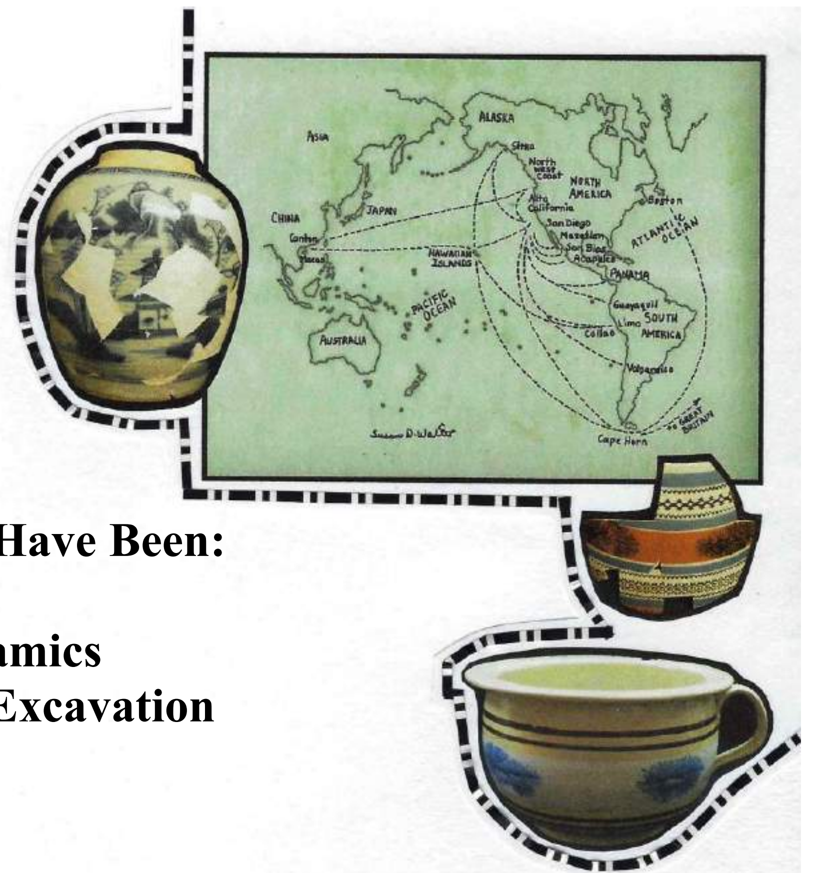


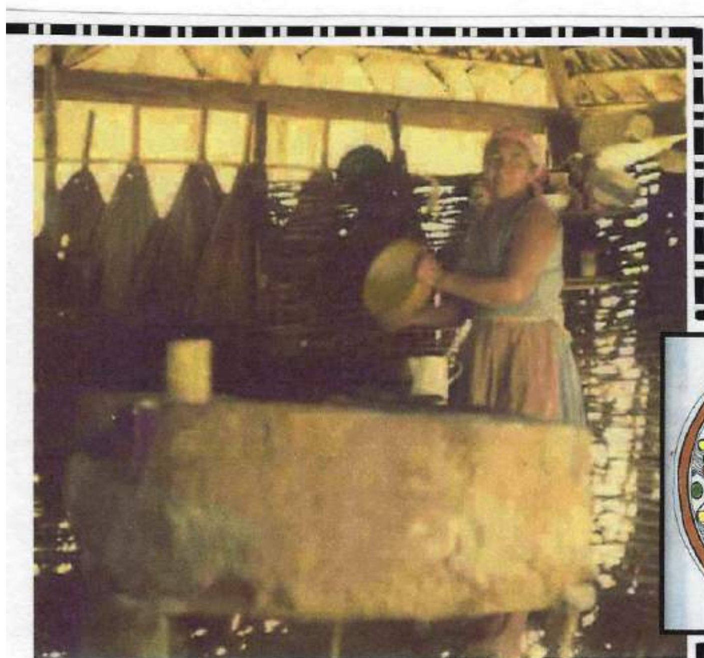
Shadows of the Things That Have Been: An Analysis of and Identification Guide to Ceramics From the Chapel Complex Excavation of the San Diego Presidio

Volume 2: Historical and Cultural Contexts

Stephen R. Van Wormer

Susan D. Walter

2024



Shadows of the Things That Have Been:
An Analysis of and Guide to Ceramics of the San Diego Presidio

Cover Design by Susan D. Walter
About the Cover
Volume 2: Historical and Cultural Contexts

All of the items on this cover are somewhere in Volume 2 of *Shadows of the Things That Have Been*.

The Upper (right) Cluster and map depicts some of the journey of items from China and England, and the United States to San Diego's Presidio that were found in the SDSU Chapel Assemblage.

The Lower (left) Cluster represents a Mexican kitchen similar to what the Presidio inhabitants would have been familiar with. The woman, Dona Margarita, was photographed in her ramada kitchen in Lower Baja California by Stephen Van Wormer in the 1970s. She is holding a brown ware cajete style bowl, and the two white items on her counter are not ceramic, but are shaped similar to some of the objects of ceramic found in the Chapel Assemblage. The inset is a Mayolica plato of Santa Cruz Polychrome, the pattern is commonly referred to as *The Portly Eunich*. The *Eunich* was identified in the Chapel Assemblage.

The artifacts are not to scale on this cover.

Shadows of the Things That Have Been: An Analysis of and Identification Guide to Ceramics From the Chapel Complex Excavation of the San Diego Presidio

Volume 2: Historical and Cultural Contexts

Stephen R. Van Wormer

Susan D. Walter

© 2024 Stephen R. Van Wormer, Susan D. Walter

TABLE OF CONTENTS

CALIFORNIO CULTURAL ORIGINS 1

SAN DIEGO PRESIDIO HISTORY 9

- Introduction 9
- Evolution of the Presidio as a Mexican Colonial Institution on the Northern Frontier of New Spain 10
- San Diego Presidio's Physical and Demographic Evolution 17
- The Role of Women at the San Diego Presidio 55
- San Diego Presidio Chapel History 62
- Post Abandonment History: 1838-1940 79

TRADE AND ECONOMICS 98

- Introduction 98
- The San Blas Supply Ships and Mission and Pueblo Production 1769-1810 99
- Bourbon Liberalization of Trade 103
- Development of the Eastern Pacific 104
  - The Chinese Fur Trade and Contraband 108
- Economic Disruption 1810-1821 111
- The Hide and Tallow Trade 1822 - 1848 115

CALIFORNIO FOODWAYS 124

- Introduction 124
- Grinding Complex Foods 127
  - Tortillas 134
  - Tamales 139
  - Atole, Pinole, and Esquite 141
- Non - Grinding Complex Foods 143
  - Corn 143
  - Beans (Frijoles) 143
  - Meat 145
  - Sea Food and Poultry 153
  - Sopas, Caldos, Ollas, Guisados, Pucheros, and Sancuchados 156

TABLE OF CONTENTS
(Continued)

Other: Rice, Vegetables, Noodles, Etc. ... 159
Milk, Curdled Milks, Cheese, and Butter ... 161
Sweets and Snacks ... 164
Beverages ... 169
Condiments ... 175
Meal Routines ... 175
Conclusions ... 177
MEXICAN FOLK VESSEL TYPOLOGY ... 179
Introduction ... 179
Cookware ... 181
Cajete and Cazuela ... 182
Comal ... 186
Olla ... 189
Serving Ware ... 197
Cajete ... 197
Jarro ... 198
Serving Olla ... 199
Plato ... 201
Escudilla - Tazón ... 202
Taza, Pocillo, Jícara - Cups ... 202
Water and Storage Wares ... 207
Water Transportation and Serving: Cántaro, Botija, Botellón ... 207
Water Storage: Tinaja, Tina, Olla, Barriel ... 212
Household and other Utilitarian Wares ... 213

TABLE OF FIGURES

Figure 1: Soldado de Cuera at Monterey Presidio 1791. 14

Figure 2: An 1804 Diagram of a Mounted Soldado de Cuera With His Full Set of Weaponry by Ramón Murillo. 15

Figure 3: Method of Fighting Indians in California (Modo de Pelear los Indios de California) by José Cardero 1791. 16

Figure 4: By far the Majority of Presidio Inhabitants in 1790 had come From Somewhere in Colonial Mexico.......... 24

Figure 5: San Diego Presidio Household Make Up in 1790.......... 25

Figure 6: San Diego Presidio Residents' Ages in 1790 by Five Year Increments.......... 25

Figure 7: 1782 Map of San Diego Bay by Pantoja. 26

Figure 8: An Illustration of How Quickly Adobe Buildings can Obtain an Unkempt Appearance.......... 30

Figure 9: 1884 Photograph of the Teodoro Arrellanes Adobe in Santa Barbara.. 31

Figure 10: Ground Plan of the San Diego Presidio circa 1790-1820. 35

Figure 11: The Hide Houses at La Playa 1842 –1843. 40

Figure 12: San Diego Presidio District 1823. 41

Figure 13: Conjectural Configuration of Buildings Outside the Southern Defense Wall. 50

Figure 14: Presidaria at Monterey 1791.......... 56

Figure 15: Typical One Room Presidio Family Dwelling. 58

Figure 16: The Patroness of the San Diego Presidio.. 64

Figure 17: Conceptual Drawing of The San Diego Presidio Chapel. 69

Figure 18: Statuary Originally in the San Diego Presidio Chapel. 70

Figure 19: Other Statuary from the Presidio Chapel now at San Luis Rey Mission.. 71

Figure 20: Courtyard Plan View by Paul Ezell (Ezell 1976:12).......... 73

Figure 21: 1851 Map of the Presidio Ruins by Lt. G. H. Derby.......... 81

Figure 22: A Sketch of the Mouth of the San Diego River from Presidio Hill, in 1856. . 82

Figure 23: Substantial Walls Still Stood on Presidio Hill in 1874. 83

Figure 24: Smythe's "Rough Plan" of the Presidio. 86

Figure 25: The Serra Cross.. 89

TABLE OF FIGURES

(Continued)

Figure 26: Presidio Ruins Circa 1925 – 1930.. 92

Figure 27: San Diego Presidio Ruins Circa 1935 Planted in Cactus. 92

Figure 28: Percy Broell's Topographic Map of the Presidio Ruins 94

Figure 29: California Trade Networks 1800 – 1848.. 105

Figure 30: The Hide Houses at San Diego 123

Figure 31: "Sketch of a Kitchen and Dining Room on a Farm in California." 132

Figure 32: A Family in a Small Village in Oaxaca Mexico Gathers in the Kitchen for the Evening Meal Circa 1940. 133

Figure 33: Late Nineteenth Century Photograph Entitled "Making Tortillas.". 134

Figure 34: Cazuela Dimensions Recorded by Foster at Tzintzuntzan, Mexico. 185

Figure 35: Comal Dimensions Recorded by Foster at Tzintzuntzan, Mexico. 188

Figure 36: Olla Dimensions Recorded by Foster at Tzintzuntzan, Mexico. 191

Figure 37: Mexican Cooks Grind Masa on a Metate and Cook Tortillas on a Comal.. 192

Figure 38: Detail From an Eighteenth Century Casta Painting. 193

Figure 39: Eighteenth Century Casta Painting 194

Figure 40: *Cocina Poblana* Circa 1850-1855 by Édouard Pingret. 195

Figure 41: Another Painting by Édouard Pingret Circa 1850-1855. 196

Figure 42: Detail From an 1865 Painting by José Agustín Arrieta 200

Figure 43: Detail From an Early Nineteenth Century Casta Panting 205

Figure 44: Detail of the Casta Painting *De Español y Negra, Mulato* 206

Figure 45: Cántaro Dimensions Recorded by Foster at Tzintzuntzan, Mexico. 209

Figure 46: Bruñido/Canela Ware Botellón Produced in Tonalá, Jalisco. 211

Figure 47: Las Aguadoras.. 214

Figure 48: Los Aguadores. 215

Figure 49: Burros Loaded with Water Cántaros.. 216

Figure 50: Water Carriers with Shoulder Poles.. 217

TABLE OF TABLES

Table 1: Post Abandonment Presidio Chapel Baptisms 78
Table 2: Post Abandonment Presidio Chapel Marriages 79
Table 3: San Blas Supply Ships Sent to California 1781-1786. 100
Table 4: Fish Species Identified From the Chapel Excavation...................................... 154
Table 5: Mexican Folk Vessel Typology.. 181

CALIFORNIO CULTURAL ORIGINS

By Stephen R. Van Wormer

> At the time of the Conquest many of the native Mexican peoples had long since risen to remarkable cultural heights. Nevertheless, apart from some aspects of government, city organization, and science, the term folk culture is applicable to the way of life of most people at that period. The early result of Spanish domination of Mexico, following initial disruptive effects, appears to have been the strengthening and reinforcing of this folk culture in many parts of the country, due to the introduction of ideas and techniques compatible to the old system. The ultimate result was to set in motion the chain of historical events which has produced the contrapositional urban industrial culture of the present century. Both ways of life have much in common, and both are more than mere hybrids resulting from the fusion of Indian and European traits. Four centuries of amalgamation and evolution have produced new entities, one of which is the folk culture of modern Mexico (Foster 1948a:53).

The culture of Mexican Colonial California was an extension of the common folk culture found in New Spain's Northwest provinces. Therefore, the customs and foodways of the Californios was that of Colonial Mexico's Northwestern frontier. Most of the Hispanic pioneers who settled in California during the eighteenth and early nineteenth centuries originated from the northern frontier regions of Baja California, Sonora, and northern Sinaloa (Mason 1978, 1998; Guerrero 2010). They possessed a Mexican Colonial Folk Cultural identity.

The invasion of Mesoamerica by Spaniards in the 1520s resulted in creation of a unique Mexican Colonial Mestizo Folk Culture. In the almost 250 years that passed between the Spaniards' conquest of Mesoamerica and their occupation of California, the resulting blend of Mesoamericans and Colonials brought an invigorating mixture of races that combined traits from pre-conquest native cultures and Europe, resulting in the emergence of a mestizo Colonial Mexican Society with its own customs and foodways (Miranda 1988:265; Super 1988; Weber 1992:315-317; Deagan 1996; Pilcher 1996:198, 1998;

Reynoso-Ramos 2015:312), as Natives and invading colonials fused as much, if not more, culturally as they did biologically (MacLachlan 2015:5). By the 1540s mestizos were a recognized racial-cultural group and by the early 1600s a Mestizo Folk Culture had emerged (Redfield 1930:13; MacLachlan 2015: 22, 30-31). The onslaught of devastating disease, rather than the destruction of invading armies, brought this about (MacLachlan 2015:22, 224, 251-252).

Mass death from pandemics created a demographic disaster that resulted in rapid Native social disintegration. From an estimated 25 million in 1519 - "at the time more than Spain and France combined" - the population fell to one million during the first century following European contact (MacLachlan 2015:22). What remained of Mesoamerican society had to be reestablished within the context of subjugation by Spanish Colonials. "Destruction, replacement, and amalgamation created Mestizo Mexico" (MacLachlan 2015:31).

Ultimately, a rich Colonial Folk Culture emerged that included a combination of Native Mesoamerican and Spanish Colonial traits, representing a common way of life for the mestizo masses that become the Mexican people. This culture consisted of a shared stock of traditions preserved from one generation to the next without dependence on writing. Once achieved, it tended to persist with little change. Many of the ways of living that evolved in central Mexico in the sixteenth and seventeenth centuries continued to prevail, were exported to northern frontiers, and remain untouched up to the present time in modern Mexico (Redfield 1930:1-2; Whetten 1948:355-356; Humphrey 1948:364-365, 370; Foster 1948b:53, 1953:170; MacLachlan 2015:253).

As used in this study, mestizo is a cultural rather than an ethnic, racial, or biological designation. Although the offspring of Indians and Europeans resulted in a new racial category, many people, both Spaniards and Natives, become Cultural Mestizos by adopting the customs and lifestyles and thereby assimilating into the dominant Mexican Colonial Folk Society (MacLachlan 2015:6-7, 255). Many Spaniards adopted dominant folk ways while entire Native villages became culturally mestizo without any

intermarriage with Europeans (Redfield 1930; Parsons 1936; Brand 1951; Beals 1952:227-228; MacLachlan 2015:23). Some of the main elements of the common Colonial culture included: the use of European domestic animals; the physical organization of communities on a grid pattern around a central plaza; housing of adobe, stone masonry, and wattle and daub jacales; diets based on the Mesoamerican staples of corn, beans, squash, and chile, with numerous Native and European accessories including tomatoes, onions, wheat, a variety of other vegetables, and meats including chicken, pork, and beef to name just a few; kitchens were based on ancient Mesoamerican models centered around a hearth, with a metate for grinding, comal for tortillas, and various clay pots for cooking and storage; religion consisted of a basic foundation of Catholicism with the cult of the saints substituting for preconquest native gods in some ceremonies, and the practice of compadrazco religious godparenting kinship (Parsons 1936:24, 27, 167, 372, 480; Foster 1948b:155, 1953:166-167; Humphrey 1948:366-369; Brand 1951:223). Spanish as a primary language was usually but not always an important factor. Some Native villages acculturated and yet retained their original languages (Redfield 1929:30; Parsons 1936).

A ruling class of elite Spaniards and their creóle American-born descendents, concentrated largely in metropolitan centers, existed separate from the folk Mexican Colonial Mesztizo Culture. They occupied "a mental world apart from that of the masses" or common people (Redfield 1930:1). Their cultural references were largely urban in character and European in origin (Redfield 1930:16; Foster 1953:164).

This Spanish elite operated from a world view of ethnocentrism and racism, based on an assumption of European superiority over all other ethnicities, that justified themselves as rulers of the conquered Mesoamerican tribes (Katzew 2004:255; Frederick 2011:497, 513). Spaniards "occupied the pinnacle of the social pyramid. Indians, with the exception of their own caciques or nobility, were identified mostly with the mass of tribute paying plebeians. Blacks were situated at the bottom of the social hierarchy" (Katzew 2004:201). As the decades progressed the ability to classify people on the bases of their ethnic origins became increasingly complicated. The interbreeding of people

considered to be of different racial types resulted in a large multiethnic population among the Cultural Mestizo. The general population became so racially diverse and mixed that social stratification by well defined racial categories became impossible. As a result, the ruling class adopted a caste classification known as the sistema de castas, which categorized people according to the color of their skin. The castas consisted of various combinations of Spanish, Indian, and African ethnic heritages represented in the culturally mestizo population. They ranked below Spaniards and their American-born creóle descendants (Miranda 1988:266; Katzew 2004:43, 201, 255; Loren 2007:23; Guerrero 2010:1-2). "The darker the casta, the lower the ranking" (Loren 2007:23). The two groups of non-European descent, blacks both free and slave, followed by indigenous natives occupied the lowest position on the social scale (Miranda 1988:266: Loren 2007:23). Unlike the mestizaje of the general population, elite Spaniards married within their own group thereby protecting their perceived ethnic purity so as to keep themselves at the top of a racial hierarchy (Frederick 2011:497).

The racially ordered society perceived as ideal by the elites did not reflect colonial demographic realities. Spaniards sought to impose a rigid structure on a society that was far more complex and adaptable than their notions of social and racial order could comprehend (Loren 2007:23; Frederick 2011:498, 515). By the end of the eighteenth century, the extensive and continuous unions among people of Spanish, Native, and African descent resulted in establishment of highly complex classification systems. Attempting to portray all possible racial combinations, terms such as mestizo, indio, mulato, morisco, castizo, albino, cuarterón, lobo, coyote, quebrado, torana atras, cambuja, and tente en el aire, to name just a portion, supposedly could identify a person's ethnic heritage to the third and perhaps fourth generation. These obviously artificially created categories lacked an official, standardized, or scientific base. Usually government officials used six or seven terms, the most common being español, indio, and negro, along with mestizo to designate white-indigenous mixtures, and mulato, for African with other ethnic combinations (Katzew 2004; Guerrero 2010:2; Frederick 2011:508).

What needs to be clearly understood is that none of these elite-imposed labels reflected distinct cultural groups based on ethnicity. The Cultural Mestizos represented a single homogeneous Mexican Colonial culture regardless of what casta label was given an individual in the official records. Economic means, much more than ethnic background, affected differences in ways of dressing or types of food consumed. The system was "less an institutional reality than an assemblage of official and cultural conceptions and rules" that embodied inconsonant and contradictory ideas on racial definition and status. The ideal imposed by the elite never reflected life conditions for the Cultural Mestizo masses, who found it to be an assemblage of official assumptions and regulations subject to resistance and manipulation (Loren 2007:28-29; Frederick 2011:499). Non-elite Spaniards along with the majority of other designated castas did not identify with a rigid racial hierarchy and constantly crossed elite-defined racial boundaries in choosing mates (Loren 2007:28-30; Frederick 2011: 496-497).

Under these circumstances it is not surprising that "rather than a fixed representation of biological parentage, casta identity could be fluid in both its definition and its influence in a person's life. Casta could be an exclusive or inclusive identification, and casta distinctions could be manipulated to accommodate varying circumstances. Different casta titles were thus often constructed rather than inborn" (Frederick 2011:496). Perceived wealth, social standing, and occupation carried as much weight in casta designation as did the supposed ethnicity of one's parents (Katzew 2004:201; Frederick 2011:496, 502). If an individual's social circumstances changed over time so could their casta designation (Frederick 2011:496, 499, 502). As Guerrero (2010:2) explained "From as early as the sixteenth century, a mestizo of legitimate birth and social position could be accepted as an upper-caste español, while one with the same racial proportions born in poverty and out of wedlock would probably be considered a mestizo." Eventually, near the end of the 1500s, "certificates of whiteness" could be purchased from the Crown so that casta designated mestizos could be reclassified as españoles. In the following century this privilege was also extended to mulatos (Guerrero 2010:2).

Not surprisingly, given the inequities, malleability, and changing ranks associated with elite-imposed racial labels, most of the Cultural Mestizo population did not identify with their casta designations, and instead considered themselves gente de razón, a term that, like the sistema de castas, came into use during the late sixteenth century and was used concurrently with it throughout Colonial Mexico (Miranda 1988:266-267; Katzew 2004:43; Guerrero 2010:268; Frederick 2011:402, 514). Literally translated the term means "people of reason." A more connotatively accurate English equivalent would be "civilized people." At its most basic it was understood to mean anyone who was not an Indian. Christianized mixed blood castas, indigenous natives that had adopted a Cultural Mestizo lifestyle and resided outside of designated Native communities including missions, and non-elite Spaniards were all considered to be gente de razón. In essence, any one belonging to the common masses that made up the Mexican Colonial Mestizo Folk Culture. As used in this study gente de razón should be considered synonymous with Cultural Mestizo (Miranda 1988:265-266; Guerrero 2010:4, 268; Frederick 2011: 496, 502; Crosby 2015:46-47;).

As settlement moved northward gente de razón carried Mexican Colonial Mestizo Folk Culture out of the original Mesoamerican core area, where it had evolved and become established, to other frontiers, including the Northwest territories of Sinaloa, Sonora, Baja California, and ultimately Alta California. In these regions it adapted to an arid and demographically sparse environment (Hewes 1935; Ives 1950; Hastings 1961; Dunbier 1968:109-111; Leon-Portilla 1972; Crosby 1994:239-249, 275-297, 354-355, 2015:41-68; Arreola et al. 2009). In addition to the major traits previously listed, including use of European domestic animals; the physical organization of communities (Dunbier 1968:136-137; Arreola et al. 2009); housing of adobe, stone masonry, and wattle and daub (Hewes 1935; Arreola et al. 2009); diets based on Mesoamerican staples of corn, beans, squash, and chile, with numerous Native and European accessories; kitchens based on ancient Mesoamerican models (Crosby 2015:103-104); Catholicism as the primary religion; and Spanish as a primary language (Ives 1950), other regional elements evolved that distinguished the western Norteño culture from its central Mexican base. Faced with a hostile aboriginal frontier, a line of Presidios was established in an attempt to provided

defenses from attacks (Hastings 1961:333; Dunbier 1968:136-137; Leon-Portilla 1972:91-92). In addition, mining and cattle ranching played larger roles in northern economies and, along with the latter, a development of highly skilled horsemanship became characteristic of the region (Hewes 1935; Ives 1950; Hastings 1961; Dunbier 1968:125; Leon-Portilla 1972; West 1993:27-69; Crosby 2015:131-132; Pavo-Zuckerman 2017). A wider variety of vegetables, along with meat, especially beef often dried and jerked as carne seca (which was and still is cooked as machaca), and cheese became common and abundant parts of daily diets (Hewes 1935; Leon-Portilla 1972; Heyman 1991:84; Crosby 2015:98, 03-104, 115, 119-120, 156-159). No doubt as a result of the sparse population and greater distances between communities, the custom of the weekly market day practiced in villages of the Mesoamerican core did spread to the northern frontier (Whetten 1948:360). Wheat developed into as important a crop as corn and was adapted to the indigenous Mesoamerican technologies of grinding with mano and metate, and cooking on a comal, to create the flour tortilla, which augmented but did not replace the original corn variety (Velasco 1850; Hewes 1935; Ezell 1961:33; Leon-Portilla 1972:111-112; Heyman 1991:84-85; West 1993:37-38; Crosby 2015:9, 29, 32, 115, 118-119).

And so it was that, after 250 years of evolution, the folk culture of the Cultural Mestizo Northwestern Mexican Colonial gente de razón was brought to Alta California in 1769 where, especially in the practice of foodways, it experienced very little change (Miranda 1988:265; Popper 2016:8-9, 18-20). It was the result of the blending of Mesoamericans and Colonials that combined traits from pre-conquest native cultures and Europe, resulting in the emergence of a mestizo Colonial Mexican Society with its own customs and foodways adapted to the arid expanses of the northern frontiers. Members referred to themselves as gente de razón, a generic term for people who were culturally Hispanic but racially mixed [1] (Kessell 1976:39, 2002:423; Guerrero 2010), and generally identified as anyone who spoke Spanish, adopted Roman Catholic beliefs, and "had shifted their self-

---

[1]. The term "espanol" was also used to denote "all hispanicized individuals, regardless of origins, race, or caste," (Guerrero 2010:7). It will not be used in this narrative in order to avoid confusion between American born Mexican Colonial people and European born Spaniards.

ascribed identities from indigenous to more mainstream national forms" (Newman 2010:35). "In simple terms any non-Indian" person (Crosby 1994:424). This term was in common use throughout Mexico including Sinaloa, Sonora, and Baja California[2] (Officer 1987:32, 41, 54-57, 72-78, 80-87, 93, 133; Crosby 1994:239-249, 275-297, 354-355; Hass 1995:2-3, 29-32; Kessell 2002:272, 273, 316, 322, 335, 423; Katzew 2004:43). The culture and foodways of the Californios was that of the Northwestern frontier gente de razón.

---

[2]. Voss (2002:156, 2005) has advanced the thesis that gente de razón was a term adopted by settlers in California, and that in doing so they rejected the Spanish-imposed racially based sistema de castas and achieved a new identity as Californios. In fact, as noted by the authorities cited in the text, the term gente de razón was in use throughout Colonial Mexico long before the colonization of Alta California, and the Cultural Mestizo pioneers who later settled there already self-identified as gente de razón prior to their move north. The sistema de castas was used by and served the needs of the elites. The people of the cultural mestizaje did not identify with it. Its use was gradually discontinued in official records and replaced by the terms gente de razón and español throughout colonial Mexico, not just in California. Weber (1992:328) notes similar phenomena during the early nineteenth century in both California and Texas. Other scholars have documented comparable trends in Sonora, including present-day Arizona, and New Mexico (Darling and Eiselt 2017; Douglas and Graves 2017:8; Jenks 2017:215; Thiel 2017:316-317).

SAN DIEGO PRESIDIO HISTORY

By Stephen R. Van Wormer

Introduction

On July 16, 1769, the Franciscan priest Father Junípero Serra established on present-day Presidio Hill the settlement that became the San Diego Presidio as Mission San Diego de Alcalá. The local Kumeyaay Native Americans who lived there knew the area as Cosoy (Kosaˈaay). Until 1774 the force of soldiers at the Mission served under the command of the Presidio at Monterey. On January 1 of that year, the military camp at San Diego became Alta California's second Presidio. The founding garrison consisted of Lieutenant José Francisco de Ortega, one sergeant, two corporals, 22 soldiers, a storekeeper (habilitado), and two carpenters and two blacksmiths who worked at both the Presidio and the Mission. The following July the missionaries relocated approximately five miles to the east (Bancroft 1884:229; Engelhardt 1920:45; Mogilner 2016).

San Diego was one of four Presidios ultimately established in Alta California. The others included Monterey (1770), San Francisco (1776), and Santa Barbara (1782) (Whitehead 1983; Williams 2004:121). The form and design of the San Diego Presidio passed through several distinct stages between its founding as a mission in 1769 and its abandonment in 1837. During these 68 years the fortified community included soldiers and their families, craftsmen, Indian workers, prisoners, and others who settled in San Diego. It became one of the more important settlements in southern California, functioning as a major center of military and government administration and commercial activities. Population fluctuated over time but remained generally steady from the late 1770s until the 1820s, when people began to live outside the Presidio walls and

especially at the base of Presidio Hill around the plaza of the pueblo that would become Old Town San Diego (Williams 2004:122-123, 128).

Developed as frontier defense fortifications, Presidios were never intended to protect from invasions of large foreign armies or heavy naval bombardments[3] (Weber 2005:173-174; Callis 2020:50-51). Their troops guarded against hostile Native tribes and acted as a police force for the missionaries. This section will discuss the evolution of the Presidio as a Mexican Colonial institution on the northern frontier of New Spain, the physical and demographic evolution of the San Diego Presidio over the 68 years of its existence, and the role of women in daily life at the Presidio. Brief biographies of the commanding officers have also been included in order to highlight the life experiences of some of the individuals who served at San Diego. Separate discussions on the specific history of the Presidio Chapel, and the site's post abandonment will conclude the chapter.

