research, Inc.).

Hull 2011, 2012; Hull et al. 2013; Merriam 1962; Reddy 2015, 2016; Strong 1929; Walker 1952; Waterman 1910). Community-level ceremonialism served to integrate native communities over time and space by means of periodic mourning ceremonies. During these events, foodstuffs and cultural items were redistributed, and political, religious, and economic power in the hands of a few elites was reinforced (Blackburn 1976:229, 233, 235–238; see also Kroeber 1925:859–860). These feasts commemorated community and family members that had passed and reinforced social memory, renewing and supporting community social networks.

Ceremonial mourning was documented among the Gabrieliño in the Los Angeles basin by archaeologists, ethnohistorians, and early ethnographers (e.g., Boscan 2005; Cleland et al. 2007; Hull 2011, 2012; Hull et al. 2013; Merriam 1962; Walker 1952). The Gabrieliño had an elaborate sacred ceremony dedicated to the memory of the dead which lasted eight days, involved four rites, and was typically hosted by persons of wealth and prominence

(Merriam 1962). The length of time that elapsed between a death and the observance of the ceremony could have been anywhere from one to four years, depending on how long it took to accumulate the necessary food, clothing, baskets, and other items required. The person giving the feast (usually a village chief) invited people from neighboring tribes and bands. A central feature of the mourning locale was the *Ko-too'-mut*, which was a pine-tree pole that was polished with pumice stone, painted, and adorned with baskets. Mourners tossed offerings of food, clothing, beads, and baskets against the pole while singing mournful chants to the dead. The four rites of the mourning ceremony included clothes washing, clothes burning, image burning, and the distribution of the property of the dead. During the image burning, many offerings and gifts were tossed into the pit and burned. The last day of the celebration was reserved for the burning of offerings to the dead. The invited guests were fed for the eight days, and this mourning-related feasting was supervised by the master of ceremonies.

At the conclusion of the rite, the group split up and the participants returned to their respective villages with renewed communal ties and stronger social relationships.

Feasts for the dead, as a part of mourning ceremonies, cultivate social memories of the past and present, and also address key facets of the future. Mourning ceremonies and associated rituals link a community's past and future in public venues where individuals, social groups, and social relationships are assessed and reinforced (e.g., see Dietler 2001; Dietler and Hayden 2001; Hayden 2001, 2014; Kan 2016). Social behaviors and actions during feasting, such as dancing, drinking, oration, exchanges of gifts, etc., link and affirm existing relationships between families, lineages, and bands. This is particularly the case when feasting is done at a community level. Contexts of feasting and mourning offer unique insights into cultural perceptions of the relationships between food, material culture, and ideology. Data from LAN-62 and LAN-211 have provided us with an extraordinary opportunity to study these relationships during the Mission period. Two distinct areas with concentrations of features containing large quantities of food remains and unique items of material culture have been interpreted as the remnants of spatially discrete areas associated with annual mourning and feasting events (Douglass et al. 2016; Garraty 2016a, 2016b; Reddy 2015, Reddy et al. 2016a, 2016b, Vargas et al. 2016).

MAIN FEATURES OF THE MISSION PERIOD IN THE BALLONA

This paper specifically focusses on the mourning features from the Mission period at LAN-62 and the feasting contexts at LAN-211. LAN-62 included a large Mission-period burial area (involving more than 300 individuals) and an adjacent mourning-ritual area (Garraty et al. 2016a; Lengyel et al. 2016a; Vargas et al. 2016). The mourning ritual area (designated Feature Block 3, and hereafter referred to as FB3) had 14 well-preserved thermal features containing burned basketry in association with shallow pits and/or burned artifacts or plant remains (Figs. 3 and 4). These 14 features and the associated midden were assigned to the Mission period (but not to a specific phase within that period) on the basis of chronostratigraphy derived from a combination of geoarchaeology, absolute dating, and the application

of the Harris matrix (see Lengyel et al. 2016a, 2016b). The mourning-ritual area was a roughly 8×4 m. area located about 4 m. to the west of the main group of burials (Garraty et al. 2016a; Lengyel et al. 2016a; Vargas et al. 2016). The baskets were lined with asphaltum, and contained thousands of carbonized plant remains and artifacts such as ritually-broken groundstone. The majority of the baskets were coiled, with twined basketry present in low frequencies (Polanich 2016). The sampling of the mourning feature included all formed artifacts from the 14 features and excavation units defined as FB3; however, faunal and floral remains were sub-sampled in select locations within these contexts. Due to this varied and complex sampling strategy, artifact and faunal and floral densities were calculated specifically for each artifact category. For details on sampling strategies for each artifact class, please refer to Reddy and Douglass (2016).

Numerous artifacts made of stone, bone, and shell, as well as European artifacts (obtained through interactions with colonists at the missions, *ranchos*, and the pueblo of Los Angeles), were recovered from the mourning feature. The nonperishable contents of the burned-basket offerings were variable. The features contained collections of shell and/or glass beads, faunal remains, shellfish, flaked stone and groundstone tools, tarring pebbles, basketry, and plant remains. Some features contained only faunal and floral remains, while others had a wider range of materials. For example, one feature contained several stone *comal* fragments, a stone-bowl fragment, bone tools, and Cottonwood Triangular points. Shell and glass beads were recovered in varying quantities, with an average of 57 shell beads and 20 glass beads per cubic meter. Several features also contained charred faunal remains along with carbonized seeds, with an average density of 233 faunal remains per cubic meter, 374 g. of shellfish per cubic meter, and 1,987 seeds per liter of sediment. These features are the residue from activities associated with annual mourning practices similar to those documented ethnographically for other southern California tribes (Bean 2017; Bean and Blackburn 1976; Bean and Saubel 1972; Benedict 1924; Strong 1929; Waterman 1910), and these collections of cultural materials represent offerings of plant foods and other cultural items that were placed in baskets and then burned during annual mourning events. Similar

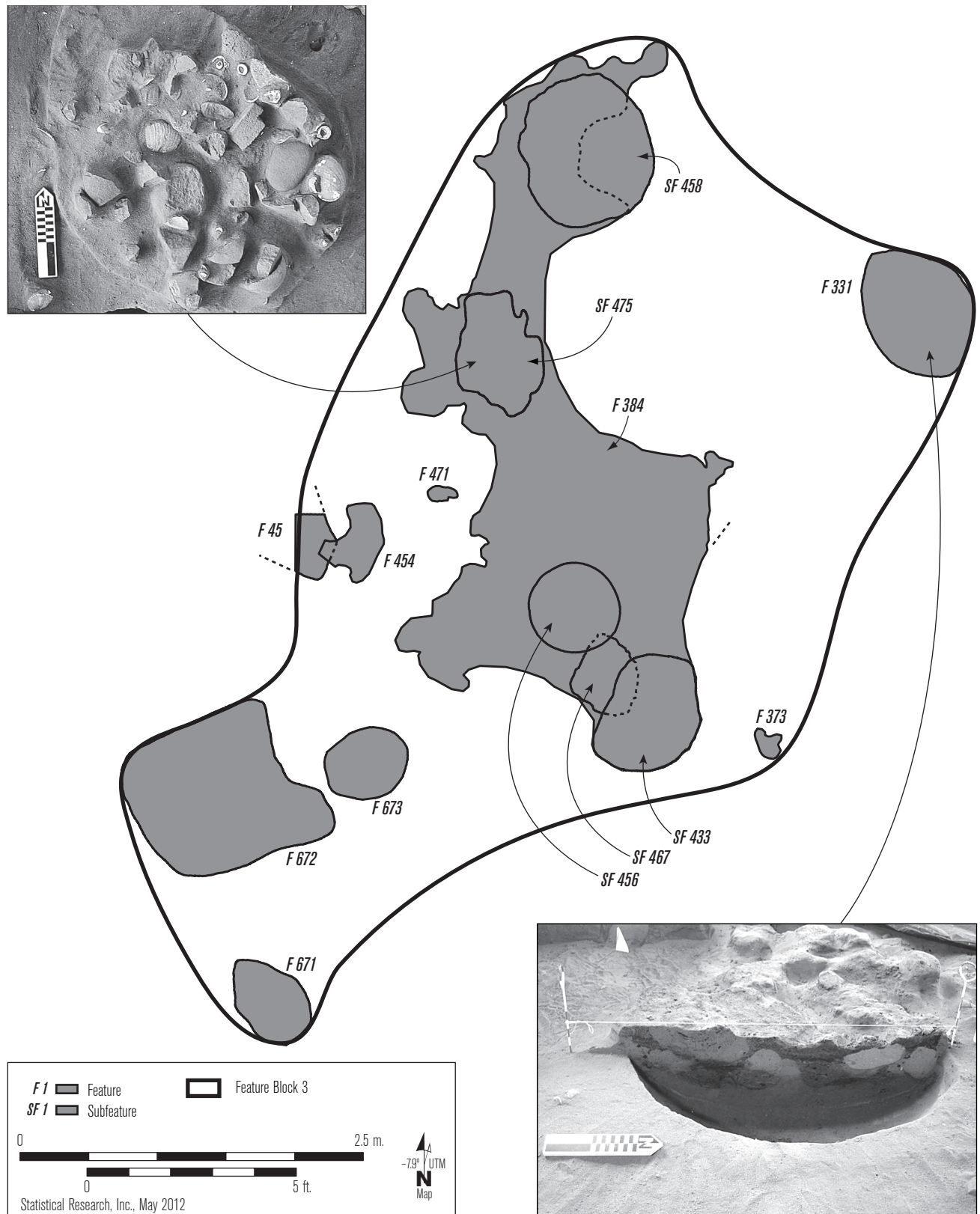


Figure 3. Drawing of mourning feature complex at LAN-62
 (from Douglass et al. 2016:Fig. 130, courtesy of Statistical Research, Inc.).

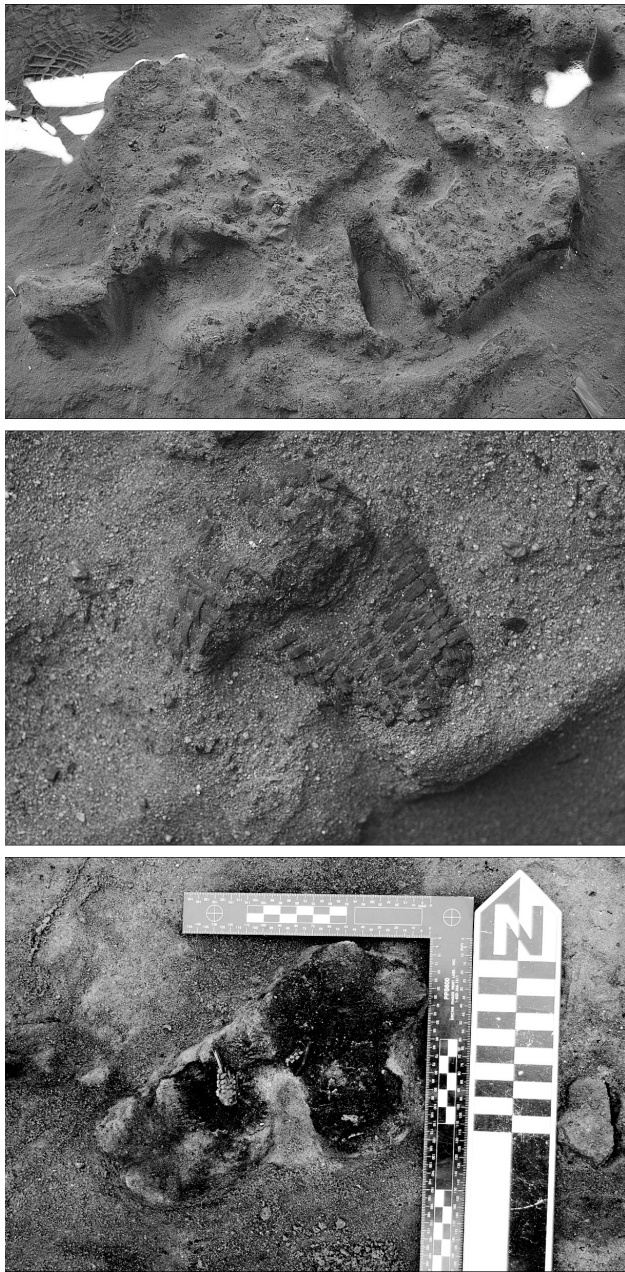


Figure 4. Mission-period mourning features, LAN-62
(from Douglass et al. 2016:Fig. 133,
courtesy of Statistical Research, Inc.).

features, though lacking documented plant remains, have been recovered at prehistoric sites in southern California and interpreted as mourning features, but are not from Mission-period contexts (Cleland et al. 2007; Douglass et al. 2005; Hull 2012; Hull et al. 2013; Walker 1952). These earlier features also had large numbers of purposefully broken groundstone artifacts and other ritual materials, and sometimes contained remnants of human cremations.

Archaeological examples of such features from Mission-period contexts are rare, although they do occasionally include caches of carbonized seeds such as those found on San Clemente Island (Eisentraut 1990).

LAN-211 is an adjacent Mission-period village with extensive evidence of feasting activities, including a rich midden and associated features. The data discussed in this paper are from an area of the site within which all contexts/features were dated to the Mission period (Feature Block 1, hereafter referred to as FB1). FB1 was a central location where a large community cooked and consumed considerable quantities of food, and the residues from these activities were discarded in a 20- to 30-cm.-thick deposit (Garraty 2016, Garraty et al. 2016b; Lev-Tov and Van Galder 2016; Van Galder et al. 2016; Vargas et al. 2016; Figs. 5 and 6). The dense concentrations of artifacts (including soot-covered Native American ceramic vessel fragments) and food remnants in the midden were associated with both large and small hearth features, trash pits, and cairns consistent with food preparation, cooking, and food consumption. Based on the high density of food remains and the spatial and temporal association of the hearths with the mourning feature at LAN-62 (Douglass et al. 2016; Garraty 2016, Garraty et al. 2016a; Lev-Tov and Van Galder 2016; Van Galder et al. 2016; Vargas et al. 2016), FB1 was considered a feasting locale. This feasting feature, a composite of 21 individual features, yielded flaked and groundstone artifacts, basketry, tarring pebbles, large quantities of food remains (4,946 faunal remains per cubic meter, 747 g. of shellfish per cubic meter, and 145 seeds per liter), glass beads, European ceramics, domesticated cattle bones and plant remains, and shell beads with needle-drilled perforations (Garraty et al. 2016b; Reddy et al. 2016a, 2016b; Vargas et al. 2016). As was done with the mourning feature, the sampling of the feasting area included all formed artifacts from the features and excavation units defined as being within FB1; however, faunal and floral remains were sub-sampled from within these contexts. Due to this varied and complex sampling strategy, densities of artifacts and of faunal and floral remains were calculated separately and specifically for each category. For details on sampling strategies of each artifact class, please refer to Reddy and Douglass (2016).