Evolution of the Presidio as a Mexican Colonial Institution on the Northern Frontier of New Spain

> Believe me Your Reverence, for there to be missions there must be Presidios . . . . (Commander Fernando de Rivera y Moncada to Father President Junípero Serra, June 17, 1775, quoted in Wills 2015:173).
>
> For without the Presidios, the missionaries would not have been able to exist (Vallejo 1875:61).
>
> The old Presidios, it seems to me, are not less important for the collection of a scholar, than the missions; for those latter were the support of these former, and they marched along together from their foundation to their ruin (Mariano Guadalupe Vallejo to Edward S. Vischer, October 19, 1878, quoted in Ezell and Ezell 1986:197).

---

[3] Campbell (1972:583) states "repelling foreign seaborne invasions," were part of the California Presidios' purpose. This is incorrect. As stated in the text the Presidios' evolution and design was as a frontier facility for the purpose of controlling Native Americans. The Spanish built large multistory stone masonry fortifications in the Caribbean, South America, and elsewhere to protect from foreign invasion and naval attacks. The Presidios were never constructed adequately, located properly, or equipped to meet those needs (Calderón Quijano 1953; Weber 2005:173-174; Jackson 2021).

Beginning with its defeat of the Aztecs in 1521, the Spanish Empire engaged on an aggressive campaign of conquest to extend its colonial frontiers and established Spanish law, language, and culture among the tribes of her claimed American possessions. The Spaniards justified these actions on the mistaken, intolerant, and ethnocentric assumptions that Native Americans lived in unorganized settlements without law or religion. This policy subjected the Natives to unaccustomed labor regimes and disrupted family ties, social relationships, and cultural values, and more than anything else brought deadly epidemic diseases, which in many regions, especially the area of present-day costal Southern California, resulted in the physical and social decline of the aboriginal population (Heizer 1978:121 – 137).

Presidios, missions, and pueblos constituted the three main institutions the Spanish government used to colonize the frontier. Missions converted Indians to Catholicism and trained them in agriculture and various industrial arts. Their goal was to ultimately make the Natives citizens of the Spanish Empire. Pueblos provided locations for non-Native American civilians (known as gente de razón) to live. Fortified frontier military settlements for garrisons of horse-mounted troops and their families, the Presidios provided defense against hostile Native tribes and acted as a police force for the missionaries (Bolton 1917; Williams 1922; Christiansen 1969:29; Faulk 1969:22; Campbell 1972, 1974, 1977; Bannon 1979).

As Spaniards pushed northward from central Mexico during the sixteenth and seventeenth centuries, the Presidios evolved into the major frontier defense fortifications. They reached their ultimate importance and effectiveness during the closing decades of the eighteenth century. By 1773 fifteen establishments formed a line along the northern frontier from the Gulf of California to the Gulf of Mexico. In addition, Presidios in Baja and Alta California defended those regions. Regardless of location, these frontier fortifications followed similar overall designs and ground plans, housed horse mounted troops and their families, and faced similar problems of supply and isolation (Faulk and Brinckerhoff 1966; Christiansen 1969:30; Faulk 1969:23-24; 1971:27-29; Morehead 1969:39, 1975:3-26, 61-65; Campbell 1972, 1974, 1977; Langellier and Peterson 1981).

Usually laid out in a square or rectangle and built of adobe block and other locally available materials, these fortified settlements had outer defense walls around 10 feet high. Triangular bastions, usually on two diagonal corners, allowed defenders to fire along the length of all four walls. Inside were storerooms, quarters for officers, families, and unmarried soldiers, and a chapel (Faulk and Brinckerhoff 1966; Faulk 1969:23-24; 1971:27-29, 47; Morehead 1975:161-167). By the 1770s a typical garrison consisted of around 43 soldiers. After 1778 the number increased to seventy-three (Faulk and Brinckerhoff 1966; Faulk 1971:30, 50; Morehead 1975:182, 197). Officers usually included the commandant (commander), who often held the rank of capitán (captain) or teniente (lieutenant), an alférez (ensign), sargento (sergeant), and six cabos (corporals) (Mason 1978).

The common Presidio soldier, known as the soldado de cuera, made up the foundation of Colonial Mexico's northern frontier military forces. The soldados duties included defense from Indian attacks, military excursions against hostile tribes, exploration, general policing duties, aiding missionaries to scout out new mission locations, mission guard duty, protecting supply trains, carrying dispatches, and tending Presidio horse herds and other livestock. In California one of their main responsibilities was as mission guards. Escoletas (squadrons) of between 5 and 12 soldiers were always on duty at each of these establishments. For his personal use each trooper kept six horses and a mule (Vallejo 1875:63; Faulk and Brinckerhoff 1966; Christiansen 1969:36; Morehead 1969:38-42, 1975:178-184, 197; Faulk 1969:25, 1971:31, 48-50; Mason 1978:409).

Uniforms consisted of a short blue woolen cloth jacket, blue woolen pants, and a blue cloth cape (Christiansen 1969:36; Faulk 1969:25, 1971:53-61; Morehead 1969 43-44, 1975:185-186; Mason 1978:409; Williams 2004). According to historian William Mason, the full outfit included "Standard black hats and black silk scarves . . ., as well as blue jackets with red collars, cuffs, and lapels. Blue wool knee-length pants were trimmed on the sides with metal buttons." Loose leggings of deer hide, called botas,

covered underlying stockings by hanging from just below the knee to the ankle, touching the tops of the low-cut shoes (Mason 1978:409) (Figure 1). When on patrol, the soldado wore over his uniform a large, yellowish brown, sleeveless coat with the royal crest and sometimes the name of the Presidio embroidered on it. Made of six thicknesses of stitched deer hide, this cuera, for which the soldado de cuera was named, provided leather armor designed to stop arrows at point blank range. A small oval-shaped bullhide shield and leather coverings on the horses also aided in defense. Weapons consisted of a short carbine musket, two pistols, a sword, and a lance. Cartridges were carried in a case on a belt (Vallejo 1875:62-62; Faulk and Brinckerhoff 1966; Christiansen 1969:36; Faulk 1969:25, 1971:53-61; Morehead 1969 43-44, 1975:186-191; Mason 1978:409; Williams 2004) (Figure 2).

"All across the northern frontier of Mexico, from Texas to California, this uniform was worn with slight variation. Mounted on their horses, these soldiers were formidable antagonists" (Mason 1978:409) (Figure 3). Due to the Presidios' isolated locations and long distances from sources of supply, uniforms, weapons and other equipment were often worn out and in disrepair (Christiansen 1969:35-36; Morehead 1969:43, 1975:185). Combat ability frequently relied on the soldados' superior horsemanship. Many considered the skills of the vaquero (cowboy) to be the most useful for the duties and conflicts they encountered (Morehead 1969:42, 1975:195).

Presidio garrisons consisted largely of individuals recruited from the frontier. Although some officers were European Spaniards, most had been born and raised in the northern regions of Colonial Mexico and risen through the ranks. Many soldiers and officers were descended from multiple generation Presidio families. As with modern Mexican people, their ancestry included a mixture of Native American, African, and European origins. In spite of this racial diversity, over 200 years of mestizaje had made them culturally unified through a Mexican Colonial society that shared a common religion, language, dietary preferences and other customs. Self-identifying members of this common Mexican Colonial Culture were known as gente de razón (Morehead 1969:40-43, 1975:182; Faulk

1969:25, 1971:48; Casteneda 2000; Williams 2004:124). The nature of their cultural evolution is addressed in more detail in the chapters on Californio Cultural Origins and Californio Foodways.

Figure 1: Soldado de Cuera at Monterey Presidio 1791 (Soldado de Monterey. Ascribed to José Cardero; Public domain Museo de América, Madrid http://ceres.mcu.es/pages/ResultSearch?Museo=MAM&txtSimpleSearch=Soldado%20de%20Monterrey&simpleSearch=0&hipertextSearch=1&search=simple&MuseumsSearch=MAM|&MuseumsRolSearch=11&listaMuseos=[Museo%20de%20Am%E9rica]).

Figure 2: An 1804 Diagram of a Mounted Soldado de Cuera With His Full Set of Weaponry by Ramón Murillo (Archivo General de Indias, Seville: Mapas y Planos, Uniformes, 81; Wikipedia Commons). 1, the cuera; 2, wooden saddle frame front and back; 3, the carbine; 4, bag for water and provisions; 5, the lance; 6, pistols at the ready hanging from their hooks; 7, shield; 8, the botas (leggings), and the spurs; 9, the wooden stirrups; 10, the cartridge box.

Figure 3: Method of Fighting Indians in California (Modo de Pelear los Indios de California) by José Cardero 1791 (Museo Naval, Madrid public domain https://bibliotecavirtual.defensa.gob.es/BVMDefensa/pacifico/es/consulta/registro.do?control=BMDB20180176760 ; also available through Wikipedia Commons). Note the leather armor covering the horse's flanks.

Other military units also served at presidios along side Soldados de Cuera. Twenty-five Catalonian Volunteers were stationed at San Diego from 1796 to 1803 (Bancroft 1885a:101; Engelhardt 1920:148; Pourade 1961:119-120). Members of the Compañía Franca de Voluntarios de Cataluña (Free Company of Volunteers of Catalonia), these soldiers had been recruited in Spain to help defend the northern Mexican frontier (Sanchez 1990).[4] From 1796 until Mexican independence in 1821, members of the Royal Corps of Artillery manned cannon batteries, called castillos, at California's Presidio harbors. They maintained the guns at San Diego's Point Guijarros and the Presidio. Since these emplacements continued to operate after Mexican independence, and at least until the late 1820s, their personnel either continued to serve as members of the Mexican military or were replaced with Mexican army artillerymen (Bancroft 1884:651-653, 1885a:103; Pourade 1961:83-84, 96-97; Carmen Velázquez 1984; Williams 1997a:49; Williams and Davis 2006:51). In 1819 the Escuadrón de Mazatlán (Mazatlán Squadron), a 100-man company of cavalry under command of Captain Pablo de la Portilla, arrived to augment personnel at California's Presidios. Fifty-five were stationed at San Diego (Bancroft 1885a:253; Pourade 1961:172-173; Williams and Davis 2006:51).

San Diego Presidio's Physical and Demographic Evolution

From 1769 until 1774, San Diego Mission was the first and only colonial settlement on present day Presidio Hill. The first occupants built small wooden pole and stick thatched roofed huts, surrounded by a log palisade (Mason 1978:400; Williams 1997a:44, 2004:125). By 1773, fifty-six individuals had been assigned to Mission San Diego. Although military personnel made up the majority, this number also included muleteers, carpenters, a storekeeper, blacksmiths, and other civilian employees, and neophytes from

[4] From 1769 to 1774, a detachment of Catalonian Volunteers under the Command of Pedro Fages served in California and participated in the establishment of Mission San Diego and the Presidio at Monterey. While in California they were under the command of the Monterey garrison where Fages resided as commander and governor (Sanchez 1990:32-57).

Lower California. Only about 26 lived on site. Around 30 soldiers were stationed at other missions in the district (Engelhardt 1920:54; Williams 2004:122).

As already noted, the garrison at Mission San Diego was under the command of the Presidio at Monterey until January 1, 1774, when it became Alta California's second Presidio (Bancroft 1884: 229; Engelhardt 1920:45). At this time the complex consisted of buildings and a palisade of wood and adobe (Carrico 1972:1; Williams 1997a:44-45; 2004:125-126). Franciscan priest Father Palóu described the frontier settlement in November 1773, just two months before it became a royal Presidio and while the missionaries still resided there:

> Within the stockade is the church or chapel, constructed of poles and roofed with tules, as also the habitation of the two missionaries, having the requisite rooms partly of adobe and partly of wood and roofed with tules. Likewise, within the stockade, is a similar structure (jacal) that serves as the barracks for the soldier guards and as a storehouse for the supplies. For defensive purposes, within the stockade, are two cannon of bronze. One looks toward the port, and the other toward the Indian rancheria. On one side of the stockade, in the wall, is an opening for the foundations of a church thirty yards (varas) long. For this some stones and four thousand adobes have already been prepared. The foremen of the work are the Fathers, and the workmen are the neophytes (Engelhardt 1920:50).

Although Father Palóu described a settlement where missionaries, Spanish military personnel, and newly converted Indians lived together, this situation soon changed. As early as 1772 it had been suggested that the mission be separated from the military establishment. The move was approved on January 1, 1774, the same day that the settlement at San Diego officially became a royal Presidio. By August the mission had been relocated to what would ultimately become its permanent location approximately

five miles to the east. In November 1775, Tipai[5] Natives from villages south of the San Diego River attacked the mission and forced the religious component of the colony to return to the Presidio for a year until the new site could once again be reestablished (Mason 1978:405-407; Carrico 1997). With the final departure of the missionaries, the Royal Presidio of San Diego became strictly a military settlement occupied by soldiers, their families, and support personnel.

Following the Tipai revolt San Diego Presidio was substantially enlarged and strengthened. California's Governor and military commander, Fernando de Rivera y Moncada, ordered construction of a new complex closer in design to other fortified settlements on the northern frontier. An adobe defense wall enclosed a compound that measured 300 feet (120 varas) on each side. Inside, built against the back of the defense wall, adobe buildings included warehouses, the commander's house, troop barracks, a residence for visiting mission clergy, and individual homes for the blacksmith, quartermaster, and some civilian settlers. These structures had flat earthen roofs (azoteas) to better resist fires. A single bastion on one of the quadrangle corners stored gunpowder (Williams 1997a:45-46; 2004:125). In 1778 José Camacho, pilot of the San Blas packet boat *San Carlos*, recorded the following description of the complex as work neared completion:

> The said Presidio is shaped as a quadrangle made up on the west side with quarters of the troops; on the opposite side the house of the Lieutenant Commanding; on the north by three buildings of residents, and on the south by the guarded storehouse close to the various smaller storehouses in which there is kept supplies and goods of the king [government stores] kept locked in the quadrangle which leads only to a door and a portico.
>
> The strength of the Presidio consists of two cannons, of four pounders, one defending the open country to the north and the other to the south. The

---

[5] The Kumeyaay natives of present-day southern San Diego County were divided into two subgroups. The Ipai resided north of the San Diego River, and the Tipai occupied lands south of the same river (Luomala1978).

> Presidio wall is all of adobe, having many openings or portholes where one can fight without exposing the body to the enemy. The troops found at the Presidio work constantly in the various and repetitive jobs, which they are given (Camacho 1778).

In December 1777 personnel included Lieutenant José Francisco de Ortega, a sergeant, six corporals, and 48 privates. "Artisans, mechanics and other employees of the Presidio at the time were: carpenter Lorenzo de Esparza, muleteer Tadeo Rivera, storekeeper Rafael de Pedro y Gil, blacksmiths Antonio Sandoval and Felipe Romero, and two San Gabriel employees of Mission San Juan Capistrano, José Manuel Silvas and Isidro José Leal." Three years later, on January 1, 1780, the company roster included supply officer Pedro y Gill, one sergeant, five corporals, and forty-six soldiers (Mason 1978:409).

Although these numbers appear to be stable, they, in fact, included a lot of personnel turnover. Historian William Mason in his 1978 demographic study of the San Diego Garrison observed:

> Five of the men listed above can be traced back to the first list of 1770. These are José Ignacio Olivera, Guillermo Carrillo, Mariano Carrillo, Mariano Verdugo, Alejo Antonio Gonzales, and Agustín Castelo. There were other veterans of the 1769 expedition at San Diego in 1780 who had been elsewhere in 1770. These were José Francisco de Ortega, Antonio Cota, Juan José Domínguez, and Alejandro de Soto. Of those who had been at San Diego on January 1, 1775, eighteen men were on the list of 1780. In five years only one-third of the garrison still remained. There were several married men in the company, especially since the Anza Expedition had added some men and their families to San Diego. There had been few children at San Diego in 1775, but by 1780 there were

several at the Presidio and among the mission guard company's families (Mason 1978:411).

In 1781 lieutenant José Francisco Ortega, who had commanded the San Diego Garrison since its founding in 1774, left to establish and become commandant of the Presidio at Santa Barbara (Bancroft 1884:451). A brief biographical sketch of his life, along with the other San Diego Presidio commandants are included in this narrative in order to explore the ethnic and national origins of members of the Presidio's garrison and their career paths. All but one were natives of Mexico, and all served at multiple posts during their years of service.

A native of Celaya in the current Mexican State of Guanajuato, Ortega had enlisted in the Presidio Garrison of Loreto, Baja California, in October 1755, where he served 10 months as a private, two years and a half as a corporal, and fourteen and a half as sergeant. In 1758, he married Antonia Carrillo of Comondú Baja California. For a time, he left the military and served as an administrator (alcalde) for mining camps on the peninsula. In 1768, he reentered the Presidio service and took part in the 1769 overland expedition with Governor Portola and Father Junípero Serra to establish missions at San Diego and Monterey, and was among the first people of European descent to see San Francisco Bay. He returned to Loreto until 1774, when, at the urging of Junípero Serra he was promoted to lieutenant and given command of the San Diego Presidio, where he served for eight years while residing with his wife, Antonia Carrillo, and their two children, Ignacio and Luisa (Bancroft 1884:670-672; Mason 1978).

A native of Mexico City, San Diego's new commander, Lieutenant José de Zúñiga, had joined the military in 1772, at the age of 17, and fought in campaigns against the Apaches. In 1778 and 1779 he was promoted from corporal to ensign (alférez), and then to lieutenant in 1780. Two years later he became commander at San Diego, where he served from 1781 until 1792. He oversaw major construction projects and personally supervised the design and construction of a new chapel, where he helped decorate and paint the church walls (Bancroft 1884:645-646; Holterman 1956:1; Williams 2004:125; Ezell 2009:35).

Zúñiga's construction projects included a new freestanding outer wall with triangular bastions. Previously constructed buildings that had butted against the original defense wall now stood free and separated from it. The spaces between these structures and the new wall were divided with adobe partitions into a series of individual rear yards for the domestic quarters. The previously earth covered buildings were reroofed with ceramic tiles (Williams 2004:125).

Population numbers remained steady. Between 1781 and 1796 the garrison, including officers, numbered from slightly over 50 to just under 60 soldiers (Williams 2004:122).[6] In 1782 the roster included eight officers and 44 enlisted men. Of these 52, twenty-four were married, including five to Indian women from Alta California. In December 1784 listed personnel included one lieutenant, one ensign, one sergeant, four corporals, and 45 privates, as well as blacksmith Felipe Romero and carpenter Lorenzo Esparza. Over the years, the proportion of married men in the presidial companies increased steadily. "By 1790, out of fifty-seven men, thirty-seven were married, eighteen were single, and two were widowers. A total of sixty-seven percent were married in 1790, as compared with only forty-six percent in 1782" (Mason 1978:413). At any given time around half of the enlisted men had been assigned to escoletas at outposts within the district where they lived with their families (Williams 2004:122). These included six at each of the three missions in the district, San Diego, San Juan Capistrano, and San Gabriel, and four at the Pueblo of Los Angeles, which left the commanding officer, a sergeant, two corporals, and around 25 soldiers to garrison the fort, care for the horses and cattle, and carry the mails (Bancroft 1884:452; Mason 1978).

The district outposts continued to expand. By 1796 they included Dominican Mission San Miguel, situated 55 miles to the south in Baja California. The number of soldiers assigned to each station consisted of San Miguel, eight; San Diego, three; San Juan Capistrano, eight; San Gabriel, four; and el pueblo de Los Angeles, four. Mission San Luis Rey, added in 1798, had an escoleta of six, and a company of eight artillery served a

---

[6] Bancroft (1884:452) states: "The presidial force under these officers was by the regulation to be five corporals and forty-six soldiers, and the ranks never lacked more than three of being full."

gun battery built at the entrance to San Diego Bay on Punta Guijarros (Ballast Point) in 1797 (Bancroft 1884:651-652, 647-648; Pourade 1961:117).

The census for 1790 provides the best overall picture of demographics at the Presidio that has been discovered to date (Figures 4 - 6). Persons assigned to or living at San Diego totaled 190 (Mason 1978:419). The number of Mexican Colonials in Alta California at this time amounted to slightly more than 1,000, so the San Diego Presidio's population represented almost 20 percent of this total (Williams 2004:123). Ninety-six adults made up only slightly more than half of this number, so that in round numbers, the 94 children under 18 years of age constituted the other 50 percent of the population. Mexican born gente de razón (indentified by various casta terminologies) accounted for all but twelve of the adults.[7] Of the others, nine were Indians. Six of these were women, and two were from Baja California, so that the number of local Alta California Natives was only seven, or 3.68 percent of the total group. The three Europeans included two born in Spain and one from Belgium (Mason 1978:416).

Historian Jack Williams (2003:12) concluded:

> The 1790 census provides a picture of households that probably prevailed through the end of the Spanish era. Twenty of the single males quartered together in communal barracks. The remainder of the settlers formed thirty-seven households. The largest families, representing 16% of the population, consisted of couples with five children. Nearly 20% of the couples were childless. Only one of the households included more than one generation [of adults] (a mother's mother).

In May 1793 Lieutenant José de Zúñiga was promoted to Captain and reassigned to command the Tucson Presidio in northern Sonora (present day Arizona). He remained in

[7] Mason 1978:419 noted "Among the adults forty-nine were listed as españoles, of whom three were europeos, that is people born in Europe; two were from Spain, one a Belgian. There were twenty-five mulatos and colores quebrados, that is, people with some degree of African ancestry who made up about a quarter of the adults. There were only two mestizos; seven were classed as coyotes, in California usually meaning persons of one-quarter Spanish ancestry, and either three-quarters Indian, or half Indian and one-quarter black."

charge at San Diego until October 1793, while waiting the arrival of his successor, Lieutenant Antonio Grajera, who assumed the offices of comandante and habilitado on the nineteenth of that month. In November, while Zúñiga prepared for departure, the first foreign vessels not of the Spanish Empire to visit the port arrived. On November 27 the *Discovery*, *Chatham* and *Daedalus*, under command of British explorer George Vancouver, dropped anchor near Punta Guijarros at the mouth of San Diego Bay (Figure 7) (Vancouver 1801:358; Bancroft 1884:645; Holterman 1956:2; Pourade 1961:78-79). Following a gracious invitation from Grajera, Vancouver called on the Presidio the following day:

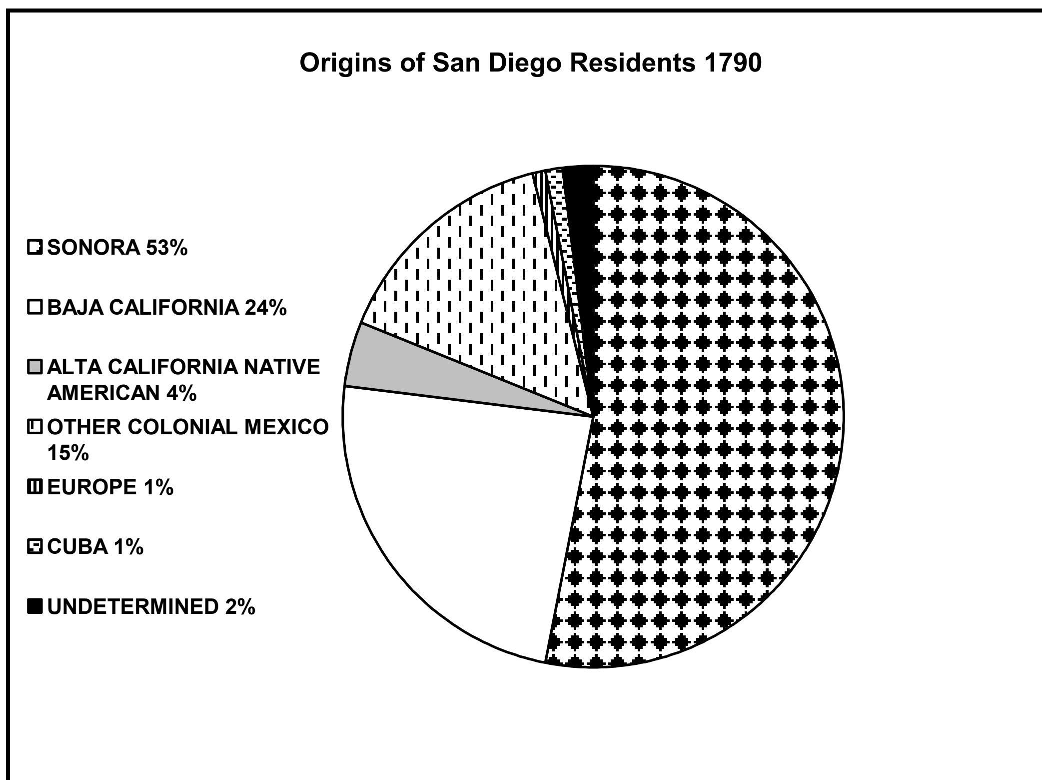


Figure 4: By far the Majority of Presidio Inhabitants in 1790 had come From Somewhere in Colonial Mexico. Most originated in the neighboring frontier provinces of Sonora and Baja California (After Williams 2003:7; based on Mason 1978:415-419, 1998).

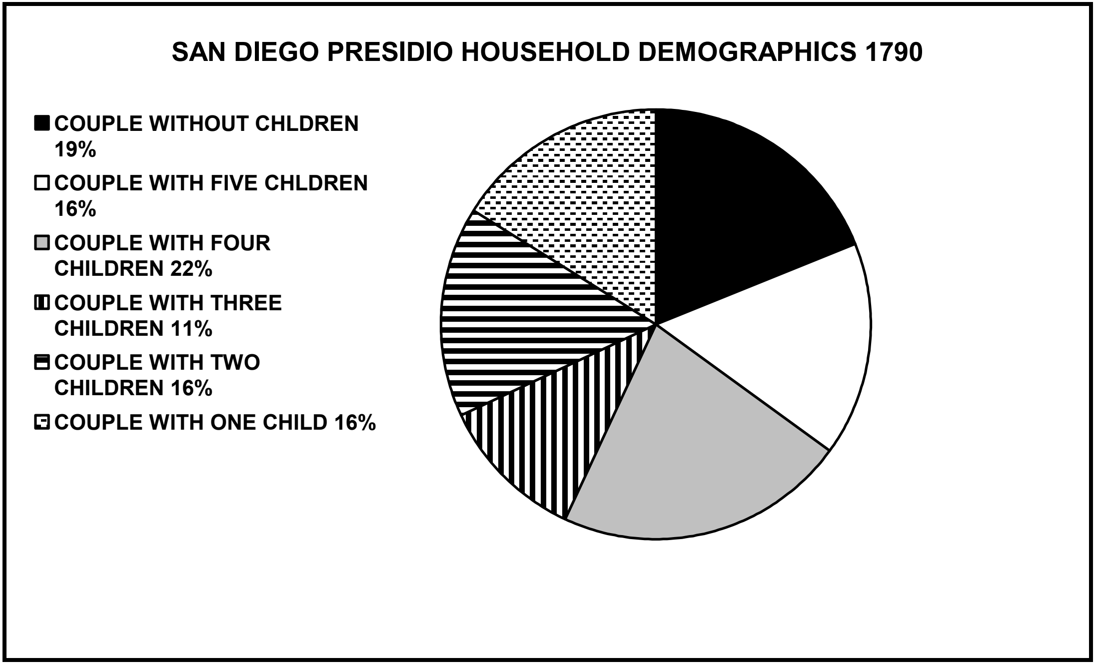


Figure 5: San Diego Presidio Household Make Up in 1790 (After Williams 2003:13; based on Mason 1978:415-419, 1998).

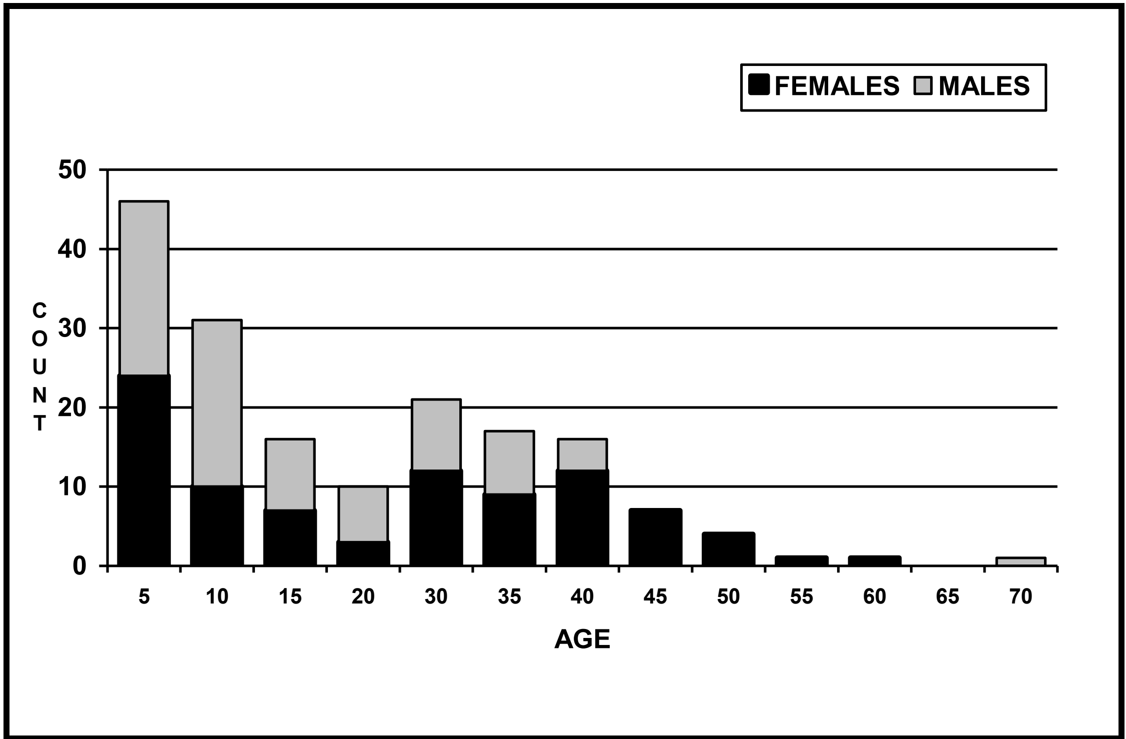


Figure 6: San Diego Presidio Residents' Ages in 1790 by Five Year Increments (After Williams 2003:13; based on Mason 1978:415-419, 1998).