The two Mission-period contexts in the Ballona of mourning and feasting provide a good dataset that offers significant insights into Native American lifeways

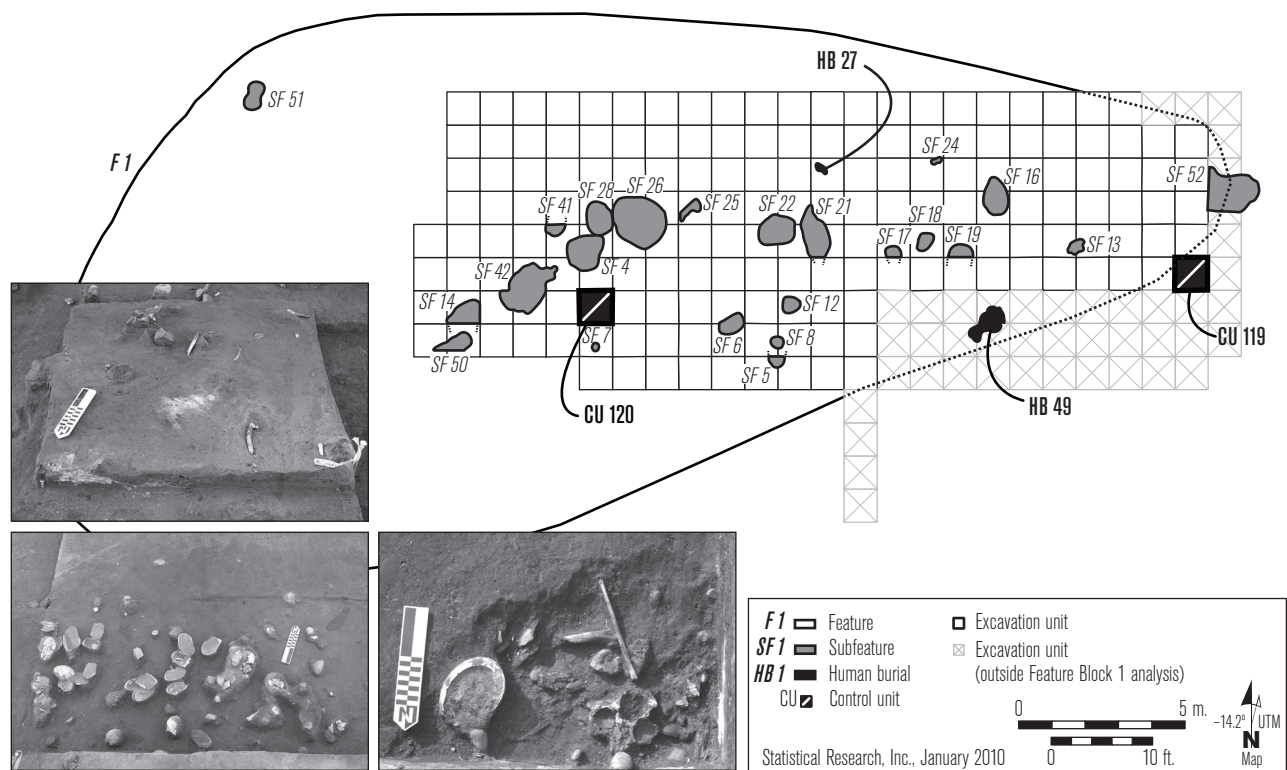


Figure 5. Drawing and photographs of Mission-period feasting feature complex at LAN-211 (from Douglass et al. 2016:Fig. 135, courtesy of Statistical Research, Inc.).

outside of the mission and the pueblo in Los Angeles. In the following discussion, we focus on six main artifact categories (flaked and ground stone, shell beads, glass beads, ceramic and bone artifacts, floral and faunal remains, and European goods) to illustrate cultural persistence in the Los Angeles basin during the colonial period. We draw comparisons between the Ballona data and data from recent excavations at San Gabriel Mission (Dietler et al. 2015a) in order to see if Native American persistence and transformation was expressed similarly or dissimilarly in the very different Mission-period contexts, where social roles and identities had different avenues of expression. The San Gabriel Mission excavations were focused on Mission garden and orchard areas; some 51 features were exposed, including a large granary, a reservoir complex, Chapman's Mill, and the Millrace (Dietler et al. 2015a).

Flaked and Ground Stone Artifacts

Determining whether an artifact has a ceremonial or ritual function is naturally a challenge. Artifacts can have complex use lives and multiple functions, and there

are often very subtle differences between ritual and utilitarian assemblages. In our research we used context, association, and condition as important indicators of a "ritualistic" function. The LAN-62 mourning features and associated midden contained the greatest diversity of lithic artifacts, including a variety of specialized groundstone artifacts (Table 1). Some of the lithic objects that were unique to the mourning feature and that were considered "ritualistic" were a number of steatite artifacts, including several steatite *comal* fragments (Peterson et al. 2016). A unique example included a partially reconstructed miniature *comal* from the feature which was scaled to approximately half the size of other examples. This miniature *comal* had a perforation, as well as an incised groove along the proximal margin. The mourning feature also contained six fire-altered metate fragments that fit together, suggesting that the metate was deliberately broken and burned *in situ*. Additionally, five steatite *comal* fragments were recovered that refit to form two complete *comales*, one of which was a miniature. Other lithic artifacts in the mourning context included a steatite shaft straightener manufactured from

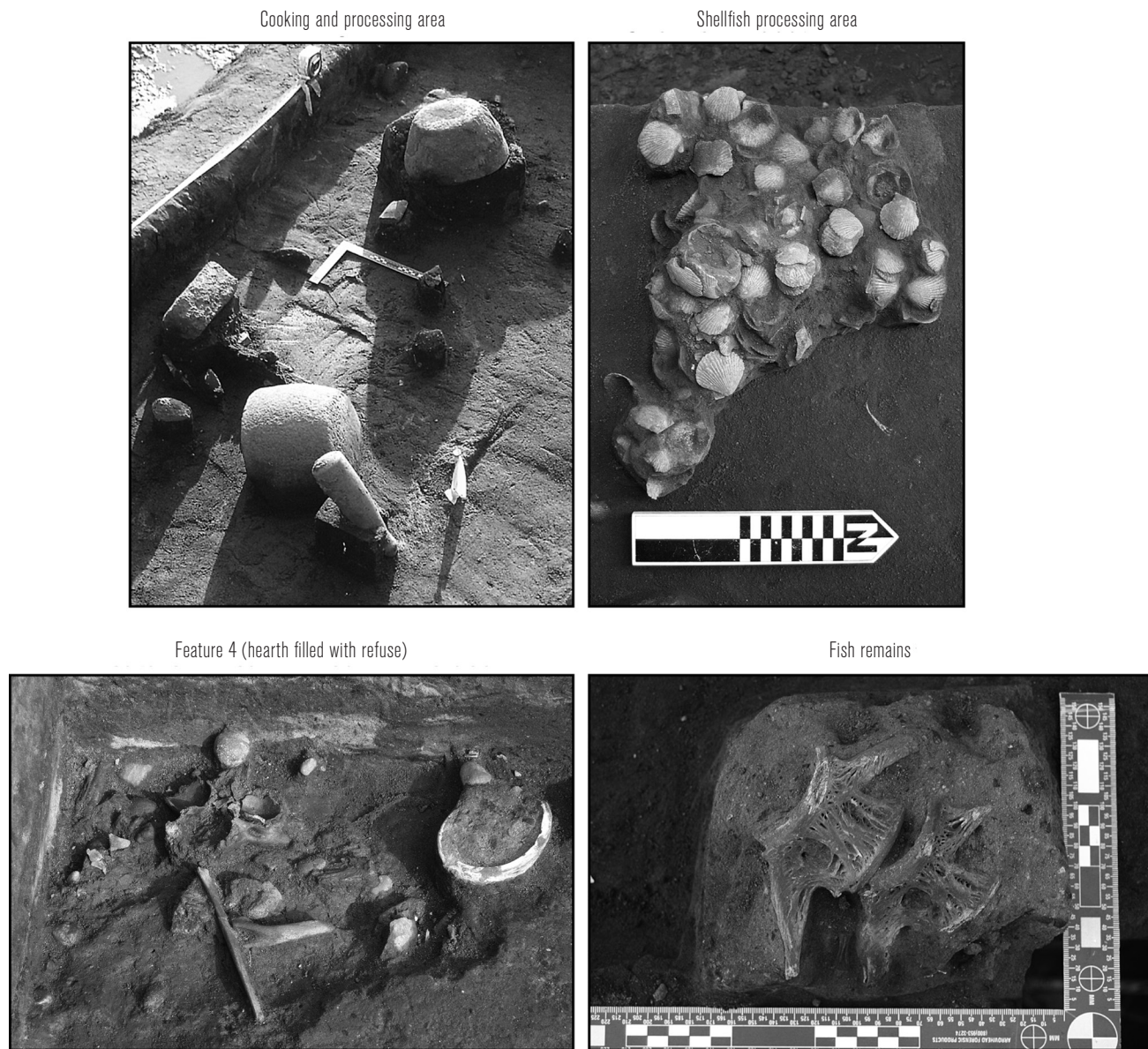


Figure 6. Mission-period feasting features, FB 1, LAN-211, showing basketry remains with tarring pebbles.
The contents yielded large quantities of carbonized plant remains.
(From Douglass et al. 2016:Fig. 136, courtesy of Statistical Research, Inc.)

a *comal* fragment; one large, thick, probably recycled sandstone metate or vessel fragment with significant post-depositional dulling of the fractured faces; a lightly used cobble metate broken in several pieces; and one fire-altered cobble metate. Stone beads and pendants were also recovered (Peterson et al. 2016). A limestone effigy was recovered from an excavation unit within the mourning-feature complex that was flaked into the shape of a clamshell; the limestone bands were oriented to give the appearance of shell growth lines. The mourning

features also contained debitage, which suggests the expedient flaking and resharpening/shaping of tools that may have been used for food preparation. The mourning-context collection also included two stone vessels, one of which exhibited intentional breakage, and a metate made of vesicular basalt. This type of rare basalt, with very large vesicles, was identified only in the mourning context in the Ballona, and its association with shaft straighteners, intentionally-broken groundstone implements, and miniature artifacts is noteworthy (Peterson et al. 2016).

Table 1
SUMMARY OF MATERIAL CULTURE FROM
MOURNING FEATURE COMPLEX AT LAN-62 AND
FEASTING FEATURE COMPLEX AT LAN-211

Item	Mourning Complex (LAN-62, FB 3) ^a	Feasting Complex (LAN-211, FB 1) ^a
Flaked Stone		
Debitage	704	16,072
Core	8	71
Projectile Points	3	125
Biface	3	132
Edge-modified	7	110
Other ^b	3	30
Total Flaked Stone	728	16,540
Groundstone		
Handstone	—	19
Metate	8	1
Pestle	—	14
Bowls and Vessel	4	51
Comal or Griddle	7	4
Bead/Pendant	2	10
Other ^c	3	30
Indeterminate	7	246
Total Groundstone	31	375
Unshaped Stone		
Cobble hammerstone	—	21
Fire Affected Rock (FAR)	95	480
Tarring Pebble	5	103
Manuport (n)	9	317
Other	13	6
Total Unshaped (n)	122	927
Other Artifact Classes		
Shell Beads (n)	1,233	973
Worked Shell Artifacts (n)	14	62
Ceramic Artifacts (n)	—	124
Bone Tools (n)	38	177
Basketry Remains (n)	19	—
Subsistence Data		
Vertebrate Remains (NISP)	5,061	88,785
Domesticated Animal Remains (NISP)	1	162
Shellfish (g.)	1,092	13,982
Floral Remains (Seeds n)	373,476	39,380
Artifacts of colonial origin		
Glass Beads (n)	436	42
European Artifacts (n)	6	93

^aIncluding features and associated midden.

^bOther: drill, chopper, split cobble, core hammerstone, fire-altered core hammerstone, and effigy.

^cOther: abrader, anvil, charm stone, disk, palette, pipe, plummet, vessel, and other.

Lithic artifacts recovered from the feasting contexts (features and associated midden) at LAN-211 reflected a range of lithic-related activities, including tool-stone production, food preparation and processing, and heating and warming, and these features are remnants of thermal activities, hearth cleanouts, discard areas, or a combination of these (Table 1). Three fragments of steatite shaft straighteners were recovered from the feasting context, and one of them was made from a vessel rim fragment or the edge of a *comal*. Two sandstone pipes, one complete and one fragmentary, were recovered from the feasting midden. Both were decorated with an incised line encircling the distal end. The pipe fragment exhibits post-depositional thermal breakage.

These data from the mourning and feasting contexts in the Ballona illustrate the Mission-period persistence of cultural traditions through the continued use of raw materials, the continued use of stone artifacts in ritual contexts, the tentative use of new raw materials but with a retention of indigenous technology, and the incorporation of new tools in Native American contexts. Despite the seeming disruption of trade and exchange networks between the Ballona and Native American groups outside of the Los Angeles basin following the arrival of the Spanish, the Ballona residents continued to acquire some non-local materials (even as finished products). The majority of the flaked stone tool raw materials from the Mission-period contexts at the two sites came from sources in the San Gabriel Mountains (basalt, rhyolite, porphyritic rhyolite, granite, gneiss, diorite, and quartz), the Santa Monica Mountains, and the south coast Transverse Ranges (sandstone, siltstone, shale, chert, chalcedony, limestone, rhyolitic tuff, and vesicular basalt). Clasts of these materials would have been carried down into the Ballona by the Los Angeles River. Quartzite, slate, andesite, porphyritic andesite, and diabase sources can be found to the southeast of the Los Angeles basin in the alluvial deposits of the Santa Ana River and its tributaries. Chert, specifically Monterey chert, was procured from the coastal zones, from the bedded formations of the Santa Monica Mountains about 13 km. (8 miles) north of the Ballona, or from the Palos Verdes Hills approximately 19 km. (12 miles) to the south. In addition, there were more exotic lithic materials, such as obsidian from sources distant to the Ballona, although these represent less than 1 percent of the flaked

stone artifacts (Peterson et al. 2016). There were four sources for the obsidian recovered from the pre-mission contexts in the Ballona, including the Coso volcanic field, Casa Diablo, and Mount Hicks sources, 229–478 km. (142–297 miles) to the north, and Obsidian Butte, 277 km. (172 miles) to the south. Obsidian was likely brought to these sites as finished tools and scavenged materials. Obsidian debitage consisted predominantly of biface-reduction flakes. The obsidian in the mourning and feasting contexts represents only 0.8 and 0.2 percent of the flaked tools, respectively (Peterson et al. 2016). In addition to the trade in stone-tool raw materials, Ballona residents could have continued their pre-contact trade relationships with the Serrano and Cahuilla to the east, and received acorns, obsidian, and deerskins in exchange for shell beads, steatite, fish, sea otter pelts, and shells (Bean and Smith 1978:547).

With the onset of the colonial period, the long-distance exchange interactions between the coast and inland (eastern Sierra Nevada) were disrupted (Jackson and Ericson 1994:397). Instead of turning to the Obsidian Butte obsidian source, the Ballona people moved increasingly to using fused shale as an alternative to obsidian. Fused-shale sources are limited to Grimes Canyon and Happy Camp Canyon in Ventura County and to Lompoc in Santa Barbara County (Demcak 1981). Fused shale was likely imported to the Ballona in the form of finished tools, and it is represented, starting in the Late Period, by projectile points, bifaces, and biface-reduction flakes. Almost all of the fused-shale debitage from Mission-period contexts at LAN-211 consists of biface-rejuvenation flakes and edge-modified flakes (less than 3 cm. in length) and could have come from broken tools. There are only two Stage 3 fused shale bifaces from LAN-211, which suggests the possibility that a few preforms of fused shale were brought to the site (Peterson et al. 2016). Finished tools of fused shale likely were traded along with Chumash artifacts (such as steatite artifacts recovered from Mission-period mourning features at LAN-62); steatite was imported from quarries on Santa Catalina Island, but could have also been obtained from several mainland sources, including a source in the San Gabriel Mountains, or from other Channel Islands, as Romani (1982:168) has suggested. When Spanish colonization began, the well-established pre-contact trade networks between the mainland and the Channel Islands

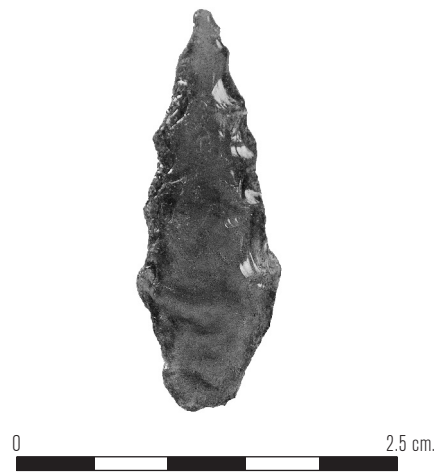


Figure 7. Green-glass arrow point from LAN-211 FB 1 (from Peterson et al. 2016:Fig. 64, courtesy of Statistical Research, Inc.).

began destabilizing, and it is quite likely that steatite acquisition may have shifted to inland sources. Other examples of artifacts made from non-local raw materials and obtained as finished products include items made of jadeite, petrified wood, and chlorite schist. None of these materials was local, and in the case of the jadeite, was likely traded in from the central California coast.