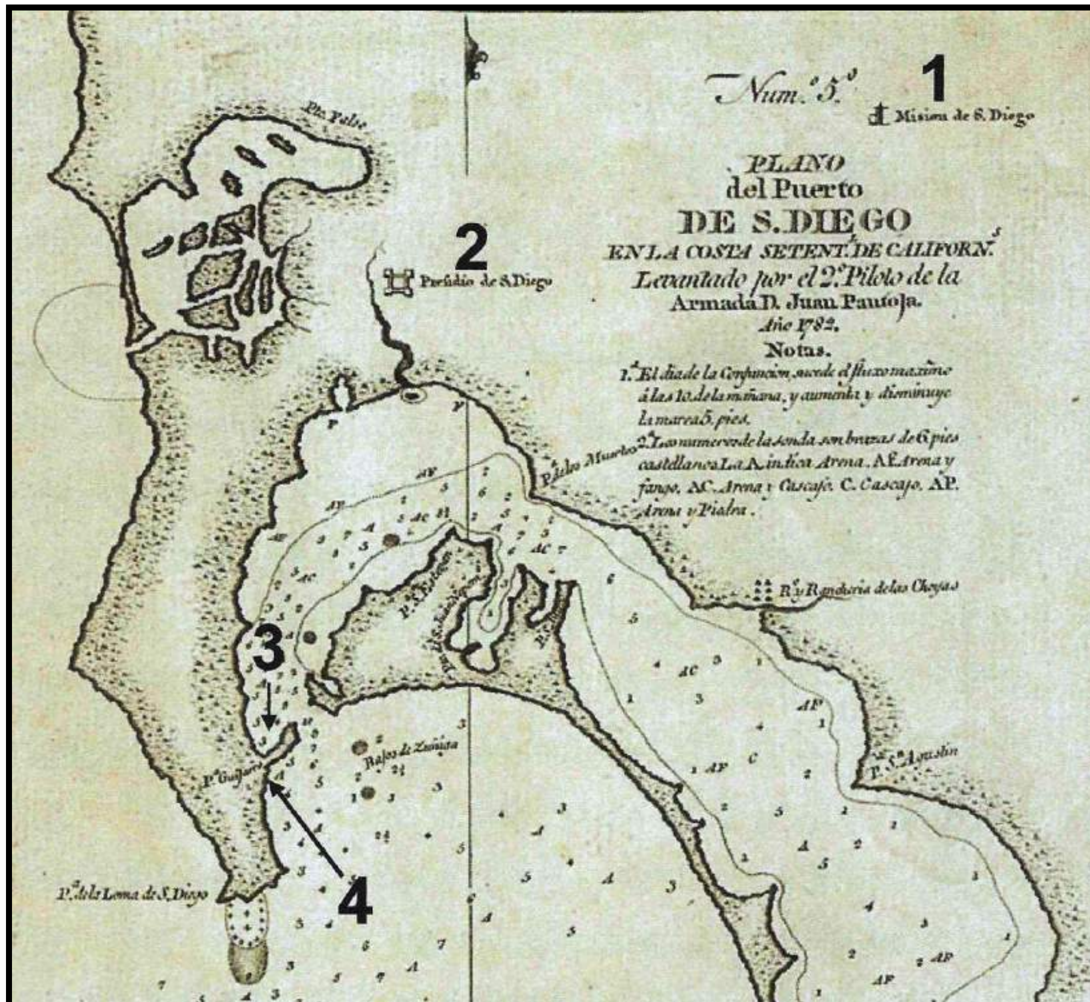


Figure 7: 1782 Map of San Diego Bay by Pantoja ("1782 - Plano del Puerto de S. Diego" [2017]. *Pre-1824 Maps*. 44. https://digitalcommons.csumb.edu/hornbeck_spa_1_a/44). Locations include: (1) San Diego Mission, (2) San Diego Presidio, (3) the anchorage at La Playa on the north side of Punta Guijarros, and (4) the future site of the 1797 gun battery El Castillo de San Joaquín on the south side of Punta Guijarros.

> This visit, accordingly took place, accompanied by Lts. Puget and Hanson. On landing we found horses in waiting for us, on which we rode up to the Presidio, where we were received with that politeness and hospitality we had reason to expect from the liberal behavior of the commandant on the preceding evening. His friendly offers were immediately renewed, and were accompanied by similar assurances of assistance from Señor Don Zúñiga, the former commandant, who had recently been promoted to the rank of captain of infantry, and appointed to the charge of an important post on the opposite side of the Gulf of California, for which he was then preparing to depart (Vancouver 1801:360-361; Pourade 1961:79).

The expedition's botanist, Archibald Menzies, described their entrance into the brown adobe walled compound:

> When we arrived at the Presidio we were met on the outside of the gate by the Commandant and Capt. Zúñiga and the Guard was under arms to receive Lt. Puget as commander of the *Chatham*. We were conducted to the Commandant's house which is on the opposite side of the area facing the gate and we must do him credit to say that it is on the whole a much neater dwelling than any we saw at the Northern Settlements, but the soldiers' barracks which are arranged contiguous to the wall round the square are wretched hovels. The church is in the middle of one side of the square and though but small is neatly finished and kept exceedingly clean and in good order, but the Presidio in general we conceived much inferior in point of situation, regularity, and cleanliness to that of Sta. Barbara though the latter is more infant a settlement. This is situated on the western declivity of a rugged eminence and guarded only by three guns mounted in carriages before the entrance (Menzies 1793:334; Pourade 1961:79-81).

Three months before Vancouver’s arrival, in August 1793, California’s Governor Diego de Borica had reported similar structural conditions to those noted by the English visitors. Even though $1,200 had been spent on repairs, structures along three sides of the Presidio’s walls were run down owing to the bad quality of the wood used in the roofs. The warehouse, church, and officers' houses forming the fourth side of the square remained in good condition (Bancroft 1884:651; Pourade 1961:84).

The descriptions by Menzies and Borcia comment on a pattern of maintenance that was echoed by other observers of the Presidio through the decades. The church and officers’ quarters tended to be well kept up, while the soldiers’ habitations seemed often to be run down. It appears to have been common practice to keep the Chapel and officers’ dwellings in good condition, while giving less attention to the homes of soldiers and their families. This probably reflects the Presidio social order and elevated status of officers and clergy over enlisted men, and the high esteem with which the community regarded the Chapel (Carrico 1972:5-10).

The degraded appearance of those sections of the settlement that did not receive the highest maintenance priorities resulted from the nature of adobe structures and the site’s location. Adobe construction is vulnerable to the elements and requires constant repair. Roofs and exterior wall coatings of mud plaster needed to be regularly maintained. The inability to keep many of the structures coated with fresh plaster and covered with immaculately-kept-up roofs, combined with erosion at the base of the walls, and the small size of the typical family’s living quarters, resulted in many of the buildings appearing as rundown hovels, especially to foreign visitors unfamiliar with the typical look of this architectural style (Figures 8 - 9). In addition, the Presidio’s location exacerbated architectural deterioration. The compound stood on a hill with a rather sharp northwesterly descending incline, so that the base of the corner formed by the southern and western defense walls was approximately 60 feet lower than that of the high corner at the junction of the southern and eastern exterior walls. The same steep grade continued beyond the Presidio for another almost 40 feet in elevation to the top of Presidio Hill. During winter storms sheet wash from rainwater flowing down these barren slopes

caused severe structural damage as it eroded the bases of adobe walls on the interior and exterior of the Presidio. The location also left the buildings exposed to strong winds, which, combined with winter rains, knocked down walls and took off roof tiles (Rodríguez 1802 quoted in Pourade 1961:85-86).

Vancouver stayed for 12 days. Zúñiga and Commandant Grajera visited the *Daedalus* and lunched on the *Discovery*. Menzies remarked, "They were both remarkably pleasant and intelligent men and seemed very partial to our little convivial parties" (Menzies 1793:337; Pourade 1961:79-81).

Assessing the lack of preparedness of San Diego's military to withstand an attack from foreign forces, which was never its intended purpose, Vancouver remarked:

> The Presidio of San Diego seemed to be the least of the Spanish establishments with which we were acquainted. It is irregularly built, on very uneven ground, which makes it liable to some inconveniences, without the obvious appearance of any object for selecting such a spot. The situation of it is dreary and lonesome, in the midst of a barren uncultivated country, producing so little herbage that, excepting in the spring months, their cattle are sent to the distance of 20 or 30 miles for pasturage.
>
> With a little difficulty St. Diego might be rendered a place of considerable strength, by establishing a small force at the entrance of the port; where at this time there were neither works, guns, houses, or other habitations nearer than the Presidio, five miles from the port, and where they have only three small pieces of brass cannon (Vancouver 1801:412; Bancroft 1884:650-651; Pourade 1961:79-81).

Figure 8: An Illustration of How Quickly Adobe Buildings Can Obtain an Unkempt Appearance. The peeling plaster on the Machado-Stewart House (left) and the Rodriguez Adobe (right) in Old Town San Diego State Historic Park are the results of heavy winter and spring rains in 2023. These buildings are constantly maintained by California State Parks (Photograph by Stephen R. Van Wormer).

Figure 9: 1884 Photograph of the Teodoro Arrellanes Adobe in Santa Barbara. This image illustrates what can happen if constantly peeling plaster, as illustrated in the previous figure, along with erosional deterioration at the base of the walls caused by water seeping up through the blocks from the ground, is not repaired. The result is the perceived unkempt appearance of adobe buildings to observers not accustomed to the characteristics of adobe architecture (California State Library; https://delivery.library.ca.gov:8443/delivery/DeliveryManagerServlet?dps_pid=IE210737).

He had to conclude, however, that California's Presidio garrisons succeeded in their intended objectives in that the Spanish monarchy:

> . . . retains this extent of country under its authority by a force that, had we not been eyewitnesses of its insignificance in many instances, we should hardly have given credit to the possibility of so small a body of men keeping in awe, and under subjection, the natives of this country, without resorting to harsh or unjustifiable measures (Vancouver 1801:409; Pourade 1961:82).
>
> These soldiers are all very expert horsemen, and, so far as their numbers extend, are well qualified to support themselves against any domestic insurrection; but are totally incapable of making any resistance against a foreign invasion (Vancouver 1801:410; Pourade 1961:82).

During the late 1790s building and repair projects continued. In 1795 the south side of Punta Guijarros (Ballast Point), at the entrance of San Diego Bay was chosen for a gun battery. Known as castillos, these small emplacements eventually fortified all four California Presidio harbors including San Francisco, Monterey, Santa Barbara, and San Diego. El Castillo de San Joaquín, an adobe and wood emplacement on a massive cobblestone foundation completed on Point Guijarros in 1797 held 10 cannon. During its construction the Presidio of Monterey provided timbers, and Santa Barbara axle trees [8] and wheels for 10 carretas that hauled adobes and ladrillo tiles from the Presidio to the bay shore, where a flat boat carried the materials to the site. Twice the guns saw action against foreign smugglers. In March 1803 they inflicted substantial damage to the Yankee ship *Lelia Byrd* under Captain Cleveland. For many years after that no other smugglers dared attempt to run contraband in or out of San Diego Bay. Another incident occurred in 1828, when the battery exchanged shots with the ship *Franklin* under similar

---

[8] An axle tree is defined as a fixed bar or beam with bearings at its ends on which wheels (as of a cart) revolve (https://www.merriam-webster.com/dictionary/axle).

circumstances (Bancroft 1884:651-653, 1885:103; Pourade 1961:83-84, 96-97; Carmen Velázquez 1984; Williams 1997a:49; May 2005).

Twenty-five Catalonian Volunteers arrived in 1796. Lumber shipped down from Monterey that same year was used in projects at the Presidio. On November 8, 1798, an artillery salute and blessing by the friars dedicated newly completed quarters for the Catalonians and a wood and earth gun battery located along the fort's north or west side.[9] The cannon emplacement included a powder magazine and wooden esplanade. No other major alterations occurred for several decades. Deterioration from weather and other natural forces continued to necessitate maintenance and repair projects (Bancroft 1884:651; Pourade 1961:84; Williams 1997a:49, 2004:126-127).

In the closing years of the 1790s, officers and enlisted men including the blacksmith and carpenter numbered fifty-seven. An augmentation of six artillerymen and the 25 Catalonian Volunteers brought the total number of military personnel to ninety. Of these around 30 served the usual assignments at the battery on Punta Guijarros, and the five missions within the district. Residents within the actual Presidio walls numbered 160 (Bancroft 1884:647-648; Engelhardt 1920:177). During these years a primary school held classes at the Presidio. In 1795 retired Sergeant Don Manuel de Vargas taught the students. On September 29, twenty-two pupils attended. The troops and families paid his salary of 100 pesos (Engelhardt 1920:148; Pourade 1961:119-120).

In 1798, the Presidio's population numbered 179 permanent residents. The 175 gente de razón[10] included 70 men, 32 women, and 77 children. Four Native Americans consisted of two adult men and two boys. An additional 120 gente de razón resided at the district's five missions and included 42 men, 26 women, and 51 children (Rodríguez 1798).

---

[9] The location of this battery is not precisely known. Smythe (1908:Figure 3) placed it on the north slope below the main defense wall on a portion of the hill that was excavated away in the 1870s to build a dike along the San Diego River. He based this on communications with local elders who recalled its location. Williams (1997:31, 2004:121,126) places the battery along the western defense wall on the north side of the main gate. The most current interpretation by the San Diego History Center (2018) places it below the western defense wall down slope from the main gate.

[10] Describd as "Españoles y otras castas" (Rodríguez 1798).

Following Zúñiga's departure, Lieutenant Antonio Grajera served as commandant at San Diego for six years. "He was an able and faithful man, who performed his official duties to the satisfaction of all . . .." His "private and social record," however was less favorable (Bancroft 1884:646). He had scandalous liaisons with Presidio women and drank excessively, which ultimately ruined his physical and mental health, resulting in his resignation in August 1799. The leave became permanent when he died two years later on a voyage to Mexico (Bancroft 1884:646; Pourade 1961:85).

Upon Grajeras' retirement in August 1799, Alférez (Ensign) Manuel Rodríguez became commandant. Promoted to Lieutenant in 1801, in 1802 he reported on wind and rain damage caused by the Presidio's exposed position. His recommendation for relocation was ignored. He had more than one encounter with Yankee smugglers, including the 1803 firing on the *Leila Byrd* by the battery at Fort Guijarros. Rodríguez remained in charge at San Diego until 1806 (Bancroft 1884:647). Ensign Francisco María Ruíz served as temporary commandant until the end of 1807 when Captain Raimundo Carrillo filled the position. Both Ruíz and Carrillo had served previously at Santa Barbara (Bancroft 1884:99-100; Pourade 1961:81).

During the early decades of the nineteenth century the fort appeared much as it had when described by Vancouver, and constituted a quadrangle enclosed by an adobe wall with the entrance on the west side. The commandant's house stood in the center of the complex, with troops' quarters and the guardhouse located along the west and north walls, and officers' quarters along the east wall. The Chapel Complex and Cemetery were along the southern wall (Figure 10) (Ezell 1976; Whitehead 1983; Ezell and Ezell 1986).

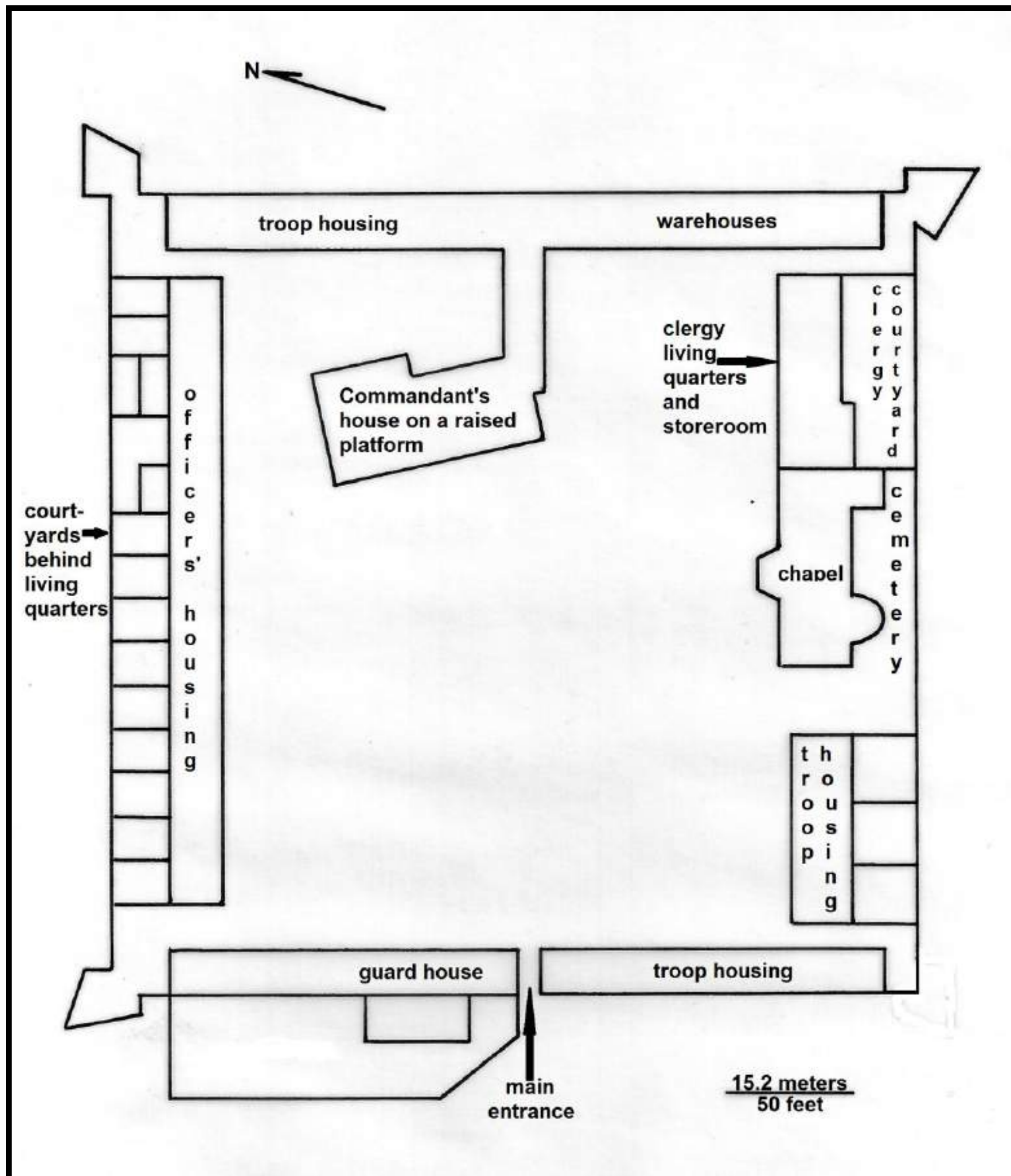


Figure 10: Ground Plan of the San Diego Presidio circa 1790-1820 (Drawn by Stephen R. Van Wormer and Susan D. Walter. After Smythe 1908:83; Whitehead 1983; Ezell and Ezell 1986; Williams 1997a:31, 46-50; and San Diego History Center 2018).

The number of personnel fluctuated slightly. In 1803 the company of 25 Catalonian Volunteers left. In 1806, the viceroy shifted responsibility for San Miguel Mission from the San Diego District to that of Loreto. Five men were consequently transferred to that

Baja California Presidio. After 1805, eighteen local Californio recruits from Los Angeles and surrounding ranchos joined San Diego's force. The garrison in 1810 numbered around eighty. With 25 assigned to the four missions of the district, and four to five artillerymen at Point Guijarros, around 50 resided at the Presidio with their families (Bancroft 1885a:101). This doubled the average of 25 that had been on duty in the 1780s.

The wars for Mexican Independence from 1810 to 1821 completely disrupted government support of California, forcing the province's inhabitants to become almost completely self-sufficient financially, and totally dependent on both legal and contraband commercial avenues of trade for merchandise not produced locally. With the outbreak of revolution Spanish maintenance for California ended. During the following decade almost no government supplies were sent, and the troops and officers went unpaid (Bancroft 1885a:251, 343; Killea 1975:2129; Francis 1976:334; Duggan 2004:45, 59). Lack of royal administrative support made Alta California dependent on private merchant ships from Colonial Mexico, Panama, and Peru, and trade with craft registered in Spanish-American colonies became the norm (Archibald 1978:123-124; Hackel 1997:129; Trejo Barajas 2006b:721-722; Bonialian 2017:23-26; Trejo Barajas and Duggan 2018:42-43). The period also saw contraband trade by English and Boston ships and some Russian vessels grow in importance (Archibald 1978:123-125). Missions and pueblos provided food and manufactured items. Essentially, produce from the labor of Mission Indians made up the deficit caused by the cessation of government military funding (Bancroft 1885a:343; Hackel 1997:129; Duggan 2016:63-65, 69-70) (See the following chapter on Trade and Economics).

One major exception to the lack of government support was the arrival in September 1819 of the Escuadrón de Mazatlán (Mazatlán Squadron). This 100-man company of cavalry under command of Captain Pablo de la Portilla came well armed with muskets, bayonets, and $10,000 in cash to defray expenses, a remarkable achievement and exception to the general neglect from royal administrators during the decade. Within a

few weeks of their arrival these troops were assigned to all four California Presidios. Fifty-five remained at San Diego (Bancroft 1885a:253; Pourade 1961:172-173).

At San Diego, Lieutenant Francisco María Ruíz had assumed command in November 1809, following the death of Captain Carrillo, and served as the Presidio's acting commander for most of the following decade. He was temporarily relieved by Lieutenant José María Estudillo of Monterey, on October 23, 1820, whose tenure was short. Estudillo transferred to take command of Santa Barbara, in June 1821, following accusations of neglect and cruelty toward San Diego's troops by Santiago Argüello. Ruíz resumed command in September of that year (Bancroft 1885a:340, 542, 640).

Up until the end of 1819 the Presidio company had 77 men on active duty, which included two officers, 69 soldiers, four artillerymen and two "mechanics." Twenty-five served at district outposts, and 52 resided in the Presidio with their families. The total number of Presidio residents totaled 247, which included 130 males and 117 females. Conditions became even more cramped before the end of the year with the addition of the 55 enlisted men from the Mazatlán Squadron under Pablo de la Portilla. This brought the number of inhabitants up to 352. Undoubtedly the increase in population created intense pressure for many to live outside the Presidio walls, which lead to establishment of the Pueblo of San Diego (now Old Town San Diego) at the foot of Presidio Hill during the next decade. In spite of repair efforts, buildings suffered from the usual deterioration because of their exposed condition on the hill. In 1817 California's Governor Sola echoed earlier sentiments on the difficulty of proper maintenance, and once again recommended that the Presidio be moved to another site. This, however, did not come to pass (Bancroft 1885a:341-342; Pourade 1961:125).

During the decade from 1820 to 1830 dramatic changes occurred at San Diego's Presidio. Mexican Independence in 1821 eliminated previous Spanish mercantilist restrictions on commerce and opened the coast to free foreign trade, resulting in San Diego's harbor becoming one of the major trading ports on the coast (See the following chapter on Trade and Economics). Most people lived outside the defense walls as the population grew

dramatically to over 500, and, for the first time, included a substantial number of Native Americans. During the last half of the decade California Territorial Governor José María Echeandía and his associated cabinet lived at the Presidio, making it a center of political and economic activity with a concentration of people of elite status residing there. Finally, a number of foreigners, which included Boston and French traders, visited and left written descriptions of San Diego, providing several first-person views of the settlement.

Many transformations resulted from Mexico's separation from the Spanish Empire. Although the wars for independence lasted for over a decade, when it happened the end of imperial rule came suddenly. On September 24, 1821, Spanish representatives signed the Treaty of Córdoba recognizing Mexican sovereignty. Three days later, on September 27, the Mexican army, known as El Ejército de las Tres Garantías (Army of the Three Guarantees), entered Mexico City and proclaimed independence, ending over a decade of civil war. The transition from imperial colony to a province of an independent nation occurred in Alta California in the spring of 1822. On April 11, the territory's military commanders met at Monterey where Governor Sola led them in an oath of allegiance to the Mexican Government. Lieutenant José María Estudillo represented the San Diego Garrison. Nine days later, on April 20, a government agent administered the same oath at San Diego to the Presidio soldiers and Franciscan missionaries (Bancroft 1885a:451-452, 550; Pourade 1961:130-131).

Mexican Independence initiated establishment of expanded trade on a stable, regular basis. The newly founded government opened ports on the west coast, including Monterey and San Diego, to foreign commercial exchanges. Now, for the first time, commerce with Alta California by nations other than Spain or Spanish Colonies was legal. This ushered in the era of the Hide and Tallow trade in which foreign and Mexican based ships exchanged manufactured goods for cattle hides and tallow produced in California. San Diego played a pivotal role in hide and tallow collecting operations. Boston, Mexican based, and other coastal trade ships constructed and maintained storage depots, commonly called "almacenes de deposito" or "hide houses," at La Playa near the

mouth of San Diego Bay (Arnaz 1878:5) (Figure 11). After trading along the coast, ships returned and off-loaded tallow and hides, the latter to be cured by a crew who resided at the hide house. The vessels then continued back north along the coast, returning to deposit another batch when enough product had been collected (See the following chapter on Trade and Economics) (Dana 1840, 1869; Phelps 1840; Arnaz 1878:7; Ogden 1929:292-293, 304-305; Dallas 1955:163-183; Pourade 1961:209-226).

During this same time, families began to build homes and live permanently outside the Presidio compound, moving down the hill to a terrace formed by a bend in the San Diego River. Prior to this, individual family garden plots had been cultivated in Mission and Soledad Valleys (Aguilar 1874).[11] Although small wattle and daub or brush jacales were undoubtedly constructed as temporary shelters in association with these plots, there is no record of permanent adobe dwellings outside the Presidio walls until around 1821. Between 1825 and 1830, a plaza was formally laid out as the nucleus for what is now Old Town San Diego (*San Diego Weekly Union* 26 July 1876; Bancroft 1885a:546; Padilla-Corona 1997). This pueblo was not self governing nor politically separated from the Presidio. Those living outside the walls remained under military rule of the commander and all, including those residing within the defense walls as well as those who lived outside their parameters, were considered Presidio residents (Bancroft 1885b:615; Killea 1966).

In 1821, the garrison had 69 members, 41 of which had families. A few years later, 35 soldiers lived at the Presidio with 30 at district outposts that included five at San Diego Mission, six at San Juan Capistrano, eight at San Luis Rey, and 11 at San Gabriel (Figure 12)(Bancroft 1885a:544-545). The battery on Punta Guijarros still functioned, so it can be assumed that in addition four to five members of the artillery company served there.

---

[11] In an 1874 interview published in the *San Diego Union*, Blas Aguilar, who had been born at the San Diego Presidio in 1811, provided information concerning cultivation in Mission Valley prior to 1824. Ignacio Lopez had an agricultural plot in Mission Valley. Solders who had little patches scattered around the mouth of Mission Valley included: Igancio Lopez, Villalobo, Miguel Blanco, Pedro Gracia, Tenorio, José Manuel Silvas, and Andrés Ybarra. Others included Doña Rafaela Serano, Juan Machado, Juan Ybarra, El Ensign Delagdo, Luz Ruíz, Juan Marine, Los Areias, and Santiago Argüello. Captain Francisco María Ruíz had an orchard with a variety of fruit trees where the Presidio Hills Golf course is now located. Two large date palms that grew at the foot of Presidio Hill (later christened the Serra Palms) were "within a large garden that was cultivated every year by some of the officers of the garrison; it had pomegranates and other trees, tuñas de Castillo, and various fruits and vegetables" (*San Diego Union* 2 July 1874:3).

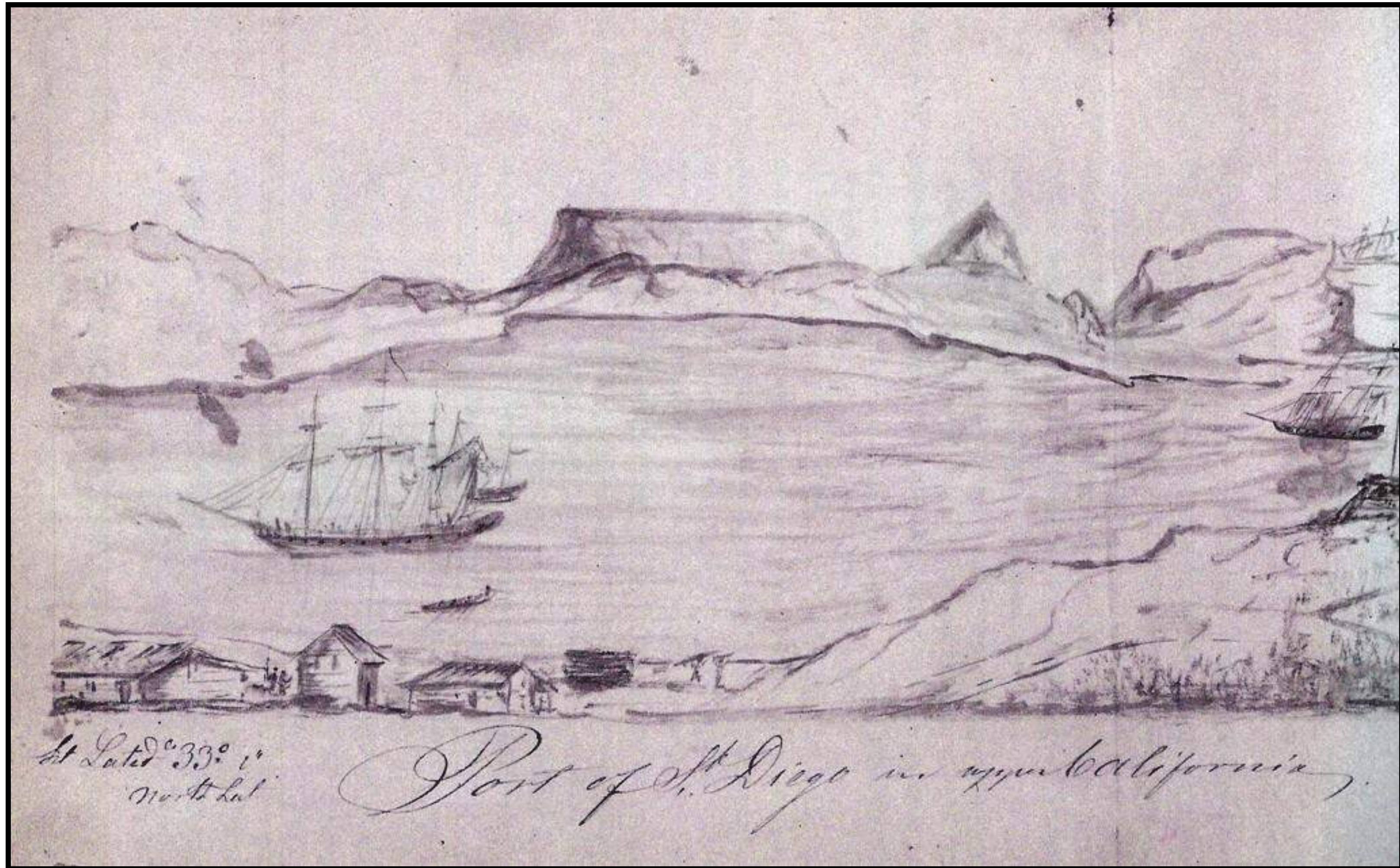


Figure 11: The Hide Houses at La Playa 1842 –1843 (Sandels 1843:52-53). This view is from the bay side of Point Loma, looking south across La Playa and the hide houses toward the south end of San Diego Bay. The edge of Fort Guijarros can be seen at the lower right corner of the sketch. A ship is entering the harbor in front of the fort and another lies at anchor in front of the hide houses.

Figure 12: San Diego Presidio District 1823 ("1823 - Carta esferica de los territorios de la alta y baja Californias y estado de Sonora from US Library of Congress." [2017]. Pre-1824 Maps. 7. https://digitalcommons.csumb.edu/hornbeck_spa_1_a/7). Locations include: (1) San Diego Presidio, (2) Mission San Diego, (3) San Luis Rey Mission, (4) Mission San Juan Capistrano, and, (5) San Gabriel Mission. Although originally under the Jurisdiction of the San Diego Presidio, by this time Los Angeles (6) and Mission San Miguel (7) in Baja California were no longer part of the San Diego District.

Beginning in 1825 Governor (Jefe Politico and Comandante General) José María Echeandía, preferring Southern California's climate to that of Monterey, resided at San Diego, along with his cabinet, which included his secretary Ensign Agustín V. Zamorano, Captain Pablo de Portilla of the Mazatlán Squadron, and Lieutenant Juan M. Ibarra, along with two scribes and eight servants. Padre Antonio Mendez, a Dominican, also accompanied the Governor. He lived in the Presidio as a permanent residential Chaplain, and taught school. In 1829, 18 students attended his classes (Vallejo 1875 I:351; Bancroft 1885a:543-544, 548; Engelhardt 1920:205, 224-225, 327; Pourade 1961:193). These gentlemen, combined with the regular garrison officers' corps, which included Captain Francisco María Ruíz, Lieutenant José María Estudillo, Ensign Santiago Argüello, Habilitado Domingo Carrillo, Sergeants José Gongora, Pedro Lobo, and José Antonio Pico, along with others of higher rank, constituted a concentration of elite status individuals associated with the Presidio at this period (Bancroft 1885a:543-544, 548).

Francisco María Ruíz served as San Diego Presidio commandant for almost 20 years. As a Lieutenant he was Acting Commandant between 1809 and 1820. He received his promotion to Captain in September 1821, when he resumed command of the San Diego Garrison (Bancroft 1885a:539), fulfilling his duties until he retired in 1827 at the age of 73. The career of Francisco María Ruíz typifies that of soldiers from multigenerational soldado de cuera families that lived in frontier Presidios. His father served in the Loreto Garrison, where Francisco had been born in 1754. His mother, Isabel Carrillo, was also a descendant of a frontier presidio family. Educated by Jesuit missionaries, Francisco enlisted in the Loreto Garrison in 1780. He transferred to Alta California and in 1795 became a sergeant of the Santa Barbara Presidio. In 1801 he was promoted to ensign and at the end of 1805 became a lieutenant. He served as acting commandant at San Diego from 1806 until 1807, and then, as discussed above, resumed command in 1809 and served until he retired in 1827, with the exception of 11 months in 1820 and 1821 when Estudillo held the position (Bancroft 1885a:542-543).

Ruíz planted an orchard on the flat below Presidio Hill that is now occupied by the Presidio Hills Golf Course, and built one of the first adobe homes outside the Presidio

around 1821. It still stands and is used as the golf course club house. In 1823 he was granted Rancho Peñasquitos. His original house at that place also still exists. In the late nineteenth century it was incorporated into the much larger Peñasquitos Ranch House (Bancroft 1885a:542-543; Hector and Van Wormer 1985; Christenson et al. 2016).

Given the length of his career, it is not surprising that Francisco María's record contained incidents of both questionable and honorable conduct. Soon after his arrival at Santa Barbara he was arrested for offensive language to a private. In 1806, when first serving as acting commander of San Diego, he had a serious physical altercation with José de La Guerra y Noriega. His suspension from duty for eleven months, from October 1820 until September 1821, resulted from a charge of drunkenness and other "irregularities." Ruíz denied the charges, and claimed they stemmed from personal animosity that Pablo de la Portilla held against him. He was earnest enough in his defense that Governor Sola restored his command (Bancroft 1885a:542-543).

On the more honorable side, Ruíz's almost 20 years as commandant is in itself testimony to his superior leadership abilities. He was held in high enough esteem by the Franciscan missionaries that in 1813 they asked him to stand as padrino (Godfather) for the dedication ceremony of a newly completed Church at San Diego Mission (Bancroft 1885a:542-543; Engelhard 1920:160-161). An 1816 recommendation for promotion stated of Francisco María Ruíz:

> This is an old American. One of the few true men met with in America or the world. He may have some faults as all men have, but all are outweighed in the balance by his natural honesty; by the justice that in the midst of his great popularity with his soldiers he deals out so as to make himself respected by all; and by his unbounded love for Fernando VII our monarch, in whose honor he often assembles his soldiers, ordering them to play, dance, drink, and shout Viva Spain! Viva Fernando VII, long live the Governor! Viva! Viva! Viva-a-a-a!' (Bancroft 1885a:542-543).

Following Independence, he was "as enthusiastically loyal" to the Mexican nation. Captain Ruíz lived to be over 80 years old and died in August 1839 in his house that still stands at the foot of Presidio Hill (Bancroft 1885a:542-543; Hayes 1929:301-302).

Upon Ruíz's retirement Lieutenant José María Estudillo took command at San Diego and received his promotion to Captain at the end of 1827. His tenure was short, however. He died on April 8, 1830, and was buried the next day in the Presidio chapel. Lieutenant Santiago Argüello took command following Estudillo's death (Bancroft 1885a:539-540; Pourade 1961:178-179).

José María Estudillo's career is an interesting contrast to that of Francisco María Ruíz. His background was less typical of those of most soldados de cuera at frontier garrisons. As a European born Spaniard, he was exceptional in his origins, and not a descendent of multigenerational frontier military families. Born in or near Andalucía, Spain in 1772, José María came to Colonial Mexico in 1787, at fifteen years of age. In 1796 he enlisted in the garrison of the presidio at Loreto Baja California. In 1806 he achieved the rank of ensign and transferred to Monterey. By the end of that year he had been promoted to Lieutenant and "kept the lieutenancy of the Monterey Company for more than 20 years," serving much of the time as commandant of that Presidio. As previously noted, he first commanded at San Diego from October 1821 until June 1822, when he was transferred to the command of Santa Barbara, following accusations of neglect and cruelty toward San Diego's troops by Santiago Argüello. In 1825 he returned to serve as Lieutenant of the San Diego Company. Although he assumed the commandant's position following Ruíz's retirement in 1827, for a period in 1828 and 1829 he is listed as absent or retired on the company rosters. This was probably due to a temporary suspension that resulted from a Mexican law demanding expulsion of all Spaniards from the nation. In 1828, California Governor Echeandía reported to the Mexican national government that "though a Spaniard [by birth], Estudillo by his activity, intelligence, and services was entitled to be considered useful to the republic, being a friend of the system he had sworn to support." Consequently, he resumed command at San Diego only to be taken by death in 1830. His military career had spanned 33 years (Bancroft 1885a:539-540, 542). Unlike Ruíz, who

got along well with the soldiers under his command, José María Estudillo was remembered as a man of "overwhelming vanity" that made him unpopular, "especially with his officers who failed to recognize in him any extraordinary qualities, and one after another became, with few exceptions, the objects of his serious displeasure" (Bancroft 1885a:542).

José María married Gertrudis Horcasitas, a Mexican woman. They had six children and by 1828 twelve living grandchildren. Around 1828 or 1829 one of their sons, José Antonio Estudillo, built a home on the south side of the plaza in the newly formed Pueblo of San Diego. It is not known if José María Estudillo ever resided there, but he did live long enough to see its construction and be inside the dwelling[12] (Bancroft 1885a:539-540, 542). The Estudillo Adobe, like the one built by Francisco María Ruíz, still exists and is one of the dominating structures on the Plaza of Old Town San Diego.

By the end of the decade the San Diego Garrisons' number of active military personnel remained close to what it had been in 1821. The roster listed 60 soldados, seven artillerymen, and 35 members of the Mazatlán Company, along with three "mechanics," which provides a total of 105 individuals on active duty. Two years earlier in 1828, more than half (75) served on escoletas at the usual district outposts, which included 12 at Mission San Diego, 17 at San Juan Capistrano, 35 at San Luis Rey, and 11 at San Gabriel. With up to five artillerymen at Punta Guijarros, this would leave 25 at the Presidio, which was a slight decrease from the 35 that had lived there in 1821. The actual population of the Presidio was recorded as 403 gente de razón and 150 Indians, for a total of 553 individuals. Most of these consisted of families living outside the Presidio walls and around the plaza of the newly established Pueblo (Bancroft 1885a:545).

The most remarkable change is the dramatic increase in the number of Native Americans in the community. Prior to 1820 local Indians made up a very small portion of the

---

[12] Alfred Robinson resided in the Estudillo house in 1829. He lists the occupants of the dwelling as "the old lady" Domínguez, Don José Antonio Estudillo, wife Doña Victoria, two children, and three servants. Although he was still alive at this time José Maria Estudillo is not listed among those occupants, which suggests he resided at the Presidio (Robinson 1846:7).

population living at the Presidio. As already noted, in 1782 the community included five Indian women from Alta California married to garrison soldiers. In 1790 only seven Natives lived there, six of whom were soldiers' wives (Mason 1978:413, 415-419). The population tally for 1798 included only four Natives: two men, and two boys. If the six soldiers' wives listed in 1790 still resided there, then by that time they were counted among the gente de razón. Over the decades a small number of Mission Indians worked in the more well-to-do officers' homes as servants. Their number, however, always remained small (Bancroft 1884:452; Engelhardt 1920:117). A San Diego Mission report of 1814 stated: "The male and female neophytes of this Mission serve the military of the Presidio nearby because they voluntarily desire to serve them. The latter then have the same obligations as the Fathers, that is to say, they must feed and clothe the neophytes, attend to their education, and give them a good example" (Engelhardt 1920:183).

This does not mean that Natives did not make major contributions to the Presidio even though very few ever became members of the settlement's community prior to the 1820s. Indian laborers constituted the main work force for most building projects at all four California Presidios. Both mission neophytes and groups that remained unassociated with the missions were employed. Each laborer received a daily food ration, clothing, and wages of between one and a half to two reales a day. Neophyte earnings were credited to the mission's Presidio account. Non-mission Indians received their pay directly, probably in goods of an equal value from the Presidio store (Archibald 1978:100-103; Duggan 2004). These work gangs most likely had their own encampments outside the Presidio walls where they resided during the period of the specific constructions task's duration. Indian workers also included skilled craftsmen. For example, in 1817 Mission San Luis Rey received a request to supply two stonemasons for projects at the San Diego Presidio (California Mission Documents (CMD) 1475 San Luis Rey 9/3/1817).

Other Natives found employment under much more difficult circumstances. Indians found guilty of crimes under Spanish law usually received a sentence of hard labor or imprisonment at a Presidio (Engelhardt 1920:98; Duggan 2000:55). Several served their

sentences at San Diego (CMD 1265 San Diego 9/8/1816, CMD 1340 San Gabriel 12/9/1816, CMD 1349 San Gabriel 12/24/1816, CMD 1900 San Diego 3/26/1820; Engelhardt 1920:136; Carrico 2019:17; 2021). In 1796, a force of Indian prisoners along with "free" mission neophytes worked on barracks, a kitchen, and family housing constructed at the San Diego Presidio for the company of Catalonian volunteers as well as the gun battery at Punta Guijarros (Schutez-Miller 1994:150).

Trade provided another avenue through which Natives entered the realm of Presidio society. The archaeological record dramatically testifies to quantities of fish and shell fish consumed at San Diego that had been gathered and supplied by local Indians, along with vast amounts of Native manufactured Brown Ware pots that Presidio households used for their basic cooking and utilitarian needs, and consequently make up a significant portion of the collection that is the subject of this study (Ezell 1976:17; Barbolla 1992; Williams 2004). Missionaries may have acted as agents for these goods, as they did for foodstuffs and other items they supplied to the military. In other instances, Natives traded directly with Presidio residents. In 1811 Father Pedro Panto of Mission San Diego requested of Commandant Ruíz: "In view of the fact that countless numbers of Indians from this mission go to the Presidio to sell various things, and it has been commanded that none of them go without the Fathers' written permission, I ask that before they are allowed to sell even a clenched fistful of goods, you order the sergeant or the sentry to review them"[13] (CMD 874 San Diego 3/5/1811).

In summary, both missionized Indians and those who remained unaffiliated with those colonial institutions interacted with the Presidio's population as laborers, craftsmen, traders, and prisoners. Although local Natives played a significant role in the development and maintenance of the San Diego Presidio, only a very few, consisting of those who married garrison soldiers or lived in more well-to-do households as servants, became actual members of the community that resided there prior to the second decade of

[13] "En atención a ser innumerables los indios de esta misión que pasan a este Presidio a vender varias cosas y están les mandado que ninguno vaya sin papel de los Padres, encargo a usted que si antes que va a vender, aun que sea una puólena, que usted orden al sargento o al centinela lo recojan" (CMD 874 San Diego 3/5 1811).

the nineteenth century. This is why the fact that 150 Natives are listed as residing among the gente de razón of San Diego in 1828 is so noteworthy.

Clearly something had changed. Perhaps the gradual economic decline at the missions encouraged Natives to seek other means of support, or maybe the increasing number of people who earned their living through trade or other means outside the military could now afford to keep servants and hire extra help. By this time the Mission Indians constituted a highly skilled labor force in trades as varied as masonry, carpentry, blacksmithing, spinning, weaving, cooking, agriculture, stock raising, and various others (Webb 1952). Whatever the cause, the number of Natives in the community dramatically increased during this decade (1821-1830), and most appeared to be employed as domestic help. In 1829 Alfred Robinson noted three Indian servants working and living in the household of José Antonio Estudillo, and his wife, María Victoria Domínguez (Robinson 1846:65; Farris 2006:8). Native domestics worked as cooks, nannies, gardeners, and did house cleaning. They collected firewood, slaughtered and butchered animals, provided fresh fish and shellfish to the community, and ground corn and wheat. The San Diego census of 1836 lists 26 servants for 13 specific households, which, of course, gives an average of two for each family unit (Farris 2003:11-12, 2006:7-8).

The decade also brought major physical changes to the Presidio. These largely resulted from the usual lack of funds for proper maintenance combined with pressure to build dwellings outside the cramped compound caused by the dramatic increase in population. An 1826 report once again described the Presidio buildings as in a “deplorably ruinous condition” that required an estimated $40,000 to repair (Bancroft 1885a:547; Pourade 1961:173). In addition to establishing the Pueblo of San Diego around the plaza laid out on the terrace below the hill, residents appear to have constructed homes and out buildings adjacent to the exterior of the Presidio walls. In some instances, parts of the defense wall may have been demolished in certain sections to provide easier access and reusable building materials. This is suggested by archaeological evidence (Figure 13) (Brockington and Brandes 1965:26; Ezell 1968:30; Field Books: Huff - Spring 1968, Schaelehlin - Spring 1969, Myers - Spring-1969, Runnels - Spring 1969, Hatch - Fall

1971, Carry - Spring 1972, Passino - Spring 1972; Williams 1997a:49-51; 2004:127), along with descriptions, maps, sketches, and paintings from the mid-nineteenth century that document buildings at the base of Presidio Hill along what would now be the east edge of Presidio Hills Golf Course [14] (Derby 1853; Vischer 1874; Hayes 1929:301-302). It is further indicated by an 1827 description by Auguste Duhaut-Cilly, who found that the Presidio of San Diego had ". . . no regular form: it is a collection of houses whose appearance is made still more gloomy by the dark color of the bricks, roughly made, of which they are built"[15] (Duhaut-Cilly 1834:218; Bancroft 1885a:548; Pourade 1961:137-138).

Two years later, in February 1829, Boston trader Alfred Robinson arrived at San Diego and called on Governor Echeandía. He found the Presidio ". . . surrounded by a high wall, originally intended as a defense against the Indians. At the gate stood a sentinel, with slouched hat and blanket thrown over one shoulder, his old Spanish musket resting on the other; his pantaloons were buttoned and ornamented at the knee, below which, his legs were protected by leggings of dressed deer-skin, secured with spangled garters" (Robinson 1846:17). Robinson's description indicates that in spite of some deterioration of the defense wall, and the construction of buildings along its outer sides, which had given Duhaut-Cilly the impression that the complex had "no regular form," enough of the rampart still stood to define the compound and the formal entrance at the original guarded gate.

Upon passing through the gate Robinson saw the interior much as Vancouver had described it in 1793. The commandant's house where the governor resided was "located

---

[14] In 1875 Judge Benjamin Hayes lived in the house originally built by Francisco Maria Ruíz that is now known as the Carillio house and is located at the Presidio Hills Golf Course. He recorded the following view from his front porch of ruins at the base of Presidio Hill: "My door fronts full upon Stockton Hill, with the Corral del Rey below it. I step to the end of the porch; the old Presidio is in view through olive leaves and pear blossoms. . .. On the hillside are the remains of the former residence of Don Bonifacio Lopez, and nearby the broken adobe walls of the corral where "the King" brought his cattle and horses to be branded, or for safety from Indian incursions. Part of this runs down into the garden of my friend George Lyons" (Hayes 1929:301-302).

[15] . This passage has been translated in slightly different ways. The one used and cited in the text is from the 1929 translation by Charles Franklin Carter. Bancroft (1885a:548) gives ". . . has no regular form. It is a shapeless mass of houses, all the more gloomy because of the dark color of the bricks of which they are rudely constructed." Furgé and Harlow (1997:99, University California Press) use ". . . has no regular shape but is a mere jumble of houses rendered more gloomy by the dark brown color of the crude bricks of which they are made."

in the center of a large square of buildings occupied by his officers, and so elevated as to overlook them all, and command a view of the sea. On the right hand was a small Gothic

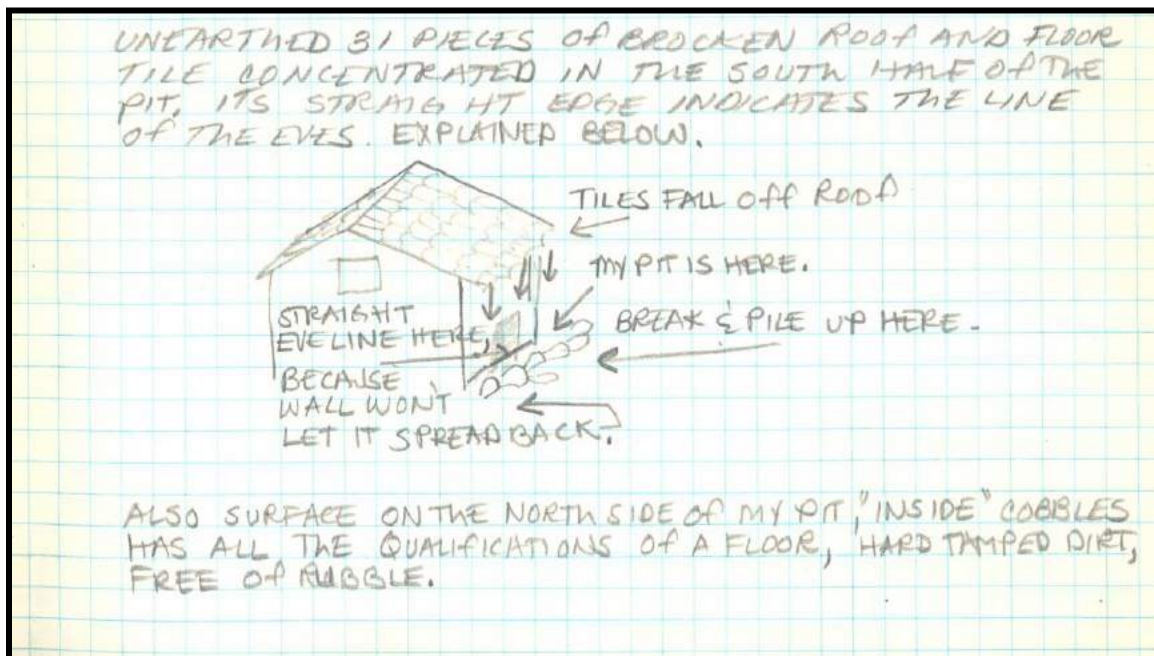


Figure 13: Conjectural Configuration of Buildings Outside the Southern Defense Wall Unit S35, E105. (Field Books: Runnels - Spring 1969).

chapel, with its cemetery, and immediately in front, close to the principal entrance, was the guard-room, where the soldiers were amusing themselves; some seated on the ground playing cards and smoking, while others were dancing to the music of the guitar." He found Echeandía to be "a tall, gaunt personage, who received us with true Spanish dignity and politeness" (Robinson 1846:17; Pourade 1961:192).

The third decade of the nineteenth century was the last in which the Presidios functioned in California. Political and economic circumstances caused their abandonment by 1840. Echeandía and many of his entourage left San Diego around 1833, which undoubtedly resulted in a decrease in the community's status and importance (Bancroft 1885b:244).

Santiago Argüello served as captain of the San Diego garrison from 1830 until he retired in 1835. Born at the Monterey Presidio in 1791, Argüello, like Ruíz, was the son of a multigenerational frontier Presidio family. His father, José Darío Argüello, served in the Presidio of Altar Sonora until 1781, when he came to California as ensign at the newly founded Presidio of Santa Barbara. He ultimately became commandant at the Presidios of San Francisco, Monterey, and Santa Barbara. He was acting governor of Alta California from 1814 to 1815, and of Lower California from 1815 to 1822 (Bancroft 1885a:358, 701). Santiago followed his father's career path and joined the San Francisco Garrison in 1805. The next year he transferred to Santa Barbara. In 1817 he was promoted to ensign of the San Francisco Company. The following year he became habilitado (paymaster and quartermaster) at San Diego. Following mission secularization and the breakup of the Presidios he had a varied career, ultimately owning Rancho Trabuco in present day Orange County, Rancho ex Mission San Diego, consisting of lands of the former San Diego Mission, and Rancho Tia Juana, where the modern Mexican city of Tijuana is now located.[16] He died there in 1862 (Bancroft 1885a:702).

---

[16] The place names Tia Juana and Tijuana have interesting morphological histories. They are based on the name of the Native American rancheria Tijuan, which was located in the Tia Juauna River Valley south of the present international border. It is the origin of the valley's name which Spanish speakers corrupted to Tia Juana, and later in the twentieth century to Tijuana (Elliott 1883; Carrico 2014).

Due to his elections to political offices, Santiago Argüello was often absent during his tenure as Presidio commander and Ensign Juan Salazar filled in as acting commander (Bancroft 1885b:608-610). Until 1835, the last year that the garrison functioned as a unit, the muster roles ranged from 25 to 35 members. During that final year, of 27 soldiers, 11 were on duty at the Presidio and the remainder at missions in the district (Bancroft 1885b:608-609). That same year Richard Henry Dana, author of *Two Years Before the Mast*, visited the fort and found it ". . . built in the form of an open square, like all the other Presidios, and was in a most ruinous state with the exception of one side, in which the commandant lived, with his family. There were only two guns, one of which was spiked the other had no carriage. Twelve half-clothed and half-starved looking fellows, composed the garrison; and they, it was said, had not a musket apiece" (Dana 1840:144).

Worsening conditions at, and secularization of, the missions formed the root cause of the California presidios' decline. The presidios had always been an extension of the missions. They served the missionaries in numerous capacities and, especially after 1810, were dependent upon them for their economic well-being. With mission closures the Presidios lost their purpose for existence and their source of economic support.

Mission secularization resulted from changing social conditions that had been evolving for decades and accelerated following Mexican Independence. Even though California missions enjoyed several decades of prosperity, the missionaries ultimately destroyed the California Indians under their control. They subjected the Natives to unaccustomed labor, disrupted family ties, social relationships, and cultural values, and more than anything else brought deadly epidemic diseases. This resulted in the physical and social decline of the aboriginal population. At their peak, the 21 California missions controlled approximately 74,000 Indians. By 1834, the year secularization took most of the institutions from the missionaries, only 17,000 Natives remained. At San Diego, the death rate amounted to half the number of baptisms between 1769 and 1800, and constituted 35 percent of the aboriginal population by 1820 (Bancroft 1885a:553; Krober 1953:705-729; Heizer 1978:121-137; Luomala 1978:592-593).

Consequently, by the time Mexico achieved independence in 1821, California's missions were facing an alarming drop in Native population, while the number of civilians residing in the province numbered over 3000. As the number of local gente de razón continued to grow their desire for land increased. Frustration mounted because the missions owned almost all the desirable acreage in Alta California. Agitation resulted in the Mexican government's secularization of all California missions by 1836 (Roske 1968:160-161; Jelinek 1979:15).

Moves toward secularization began in 1826 when Governor Echeandía presented a plan. The following year the Mexican Government passed legislation ordering all missionaries from the nation, which, however, was never enforced in California. On January 6, 1831 Echeandía issued a proclamation for the gradual secularization of the missions. This also had little effect and was not implemented by his replacement Governor José Figueroa. In 1833 legislators in Mexico City demanded that all missions in Baja and Alta California be secularized, and in April 1834 passed a law requiring secularization in four months (Roske 1968:160-161).

The effect of these decrees forced Governor Figueroa to act, and brought complete secularization to the four missions of the San Diego District by the end of 1834. Experiments had begun as early as 1833, when limited emancipation was enacted at San Diego, San Luis Rey and San Juan Capistrano. These moves disrupted Indian communities and their abilities to provide economic aid. Final secularization came to all four Missions in the district, including San Gabriel, by November 1834, leaving the Presidio without any means of support (Bancroft 1885b:332; Engelhardt 1920:235, 1922:80-82, 11-117). That same year San Diego became a self-governing pueblo and was no longer under military rule, which removed the Presidio's political authority (Killea 1966:41).

Decline of the missions had resulted in continued worsening conditions for enlisted men for at least a decade prior to 1830. As previously stated, there had been no real government support since the outbreak of revolutions in 1810. Supplies were not sent

and salaries went unpaid. Since the missions had been providing the majority of Presidio food stuffs for several decades prior to that time, they expanded their role and also become major distributors of manufactured goods (See the following chapter on Trade and Economics). As labor forces decreased, and it became harder to meet production, shortages had become common by the mid-1820s. Mariano Guadalupe Vallejo recalled that during this period "Many of the soldiers had very little clothing, pants in particular. Most of the time they wore pants made from blankets" (Vallejo 1875:292). In 1826 Echeandía complained that only his officers had been paid. Two petitions from the soldiers that year claimed they were receiving nothing but their food ration, which had been the case for several years past. In 1827 there were no funds to supply blankets, and both food and money were lacking. Echeandía met this emergency by lending $600 of his personal funds (Francis 1976:345). The next year, 1828, the crises continued. Reports described the troops as "naked, in great want, and unable to collect any part of their dues." At Monterey a large part of the garrison and mission escoletas struck and marched out of the Presidio with their weapons to demand back pay. At San Diego the soldiers also protested their "hunger and nakedness" and asked for unpaid wages. Commander Santiago Argüello put the five spokesmen in irons. After their fellow soldiers' outraged protest achieved their release, the five took their case to Echeandía. He resolved the issue by transferring them to other Presidios. At San Francisco incidents of insubordination also occurred in 1828, and in 1833 the garrison mutinied as a protest against their lack of food and clothing (Bancroft 1885b:56-67, 248, 549, 610; Francis 1976:346-347).

With implementation of secularization matters continued to worsen. Throughout 1834 complaints of military destitution were frequent, especially from the south. That spring San Diego Ensign Juan Salazar, who had often served as acting commander, was unable to travel to Monterey because he did not have a shirt and jacket, and could only cover the "deplorable condition of his trousers" with a "poor cloak" (Bancroft 1885b:56-67, 248, 549, 610; Francis 1976:346-347).

At this point the need to allow soldiers to find other occupations to support themselves assured the dissolution of the standing army (Francis 1976:357). In 1837, the few troops that remained at San Diego went north to put down a revolt and never returned. From that date the Presidio stood abandoned (Bancroft 1885b:609; Killea 1966:10). By 1840 the buildings were in ruins as a result of scavenging of construction materials from the former fort to build homes in the Pueblo on the terrace at the foot of the hill where San Diego's residents now resided (Bancroft 1885b:610).

The Role of Women at the San Diego Presidio

For most of the San Diego Presidio's 63 years of existence, from 1774 until 1837, Presidio women (presidarias) played as important a function, if not more so, as men in the community's daily life (Figure 14). They fulfilled obvious roles in establishing and sustaining families and perpetuating Mexican Colonial culture. Through their essential contributions and hard labor as mothers, family caregivers, cooks, and house keepers, they developed and maintained Presidio communities and were the primary handlers of the cooking, serving, utilitarian, household, and storage vessels that make up the majority of the collection this report is focused on (Casteneda 1990:130, 229; Villa de Prezelski 1996:105; Williams 2003:18, 51).