The continued use of indigenous stone artifacts in ritual contexts is another strong illustration of persistence in tradition and practice by the Ballona residents during the Mission period. Shaft straighteners, stone beads and stone pendants, projectile points, drills, and groundstone bowls and vessels were all offered as mourning items. We also see persistence in the way in which the Mission-period Native Californians in the Ballona made tools from new raw materials. A few flakes of European-manufactured glass were recovered from LAN-62 and LAN-211, in addition to a bottle-glass projectile point and pressure flakes from the feasting complex at LAN-211 (Peterson et al. 2016; Swope and Douglass 2016) (Fig.7). Some of the glass fragments, consisting of apple-green glass with gas vesicles, were probably scavenged from a historical-period liquor bottle (Goodman and Gilpin 2005:34). Although these projectile points were manufactured from non-native materials, an indigenous stone-knapping technique was employed in their construction. Although only a few examples exist, it is possible that bottle glass was added to the repertoire of materials as a viable alternative to obsidian. Alternatively, the green glass may

have been selected because of its attractive color or the ease with which glass can be worked. Nonetheless, this small sample demonstrates an incorporation of newly introduced materials while technological continuity was maintained during the Mission period.

While we observed cultural persistence in the use of stone artifacts, we also observed transformation in the incorporation of new tools such as *comales* or griddles (see Table 1) into indigenous contexts. There are several perspectives on the timing of *comal* adoption in coastal southern California and on their function. Some scholars state that among the Chumash, flat steatite artifacts similar to *comales* were used during the Late Period to mill hard seeds, as cooking surfaces, as boiling stones, and for ritual use (Gamble 1991; King 1982; Lee 1981). In contrast, according to Hudson and Blackburn (1983:196–197) and Harrison (1965:163), *comales* were introduced into California during the Mission period. Hudson and Blackburn (1983:196–197) report that the *comales* were made of steatite among the ethnohistoric Chumash, and were used to cook tortillas and toast wheat, corn, and chia. The authors also refer to them as frying pans. Steatite *comales* were almost exclusively from Mission-period contexts at the Chumash site of SBA-78 (Harrison 1965:163). Recently, Brown (2018:248) has argued for a much earlier date for *comal* use in coastal southern California, based on the recovery of soapstone griddles from Middle Period contexts at LAN-264 (the Malibu site). Thus, the Chumash had flat, griddle-like cooking implements from the Middle Period onwards. However, there are no examples of such artifacts, either griddles or *comales*, from the Ballona Gabrieliño pre-contact collections (Peterson et al. 2016). The *comales* recovered in the Ballona were all of steatite, had signs of being exposed to heat, and were recovered from both the mourning and feasting contexts. The timing of the initial use and incorporation of griddles may well have been different between the Chumash and the Gabrieliño areas. If griddles or *comales* were used by pre-contact Ballona communities, they have not yet been recovered.

The function of the griddles or *comales* is also a moot topic, and interpretations of their use have ranged from employment as a platform for cooking acorn meal and milling hard seeds (Chartkoff 1998:174), to use as a lid and in rock cairns (King 1982:439), to use in cooking tortillas (Hudson and Blackburn 1983:196–197;

King 1982:440; Romani 1982). King (1982) has also suggested that they may have been ritual artifacts that were ceremonially broken, perhaps during mortuary ceremonies. Lee (1981:43) has suggested that flat, shaped steatite artifacts with incised decorations and lacking evidence (such as burning or food residues) of being used in cooking, and without use wear, were likely steatite plaques unassociated with either cooking or Spanish colonization. No food residue studies were conducted on the artifacts from LAN-62 and LAN-211, so a definitive conclusion about their use as cooking tools cannot be reached at this time. Brown (2018:257) suggests that handles, projecting rims, rounded edges, and incised lines near the edge of the cooking surface are Spanish-influenced design traits, and characterize artifacts found in Mission-period contexts, and particularly within mission walls. The artifacts from the Mission-period mourning and feasting contexts in the Ballona did not have handles, but they were thick, with a slight curvature and rounded edges; however, the edges did not project out or upward. Furthermore, these artifacts were distinct from steatite tablets (also referred to as plaques), which were also identified at these two sites (but not from mourning and feasting contexts). The tablets were distinct from *comales*/griddles in the Ballona Mission-period collection in that they had no curvature and some had incised designs (Peterson et al. 2016). The Ballona *comales* may have been imported in a finished form or made from recycled vessel fragments, because they were generally small. Based on the available data from the Ballona, these *comales* or griddles do not appear to have been part of the Gabrieliño pre-contact material repertoire as they were among the Chumash. The function of the Mission-period *comales* in the Ballona may have varied, and might have included use as food preparation surfaces to make tortillas and mill grass seeds, to use as lids, and use as ritual objects. The Spanish introduced both corn and the use of corn flour to make tortillas on iron griddles into California. The incorporation of corn into the Native American diet was accompanied by the need for griddles, and in the absence of metal griddles, Native Americans in the Ballona used raw materials they were used to, such as steatite, to make a tool that could be used to make flour and dough. Interestingly, the only corn kernels recovered in the Ballona were from the feasting context, which also yielded *comal* fragments.

Based on the flaked and groundstone tools from the two distinct Mission-period contexts, it is clear that native people living in the Ballona continued to use indigenous flaked stone technologies and raw materials and practices. In addition, several tools and items made from obsidian and shale were obtained through trade and exchange, indicating that connections with groups to the east, south, and north continued despite the colonial presence in the area. Along with this persistence, the Gabrieliño started using old technologies with new European raw materials (glass), and also incorporated colonial items such as *comales* into their indigenous practices.

This pattern of a continuation of tradition in the Ballona is very different from what Dietler et al. (2015a, 2015b) have argued with regard to neophyte contexts at Mission San Gabriel. There, based on large-scale excavations within limited contexts, there was a surprising dearth of flaked stone artifacts manufactured using indigenous techniques. However, the presence of at least some of these objects in neophyte contexts does indicate that there was some continuation of cultural traditions even at the Mission. This does raise the question of what the neophytes used for tasks involving cutting and preparation. Processing and cut marks on faunal remains indicate a use of small knives or flaked stone tools (Dietler et al. 2015a:216). The authors suggest that the high frequencies of rib fragmentation likely resulted from the use of axes to remove meat from the ribs, which was a common colonial Spanish practice.

Shell Beads

Shell beads were recovered in large quantities from the two sites (Cannon 2016). More than 1,200 shell beads were recovered from the mourning feature, with the majority being *Olivella* semi-ground disk beads (50 percent), and with an overall shell-bead density of nearly 80 beads per cubic meter (Cannon 2016; Table 1). Shell beads were used as currency, status symbols, and personal adornment. In addition to numerous individual beads, strands of beads were also recovered from the mourning features. The shell beads in the mourning features are likely the remnants of offerings that were broadcast during annual ceremonies. In addition to shell beads, worked shell artifacts were recovered from the mourning features, including shell scoops and containers, fishhooks, and worked pieces of abalone covered with

asphaltum. These shell containers and scoops may have contained offerings of food.

Shell beads were also recovered from the feasting contexts at LAN-211, but in slightly lower numbers ($n=906$; Table 1). There is little evidence of strands of shell beads in the feasting features. Other worked shell artifacts in the feasting contexts included shell containers, scoops, tools for cutting or abrading, perforated whole abalone shells, and asphaltum-coated shell (Venus clam, abalone, scallop, and wavy turban).

Overall, shell-bead types identified in mourning contexts were similar to those recovered from feasting contexts; however, shell beads in mourning contexts were found in much higher frequencies, as were certain bead types such as Pismo clam cylinders and tubes, California mussel disks, and giant rock scallop tubes (Cannon 2016). King (1974), based on his research on Chumash burials at Malibu and Medea Creek, has characterized these specific bead types as high status items, reportedly associated with community leaders or wealthy individuals. Shell-bead caches and strands were rare outside of mourning contexts.