Few women resided at the Presidios during the early years of establishment. Their numbers quickly increased after the mid-1770s. The first four to live at San Diego arrived in March 1774, and included María Petrona García de Romero, who came with her son, blacksmith and armorer Felipe García Romero. María Arroyo Herrera, wife of the other Presidio blacksmith, José María Arroyo, also joined the community at this time. The other two new female arrivals represented a single household and included Josefa de Pedro y Gil, the wife of storekeeper (habilitado) Rafael de Pedro y Gil, and their household servant María Teresa de Ochoa (Casteneda 1990:122-123; Williams 2003:3). An additional group of settlers that included wives and children arrived a little more than a year later in September 1775. By 1790 thirty-eight adult women resided at San Diego's Presidio. All but three were married (Bancroft 1884:23; Mason 1978:413; Williams

2003:4-6, 13-14). By 1798 the number had fallen slightly to thirty-two (Rodríguez 1798).

Figure 14: Presidaria at Monterey 1791 (Mujer de Un Soldado de Monterey). Ascribed to José Cardero; Public domain Museo de América, Madrid [http://ceres.mcu.es/pages/ResultSearch?Museo=MAM&txtSimpleSearch=Mujer%20de%20un%20soldado&simpleSearch=0&hipertextSearch=1&search=simple&MuseumsSearch=MAM|&MuseumsRolSearch=11&listaMuseos=[Museo%20de%20Am%E9rica]](http://ceres.mcu.es/pages/ResultSearch?Museo=MAM&txtSimpleSearch=Mujer%20de%20un%20soldado&simpleSearch=0&hipertextSearch=1&search=simple&MuseumsSearch=MAM|&MuseumsRolSearch=11&listaMuseos=[Museo%20de%20Am%E9rica])).

Presidio family life took place in what, by today's standards, was a small, cramped, one or two room adobe walled apartment with a compact rear patio (Figure 15). Most Presidio women lived lives filled with hard physical labor as they performed the daily routines that made up their own domestic work. Few had help outside the household. Prior to the 1820s a scarcity of servants meant they could only be afforded by a few of the elite officers' families, like the household of Pedro y Gil previously referenced. Commandant José Zúñiga had a butler named Fabían, who had been a former Mission Indian from Baja California. So scarce was available domestic help that few could be had even with an elite status income. In 1799 Governor Diego Borcia complained that due to Presidio officers' poor salaries, which did not allow them to afford household help, their wives and daughters worked at tasks below their station in life. They washed their own clothes, baked bread for sale, and sewed clothes for others (Casteneda 1990:214-215; Langellier and Rosen 1992:65; Williams 2003:18, 42, 48-49).

For Presidio wives and mothers, domestic duties included cooking, cleaning, sewing, soap making, laundry, child rearing, small animal husbandry, and a myriad of other "womanly" duties (Casteneda 1990:120). These consisted of daily tasks as well as jobs that needed to be performed weekly, or on a less often but regular schedule.

Everyday chores included fetching water, cooking and preparing food, house cleaning, and tending to household animals. Water for cooking and washing had to be brought in ceramic jars (tinajas, botijas, and cántaros), leather bags, or wooden barrels from wells in the sandy bottom of the San Diego River, located some 50 feet below and around 60 to 100 yards (55 to 80 m) from the Presidio's main gate. This work could also have been assigned to older children (Bancroft 1884:652; Engelhardt 1920:69, 55; Williams 2003:18, 30-31). Throughout Mexico women customarily carried water jars on their heads. Donkeys and other beasts of burden were also used (See Figures 47 - 50 in Mexican Folk Vessel Typology) (Foster 1948b:85; Whitaker and Whitaker 1978:60; Mindling 2015:140-143; Reynoso Ramos 2015:116, 285, 288).

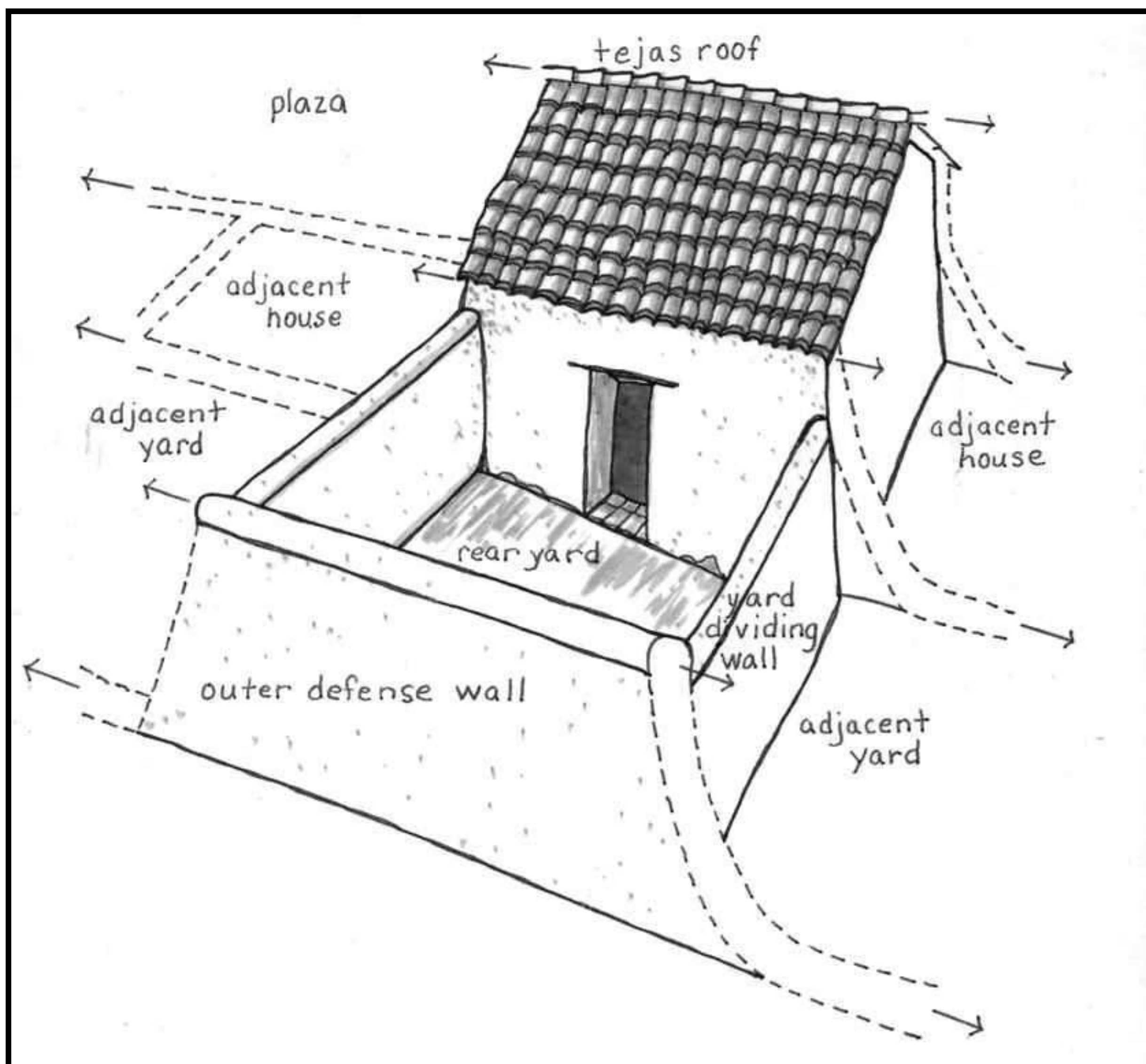


Figure 15: Typical One Room Presidio Family Dwelling (By Susan D. Walter, After Williams 2003:19).

Cooked on small wood fueled adobe hearths, or fires built directly on the floor, food preparation began in the morning and continued throughout the day. Not surprisingly, meals eaten in the Presidios consisted of what today would be considered traditional Mexican food. Each dawn broke to the music of slapping hands preparing tortillas, and the smell of wood smoke as fire embers from the night before came to life with kindling and gentle encouragement from woven reed fans (Arnaz 1878:16; Williams 2003:38; Williams and Davis 2004:55-56; Van Wormer and Walter 2012). As in other Mexican settlements, the last sound at night was once again the rhythmic slap-slap of tortilla making, along with "the subdued, wet, rubbing sound" of other women bent over metates to grind lime-soaked nixtamal corn kernels into masa for the following day (Redfield 1930:85-87).[17]

Between these first sounds of morning and the final ones at the end of the day, a variety of tasks had been accomplished to fix the family's food. Women made from three to as many as five meals a day. The ancient Mesoamerican Grinding Complex constituted a central foundation of meal preparation. Grinding grain was a major occupation of women. Accounts of Mexican households document that a wife's daily grinding took from 4 to 6 hours (Redfield 1929:182, 1930:87; Parsons 1936:31; Brand 1951:180; Morton 2014:8). Similar routines of preparing nixtamal and daily grinding occurred in California (Vallejo 1844; Híjar 1877a:40, 1877b:25, 61; Arnaz 1878:18; Bancroft 1888:370; Pinedo 1898:166, 2003:134). The grinding of corn and wheat dictated the nature of many foods and their method of cooking, resulting in tortillas, atoles, tamales, and pinoles. Other dishes served daily included broth-based stews and soups cooked in earthenware pots. The basic underlying ingredients, cooking methods, pottery, and utensils used by presidarias, including the mano and metate, comal, and earthenware ollas, cazuelas, jarros and other ceramic vessels, were common throughout Colonial Mexico (See the section on Mexican Folk Vessels Typology in this volume).

---

[17] Nixtamal refers to the corn kernels that have been soaked in the alkaline solution. Masa is the ground nixtamal formed into a dough. See the section on Californio Foodways in this volume.

Along with preparing food, cleaning constituted the other task that took up a substantial part of a Presidio woman's days. Keeping the small adobe dwellings orderly required constant labor. Ladrillo tiled floors were swept with reed and grass brooms. Sweeping earthen floors and patios after they had been sprinkled with water kept these surfaces compact, smooth and clean. Dishes, from the humblest Galera and Brown Ware bowls and cooking pots to the most elaborate transferware and Chinese porcelain tea cups and platters were washed with soap and water (Williams 2003:26-27). Lastly, sometime during the day, lighting fixtures needed tending. Oil lamps had to be cleaned and refilled, and candles put in their holders, so they would be ready to light as the evening's darkness fell (Williams 2003:27-40).

Household animal husbandry demanded another set of daily chores. Most households had chickens and other poultry. Hogs were another popular livestock. During the spring, families kept cows to milk. All of these creatures had to be fed, watered, and have their enclosures cleaned. Usually, a woman of the family managed the milking and making of cheese, butter, and other dairy products (See the section on Californio Foodways in this volume) (Lugo 1877a:76-77, 1877b:215; Williams 2003:40).

Presidarias undertook other sets of household tasks on weekly, monthly, or seasonal schedules. These included laundry, baking, and agricultural field work. Archaeological remains of earthen beehive-shaped ovens have been found associated with several family household compounds at the San Diego Presidio and in the courtyard of the Chapel Complex (Ezell 1976:11; Williams 1996:13, 1997b:18-19; Williams and Cohen-Williams 1997:100-103). Baking usually occurred once a week and more than one family might join together in the undertaking. Ovens had to be preheated with a wood fire. Once the fuel had burned down and a high enough temperature achieved, the bakers raked out the coals and ashes and put bread and other items in, using a long wooden or iron peel (bread paddle). They then sealed the chamber with a wood or metal door. This process could last all day, with goods requiring the most heat placed in the oven first (Williams 2003:28).

Presidio women probably did the laundry once a week, cleaning clothes, sheets, and blankets. The soiled articles would have been hauled to water sources in the river bed to wash by hand, using hand carved wooden wash boards and large cobbles or boulders as washing surfaces, as well as baskets and large wooden bowls for containers (Williams 2003:31). Wet clothes were spread out to dry on areas of clean gravel and rocks, or grasses, brush, and tree branches. They may also have been suspended on a rope. Undoubtedly, like baking, this became a group activity in which various households participated, adding a significant social aspect to a highly arduous chore.

Households cultivated agricultural plots below Presidio Hill in Mission Valley and to the north in Soledad Valley. Tending and harvesting gardens were seasonal tasks in which the entire family usually participated, camping out in temporary brush shelters and huts (ramadas y jacales). Following the harvest, the processing of foodstuffs was another seasonal task. A variety of produce had to be cleaned and dried including beans, squash and various fruits (Williams 2003:35-37).

Other household duties did not follow a regular schedule. As the primary caregivers of small children, Presidio women undoubtedly found parenting to be a constant state of existence, even though older children, god parents and relatives helped (Williams 2003:32-33). Known for their embroidery and delicate fringe work, presidarias sewed constantly, not only mending, but designing and creating their families' clothes (Williams 2003:32). Other chores were undertaken as needs arose. Water storage vessels, for example, had to be occasionally cleaned when they showed growths of algae (Williams 2003:27). Women also applied their household skills to earn extra income. Examples include cooking, sewing, and doing laundry for bachelor soldiers. Juana Machado Alipaz recalled, "The women had in their own shoe making operations in their homes. They would make shoes out of scraps of cow hides and fabric and there with little pieces of leather and scraps they made footwear" (Machado Alipaz 1878:126). Others attained skills as curanderas (healers) and midwives and tended to community therapeutic and medical needs (Pérez 1877a:1, 1877b:100; Casteneda 1990:210, 219; Williams 2003:48-49). In summary, women played vital roles in the functioning of Presidio communities

through their hard physical labor and highly dexterous and skilled expertise in a variety of tasks.

San Diego Presidio Chapel History

The San Diego Presidio Chapel was the sixth and final edifice used at the settlement for spiritual purposes. Although constructions designated as religious buildings had existed at the site since its establishment in 1769, these had all been temporary structures (Ezell 2009:28-34). The final and last Chapel came into existence as part of the extensive construction program implemented by Commandant José de Zúñiga in the early 1780s (Williams 1997a:47-48, 2004:125-126; Williams and Davis 2006:23, 27; Ezell 2009:35-39).

Zúñiga's Chapel was probably built on the foundation of an earlier mission church that had never been finished (Ezell 2009:35). In 1773, while Mission San Diego still remained on present-day Presidio Hill, Father Palóu reported that: "On one side of the stockade, in the wall, is an opening for the foundations of a church thirty yards (varas) long. For this some stones and four thousand adobes have already been prepared. The foremen of the work are the Fathers, and the workmen are the neophytes . . ." (Palóu 1773, quoted in Engelhardt 1920:50). Writing the same year, Governor Pedro Fages confirmed the construction when he noted that at San Diego "The reverend fathers have sketched a plan, and have dug the foundation-trenches for another and larger building to be made entirely of adobes. They have a supply of the latter as well as of stone; but the inevitable lack of food and supplies will not permit the acceleration of this important task" (Fages 1773:493). Although construction continued until walls attained a height of four to five feet, the mission moved the following year and this building was never finished (Bancroft 1884:230; Ezell 2009:37). As historian Greta Ezell (2009:35) concluded, even though the unprotected adobe walls would have deteriorated by the early 1780s, the previously laid out foundation constituted too great an investment to abandon, and Zúñiga undoubtedly used it. Its location stood next to the Cemetery which had been in existence since 1769 (Carrico 2019:9-10).

Construction on the Chapel had begun by the spring of 1782, when Pedro Fages, on April 13 of that year, was once again at San Diego and noted that the ". . . royal Presidio is in good condition, as is the troop. They are building a little church in the center and around the perimeter of the Presidio a wall of adobes"[18] (Fages 1782:98, 99). It is estimated that it took between twelve and twenty thousand blocks to complete the chapel, a task that would have taken a crew of nine neophytes around three to four weeks to accomplish.[19] As was the case for the other Presidio buildings, timbers for the roof would have been sawn in Monterey and then shipped down the coast (Ezell 2009:37). The building had a Spanish tile teja roof, as did all new San Diego Presidio construction at this time (Williams 1997a:48, 2004:125). These would have been made and fired by Mission Indians. By April 1783, a year after Fages had observed it under construction, the Chapel was finished to the point that it could be used. This is indicated by a San Diego Mission inventory of that month listing a painting of San Diego de Alcalá (St. Didacus) and a consecrated altar stone in use at the Presidio (Nolan 1978:42; Ezell 2009:38). The following September 29, Father Serra, who was visiting from Carmel Mission, assisted by Mission San Diego's Father Fermin Francisco de Lasuén, confirmed 38 worshipers at the Presidio Chapel (Engelhardt 1920:118; Ezell 2009:38).

An exceptionally devout Catholic, Zúñiga took a highly personal interest in the chapel's construction. He was the project's architect and supervisor. Its creation became his lasting legacy to the Presidio community. Although Indians undoubtedly accomplished most of the routine manual labor, the Commandant personally undertook the tasks of mason, carpenter, and painter in certain areas (Pourade 1961:74; Ezell 2009:37). He painted the interior himself, and acquired at least one piece of iconic statuary, a nearly lifesize figure of the Immaculate Conception, the Patroness of the San Diego Presidio, for

---

18 "Dicho real Presidio se halla en buen estado, igualmente que su tropa: se estan fabricando una Yglesita en el centro, y a lo que haze al rehedor del presido una muralla de adoves" (Fages 1782:98). Also quoted in Ezell 2009:36.

19 Greta Ezell (2009:37) based this estimation on figures provided by (Engelhardt 1912:II 560) that stated that a team of nine laborers could produce 360 adobes in a day and the assumption that the finished walls were somewhere between 20 and 30 feet high.

its altar (Zúñiga 1790; Nolan 1978:24, 40-41). This piece still exists and is currently at Mission San Luis Rey (Figure 16).

Figure 16: The Patroness of the San Diego Presidio. This Immaculada Concepcion, now at San Luis Rey Mission, was the central figure in the retablo at San Diego's Presidio Chapel (Nolan 1978:24, 40-41). Photograph by Lourdes Araiza.

An extremely pious person, José de Zúñiga seemed to have felt that in building the Chapel he would pay penance and make up for perceived misdeeds in his earlier life. Although in use by 1783, finishing touches on the Chapel seemed to have continued for the next seven years. In February 1790, San Diego's Commandant wrote to his mother that "he was strong and robust" and "had the pleasure of informing her that in the course of the past year a beautiful church had been commenced at the Presidio under his charge and an image in honor of the pure and Immaculate Conception provided for it." He had been "instrumental in accomplishing the work and had himself personally labored as a mason and as a carpenter, and had painted the whole with his own hands." He "thanked God that she would see that her son, who had done things that were evil, was now zealous in doing things that were good." He closed by requesting garden and flower seeds, and, although he had little time for reading, "comedies, if she had any to spare" or "histories" of the "Most Holy Virgin," and especially any on the "mystery of the pure and immaculate conception." He also requested "carmine, vermillion, and other painting materials," for which he had enclosed 10 pesos, along with another 50 pesos for her and his father[20] (Zúñiga 1790). The request for painting supplies suggests decoration of the Chapel interior was still ongoing.

The discrepancy between the fact that Fages recorded the Chapel under construction in April 1782, and that it was in use a year later, has never been reconciled with Zúñiga's 1790 statement that "in the course of the past year a beautiful church had been commenced at the Presidio" (Zúñiga 1790). This of course would have put its construction date at 1789. One can only assume that the Chapel had been completed to the point of occupation by the spring of 1783, and "finishing work," such as the detailed painting of the interior by the spiritually inspired commander, continued through 1789 or even 1790.

---

[20] The original of this "remarkable letter" no longer exists. It was in the California Archives that was destroyed in the San Francisco earthquake and fire of 1906. Fortunately, prior to that, it had been translated and copied by Theodore H. Hittell, who published a paraphrased yet detailed version in his 1897 *History of California* pp: 536-537 (Nolan 1978:110).

When completed, the Chapel Complex constituted a self-contained unit within the Presidio that measured approximately 185 feet east-west by 60 feet north to south (56 by 18 m). It included the Chapel and Cemetery in the western portion. Living quarters and storerooms within an enclosed courtyard compound made up the eastern section of the complex (Ezell 1976:7, 12; Ezell and Ezell 1980:86; Carrico 2019:7).

Zúñiga's Chapel measured approximately 80 by 25 feet (24 by 7.5 m), with the mortuary side chapel extending 10 feet to the north, and baptistery and sanctuary 15 and 20 feet (4.5 and 6 m) respectively to the south (Figure 17). An uncovered entranceway extended westward from the front facade for an additional 35 feet (10.5 m). Estimated wall heights ranged from 20 to 25 feet (4.5 to 7.5 m) along the sides and 25 to 30 feet (7.5 to 9 m) at the peak of the gabled end walls on the east and west. The building's exterior was finished with a mud plaster and whitewashed, with the roof covered in ceramic tiles (tejas) (Ezell 1968, 1976:5-8, 2009:35-39).

One accessed the church on the west end. Brick red colored ladrillo tiles paved the entrance way, formed the steps to the front door, and covered the interior floors. The western approximate two-thirds of the main hall constituted the nave, which was the primary public space where the congregation gathered for services. Beyond and separated from this preceding area by a copper trimmed altar rail lay the slightly raised floor of the sanctuary, an area surrounding the altar where a priest officiated during mass and other ceremonies. Doorways on the north and south walls led to the Sanctuary, Baptistery, and Mortuary Side Altar. Seven light blue painted pillars along the inside walls supported heavy roof beams. Whitewashed walls exhibited a variety of painted designs, including large yellow checks on white plaster, floral motifs, and a variety of other decorations in red, blue, and white. Those in the sacristy and sanctuary were accented with gold leaf [21] (Brockington and Brandes 1965:20; Typed Field Notes: Bratz - Spring 1965, Falk - Spring 1965, White - Spring 1965; Carrico and Hawkins 1980;

---

[21] Remnants of gold leaf were found on the walls of the sacristy (Brockington and Brandes 1965:20). It is the author's observation, from having experienced the interiors of numerous eighteenth century and earlier Mexican churches, that gold leaf would also have been used in the sanctuary.

Carrico 2019:7). Adobe blocks in the arch of the baptistery doorway on the south wall "had been carved into ridges and grooves and this then plastered over," simulating the radial fluting of cockle shells (Ezell 1976:14).

The Chapel played a central role in Presidio life. Like all of Colonial Mexico, and most of Latin America, San Diego's population was integrated into a devout Roman Catholic culture whose ideology included a complex network of social relationships that played a significant part in numerous aspects of everyday existence (Parsons 1936:183-204; Rivera 1978:101). A main emphasis of this religious life focused on the community's church or chapel, which constituted an area set aside as a sacred space worthy of exceptional respect and devotion (Wheaten 1948:467; Villa de Prezelski 1996:105; Williams 2000:4-1, 4-5; Williams and Davis 2003:49-53).

As with most of these houses of worship, in addition to the decorated walls, a variety of religious figures and paintings established the atmosphere of a venerated cosmos inside San Diego's Presidio Chapel. In the sanctuary beyond the altar rail a likeness of the Chapel's and Presidio's Patroness, La Immaculada Concepción (The Immaculate Conception[22]), representing the Virgin Mary standing on a crescent moon, sat in a niche high on the retablo, or back wall of the Altar (See Figure 16). Likenesses of three archangels, San Gabriel, San Miguel, and San Rafael resided in recesses below the Immaculada. An alcove in the wall of the baptistery held a statue of San Juan Bautista (Saint John the Baptist), and in the side chapel was a figure of Ecce Homo (Christ under condemnation). A delicately sculptured Angel on a Cloud completed the known statuary[23] (Figures 18 - 19). In addition to these icons, a painting of Nuestra Señora de Guadalupe (Our Lady of Guadalupe), along with the 14 Stations of the Cross hung on the Chapel's walls (Nolan 1978:42-70; Carrico and Hawkins 1980).

---

[22] The concept of the Immaculate Conception is "Roman Catholic dogma asserting that Mary, the mother of Jesus, was preserved free from the effects of the sin of Adam (usually referred to as "original sin") from the first instant of her conception" (https://www.britannica.com/topic/Immaculate-Conception-Roman-Catholicism).

[23] Neuerburg (1980:6) feels that the Angel on a Cloud and Ecce Homo may have been displayed "at outlying chapels in the mission rancherías," rather than at the Presidio.

The lifelike wood and gesso statuary, with their flesh-toned limbs and faces, glass eyes, and multi-colored red, pink, green, and yellowish-brown clothing, painted over a wash of gold leaf and accented with the same so that they glowed in and reflected light, combined with the colorful decorations on the chapel's walls to produce a dramatic environment. In the dim light coming through the small windows, and illuminated with rows of flickering candles, and perhaps torches at night, it became a holy space for the Presidio's worshipers (Ezell 2009:38; Williams 2000:4-6).

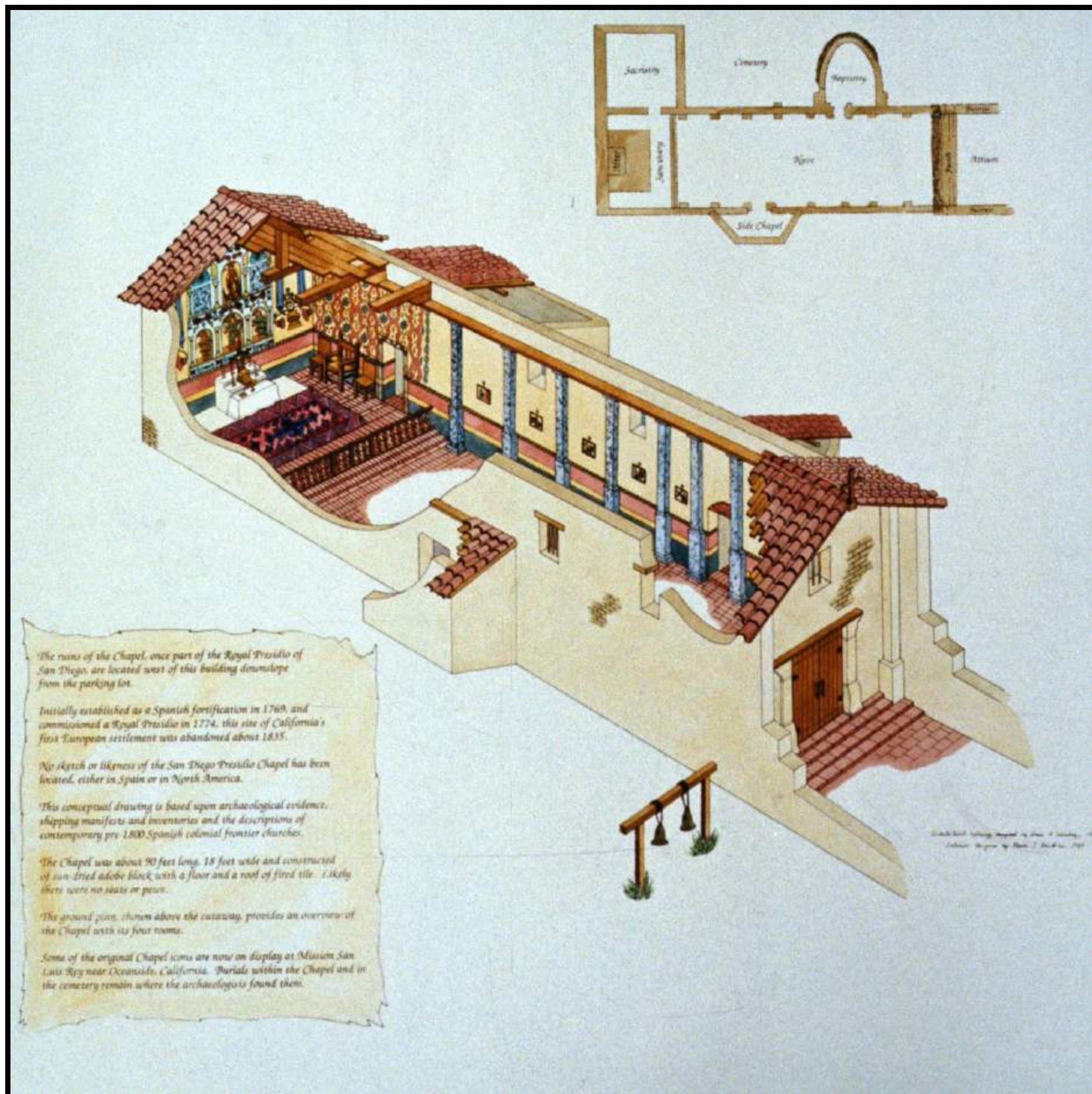
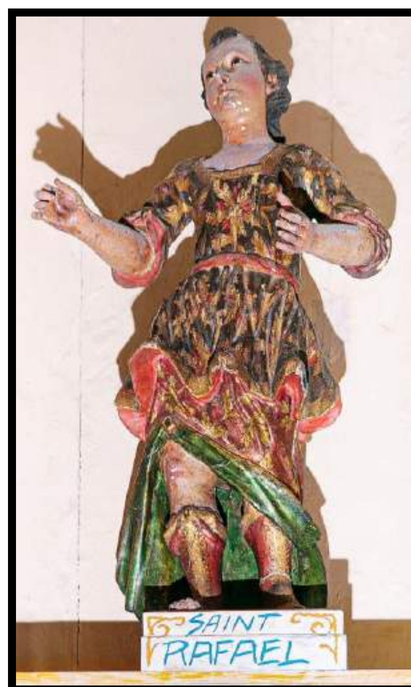


Figure 17: This Conceptual Drawing of The San Diego Presidio Chapel is Based Upon Archaeological Evidence, Shipping Manifests and Inventories, and Descriptions of Pre-1800 Mexican Colonial Churches (Courtesy Richard Carrico) (Carrico and Hawkins 1980).

A



B

Figure 18: Statuary Originally in the San Diego Presidio Chapel and now at Mission San Luis Rey. A, San Miguel; B, San Rafael (Nolan 1978:42-70). Photographs by Lourdes Araiza.

A

B

Figure 19: Other Statuary from the Presidio Chapel now at San Luis Rey Mission. A, San Juan Bautista; B, Angel on a Cloud. Photographs by Lourdes Araiza.