Perhaps one of the more intriguing and rare items recovered from the feasting feature complex at LAN-211 was an incomplete *canidae* mandible without teeth, covered with asphaltum and shell beads (Cannon 2016; Fig. 8). Thirty-eight shell beads (*Olivella* bushings) were arranged in rows on the mandible. Similarly decorated mandibles were recovered from *Mikiw*, a historical-period Chumash site at Dos Pueblos Canyon, north of Santa Barbara (Harrison 1965:100–101). These mandibles showed signs that they might originally have been mounted in another object or suspended from a string, perhaps as a pendant (Harrison 1965:138). The Ballona mandible's association with the feasting context at LAN-211 is intriguing, and suggests that there may have been some ritual involved in the feasting activities.

Persistence in cultural traditions is clearly apparent in the way in which the Mission-period Gabrieliño in the Ballona continued to obtain shell beads and incorporate them extensively into their mourning rituals. In part because of the dearth of manufacturing debris associated with shell beads, we suspect that the beads were obtained as finished items, likely from further up the coast and from the northern Channel Islands (Cannon 2016). While shell beads continued to be important well into the Mission

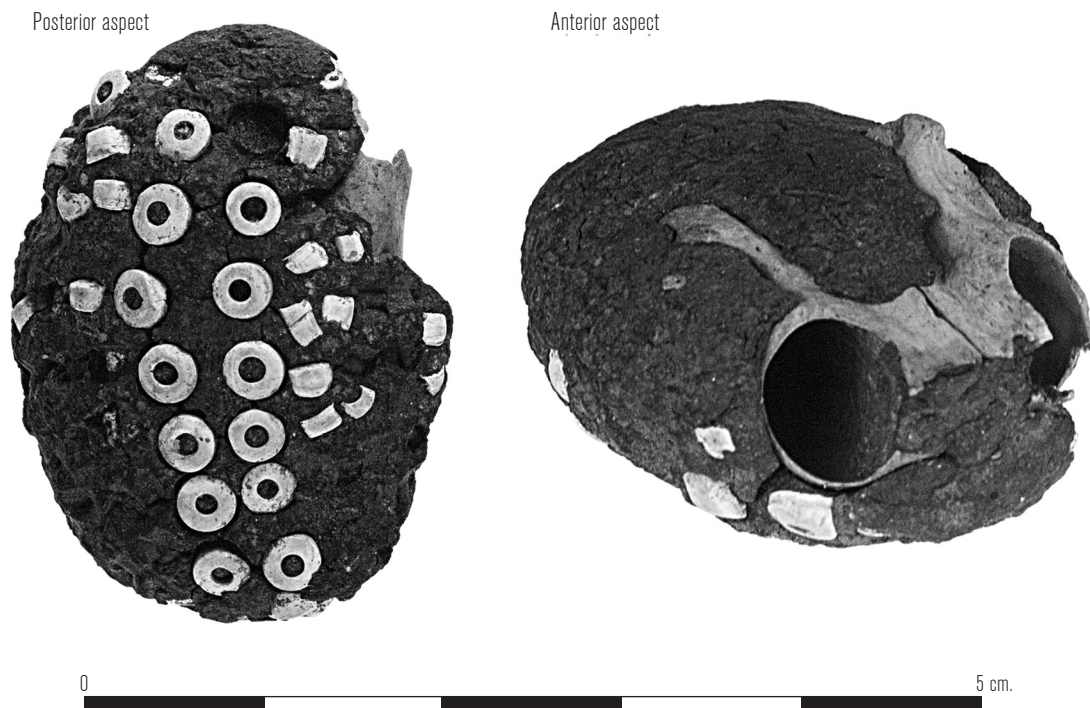


Figure 8. Canid mandible covered by asphaltum and shell beads, LAN-211, FB 1 (from Griffiths et al. 2016:Fig. 118, courtesy of Statistical Research, Inc.).

period, continuing a practice that began thousands of years before, it is interesting that the manufacturing of shell beads during the Mission period changed massively, due in part to new colonial introductions like metal needles. For thousands of years, shell beads were highly crafted items that—depending on the type—may have required a considerable investment of labor. By the Mission period, the advent and popularity of crudely-produced and roughly-finished shell-bead types suggests that while the idea of shell beads was still important, their value may have changed. Mission-period Olivella and red abalone disk manufacturing locations have been identified on Santa Cruz and Santa Rosa islands (Arnold and Greasch 2001; Rick 2004). The scholars involved suggest that the flood of glass beads into native exchange systems may have resulted in inflation, requiring greater numbers of shell beads in exchange for goods and services (Arnold and Graesch 2001; Patterson 2014). Rick (2004) argues that because of the disruptions and changes in native exchange systems following European contact, increased shell bead production may have been a way to intensify (or create new) exchange relations. That said, the high densities of shell beads identified at LAN-62

and LAN-211 suggest that shell-bead exchange systems continued to be important in the Los Angeles basin well after the establishment of the missions.

At Mission San Gabriel, however, Dietler et al. (2015a) only recovered a total of 123 shell beads and a single stone bead. A small number of shell beads ($n=14$) were from the Late Period deposits at the Mission, which may indicate that these were family heirlooms or collectables. Dietler et al. (2015b) noted that Class H and J shell beads (ground, rough, and chipped disk beads, and south coast wall disk beads) dominated the Olivella bead collection, and that the presence of Class H beads might be related to the rise of the *Chinigchinich* religion.

Glass Beads

Glass beads were introduced into the Los Angeles basin during the colonial period by the Spanish. A small number of glass beads were recovered from the mourning and feasting areas (Table 1). Larger quantities were recovered from other contexts, particularly from burials (Ross et al. 2016; see also Hackel 2016). The mourning feature complex yielded only 436 glass beads, which were classified into 10 different types. The 436 beads were

primarily drawn varieties, except for two beads which were free-wound. The collection is dominated by purple glass beads (64.7%), with green (19.3%), blue (8.7%), black (3.2%), clear/white (2.5%), yellow (1.1%), and red (0.5%) in lower frequencies (Ross et al. 2016:Table 134). No glass-bead strands were recovered from the mourning complex.

Only 42 glass beads were recovered from the feasting complex at LAN-211, and they included eight different varieties of undecorated, drawn, and rounded beads. Purple-colored glass beads were most frequent ($n=18$; 43%), with green ($n=11$; 26%), blue ($n=7$; 17%), black ($n=3$; 7%), red ($n=2$; 5%), and clear/white ($n=1$; 2%) less common. The absence of yellow glass beads and the limited number of black beads is notable, since they represent later phases of the Mission period.

Ross et al. (2016), using data from numerous Chumash and Gabrieliño sites with both burial and non-burial contexts, observed that white glass beads do not appear to have been a major commodity sought by the Chumash and Gabrieliño. Instead, the preferred colors were purple, green, and blue. Ross et al. (2016) argue that the absence or low frequencies of white glass beads in most Chumash and Gabrieliño sites suggests that white glass beads were not being used as a substitute for white shell beads in those areas where shell bead production occurred, was nearby, or was controlled, with some variation.

Shell beads, rather than glass beads, dominate the bead collection in both the mourning and feasting contexts. The mourning feature complex contained more than 1,200 shell beads and only 436 glass beads, while the feasting complex had 906 shell beads and only 49 glass beads. Allen (1998) has argued that shell and glass were important symbols of social and economic power among Native Americans in colonial California. The recovery of both shell and glass beads from the Mission-period mourning feature complex may indicate that the native inhabitants of the Ballona accepted colonial materials as symbols of social and economic power, while still focusing on the traditional symbols—shell beads. The incorporation of colonial items into an important indigenous ritual that included both ideology and cosmology illustrates how the Gabrieliño were slowly but steadily transforming their traditions and practices in the context of changing socio-political and economic conditions. This subtle transformation clearly indicates that there

was a persistence of tradition, but within the context of a changing world.