The Courtyard Compound lie directly to the east, but completely separated from the Chapel and Cemetery (Figure 20). It measured 70 feet east to west by 60 feet north to south (21 by 18 m). Free-standing adobe walls surrounded the area on the west, north, and east sides. The Presidio's exterior defense wall formed the south side. The courtyard was separated from the Chapel and Cemetery by its west wall, which consisted of a southward extension of the east wall of the Chapel and Sacristy to where it connected to the south exterior Presidio defense wall. Built against the enclosures north wall, a row of rooms with ladrillo tiled floors and teja covered roofs formed the compound's north side. The remaining area was a cobble paved courtyard with a beehive-shaped adobe oven at the southeast corner, and a small walled structure, defined archaeologically by shallow foundation stones and a cooking pit, roughly centered on the south wall. Floor and roof tile lined drains conveyed rainwater away from buildings and into the Cemetery and beyond the southern defense wall (Ritchie 1974; Ezell 1976:11-14; Ezell and Ezell 1980:86).

Archaeological evidence suggested that the compound could be accessed only through a single entry on the north wall that led into a set of two of the rows of rooms along the north side. From this point a doorway led into the courtyard. The other rooms had entrances onto the courtyard or doorways that provided passages between rooms (Ezell 1976:11-14; Ezell and Ezell 1980:86) (See Figure 20).

Construction of the Courtyard Compound may have predated the Chapel by several years. In 1773 Father Serra recommended building storehouses at the future Presidio to keep supplies for the missionaries after the mission relocated to the east (Engelhardt 1920:55). The compound closely resembled a 1778 description by José Camacho of a "guarded storehouse" on the south side of the Presidio "close to the various smaller storehouses in which there is kept supplies and goods of the king [government stores] kept locked in the quadrangle which leads only to a door and a portico" (Camacho 1778; Ezell and Ezell 1980:86). In addition to secured warehouses, two of the rooms, and perhaps more, were reserved for the missionaries as supply rooms and living quarters

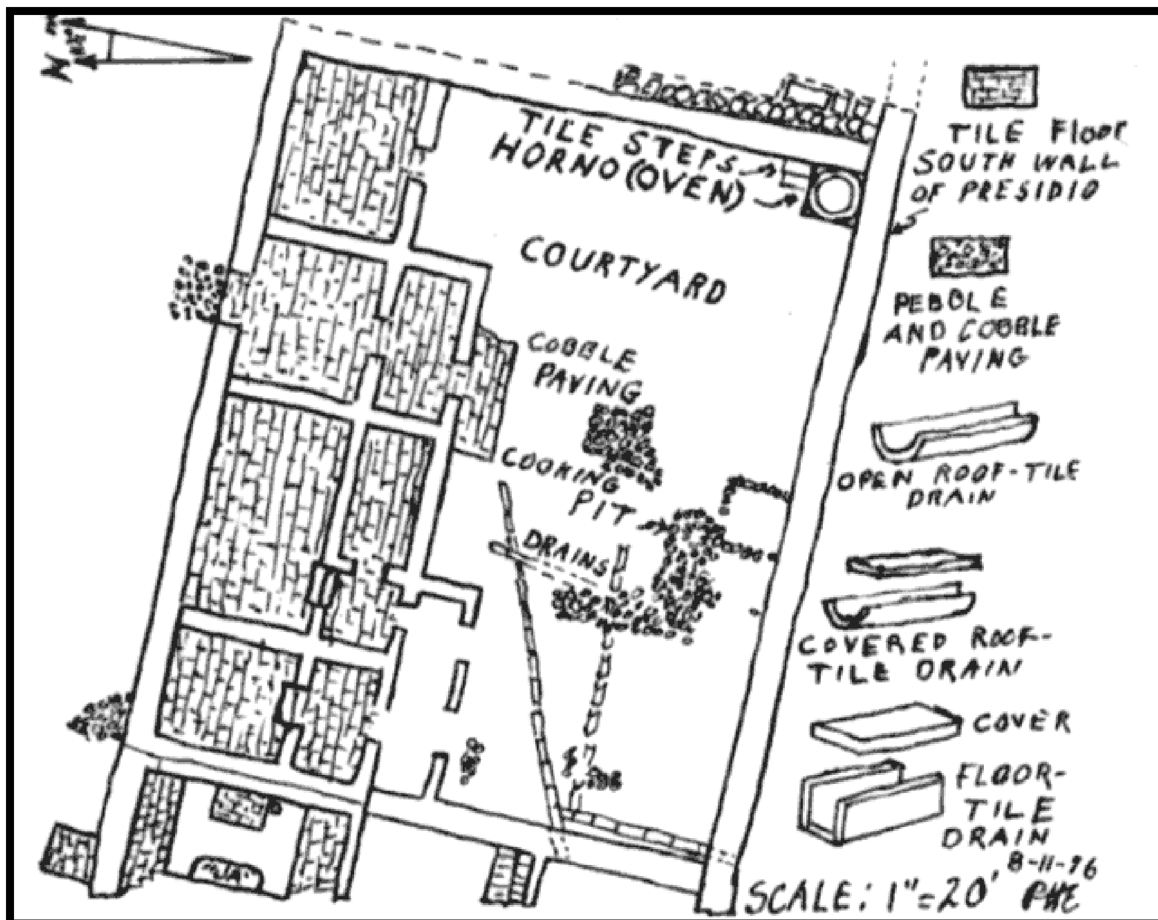


Figure 20: Courtyard Plan View by Paul Ezell (Ezell 1976:12).

(Ezell and Ezell 1980:86). It seems likely that Dominican Friar Antonio Menéndez resided here while he served as Presidio Chaplain from 1824 to 1839 (Engelhardt 1920:224-225, 327). In the 1830s the Franciscans "held legal title to a warehouse and apartment complex in the south wing" (Williams 2004:127), which undoubtedly was the Courtyard Compound.

Zúñiga's Church served the Presidio community for over 50 years. As is the custom in most Mexican towns, undoubtedly a number of the settlement's families, especially the women, as well as some men, took it upon themselves to care for and clean it[24] (Villa de Prezelski 1996:105). They would have opened the building daily to provide a place of sanctuary for those who needed moments of religious solitude and contemplation. Priests from San Diego and other missions regularly visited to perform services and preside over marriages and baptisms and conduct funerals, even though most of these ceremonies took place at the Mission (Libros de Mission San Diego 1783-1845; Engelhardt 1920:275-283).

Baptisms, marriages, and burials at the Presidio Chapel were documented in San Diego Mission's record books (Libros de Mission San Diego 1783-1845). Although incomplete, they provide some idea of how active the Chapel was from its completion in 1783 to the Presidio's abandonment in 1837. During this 54-year period there were 350 recorded baptisms, which averaged 6.5 per year. The earliest was on August 21, 1783, and the final one on December 24, 1837. No known marriage records for the Presidio currently exist for the years prior to 1804. For the 32-year span from August 24, 1804, until August 21 1836, 56 wedding ceremonies occurred in the Presidio Chapel, which averages almost 2 (1.75) per year. For the 47 years between September 1, 1783, and December 19, 1830, 107 burials were recorded for the Presidio Chapel and Cemetery, averaging 2.27 per year (Libros de Mission San Diego 1783-1845). In addition to these expected ceremonies, punishments also occurred in the Chapel. In 1821, a woman

---

[24] Among these were probably Apolonaria Lorenzana, and the Estudillo family, including the family patriarch following his father's death, José Antonio Estudillo. Both were very active in San Diego's religious community and took it upon themselves to care for the Mission's furnishings after it had been abandoned (Nolen 1978:17).

accused of adultery had to stand with a shaven head during church services. Her accomplice served two months in prison and was transferred to another Presidio (Bancroft 1885b:548).

The Chapel figured prominently in two visitors' descriptions from the late 1820s. In June 1827 Duhaut-Cilly observed a bull fight at the Presidio during which the bull attempted escape by jumping onto the roof of the courtyard buildings and Chapel.

> This scene, begun in a tragic manner, was later enlivened by an odd incident. The church at the Presidio, forming one of the sides of the interior court, is built upon the very steep slope of the hill, in such a way that one end of the roof rests upon the ground, while the other is raised nearly 40 feet above the soil. The bull, more ready for flight than combat, frightened by the cries of the spectators, and threatened by the noose, finding no outlet for escape, was driven into a corner near the spot where the roof of the church seems to join the mountain. There was no other retreat for it, and a spring of two feet in height put it upon the flattened roof of the chapel whence, continuing to go on, it might be predicted that it would have an abrupt introduction into the sanctuary, through the tiles where it thrust through now one leg, now the other. At last it reached, stumbling along in this fashion, the highest part of the roof, before recognizing the imminence of a danger which it then seemed to comprehend with a new terror. It tried, however, to turn about, in order to retrace its steps; but in this movement it slipped and fell into the court, with a heap of débris and in the middle of a cloud of dust. Can one conceive of the boisterous delight among the descendants of the Spanish roused by the cruel death of this poor animal? (Duhaut-Cilly 1834:232; Pourade 1961:144-145).

Two years later, in December 1829, Alfred Robinson saw the complex under more festive religious circumstances. He witnessed a performance of the traditional Mexican

nativity play, La Pastorela,[25] and left the following written description of a Christmas celebration in the Presidio Chapel:

> At an early hour illuminations commenced, fireworks were set off, and all was rejoicing. The church bells rang merrily, and long before the time of Mass the pathways leading to the Presidio were enlivened by crowds hurrying to devotion. I accompanied Don José Antonio [Estudillo], who procured for me a stand where I could see distinctly everything that took place. The Mass commenced, Padre Vicente de Oliva officiated, and at the conclusion of the mysterious *'sacrificio'* he produced a small image representing the infant Saviour, which he held in his hands for all who chose to approach and kiss. After this, the tinkling of the guitar was heard without, the body of the church was cleared, and immediately commenced the harmonious sounds of a choir of voices. The characters entered in procession, adorned with appropriate costume, and bearing banners. There were six females representing shepherdesses, three men and a boy. One of the men personated Lucifer, one a hermit, and the other Bartolo, a lazy vagabond, whilst the boy represented the archangel Gabriel.[26] The story of their performance is partially drawn from the Bible, and commences with the angel's appearance to the shepherds, his account of the birth of our Saviour, and exhortation to them to repair to the scene of the manger. Lucifer appears among them, and endeavors to prevent the prosecution of their journey. His influence and temptations are about to succeed, when Gabriel again appears and frustrates their effect. A dialogue is then carried on of considerable length relative to the attributes of the Deity, which ends in the submission of Satan. The whole is interspersed with songs and incidents that seem better adapted to the stage

---

[25] One of Mexico's oldest traditions, the Pastorelas are plays that recreate the Biblical passage where the shepherds follow the Star of Bethlehem to find the Christ Child. While on their journey they experience a series of confrontations with the Devil, who attempts to prevent them from completing their mission. They are saved by repeated interventions by the Archangel Michael.

[26] Robinson mistakenly mistook the character of the Archangel Michael to be that of Gabriel (Nolan 1978:94).

> than the church. For several days this theatrical representation is exhibited at the principal houses, and the performers at the conclusion of the play are entertained with refreshments (Robinson 1846:68-69; Pourade 1961:196-197).

In 1837, eight years after Robinson's visit, the Presidio stood abandoned. The Chapel continued to be used, undoubtedly maintained as much as possible by those pious families who dedicated themselves to its upkeep, for almost another decade. The missionaries probably continued to hold title to the complex, as they had in the 1830s (Williams 2004:127). In 1841 the first Bishop of both Californias, García Diego y Moreno, confirmed 125 persons in the Presidio Chapel (Engelhardt 1920:243; Ezell 2009:39).

The Presidio's house of worship served as a site for baptisms, marriages, and undoubtedly funerals, through 1845 (Engelhardt 1920:284-285). From February 1838 through December 1845, sixty-two baptisms occurred there, indicating the baptistery was certainly intact (Table 9). Numbers ranged from as high as 10 in 1838 to as few as four in 1841, with an average of 9.5 per year. This is quite a few more than the average of 6.5 baptisms a year for the period during which the Chapel served the occupied Presidio from 1783 through 1837. Eight marriages were performed there between January 1839 and September 1844, suggesting the nave and sanctuary also remained functional (Table 10). Half of these occurred in 1839, with one each in 1841 and 1842, and two in 1844. No marriages took place in 1840. This provides an average of slightly over one per year for these seven years, compared to the average of two per year for the period 1804 to 1836 (Libros de Mission San Diego 1783 -1845). In conclusion, even after the Presidio's abandonment the Chapel continued to be a popular place for baptisms. Marriages, although down about 50 percent from what they had been during the years of occupation, also continued to be performed there.

As noted above, burial records are not available for the period after 1830. Certainly, they also continued to occur at the Presidio's Chapel and Cemetery. Three that are known include Natalie Fitch in 1841, José Francisco Snook, in 1848, and Henry Delano Fitch, in 1849 (Carrico 2019:9). Archaeological evidence suggested that by the time Fitch was interred the Chapel had been abandoned. His grave had been dug partially through a remnant of the north wall of the nave, and also into a portion the floor by breaking through the ladrillo tiles. After it had been filled, the burial's location was left uncovered as a gap in the tile floor. Other interments encountered in the Chapel, that had occurred while the building was still in use, showed evidence that floor tiles had been removed intact, rather than broken, and then replaced after the grave had been filled, so that the floor could continue to be used (Ezell 1976:10; Carrico 2019:9).

So, even though no one lived at the San Diego Presidio after 1837, the Chapel continued to be used on at least a semi-regular basis through 1845. After that time the building deteriorated to a point where it no longer remained functional. Those who had cared for it, the Estudillos, Apolonaria Lorenzana, and others, removed the statuary and other sacred objects to the Estudillo house (Nolan 1978:17). Although occasional burials occurred inside the abandoned building and Cemetery as late as the 1870s (Carrico 2014:76, 2019:10), the Chapel building fell into ruin along with the rest of the Presidio.

Table 1: Post Abandonment Presidio Chapel Baptisms

YEAR	NUMBER
1838	10
1839	11
1840	8
1841	4
1842	10
1843	7
1844	7
1845	5
Total Post Abandonment	62
(Libros de Mission San Diego 1838-1845)	

Table 2: Post Abandonment Presidio Chapel Marriages

YEAR	NUMBER
1839	4
1841	1
1842	1
1844	2
Total Post Abandonment	8
(Libros de Mission San Diego 1838-1845)	

Post Abandonment History: 1838-1940

> Some day some great, strong step shall find the place - holy with blood of martyrs and the tears of penitents - some great, strong hand will reach out lovingly, and morning suns and mellow moons will look again on the shrine rebuilt in the Place of First Things where California began (McGroarty 1910:21).

Following its abandonment in 1837, the San Diego Presidio fell quickly into ruin. The site remained unoccupied and exposed to the elements for 100 years. In 1913 construction of the Serra Cross constituted the first effort to recognize the location's historical significance. Establishment of Presidio Park from the mid-1920s through the late 1930s brought more formal recognition and the ruins were covered with a protective layer of soil.

While the Chapel remained in use through 1845, the rest of the compound rapidly decayed. The abandoned structures provided readymade construction materials for residents building homes at the base of the hill in present-day Old Town San Diego. They removed roof tiles, floor tiles, and timbers, and dismantled walls for adobe blocks (Bancroft 1885b:610). On a return trip to San Diego in 1841, Alfred Robinson observed that: "Here everything was prostrated - the Presidio ruined" (Robinson 1846:185).

Eugéne Duflot de Mofras, visiting a year later also noted the Presidio's ruined ("ruine") condition (Duflot de Mofras 1844: Plate 11). After 1845 the Chapel Complex succumbed to the same fate, even though burials continued in the Cemetery and within the crumbled building's walls through the mid 1870's (Ezell 1970:20, 1976:10; Carrico 2019:9).

Vestiges of the Presidio stood overlooking Old Town San Diego and Mission Valley through the 1870s. In 1853, United States Army Engineer George Derby mapped the ruins as part of a larger reconnaissance of the mouth of the San Diego River. On his drawing the Chapel Complex, main gate, bastions, and room complexes along the north and east wings can be seen, indicating that the main features of the former compound could still easily be identified (Figure 21) (Derby 1853; Pourade 1963:199-200; Williams 1997a:31). A sketch depicting the mouth of the San Diego River from Presidio Hill, made three years later in 1856 by William McMurtrie, shows the enclosure's southwest corner. The outer defense wall is substantially deteriorated. Ruined walls of a building just inside the outer barrier still retain substantial height, even though adjacent structures have been reduced to low mounds (Figure 22) (McMurtrie 1856; Trent and Seymour 2010:106). Other depictions made through the 1870s show a similar pattern of decay. Low mounds characterize much of the former Presidio Compound with taller walls of less decayed segments jutting up amongst these surroundings (Figure 23) (Parker and Parker 1872; San Diego History Center Photo 1872: # 11675-2; Vischer 1874). Perhaps the dismantling of portions of the compound for construction materials brought on quicker deterioration in those areas that had been reduced to low mounds, while sections that had not been salvaged retained higher walls for a longer period. In 1876 the *San Diego Union* reported that on Presidio Hill "a portion of the ruins of the ancient Presidio are still to be seen . . ." (*San Diego Union* 13 July 1876:2). Seven years later Wallace W. Elliott (1883:143) used the exact same language to describe the site in his *History of San Diego County*.

The first known set of major earth disturbing impacts to the site occurred in 1877. Federal government engineers excavated the bluff "forming the point" on the north side of the hill to obtain soil for construction of a dike to divert the San Diego River into False

(now Mission) Bay. "In later years," earth from this location "was also used for grading county roads across Mission Valley." Removal of soil from the north bluff resulted in complete obliteration of the artillery battery constructed in 1796 (Smythe 1908:87).

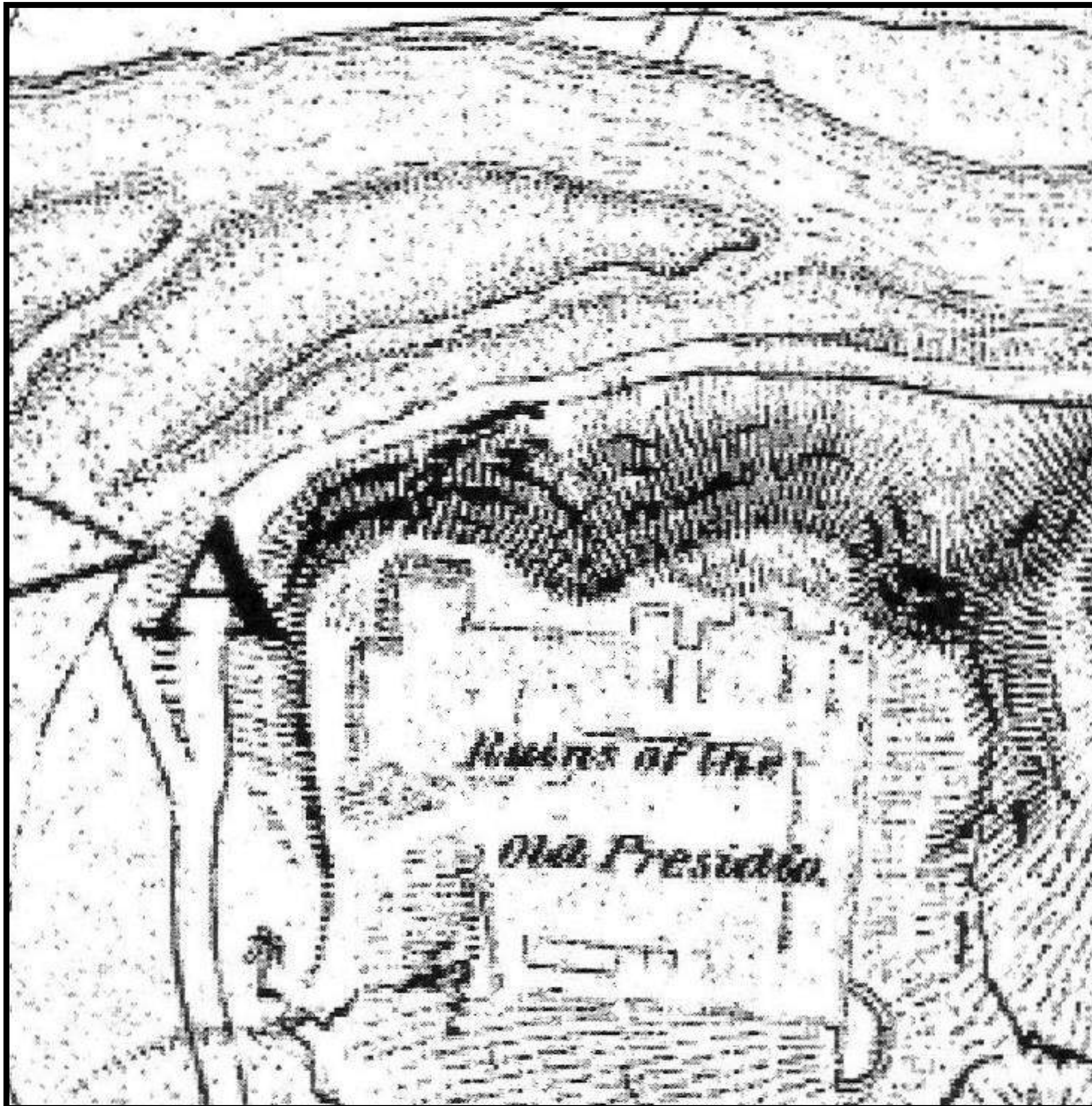


Figure 21: 1851 Map of the Presidio Ruins by Lt. G. H. Derby (Derby 1853). Building outlines along the south side (bottom) of the quadrangle correspond to the Chapel Complex's location. The gap in the west (left) wall is the gateway. Note the irregular shape of the outline of the north (top) wall formed by numerous square and rectangular projections extending beyond the wall alignment, suggesting structures have been built on the outside of and against the exterior of the northern defense wall. The "Serra" Palm can be seen at the base of the hill on the left side.

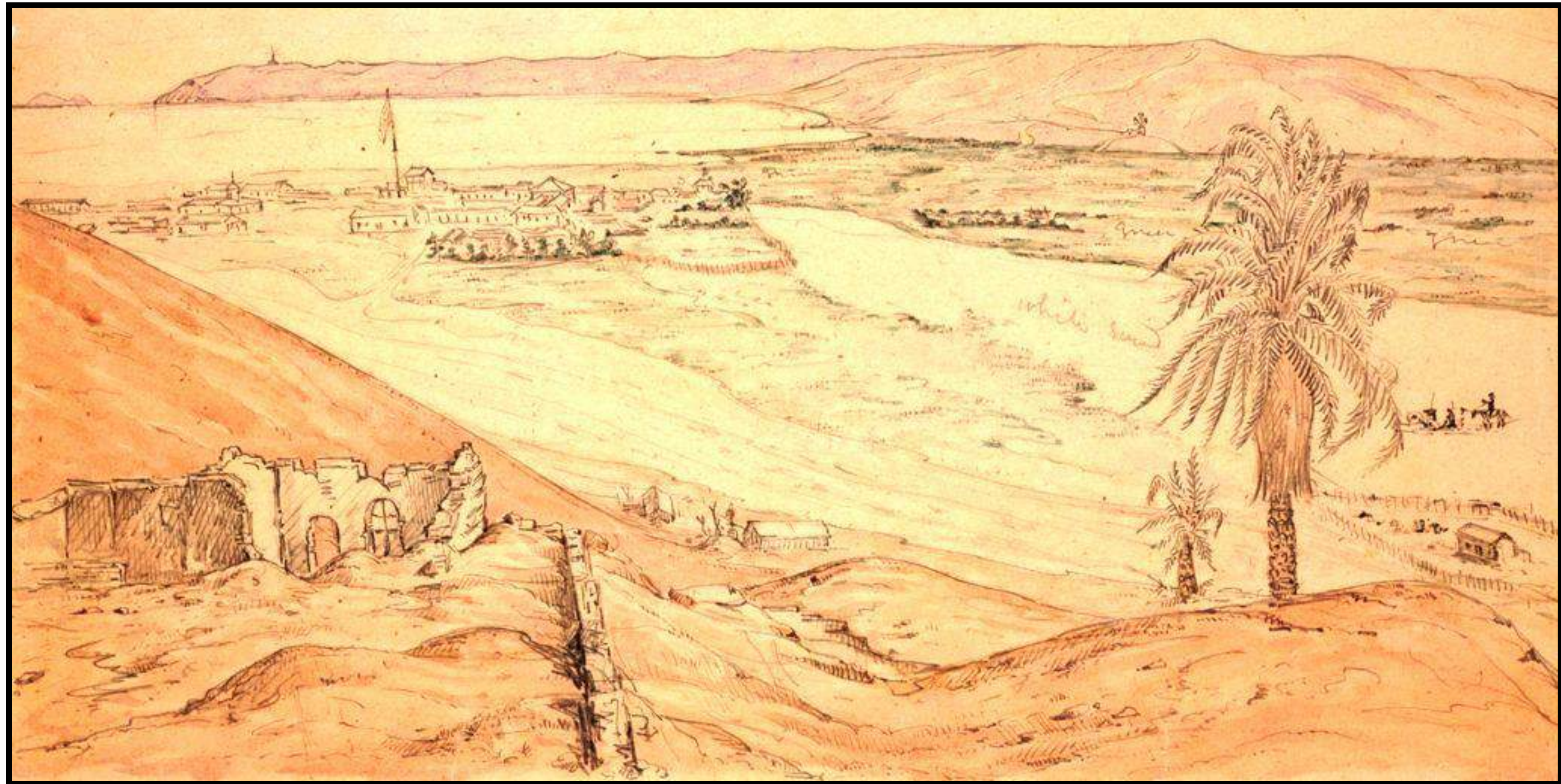


Figure 22: A Sketch of the Mouth of the San Diego River from Presidio Hill, in 1856 by William McMurtrie, Showing the Presidio's Southwest Corner. The outer defense wall is substantially deteriorated. Ruined walls of a building just inside the outer barrier still retain substantial height, even though adjacent structures have been reduced to low mounds. Note the Serra Palms at the base of the hill (McMurtrie 1856, Courtesy Bancroft Library, also published in Trent and Seymour 2010:106).

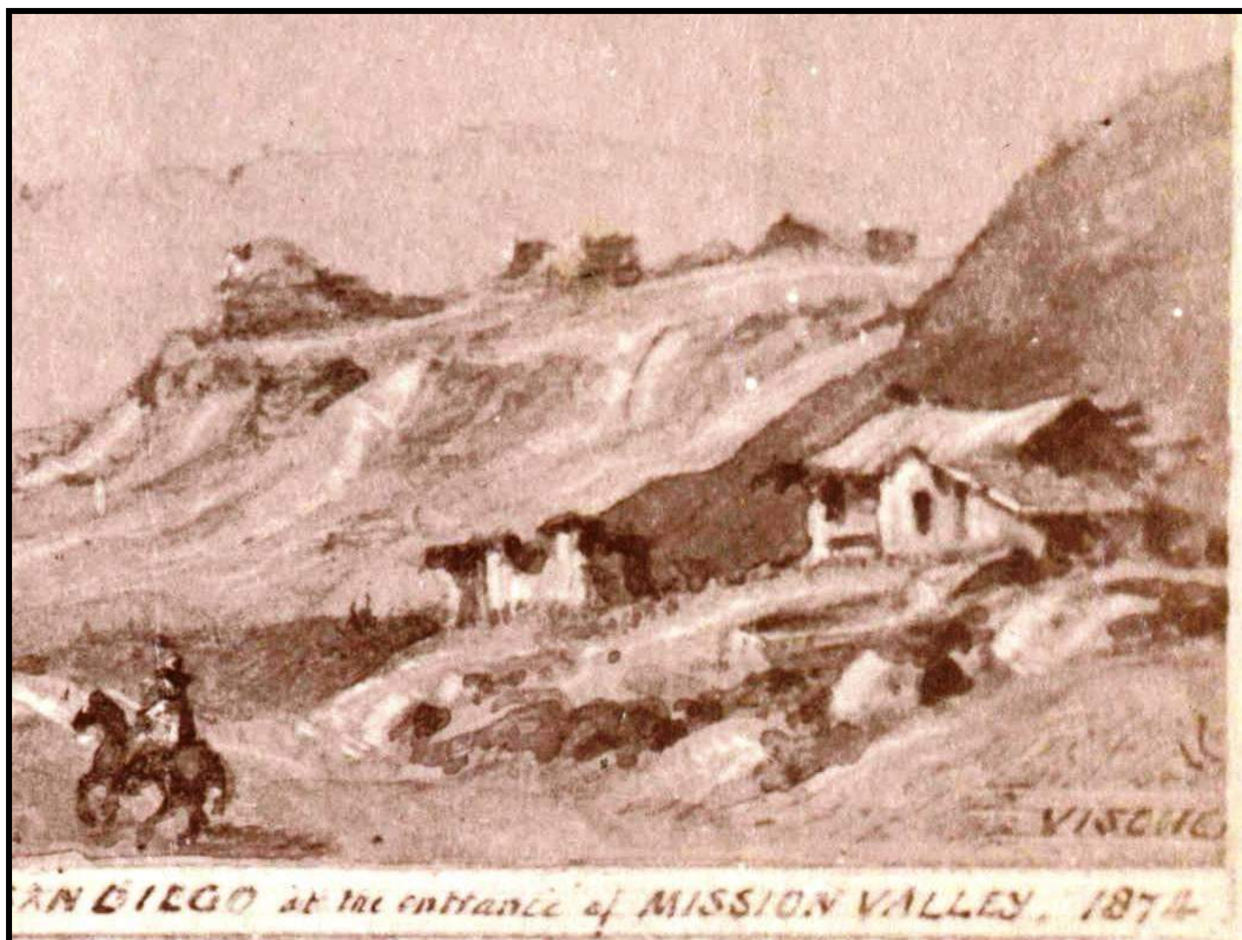


Figure 23: Substantial Walls Still Stood on Presidio Hill in 1874 When Edward Vischer Painted This View. The ruins in the foreground at the base of the hill testify to the construction of buildings outside the Presidio's walls in the early nineteenth century. (Public Domain courtesy University of Southern California Libraries and California Historical Society. Digitally reproduced by the USC Digital Library. Permanent Link (DOI http://doi.org/10.25549/chs-m8709).