Dietler et al. (2015a) recovered 69 glass beads from the excavations at Mission San Gabriel, including drawn ($n=56$) and wound glass beads ($n=13$). Most of these were recovered from the Chapman's Mill and Millrace area ($n=45$; 65%). Dietler et al. (2015a:273) reported that most glass beads fell within the blue, green, and blue-green category; this is in striking contrast to the Ballona, where purple glass beads (along with the green and blue beads) occur in similar frequencies. The wound beads recovered from the Mission deposits included seed beads, which were used in embroidery (Dietler et al. 2015a:273).

Ceramic and Bone Artifacts

A small number of fragments of ceramic items were recovered from the feasting feature complex at LAN-211, including 95 body sherds, 7 rims, 1 modeled artifact, 2 cylindrical artifacts, and 19 indeterminate artifacts (Garraty 2016; Table 1). Many of the ceramic sherds had soot accumulations on their exterior surfaces, probably as a result of having been once part of cooking utensils. Garraty (2016:420) identified some rim and body sherds as originally forming portions of “two bowls, two jars with necks, one neckless jar, and one indeterminate bowl or necked jar with an out-flaring rim.” These forms are generally comparable to Chumash steatite bowls and ollas, and suggest that cooking techniques may not have differed significantly from those employed in pre-contact times.

The vessel sherds seemed to be more densely concentrated near three specific clusters of hearths and associated cleanout feature within the feasting feature complex, and they represented cooking vessels rather than serving or storage vessels (Garraty 2016). In addition, the collection reflected an early stage of pottery use following an initial adoption of ceramic technology, and it seems to have been locally made, rather than introduced via the mission as Mission Ware. No ceramic vessel fragments were recovered from the mourning feature complex.

Some 38 bone artifacts were recovered from the mourning feature complex, including awls, a punch, spatulas, wands, beads, a barb, a whale-bone grave marker, and indeterminate pieces of worked bone (Griffitts et al. 2016; Table 1). Relatively more bone artifacts were recovered from the feasting feature complex, including

24 pieces of worked bone from domesticated animals (domesticated cow, *Bos taurus*), and 153 worked bone artifacts from wild animals (deer, bird, bony fish, sea mammal, coyote, unknown large mammals). Some of the bone tools from the feasting feature complex included awls, a strigil, punches, flakers, beads, pendants, a gaming piece, a composite harpoon, spatulates, handles, whale-bone grave/area markers, and indeterminate pieces of worked bone (Griffitts et al. 2016). Both contexts (mourning and feasting) contained items that may have had ritual functions (wands, gaming pieces, rattles, whistles, and flutes), or uses related to subsistence (a fishhook, barb, harpoons, a pry, a spatula, a strigil, and a scraper).

Although the collections of ceramic and worked bone artifacts from the mourning and feasting contexts are small, they provide unique insights into both cultural persistence and transformation. First, the presence of ceramic vessels from the feasting contexts dovetails with the use of ceramics very late in the cultural sequence in southern California. Garraty (2016) suggests that ceramic vessels may have entered Gabrieliño territory through trade or gift exchange well before colonization; but the Ballona residents avoided a large-scale adoption of this technology before the Mission period. Alternatively, pottery may have been brought in by indigenous pottery-making groups (e.g., Cahuilla or Luiseño peoples) who resettled in the general area as a result of the disruption and depletion of native communities, although there is no archival data to support the idea of desert groups in the area moving to the coast. Regardless, it is unclear why pottery was adopted in the Ballona. It is possible that steatite vessels, which would be needed for cooking foods at high temperatures and for longer periods, and which were used during pre-contact times in the Ballona, were not as readily available in the Mission period following the breakdown of trade networks. There might have been a shift to an adoption and use of Native American ceramics in response to the possible shortage of stone and steatite vessels. Garraty (2016) also speculates (following Eerkens 2004) that new foods and cooking methods (and recipes) might have required longer cooking times than were possible using boiling stones in baskets (and at a time when stone vessels were in short supply). Although plausible, the subsistence data (discussed below) do not support the suggestion that there was any significant or marked change in diet. Wild plants, animals, and fish

continued to be used in the Mission period; and when domesticated foods (plants and animals) are discernible in the collection, they do not dominate, indicating that they were minor components in the diet.

In addition, the use of domesticated cow bones to make tools is a great example of the use of new materials for indigenous purposes. Cattle may have been acquired from local *ranchos*, or from more distant colonial institutions such as the pueblo of Los Angeles. Mason (2004) noted that Native Americans in the Santa Monica Bay area had killed and eaten cattle in A.D. 1787.

At Mission San Gabriel, in comparison, Dietler et al. (2015a, 2015b) recovered a number of bone tools, all manufactured from the bones of wild, native animals, but none from the bones of domesticated animals. The tools, typical for southern California, were for cutting and perforation, and were perhaps related to sewing, basketry, and animal-hide processing. While limited in numbers, these types of artifacts, like flaked stone, suggest a persistence of tradition among Mission neophytes.

Subsistence Data

The two Mission-period feature complexes yielded large faunal and floral subsistence datasets. The food remains included both wild and introduced domesticated foods. The domesticated foods (animals and plants) may have been obtained either directly, as payment for labor at the pueblo of Los Angeles or at local *ranchos*, or indirectly, from people in villages closer to the pueblo or from relatives returning periodically from the pueblo (Lev-Tov et al. 2016; Reddy 2016).

The main categories of identified faunal remains from the two contexts consisted of terrestrial mammals (72%), sea-mammals (0.1%), fish (15.7%; including pelagic fish, which accounted for 3.2% of all fish, and estuarine fish, which accounted for the rest), birds (8%), reptiles (3%), and other (1.2%; Lev-Tov et al. 2016). The bones of domesticated animals were also recovered, including those of cattle, sheep, goats, pigs, and chickens, but in low percentages. There were distinct differences between the mourning and feasting areas in terms of the faunal remains recovered (Lev-Tov et al. 2016). Overall, the mourning features contained more mammals and birds. The feasting features generally had more fish, particularly cartilaginous fish. The mourning features had lower frequencies of fish, but the bony fish

(some of which might have been pelagic) occurred in higher frequencies. Pelagic fish might have had a higher cultural value because they were not as easily obtained. Interestingly, domesticated animals such as cows, sheep, and goats were present in similar frequencies in both contexts, suggesting that there was no effort in mourning offerings and related funeral feasts to distinguish between wild or native animal foods and the domesticated animals acquired from the missions and *ranchos*.

Over 400,000 carbonized seeds were recovered from the two contexts, including seeds of wild plants and introduced domesticated crops (Reddy 2015, 2016). Overall, native annual spring- and summer-seeding grasses, particularly Maygrass (*Phalaris* sp.) and native Little Barley (*Hordeum pusillum*), dominated the plant remains from all contexts. Introduced non-native plants accounted for less than 1% of the combined collection, and included low frequencies of six domesticated crops: Chick pea (*Cicer* cf. *arietinum*), Garden pea (*Pisum* cf. *sativum*), Oats (*Avena* cf. *sativa*), Cereal barley (*Hordeum vulgare*), Wheat (*Triticum* cf. *aestivum*), and Corn (*Zea mays*). Although native wild grasses dominated the plant remains, and were the most ubiquitous in both contexts, wild grasses were more dominant in the mourning contexts, where they represented 88.7% of the total assemblage (Reddy 2015, 2016). In contrast, wild grass seeds accounted for 67.8% of the feasting assemblages. Maygrass appeared to have been the preferred offering in mourning features over Little Barley; however, Little Barley was the preferred food. Despite the mission and rancho establishments in the Los Angeles Basin, the Gabrieliño in the Ballona relied on native wild grasses as staples.

In terms of introduced domesticated grain, there was a distinction between the mourning and feasting contexts. A total of 635 seeds of domesticated plants was recovered from feasting contexts, including two legumes (chick pea and pea) and four cereals (oats, wheat, barley, and corn). Wheat grains were most dominant, with barley and pea in lower frequencies, and the remaining three crop seeds occurred in much lower frequencies. All but one mourning feature contained domesticated crop seeds, and they consisted primarily of peas, along with much lesser quantities of oats, wheat, barley, and chick pea. Overall, domesticated crop seeds were recovered in higher ratios than wild seeds from feasting (1:61) compared to mourning contexts (1: 617; Reddy 2015,

2016). The seeds in the mourning contexts represented basket offerings and had higher ratios of wild grass seeds to non-grass seeds (8:1). These baskets of seeds may have consisted of different types of *pinole* mixes that were being ritually offered to the deceased (Reddy 2015). The greater incorporation of introduced plant foods into feasting settings versus mourning contexts provides a glimpse into aboriginal perspectives on the adoption and acceptance of non-local plant foods during a period of immense cultural turmoil and rebellion. This may be an indication that there was more resistance to the integration of new plant foods into ceremonial events than into funeral meals (Reddy 2015, 2016).