These excavations set the unfortunate precedent of viewing Presidio Hill as an open source for fill dirt by road construction crews in years to come.

Weather and casual vandalism by children pushing over wall stubs continued to take their toll (Ezell 1977 Personal Communication to S. R. Van Wormer).[27] By the beginning of the twentieth century almost all the Presidio's ruins had deteriorated to the point that only shallow mounds remained that could no longer be seen from a distance (San Diego History Center Photograph 1900: #3932-A). Writing around 1906 historian William Smythe (1908:81) described the site:

> Nothing now remains on Presidio Hill to show the casual observer that it was ever anything but a vacant plot of ground. Weeds cover the earth, wild flowers bloom in their season and always the ice plant hangs in matted festoons from the scattered mounds of earth. A closer examination of these mounds however, shows them to be arranged in something like a hollow square. The soil is found to be full of fragments of red tile and to show the unmistakable signs of the long trampling of human feet. Looking more closely at the mounds, beneath the coverings of weeds and earth, one finds the foundations of old walls built of thin red tile and adobe bricks. These remains are all that is left of the Spanish Presidio of San Diego.

In a history of San Diego published in 1913, Samuel T. Black (1913:79) used Smythe's exact text for his description of Presidio Hill.

During this period local personalities began to recognize the historical significance of San Diego's Presidio site. William Smythe surveyed the ruins and consulted with local long time residents to determine area functions. Based on this information he produced the

---

[27] Dr. Ezell stated that he had spoken to an elderly gentleman in the 1960s or early 1970s who recalled pushing over wall remains as a boy.

first conjectural map of the former compound for his book on San Diego's history (Figure 24) (Smythe 1908:83; Williams 1997a:31).

In his 1910 publication *Harbor of the Sun*, poet and author John S. McGroarty colorfully pleaded for recognition of the site of the original founding of Mission San Diego on Presidio Hill, and restoration of the Mission's ruins still visible further up the valley with the paragraph already used as the introduction to this section and presented a second time here:

> Some day some great, strong step shall find the place - holy with blood of martyrs and the tears of penitents - some great, strong hand will reach out lovingly, and morning suns and mellow moons will look again on the shrine rebuilt in the Place of First Things where California began (McGroarty 1910:21).

A year later, in 1911, William Smythe also put forward the case for conservation: "The old Presidio Hill overlooking Old Town should be perpetually preserved and made the object of sacred and loving care. . . . The hand of decay, now lying so heavily upon the . . . establishment which dominated San Diego and its surroundings for seventy years, should be sharply arrested, for complete obliteration of that eloquent ruin is unthinkable to men and women who have any reverence for the past" (*San Diego Union* 2 January 1911:20).

In 1913 formal acknowledgment of the site occurred with erection of the Serra Cross, a commanding structure some 24 feet high built out of fragments of discarded Presidio roof and floor tiles and placed on a raised cobble and earthen pedestal that had supported the former commandant's house. At that time the spot was believed to be the site of the founding of San Diego Mission (*San Diego Evening Tribune* 27 September 1913:2).

Events related to erection of the cross brought another set of major ground disturbances to the Presidio site. In 1907 the Southern Construction Company, under direction of local developer D. C. Collier, was engaged in road work near Presidio Hill. In need of fill dirt,

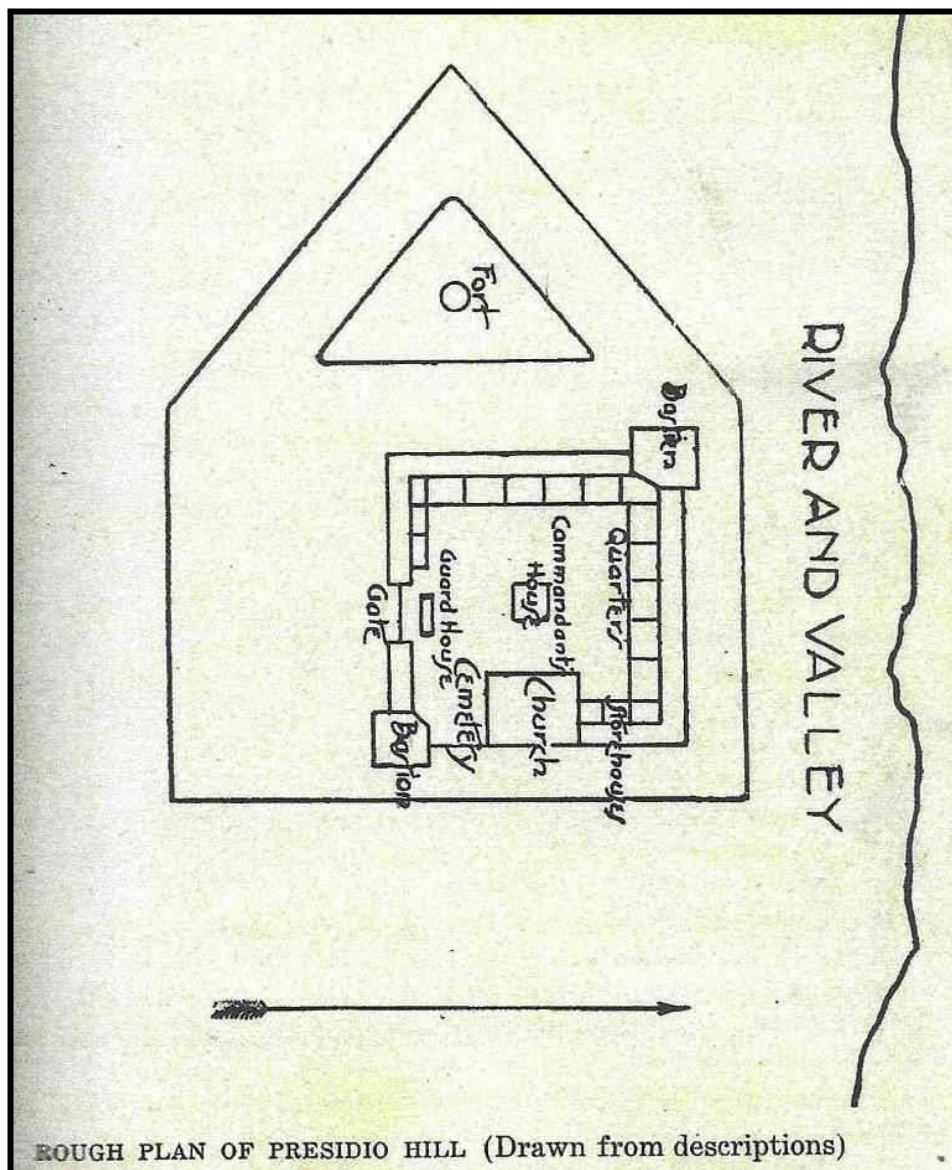


Figure 24: Smythe's "Rough Plan" of the Presidio Based on Early Residents' Descriptions (Smythe 1908:83). In spite of the arrow at the bottom of the map pointing easterly instead of to the north, this plan is remarkably accurate. The gateway and the church are positioned correctly, and a "storehouse" is identified at the location of the Chapel courtyard. Although slightly to the west of its actual location, the commandant's house is generally in the right spot, and the configuration of rooms along the interior edge of the defense wall is conceptually correct. The "fort" on the point of the hill is intended to represent the 1796 cannon emplacement. Given the overall general accuracy of the rest of the map there is no reason not to accept this location as reasonably accurate, although the battery was probably not that large.

under Collier's directions, the crew "proceeded to 'shoot' up-the-side of the hill with giant powder [dynamite] placed in mines all long the face. . . ." When the charges detonated: "A dull roar resulted and the earth was thrown into the sky. . . . As the dust cleared . . . and the blown loose earth settled, D. C. Collier and his men saw a great quantity of tile falling and lying loose on the ground" (*San Diego Evening Tribune* 27 September 1913:2).

The construction crew took their fill dirt and left the tile. Its presence on the hill as a physical representation of the place where Europeans first settled at San Diego remained with Collier. He become inspired in 1910, when McGroarty called for formal recognition of Presidio Hill's historic significance and conceived of erecting a cross constructed from the tile fragments to mark and commemorate the site (*San Diego Union* 17 July 1913:5; 2 October 1913:8).

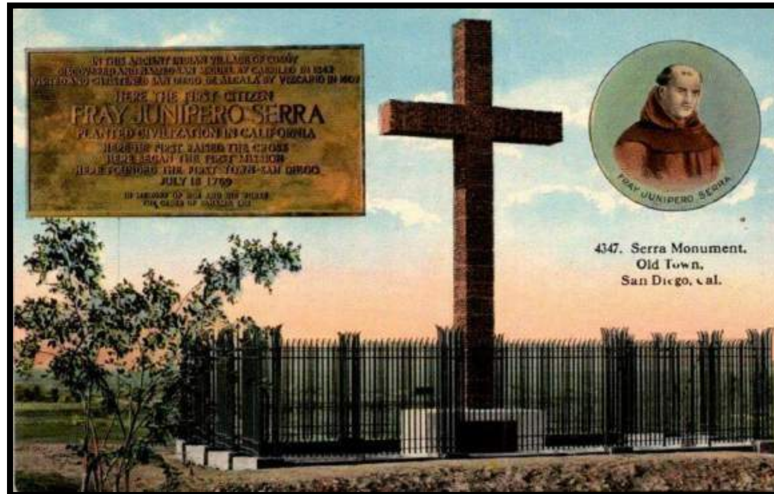
Three years later he realized his vision. Collier, as president of a local community booster's association, The Order of Panama, was in charge of the Carnival Cabrillo, a four day celebration scheduled for September 24, 25, 26, and 27, 1913, to celebrate the 375th anniversary of Cabrillo's discovery of San Diego Bay, the 400th anniversary of Balboa's discovery of the Pacific Ocean, and the 144th anniversary of Father Serra's establishment of the first California mission at San Diego. Along with a parade and other festivities, memorials would be dedicated at the newly established Cabrillo National Monument on Point Loma, at Balboa Park, and on Presidio Hill. The Presidio would be marked with a large cross dedicated to Father Serra and built from tiles buried within the ruins (*San Diego Union* 22 September 1913:3; *San Diego Evening Tribune* 27 September 1913:2).

The cross's construction occurred during the summer and fall months of 1913. On July 17, Collier led "a band of seventy men of San Diego and visitors from Los Angeles," who "scrambled up the . . . hill and attacking the hard ground with pick and shovel, began the work of reclaiming the precious bits of tile. Reverent hands worked with a will, officials

of the City, members of the Order of Panama, and prominent men in every walk of life, with coats off and sleeves rolled up, picked side by side, spurring each other on to greater efforts, and soon the old hill was punctured with holes and dotted with goodly piles of the flat red brick. . .. When enough of the tiles had been piled up and carted to a cache in the side of the hill, the workers returned to their automobiles and scattered to their duties in the city" (*San Diego Union* 17 July 1913:1).

Trenches were excavated, foundations poured, and, what appears to be in old newspaper photographs a cross of steel "I" beams, erected. Perched on wooden scaffolds, masons laid layers of tile around the steel core to complete the monument (*San Diego Union* September 2 1913; 9-22-1913:3). "The foundation of the new cross" was believed to have been "laid upon the very floor of the mission of 1769, which was discovered during recent excavations" (*San Diego Union* 2 October 1913:1). The cross's location is actually on the elevated foundation of what is now known to have been the former commandant's house.

On the last day of the festival, September 27, 1913, an unveiling ceremony revealed the Serra Cross to a gathered crowd. A large stand for speakers had been erected, and "thousands of persons trudged up the hill and crowded about the cross and the platform before it" (*San Diego Union* 2 October 1913:1). An ambassador from the King of Spain addressed the audience. Next, Catholic Bishop Conaty performed a high mass. Following this, Native Americans from the Mesa Grande Reservation demonstrated a traditional dance. Finally, a canvas covering draped over the new monument dropped to the ground revealing the 24-foot tile Serra Cross (*San Diego Union* 27 September 1913:1; 2 October 1913:1). Standing alone on the un-landscaped barren slopes of Presidio Hill it could be seen from a great distance and "by travelers" arriving by "rail and water" (*San Diego Union* 27 September 1913:1). Following formal recognition that came with the building of the Serra Cross, Presidio Hill became a popular destination. Tourists and locals regularly visited the site and it was depicted on popular post cards (Figures 25) (McGrew 1922: Front Piece).



A

B

Figure 25: The Serra Cross. A circa 1920 post card, collection of S. R. Van Wormer; B, from a 1926 stereo card (courtesy Library of Congress, https://www.loc.gov/pictures/collection/stereo/item/2018646154/).

The next set of significant disturbances to the ruins occurred a little over a decade later with construction of Presidio Park. These intrusions were conducted under much more

controlled and careful circumstances than those caused by the erection of the Serra Cross, and ultimately resulted in the stable preservation of the site. During the same period as McGroarty, Smythe, and Collier's initial concerns for recognizing Presidio Hill's significance, San Diego businessman, developer, and philanthropist George Marston became interested in the Presidio's preservation. During the first decade of the twentieth century Marston advocated for the cultural development, moral uplifting, and beautification of San Diego. He was an outspoken Progressive who believed in the latest ideas of city planning. In 1902 he publicly offered to pay $10,000 of his own money to hire a professional to develop a plan for the 1,400-acre City (now Balboa) Park, which continued to remain threatened by development. The concept of Urban Parks had formally evolved during the late nineteenth century. Parks were seen as a means to bring nature back into the city and provide some relief from congested living conditions and industrial blight. They would give the city's working class a respite from the urban environment and offer morally uplifting surroundings (Hennessey 1986).

In 1907 Marston and four other members of the Chamber of Commerce Streets and Boulevards Committee purchased fourteen lots for $6,000 to preserve the site of the first Spanish settlement and Mission in California on Presidio Hill. Over the next dozen years Marston bought out his other partners and acquired additional property surrounding the original purchase. He put these 20 acres in trust for the city to develop a historic park. In 1925 Marston hired urban park designer John Nolan to provide landscaping and planning advice. More acres were donated by the city (Hennessey 1986). During the next four years, under the supervision of Percy M. Carter, the area of the original Presidio was delineated by a perimeter stuccoed wall running along the visible outside of the remains of the original defense wall,[28] irrigation facilities were installed, landscaping initiated, and the Serra Museum, an imposing Spanish Colonial style building designed by William Templeton Johnston - constructed at the top of the hill overlooking the original Presidio site (*San Diego Union* 7 March 1926, 10 February 1929:19, 19 May 29:4, 3 April 1931:12; *San Diego Evening Tribune* 9 February 1929:5; Broell 1978:13).

[28] The stucco covered wall built to define the boundaries of the Presidio compound is called the "Marston Wall."

By the time Presidio Park was dedicated on July 16, 1929, on the 160th anniversary of the founding of Mission San Diego at that location, George Marston had spent 22 years and $400,000 dollars of his own money to acquire the land, develop the park and build the museum (Hennessey 1986).

In July 1930, San Diego City Council formally accepted ownership of Presidio Park from George Marston, although the local philanthropist would remain in charge of and secure financing for most of the tract's continued development for the next decade (*San Diego Union* 8 July 1930:5; *San Diego Evening Tribune* 7 July 1939:1). By the spring of 1931 the grounds had been landscaped with "at least 100,000 trees, shrubs, vines, flowering perennials and annuals." The ruins remained exposed at this time and: "Within the Presidio walls cacti grow among those mounds which were once the living quarters of Catalan soldiers, . . Pio and Andres Pico, Santiago Arguello (sic.), Governor Echeandía and their contemporaries. In these little apartments, the tiled floors of which are here and there still visible, bristle the strange cereus, ocotillo, [and] Joshua trees" (*San Diego Union* 3 May 1931:17) (Figures 26 - 27).

In 1932 Percy C. Broell became Presidio Park superintendent, replacing Percy M. Carter who had died unexpectedly in April of the previous year. Broell planned and oversaw all aspects of the park's development for the next 10 years (*San Diego Union* 3 April 1931:12; 6 December 1937:2; Marston 1942; Broell 1978:3-4). He and Marston secured "several hundred thousand dollars" in Great Depression assistance funding from the California State Relief Agency (SERA) and Federal Works Progress Administration (WPA) (*San Diego Union* 15 July 1938:15). The grants provided money for road improvements, landscaping, cobble gutters and stairways, paths, expansion of irrigation systems, picnic areas, restrooms, and other facilities (Marston 1942; Broell 1978:11).

Figure 26: Presidio Ruins Circa 1925 – 1930. Low mounds are all that remained of the Presidio by the first decades of the twentieth century (Public Domain: University of Southern California Libraries and California Historical Society. Digitally reproduced by the USC Digital Library accession number, CHS-9505. Permanent Link (DOI) https://doi.org/10.25549/chs-m8708).

Figure 27: San Diego Presidio Ruins Circa 1935 Planted in Cactus (San Diego History Center Image # 80:8040).

One of the major tasks accomplished with WPA monies was definition of the true extent of the physical remains of the Presidio through archaeological excavation, and the subsequent covering of the ruins with imported soil for their preservation. Broell and his assistants, Reeves L. Rowe and Ernest H. Smith, supervised WPA crews in test excavations along all four sides of the site. Test pits at selected locations cleared debris from intact remains, and encountered tiled floors, cobble and tile foundations, roof fall, and wall remains (*San Diego Evening Tribune* 6 December 1937:2; *San Diego Union* 15 July 1938:15; Broell 1938, 1978:18-20). Individual excavations were mapped and photographed. Notes were kept by creating detailed drawings (Broell 1978:18-20). Cataloged ("indexed") artifacts including ceramics, Native American pottery, hammered copper, iron fragments, tools, and other items were archived with the San Diego Historical Society (now the San Diego History Center) at the Serra Museum (*San Diego Union* 16 July 1938:12; *San Diego Evening Tribune* 5 January 1939:6; Broell 1978:7, 12). Finally, a detailed topographic map of the ruins was created with a lettered key describing the major features uncovered (Figure 28) (Broell 1938).

Evidence from the excavations concluded that remains of "an extensive array of permanent, well fashioned buildings dotted the site" (*San Diego Evening Tribune* 6 December 1937:2). The compound "covered several acres, and evidence indicated . . . it was solidly and carefully constructed with an engineering accuracy that has amazed [the] investigators" (*San Diego Union* 15 July 1938:15).

Testing had occurred along all four wings of the old Presidio and defined areas that would be opened up and further identified by later investigators. In the south wing WPA crews delineated features eventually recognized by San Diego State archaeologists in the 1960s as the Chapel Nave, Sacristy, Side Chapel, and Baptistery, as well as the buildings along the north side of the Chapel Courtyard (Broell 1938; Brockington and Brandes 1965; Ezell 1968, 1970, 1976). Along the eastern edge Broell's crews uncovered a bastion at the southeast corner, along with floors in the area of the commandant's house. In the western wing rows of rooms and an opening that was later identified by San Diego

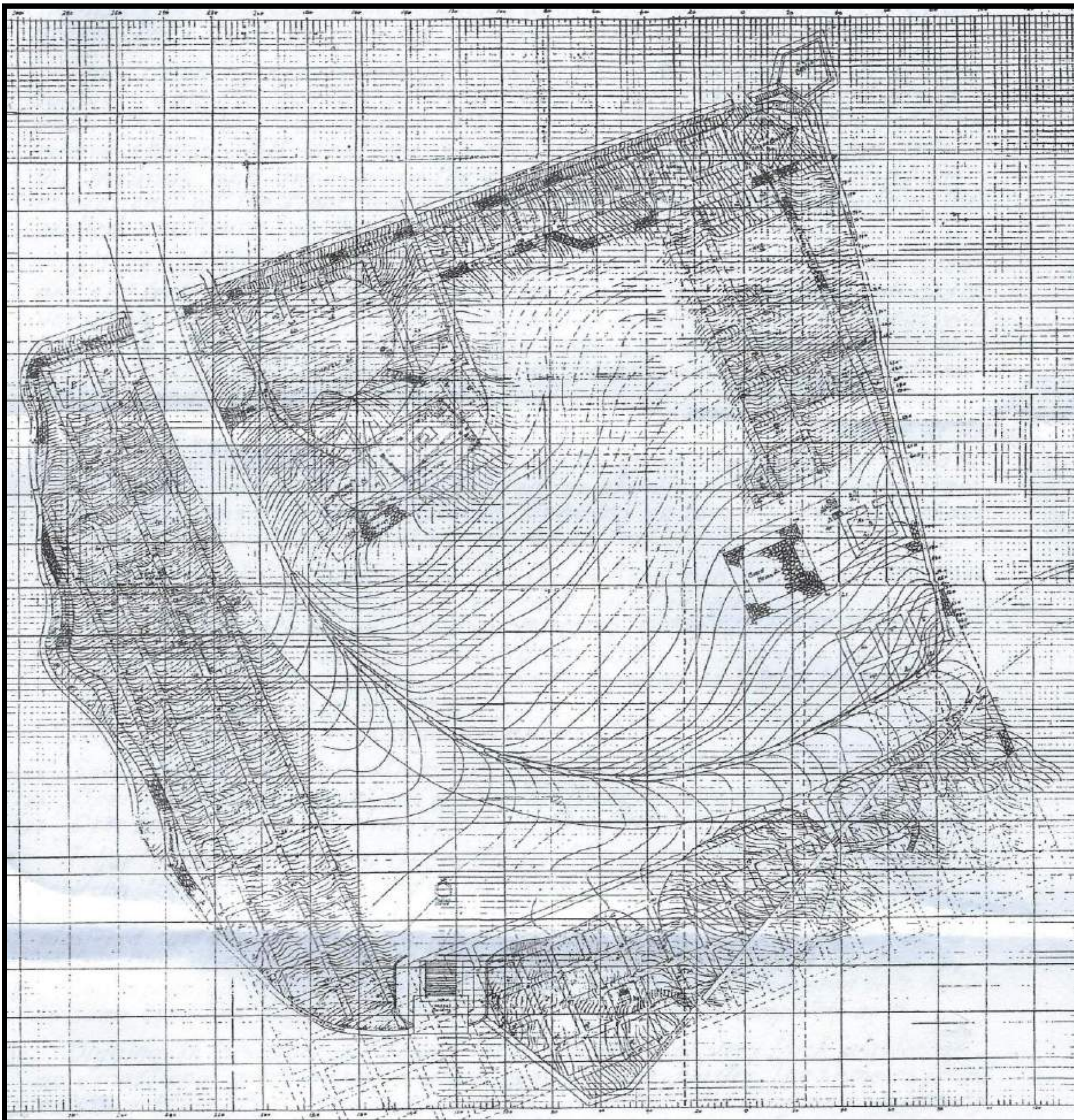


Figure 28: Percy Broell's Topographic Map of the Presidio Ruins. North is at the top of the drawing (Broell 1938).

Mesa College excavations in the 1970s and ’80s as the main gateway were outlined (Broell 1938; Barbolla 1992).

One of the last areas to be opened was a large complex of rooms in the north wing, “its red 14-inch square tile still in place and parts of its walls and foundations still preserved. It is undoubtedly the largest of the structures brought to light so far” (*San Diego Evening Tribune* 6 December 1937:2). Excavations led by Jack Williams eventually exposed this substantial group of features and identified it as Commandant Zúñiga’s house (Broell 1938; Williams 1997a).

Lacking substantial background research, and the ability to see beyond the limits of his small test pits, Percy Broell did not succeed in accurate identification of what his excavators uncovered. He felt the Chapel Complex represented remains of the guardhouse and gateway. Although he correctly identified the commandants’ house location under the Serra Cross, he believed the Chapel had been in a small alcove immediately adjacent to the cross, when in actuality this was also part of the commandant’s house complex (Broell 1938). Given the accuracy of his delineation of the ruins, which was the primary objective of the excavations, the inaccurate identifications of function are of minor importance, and certainly understandable, given the lack of contextual information under which he labored. His San Diego Presidio investigations should be considered one of the pioneering efforts of Historical Archaeology.

Upon completion of excavations, Percy Broell had the Presidio’s ruins, along with the rest of the park that remained unlandscaped, covered with fill dirt topsoil. He used alluvial silt excavated from the “middle of the [San Diego River] bed” and carried in “half ton” trucks. “We hauled it for months, tons, tons . . .” (Broell 1978:10, 24). The ruins and other open areas of the park were then planted in green grass lawns (Marston 1942).

Creation of Presidio Park brought stabilization to those ruins that had not been impacted by road building, irrigation and other public works, and monument construction. No further dramatic ground disturbances occurred until the implementation of future academic archaeological investigations. From 1964 through 1997 various excavations occurred. First was Paul Ezell's field school at the Chapel Complex from 1965 through 1976 (Brockington and Brandes 1965; Ezell 1968, 1970, 1976; Larkin 1968; Ezell and Ezell 1980). Between 1976 and 1987 Diane Barbolla investigated the west wing and gateway (Barbolla 1983, 1992). From 1987 through 1990, Brad Bartel tested portions of the north wing (Bartel 1991). The Center for Spanish Colonial Archaeology, under the direction of Jack Williams, completed uncovering the north wing between 1993 and 1997 (Williams 1997a:30, 2004:121).

To conclude and summarize, the settlement that became the San Diego Presidio was established on present-day Presidio Hill as Mission San Diego de Alcalá on July 16, 1769, by the Franciscan priest, Father Junípero Serra. Until 1774 the force of soldiers at the Mission served under the command of the Presidio at Monterey. On January 1 of that year, the military camp at San Diego became Alta California's second Presidio. San Diego was one of four Presidios ultimately established in Alta California. The others included Monterey (1770), San Francisco (1776), and Santa Barbara (1782).

The form and design of the San Diego Presidio passed through several distinct stages between its founding as a mission in 1769 and its abandonment in 1837. During these 68 years the fortified community included soldiers and their families, craftsmen, Indian workers, prisoners, and others who settled in San Diego. It became one of the more important settlements in southern California, functioning as a major center of military and government administration and commercial activities. Population fluctuated over time but remained generally steady from the late 1770s until the 1820s, when people began to live outside the Presidio walls and especially at the base of Presidio Hill around the plaza of the pueblo that would become Old Town San Diego (Williams 2004:122-123, 128).

Developed as frontier defense fortifications, Presidios were never intended to defend from invasions of large foreign armies or heavy naval bombardments. Their troops provided defense against hostile Native tribes and acted as a police force for the missionaries. Additional duties included exploration, aiding missionaries to scout out new mission locations, protecting supply trains, carrying dispatches, and tending Presidio horse herds and other livestock. In California one of their main duties was as mission guards. Escoletas (squadrons) of between 5 and 12 soldiers were always on duty at each of these establishments.

At San Diego and California's other Presidios women (presidarias) played as important a function, if not more so, as men in the community's daily life. They fulfilled obvious roles in establishing and sustaining families and perpetuating Mexican Colonial culture. Through their essential contributions and hard labor as family caregivers, cooks, and house keepers, they developed and maintained Presidio communities and were the primary handlers of the cooking, serving, utilitarian, household, and storage vessels that make up the majority of the collection on which this report is focused (Casteneda 1990:130, 229; Williams 2003:18, 51).

Following its abandonment in 1837, the San Diego Presidio fell quickly into ruin. However, the Chapel continued to be used on at least a semi-regular basis through 1845. After that time the religious building also deteriorated to a point that it ceased to be functional. The site remained unoccupied and exposed to the elements for 100 years. In 1913 construction of the Serra Cross constituted the first effort to recognize the location's historical significance. Creation of Presidio Park from the mid-1920s through the late 1930s brought more formal recognition and the ruins were covered with a protective layer of soil. No further dramatic ground disturbances occurred until implementation of academic archaeological investigations from 1964 through 1997.

TRADE AND ECONOMICS

By Stephen R. Van Wormer

Introduction

The purpose of this section is to provide a summary discussion of, and context for, the varied sources of supply that brought a wide variety of merchandise, including ceramics, to Alta California. From the time of its founding the province was dependent on maritime delivery routes. From 1769 to 1810 annual supply ships from San Blas brought provisions to presidios and missions. Although somewhat irregular in service during the early period, after 1774 San Blas ships made at least two and sometimes three trips a year, calling regularly at the presidios of San Francisco, Monterey, San Diego, and Santa Barbara. These cargos included mostly manufactured items since by the late 1770s the missions generated a surplus of agricultural produce and became the main providers of foodstuffs for the presidios. In addition, over time they also evolved into an important source of locally manufactured merchandise. Civilian pueblos at San José and Los Ángeles also provided foodstuffs.

During the late eighteenth and early nineteenth centuries alternate sources by private commercial interests began to augment government shipments. These developments laid an important foundation for the coastal trade that became critical to California commerce during the early nineteenth century. At the same time international maritime development in the eastern Pacific established a trade complex that integrated California into a commercial network involving Mexican, Central American, and South American ports, the Hawaiian Islands, the northwest coast of the American continent, and China. The wars for Mexican Independence from 1810 to 1821 radically disrupted government support of the province, forcing California's inhabitants to become almost completely self-sufficient financially, and totally dependent on both legal and contraband avenues of the

coastal trade for merchandise not produced in the province. California's coast was opened to legal foreign imports following Mexican independence, and from 1822 to 1848 the hide and tallow trade dominated the region's commerce.

The San Blas Supply Ships and Mission and Pueblo Production 1769-1810

From the time of its founding in 1769, Alta California was dependent on maritime delivery routes. Realizing that California colonization could not succeed without a dependable supply chain, inspector general (visitador general) José de Gálvez founded the naval port of San Blas on Mexico's west coast, halfway between Mazatlán and Bahía de Banderas, in the present state of Nayarit, for the specific purpose of shipping supplies to Alta California. For 35 years San Blas served as the most significant supply point for California, as well as the port that many of those serving in the province were required to pass through (Chapman 1915; Thurman 1967:13-15, 24; Archibald 1978:23, 49-72; Hackel 1997:113-114; Perissinotto 1998:18).