In summary, introduced domesticated plants were more abundant in feasting contexts but more constrained in annual mourning ceremonies. In contrast, domesticated animals such as cows, sheep, and goats were present in similar frequencies in both feasting and mourning contexts, suggesting that there was no effort to distinguish between native wild-animal foods and domesticated animal foods in mourning offerings and related funeral feasts. The fact that the native populations were including new foods in their ritual practices soon after those foods were incorporated into their diet indicates that they looked favorably on at least some of the new foods acquired from the missions and *ranchos*. The subsistence data highlight a remarkable persistence of indigenous ritual practice, in that while new foods were readily consumed during feasts, only some were incorporated into ceremonial activities centered on mourning.

In contrast, and not surprisingly, the faunal remains from neophyte contexts at Mission San Gabriel were quite different. The excavations detailed by Dietler et al. (2015a) indicate that the neophyte diet was dominated by large animals, including cattle, sheep, and deer. Potter (2015) suggests that much of the consumption of cattle and sheep by the neophytes was related to mass slaughters (*matanzas*) practiced by the Spanish to cull herds (see discussion in Mason 2004). Deer remains occurred in lower frequencies in neophyte contexts at Mission San Gabriel, and this may have been due to a decrease in wild deer populations as a result of a changing environment and encroachment by ranching and agriculture, as Hackel (2005) and others have suggested. Potter (2015) makes an interesting observation that domesticated animals were butchered by the neophytes using Spanish techniques,

but indigenous butchering techniques were employed for wild animals. Clearly, there were elements of cultural persistence even within mission contexts.

In addition, paleoethnobotanical studies of samples from the San Gabriel Mission excavations carried out by Dietler et al. (2015a) suggest that the neophytes had house gardens in which they grew several plants in addition to what they were given by the padres as food. Corn was the dominant plant consumed by the neophytes, but numerous foreign plants such as cherry or plum, broccoli or cauliflower, mint, chamomile, rose, and geranium were grown in the Mission garden (Potter 2015; Puseman et al. 2015). Grape, fig, corn, mustard, tomatillo or ground cherry, pepper, and elderberry may have also been grown in the Mission garden. Tobacco was also recovered, but it is unclear if it was gathered wild or grown at the Mission. In addition to the domesticated plants, wild plants such as cheno-ams, elderberry, pine nuts, sage, and prickly pear, among others, were also grown (Puseman et al. 2015). Overall, small seeds from wild plants were recovered in low densities and frequencies. Some of these plants were likely collected from the Mission gardens and fields, and others (such as pine nuts) during furloughs granted to the neophytes. The plant diet of the San Gabriel Mission neophytes suggests that a persistence of indigenous diet was not possible within the Mission walls, primarily because of a lack of access to the wild foods, except at certain times of the year when the neophytes were allowed to leave the Mission and return for short periods of time to their indigenous lands and villages.

Artifacts of Colonial Origin

A handful of historical artifacts of colonial origin were recovered from the mourning and feasting contexts in varying frequencies (Swope and Douglass 2016; see Table 1). We use the term “of colonial origin” because some items found at LAN-62, for example, were not “European” per se, as they may have arrived on the Manila galleons, but were clearly non-local and colonial in origin. Some metal objects, as another example, may have originated in Mexico and arrived via annual shipments from San Blas, Mexico (Hackel 1998). Six artifacts were recovered from the mourning context, including a ceramic white-stoneware vessel sherd, two glass fragments, and three metal fragments. The feasting context yielded 93 artifacts, including glass

($n=38$), ceramic ($n=2$), and metal ($n=53$) items. The two ceramic fragments were body sherds from porcelain and earthenware items dating to A.D. 1700–1850 and the 1950s, respectively. The metal items included one cast iron button with a shank, while the glass items included a green-glass projectile point made from a broken alcohol bottle. Swope and Douglass (2016:477) note that most of the glass and metal from the feasting context were non-diagnostic, likely date to the twentieth century, and were not associated with the Gabrieliño.

These introduced historical artifacts, much like the domesticated foods, were likely obtained from the pueblo and nearby *ranchos* as payment for native labor. The recovery of these non-native items from the Mission-period mourning feature complex may mean that the Ballona residents were accepting colonial materials as symbols of social and economic power, but their very low frequency is a clear testament to the fact that their focus was on indigenous goods. The higher frequencies of these “exotic,” introduced colonial artifacts in feasting contexts may indicate that the Gabrieliño were using them in non-ritual contexts but made a conscious effort to include them less often in the mourning ceremonies.

SUMMARY

The Mission period in coastal Southern California witnessed unprecedented shifts in native social interactions, interpersonal relationships, religious practices, and economic patterns. Native American mourning and feasting practices in the Ballona during the Mission period reflect a fascinating mixture of cultural persistence combined with glimpses of emerging transformations of indigenous culture. Within this context of transformation, one still witnesses a strong trend toward cultural persistence, and this is particularly evident in how indigenous items of material culture and food were chosen to maintain tradition.

There was a persistence of cultural tradition in the continued use of locally-available raw materials and tool maintenance technology, while new raw materials (fused shale, glass, etc.) were sought for stone tools when trade routes were disrupted (Peterson et al. 2016). An extension of this acceptance of new raw materials is also found in the use of domesticated cattle bones to make indigenous bone tools. A persistence of indigenous tradition is evident in the continued use of stone artifacts,

shell beads, and ornaments in ritual mourning contexts, a persistence tempered by the slow incorporation of new items of material culture (such as *comales* and glass beads) in Native American contexts. This concerted effort to limit European items in the Mission-period mourning ceremonies highlights the fact that colonial goods were not accepted readily into rituals where the community was involved. Note, however, that such concerns were not as pronounced when it came to food, because colonial foods were recovered from the mourning contexts, although in lower frequencies relative to the native food remains. The native foods offered during mourning were a way to culturally unify populations, perhaps from a larger catchment, through the powerful links between food and memory (Bahloul 1989; Fabre-Vassas 1997; Feeley-Harnik 1995; Mahias 1985; Sutton 2001). The consumption and ritual offering of indigenous foods reinforced cultural traditions in a rapidly changing world (Reddy 2015). At the same time, a limited incorporation of new foods into ritual events validated the acceptance of new culture items.

Overall, the items of material culture recovered from the ritual mourning and feasting contexts suggest an underlying pattern of cultural continuity and persistence, as native communities made a concerted effort to maintain traditional ritual practices, particularly during mourning events, in a time of considerable change (Douglass et al. 2018; Douglass and Reddy 2016; Reddy et al. 2016a). At the same time, there was an emerging incorporation of colonial material culture in some aspects of the mourning rituals. This incorporation of newly introduced material goods did not mean that the Gabrieliño viewed these items in the same way that the colonists did; rather, these items were likely imbued by local native narratives with new meanings and interpretations and given alternate uses, often just as native material goods would have been treated and used. When considered in this way, the use and incorporation of new colonial items in indigenous ceremonies and in everyday life accentuates in many ways the persistence of culture and tradition. At the same time, we can also consider this transformation of identity—as reflected in material culture and in the incorporation of new items and ideas into traditional belief systems and everyday practices—as part of what Panich (2013) has termed “the process of becoming” for Native Californians during

the colonial era. Native Americans in coastal southern California both adopted and resisted changes in their lifeways while they strived to maintain a balance between old and new cultural norms. There were selective and conscious decisions made about which new or indigenous material culture items and foods were acceptable; and the data from the Ballona indicate that the identities and social memories of both the living and the dead could be asserted, challenged, and renegotiated, all within the context of mortuary ceremonies.

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