On an annual basis the quartermaster (habilitado) for each presidio completed orders of needed supplies, called memorias. Every spring, these were compiled and sent to Mexico City where agents purchased requested goods and then shipped them by pack mule train to San Blas, from where naval supply ships carried the cargo to California (Forbes 1839:281; Bancroft 1884:629; Archibald 1978:25-27, 35; Perissinotto 1998:19; Trejo Barajas 2014:113; Trejo Barajas and Duggan 2018:32). Although plagued by problems of unreliable scheduling, late arrivals, and spoiled foodstuffs, during the early years of the colony, after 1774 the San Blas ships made at least two, and sometimes three trips a year, calling regularly at the presidios of San Francisco, Monterey, San Diego, and, after 1781, Santa Barbara (Table 3) (Bancroft 1884:444; Chapman 1915; Thurman 1963:60-70, 105, 1967:242, 251, 252, 344; Archibald 1978:5).[29]

---

[29] Bancroft 1884:444 noted, "Each year two of the four transports arrived from San Blas with supplies for presidios and missions, one usually visiting San Diego and Santa Barbara, and the other San Francisco and Monterey. The *Favorita* from 1783 to 1790 made five trips; the *Princesa* and *San Carlos*, or *Filipino*, each four trips; and the *Aranzazu* three.

Table 3: San Blas Supply Ships Sent to California 1781-1786 (Thurman 1967:252).

Year	Vessel	Commander	Destination
1781	*Favorita*	Juan Pantoja	Loreto
1782	*Princesa*	Estevan Martínez	Alta California Presidios
	Favorita	Ag. De Echevarria	Alta California Presidios
1783	*San Carlos*	Estevan Martínez	Port of San Francisco And Monterey
	Favorita	Juan B. Aguirre	Presidio of Santa Barbara Channel and San Diego
1784	*San Carlos*	José Canizares	Presidio of Santa Barbara Channel and San Diego
	Favorita	Estevan Martínez	San Francisco and Monterey
	Aranzazu	José Tovar	Loreto
1785	*Favorita*	José Camacho	Presidio of Santa Barbara Channel and San Diego
	Aranzazu	Estevan Martínez	San Francisco and Monterey
1786	*Princesa*	Estevan Martínez	Port Of Monterey and San Diego
	Favorita	José Tovar	Port Of Monterey and San Francisco
	Aranzazu	Juan Pantoja	Presidio of Santa Barbara Channel and San Diego

Royal warehouses established at San Diego and Monterey in 1773 stored supplies and merchandise from San Blas (Archibald 1978:7). A guarda-almacén (store keeper) managed distribution. In 1781 this position was changed to habilitado, whose duties were similar to that of a military quartermaster. Chosen by each presidial company from among the junior officers,[30] this administrator oversaw the reception and distribution of pay and rations and kept company accounts. In addition to the numerous items sent from San Blas, warehouses also stored produce of local California manufacture from missions and pueblos (Bancroft 1885a:335; Archibald 1978:21). California soldiers received their pay as credits from the habilitado for purchases at company warehouses (Archibald 1978:65).

In the late 1770s some missions began to reap surplus crop yields. This trend continued so that by the mid 1790s mission harvests had achieved agricultural independence for the province and relieved reliance on imported food. As a result, while early San Blas cargos consisted almost exclusively of foodstuffs, after 1780 shipments gradually became more oriented to manufactured goods (Archibald 1978:11, 13, 20, 52-53; Hackel 1997:116;

---

[30] Below the rank of captain.

Duggan 2000:167-198). The ships carried thousands of different items ranging from military supplies to agricultural equipment, fabric and clothing, hardware, personal and household items, and kitchen utensils that included various types of ceramics such as Galera Ware, Mayolica, Chinese porcelains, and some European manufactured items. Consumable products that could not be grown in California such as rice, sugar, and chocolate were also regularly included in the cargos (Presidio de San Diego Memorias 1782-1802; Perissinotto 1998).

As missions continued to produce agricultural excess of both harvested crops and livestock, they became the presidios' major source of foodstuffs. Through credits from sales to the military that they could redeem for purchases of manufactured goods in Mexico, these institutions augmented their incomes far beyond their $800 pesos annual government stipends[31] (Archibald 1978:14-16, 30-35, 43-44, 64; Hackel 1997:116-117; Barger 2000:125; Duggan 2016:29). Each presidio depended largely on the missions within its district. For San Diego Presidio these included San Luis Rey, San Gabriel, San Juan Capistrano, San Diego, and, in present day Baja California, San Miguel (Bancroft 1884:647, 652). Due to more arid conditions at their locations, San Diego and the Baja California mission did not always generate an abundant surplus. San Luis Rey, San Juan, and San Gabriel, on the other hand, became some of the most productive institutions in the system, and more than made up for any periods of deficit suffered by the more southern establishments. During the second decade of the nineteenth century missions San Diego, San Luis Rey, San Juan Capistrano, and San Gabriel shipped an estimated "25 fanegas[32] of maize, 5 1/2 of beans, and 16 arrobas of lard" weekly to the San Diego Presidio. On a yearly basis this totaled 1300 fanegas of maize, 286 of beans and 832 arrobas of lard. In addition, these missions provided the Presidio with rations for prisoners held there (Archibald 1978:11). Presidios and individual soldiers also procured goods from missions outside their districts (Archibald 1978:67).

---

[31] The symbol "$" is used to designate pesos unless otherwise specified. The Spanish / Mexican peso during the late eighteenth and early nineteenth centuries was equivalent in value to the U.S. Dollar (Beilharz 1971:40-41).

[32] Fanega "Any of various units of capacity used in Spain and Spanish-American countries especially: one of about 1.6 bushels." Arroba "An old Spanish unit of weight equal to about 25 pounds." (https://www.merriam-webster.com/).

By the end of the eighteenth century the missions had also become a source of locally produced manufactured goods. Mexican artisans had been sent to California in 1790 to instruct the neophytes in various crafts. They included carpenters, blacksmiths, spinners, weavers, masons, tanners, cobblers, tailors, a ribbon maker, saddlers, and potters. Mission Indians proved to be adept and quick learners and soon products from their workshops became common at the presidios (Archibald 1978:147; Hackel 1997:116-117, 120-121). Mission-produced Brown Ware and lead glazed Galera Ware pottery constituted a regular part of the ceramics used in presidio households (Barbolla 1992:120; Voss 2002:77, 487, 676-677, 686-688; Costello 2014; Felton et al. 2014; Peelo 2014; Skowronek et al. 2014:178-217, 2015).

Although at first glance the relationship between missions and presidios may appear one sided in favor of the latter, in actuality it was one of very close mutual interdependence. Presidios needed the missions as suppliers of foodstuffs and manufactured goods to supplement those sent from San Blas. Missions needed the presidio markets as a source through which they could augment their income beyond their annual government stipends through accumulation of credits that could be redeemed for goods from Mexico (Archibald 1978:20). In addition, presidio military forces were essential for establishment of the security and social stability required for mission survival. In summing up the complex intercourse between presidios and missions, historian Robert Archibald noted:

> When mission and presidio accounts are closely examined, it is difficult to avoid being impressed by the intimate relations between the two institutions and the many relationships and transactions which elicited no argument. Both recognized their basic interdependence and, although both fought bitterly when it appeared that essential prerogatives were being usurped, neither ever questioned the other's right to exist. Both mission and presidio were integral to a time-proven scheme designed to add to the imperial glory of Spain and this basic fact was recognized.

> When the monarchy and their role in it was threatened in the nineteenth century, neither mission nor presidio used the opportunity provided by absence of authority to attack its partner on the frontier. In fact, the reverse was true; the two cooperated more closely to insure their mutual survival (Archibald 1978:74).

Civilian occupied pueblos provided another source of foodstuffs for the presidios. Three pueblos were established for the specific purpose of producing food for the military: San José in 1777, Los Angeles in 1781, and the Villa de Branciforte, near present-day Santa Cruz in 1797. Generally unsuccessful, Santa Cruz lasted only about a decade. San José and Los Angeles prospered, producing large harvests of beans, wheat, and, most of all, corn (Archibald 1978:93-95; Hackel 1997:117).

Bourbon Liberalization of Trade

During the late eighteenth and early nineteenth centuries alternate sources of supply by private commercial interests began to augment government shipments from San Blas. These developments laid an important foundation for the coastal trade that became critical to California commerce during the early nineteenth century. Change started with implementation of reforms by the Spanish Bourbon Monarchy. These weakened the monopoly of merchant guilds in Cadiz, Mexico City, and Lima, Peru that controlled most Spanish-American trade during the period (Trejo Barajas 2014:108-109; Bonialian 2017:13-16). The monarchy desired to reform the colonial economy, generate new forms of revenue, and restrict privileges of monopolistic merchant guilds, while opening opportunities for smaller businesses in other parts of the empire. Opening the port of San Blas to private merchant marines played a pivotal role in these efforts (Trejo Barajas 2006a:128-130; Trejo Barajas and Duggan 2018:28-29). These reforms did not signal an abandonment of overall Spanish mercantilist policies. The new regulations did not open the port to foreign trade from sources outside the Spanish Empire, and the naval function and mandate to send supply ships to California did not cease until after outbreak of the wars for Mexican independence in 1810.

Major implementation of reforms began in 1795 with establishment of a Guadalajara based merchant guild the *consulado de Guadalajara*. Guadalajaran businesses, which were three times closer to the port than Mexico City, could now provide merchandise for San Blas cargos. After this date a greater portion of shipments to California originated in Guadalajara and its surrounding area, such as the ceramic production centers of Tlaquepaque and Tonalá (Trejo Barajas 2014:121; Duggan 2016:46-47; Trejo Barajas and Duggan 2018:30-34). These actions also defined a legitimate commercial aspect to the port's operations. Individual merchants received permits in the late 1790s to conduct commercial voyages from San Blas to Baja and Alta California. Trade between the port and South America was opened in 1796, followed by commercial relations with Panama in 1809 (Trejo Barajas 2014:115-119; Bonialian 2017:17-18; Trejo Barajas and Duggan 2018:30-35, 44;). The Panamanian commerce consisted of English merchandise sent from the British Isles to Jamaica, and then transported to and across the isthmus to the Pacific coast from where Panamanian merchant ships carried the cargos to San Blas. Some of this merchandise, as well as that on Peruvian ships, ultimately reached California (Trejo Barajas 2006a:26, 2014:127; Bonialian 2017:24-26). In 1812 the port of Mazatlán was granted the same trading privileges as those of San Blas (Trejo Barajas 2014:123).

Development of the Eastern Pacific

The initiation of commerce between Mazatlán, San Blas, Panama, and Peru at the turn of the nineteenth century established the foundation for a coastal trade along the Pacific coast of North and South America of which Alta California would become a significant contributor. The entrance of merchant vessels from England and the east coast of the United States into the Eastern Pacific during the same period contributed largely to this commerce and development of a trade complex that integrated California into a commercial network involving Mexican, Central American, and South American ports, the Hawaiian Islands, the northwest coast of the American continent, and China (Figure 29) (Igler 2004; Bonialian 2017:21).

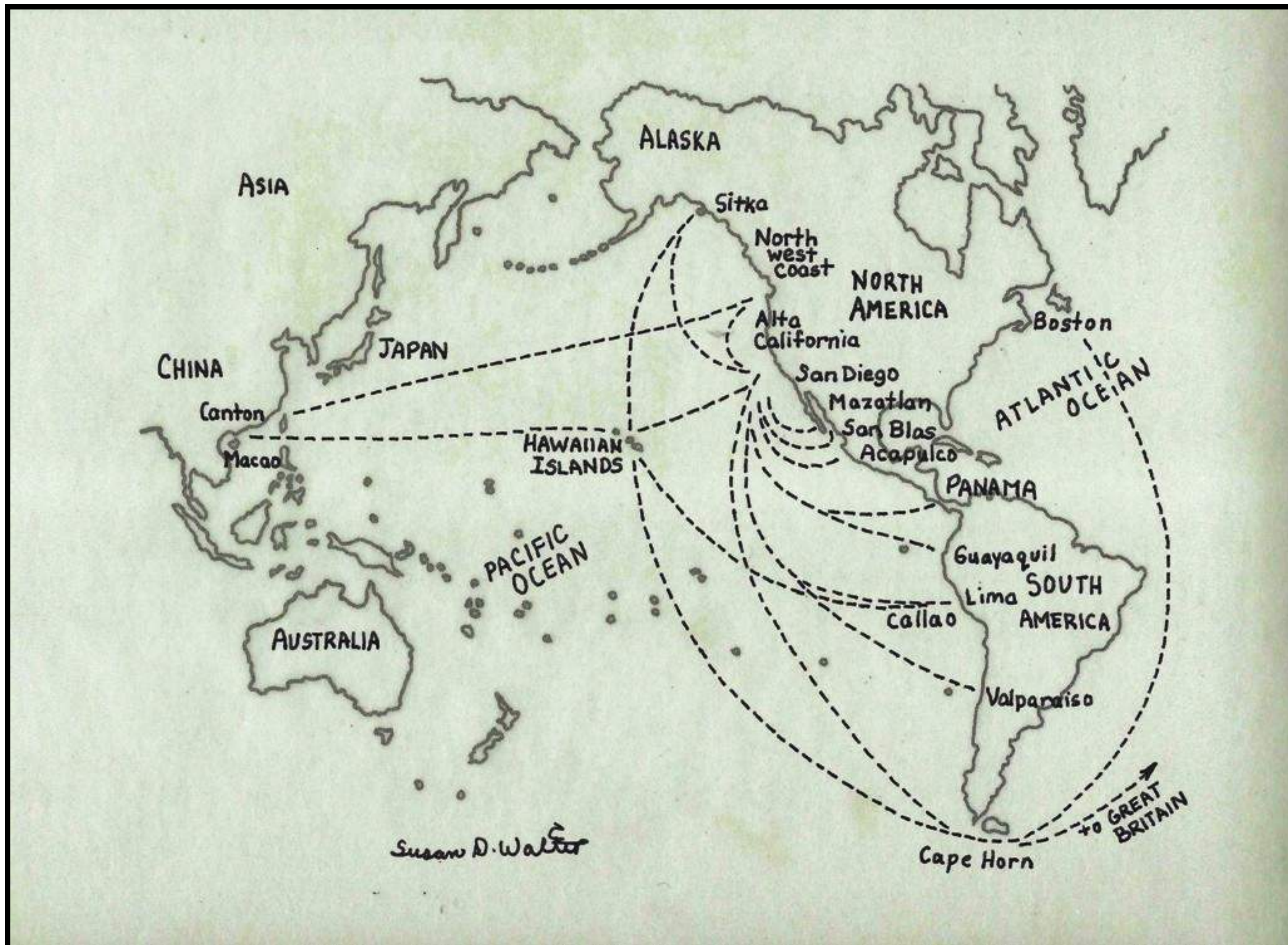


Figure 29: California Trade Networks 1800 – 1848. Map by Susan D. Walter after Igler 2004.

Sustained English and American trading in the Pacific began with Captain Cook's third Pacific voyage. In January 1778, his ships arrived at Hawaii, which he named the Sandwich Islands. From there the expedition traveled to the Russian-occupied American Northwest coast and loaded a cargo of sea otter pelts. Cook was killed when his vessels returned to Hawaii in February 1779. The crew continued explorations in the Pacific, eventually arriving at the port of Macao (Macau), where its crew discovered that the Chinese highly valued sea otter pelts and would pay handsomely for them. By the 1790s the Northwest-China fur trade had become established. Ships from England and the east coast of the United States voyaged to the Pacific to gather otter pelts along the Northwest Coast, then sailed to Hawaii to resupply, and continued to China to sell their cargos (Morrison 1921a:167-169; Ogden 1941; Archibald 1978:115; Griffin and Drummey 1988:128-129; Whitehead 1992:158-159; Igler 2004).

As a result, the port of Honolulu became a vital link in the Pacific trade and developed into a major commercial hub. By 1800, vessels from the eastern United States dominated the trans-Pacific fur trade and around twenty Boston-registered ships annually pursued this route (Morrison 1921a:168-169; Griffin and Drummey 1988:128-129; Whitehead 1992:158-159). King Kamehameha I granted American merchants a monopoly on Hawaiian sandalwood, another resource highly esteemed in China, which added an additional valuable product to their Canton-bound cargoes (Whitehead 1992:158-159; Oakley 2000). "During the first two decades of the nineteenth century the total annual worth of the furs and sandalwood routed through Hawai'i to China was estimated from $300,000 to $1,000,000 annually" (Whitehead 1992:158-159). Pacific historian David Igler has concluded:

> Hawaii's traffic quickly multiplied. It became the hub of trans-Pacific shipping due to its central location, abundant natural resources, and merchant houses established by American and British traders who forged strong alliances with Hawaiian royalty. King Kamehameha II (Liholiho) and these merchants turned the Honolulu harbor into the ocean's Great

> Exchange, the meeting point of the China trade, the Northwest fur trade, Pacific whaling fleet, and Hawaii's own exports, which included agriculture, sandalwood, and shipboard laborers. Despite Hawaii's seemingly isolated location in the middle of the ocean, Honolulu merchants carried on active correspondence with their counterparts in Canton, California, Callao, Boston, and London during the 1820s and 1830s - demanding cleaner hides from California, complaining of bloated warehouses, and inquiring of market prices everywhere (Igler 2004:709).

Forces that created Honolulu's commercial development also brought an expansion of commerce across the Eastern Pacific that linked isolated ports into global trading systems. Rather than returning to New England, a number of Boston-based captains began to operate within the Pacific Ocean. After exchanging their cargos in China for a variety of goods, including porcelain packed in crates and baskets and loaded into the bottom of a ship's hold, they returned to the northwest coast to trade for sea otter pelts. They then continued south along the coast of New Spain, and Central and South America trading for local products such as California produce and sea otter pelts, Chilean wheat, Peruvian wine and oil, and cacao from Guayaquil and Panama, thereby establishing a coastal trade that included the Russian northwest coast of Sitka, Alaska; Acapulco, San Blas, Mazatlán, and Alta California in Colonial Mexico; Panama; and Callao-Lima Peru. Via Honolulu and Manila, these trade networks reached across the ocean to Canton, China. These ships, as well as those that continued to come directly from New England, also carried cargos of English and some American manufactured goods. British merchandise could be obtained in warehouses at Honolulu and Panama. Between 1805 and 1814 forty-three American registered ships pursued the China trade.[33] In addition, Spanish American ships, especially from Panama and Lima-Callao engaged in the coastal trade, often also

[33] Not surprisingly, estimates of number of ships vary. Bonialian 2017:22 has noted: "El estudio de Trejo (2006a, pp. 24-25) alista 30 buques de compañías balleneras británicas que operaron entre 1793 y 1820 por el Pacífico mexicano, luego de haber cruzado el estrecho austral y visitar Valparaíso, El Callao y Guayaquil. Otros estudios (Pereira, 1971, pp. 315-353) constatan que, desde 1788 hasta 1809 navegaron 165 buques ingleses y estadunidenses entre los puertos y mercados del espacio comprendido entre Valparaíso hasta California. Villalobos (1965, p. 94) nos ofrece una cifra más elevada para el mismo periodo de 257 barcos. Jorge León (2001, p. 326) contabilizó unos 80 barcos balleneros y cazadores de pieles por los puertos de Chile, Perú y México hacia 1800, participando en un activo contrabando que respondió a la gran demanda de bienes europeos de los mercados del Pacífico hispanoamericano. Entre 1817 y 1818

dealing in British manufactured goods (Morrison 1921a:168-169; Miller 2001:3-6; Igler 2004:693-694; Trejo Barajas 2006a:10; Bonialian 2017:21; Trejo Barajas and Duggan 2018:37, 44-45). Marie Christine Duggan (2016:25) calculated that between 1801 and 1809 a third of Alta California's income derived from the Pacific Rim Trade.

The Chinese Fur Trade and Contraband

From the 1780s until around 1820 sea otter skins were the main means of economic exchange in California. In the mid-1780s a short lived government program that employed mission neophytes to gather furs for export to China introduced inhabitants to the value of otter pelts (Ogden 1941:15-31; Hackel 1997:119). San Diego Presidio's commandant, Lieutenant Zúñiga, shipped skins valued at $2,000.00 in October 1786. By 1790, the year the experiment ended, 9,729 skins had been sent to Manila (Bancroft 1884:441; Krase 1979:72, 1981:130). After the program terminated, missions and presidios remained sources of furs (Hackel 1997:119). Through "informal channels" each mission shipped around one hundred otter pelts a year on San Blas supply ships (Duggan 2016:43-44). During the first decade and a half of the nineteenth century an estimated 2,500 to 3,000 pelts "came into the hands of the missionaries" to be ultimately purchased by "Boston Men" (Archibald 1979:122).

Spanish mercantilist policies prohibited trade with foreign vessels so that almost all of the commerce conducted by Boston and English registered ships was illegal, forcing them to engage in smuggling to sell their contraband merchandise.[34] By the 1790s California's

---

había en las costas peruanas más de 100 balleneros estadunidenses que habrían alcanzado el occidente mexicano." (Trejo Barajas' study (2006a, pp. 24-25) lists 30 company ships and British whalers that operated between 1793 and 1820 in the Mexican Pacific, after having crossed the southern strait and visiting Valparaíso, El Callao and Guayaquil. Other studies (Pereira, 1971, pp. 315-353) confirm that, from 1788 to 1809, 165 English and American ships sailed between the ports and markets of the area between Valparaíso to California. Villalobos (1965, p. 94) offers us a higher figure for the same period of 257 ships. Jorge León (2001, p. 326) counted about 80 whaling ships and fur hunters through the ports of Chile, Peru and Mexico around 1800, participating in active smuggling that responded to the great demand for European goods from the Latin American Pacific markets. Between 1817 and 1818 there were more than 100 American whalers on the Peruvian coast that would have reached western Mexico).

[34] According to Trejo Barajas and Duggan (2018:125), the legitimacy of foreign traders was at times "muddled by the moments when war made trade with the Americans licit. For example, on July 9, 1805 the United States declared itself neutral in the war between Spain and Great Britain. During time of war, neutral commerce favored contraband, since it was well-known that the New England ships broadened their privilege in order to transport above all English goods."

mission and presidio residents found the San Blas ships' annual cargos inadequate to their needs and desires, and turned to illegal trade to enhance their material essentials. Clandestine transactions significantly augmented the variability of manufactured goods along the Spanish-American west coast. Legitimate Spanish-American traders had higher overhead and taxes than foreign smugglers, making it more difficult for them to compete. Residents of Baja and Alta California, Sonora, and Sinaloa found foreign vessels offered higher prices for their local produce than Spanish registered ships, while providing required items that were often in short supply. Many of these transactions took place in minor ports, along secluded shorelines, and on islands, where they could remain undetected by authorities, who often had legitimate reasons not to get involved (Ogden 1941:32-44; Coughlin 1967; Archibald 1978:122, 139-140; Krase 1979:80-81, 1981:131; Trejo Barajas 2006a:17-20, 2014:125; Duggan 2016:71; Trejo Barajas and Duggan 2018:39-40, 45).

Because of the surreptitious nature of the trade no accurate records of the value of this commerce, or the number of ships involved in smuggling is available (Archibald 1978:139-140). Trejo Barajas and Duggan (2018:37) found that:

> From 1793 to 1809, the naval department of San Blas detected the following illegitimate traders: the *Resolution* in 1793 (Captain Locke) whaling near the Californias; the *Phoenix* (Captain Moore) in San Diego and the *Garland* (Captain Basil Worth) in the Sandwich Islands in 1795; *La Providencia* (Captain William Bougton) in California in 1796; two New England whaling vessels at Puerto Vallarta in 1797; the *Garland* (Captain Basil Worth) was in South America, the Sandwich Islands, and Baja California in 1797; the *Walker* (Captain John Nicol) was a pirate in 1800 who traveled with two other ships, the *Betsy* and the *Albinoti*; the *Betsy* under Captain O'Cain traveled between Asia and the Californias in 1801, and in the same year the *Enterprise* under Captain Winship was spotted. The ships *Dromo* and *Lelia* under Captain Shaler were watched

> closely in San Blas because they were plying trade in the Gulf of California in 1802; the *Alexander Anser* under Captain Brown out of Boston engaged in the fur trade in the Pacific Northwest in 1803. The ships *Madame Nelson* and *Jorn* abandoned sick crew in San Blas in 1805. The *Domino* was along the coast of California in 1806, and the *Peacock* under Captain Kimball was also spotted in San Blas that year. The *Dromo* under Captain Bordaw carried out contraband trade in Guaymas and Mazatlán in 1809.

California authorities reported some of these same ships as well as others. In 1796 the *Otter*, under command of Captain Ebenezer Dorr, dropped anchor at Monterey. In 1799 the *Eliza* sought provisions at the same port. The *Mercury*, under the command of William Heath Davis Sr.,[35] cruised the coast of Upper and Lower California in 1806 and 1807. Also in 1807, the *Domo* was sighted at Bahia de Todos Santos (modern Ensenada, Baja California). During the first three years of the nineteenth century San Diego Presidio's commandant, Manuel Rodríguez, had to deal with four Boston ships calling at his port: the *Betsey* on August 25, 1800, the *Enterprise*, on June 28, 1801, the *Alexander* on the 26th day of February, 1803, and less than a month later, on March 17, 1803, the *Lelia Byrd* (Bancroft 1885a:10-19; Ogden 1941:35-41; Archibald 1978:131-133; Miller 2001:7-8).

So to summarize, by the first decade of the nineteenth century California's supply and economic situations had evolved from that of a precarious frontier outpost to one of agricultural self sufficiency, connected to lawful and illegitimate sources of manufactured goods through various trade networks from Mexico, Central and South America, Honolulu, China, England, and the northeast coast of the United States. Through 1810 government stipends to the missionaries, along with the salaries of military personnel, provided physical capital, although usually in the form of credits for goods purchased.

---

[35] Captain William Heath Davis, Sr. was a Boston ship captain and pioneer of the Hawaiian sandalwood trade. His son, William Heath Davis, was born in Honolulu in 1822. First traveling to California as a small boy in 1831, he became a California coastal trader and later wrote his memoirs as *Sixty Years in California* (Davis 1889), which is cited abundantly in this work. For this report the senior sea Captain and sandalwood trader will be referred to as William Heath Davis Sr. His son and the author of *Sixty years in California* will be called William Heath Davis as is commonly done in most works on California History where he is referenced.

Most military salaries consisted of credits towards merchandise acquired from the presidio warehouses or missions. In addition, sales of foodstuffs and locally manufactured goods to the military provided the missions with government credits they redeemed for the purchase of needed supplies.

Economic Disruption 1810-1821

The wars for Mexican Independence from 1810 to 1821 radically disrupted government support of the province, forcing California's inhabitants to become almost completely self sufficient financially, and totally dependent on both legal and contraband avenues of the coastal trade that had been developing since the 1790s for merchandise not locally produced. With the outbreak of revolution, imperial maintenance for California ended. The last regular supply ship from San Blas sailed in 1809. Two ships, the *Princesa*, and *Activo* brought supplies in 1810. One more vessel, the very last, did make a voyage in 1817. In 1810 insurgents captured San Blas for a brief period and by 1811 had blocked roads between Mexico City and Guadalajara. By 1813 all government monetary support for missions and presidios ceased (Bancroft 1885a:96; Archibald 1978:123-124; Trejo Barajas 2006b:718; Duggan 2016:25, 64, 70; Trejo Barajas and Duggan 2018:45).

Lack of government support forced Alta California to become more dependent on the coastal trade between Colonial Mexico, Panama, and Peru. After 1810, free trade with ships registered in other Spanish-American colonies became the norm. At least twenty made port in California between 1810 and 1821 to trade for products produced by the missions, largely lard, tallow, and hides. Some worked closely with merchants from Guadalajara (Archibald 1978:123-124; Hackel 1997:129; Trejo Barajas 2006b:721-722; Bonialian 2017:23-26; Trejo Barajas and Duggan 2018:42-43). Panamanian and Peruvian ships also served as merchant marines by carrying produce, mostly tallow, to Acapulco and returning with purchased goods, thereby replacing the San Blas supply service. Upon arrival, the Franciscan Missionaries' agent (syndic) paid shipping fees and sent merchandise purchased by the Franciscan College for the California missions on the

return voyage (Archibald 1978:124-125; Hackel 1997:129; Trejo Barajas 2006b:721-722).

After 1810 missions continued to supply the presidios, but without government compensation. This changed the interdependent financial relationship between the missions and the military to one where the presidios became completely reliant upon the missions for their economic survival. Essentially, produce from the labor of Mission Indians made up the deficit caused by the cessation of government military funding (Duggan 2016:64-65). From 1810 to 1821, the military received provisions and merchandise valued at 400,000 pesos (Duggan 2016:63, 69-70). This included foodstuffs and locally produced goods (Duggan 2016:69-70). In addition, the missions provided the military with tallow so that commanders could buy goods directly from costal traders (Hackel 1997:129). In 1817 Alta California's Governor Sola, "desperate for supplies, requisitioned 16,000 arrobas of tallow, 4,000 arrobas to be collected from missions in each of the four presidio districts." Using this neophyte-produced resource he traded with the Lima ships *Hermosa Mexicana* and *San Antonio* for provisions, including items for the San Diego and Santa Barbara Presidios and his personal use (Archibald 1978:126).

In California José de la Guerra y Noriega acted as a local agent or intermediary for the missions and coastal traders. He received shipments for individual missions and then delivered the merchandise to the appropriate institutions (Archibald 1978:126-128).

De la Guerra y Noriega also acted as an agent for the California Presidios (Archibald 1978:137). A career soldier, he had strong ties with the presidios. Appointed a cadet at San Diego in 1798, two years later, in 1800, he was promoted to alférez (ensign) at the Presidio of Monterey, and became its acting commandant in 1804. In 1806 he advanced to lieutenant at Santa Barbara. From 1807 to 1809 he served with the same rank at San Diego, where he was habilitado. In 1808 he received a "large consignment of goods from his uncle Pedro in Mexico, the sale of which greatly improved his financial condition." After traveling to San Blas in 1810, where he was held for a time by

insurgents, he returned to Santa Barbara. In 1813 he was once again habilitado at San Diego. In 1815, he transferred back to Santa Barbara where he became captain in 1817 (Bancroft 1885b:769). His substantial influence and interest in the military's well being, no doubt motivated him to see that merchandise found its way to the presidios, via transfers from the missions or other means.

De la Guerra y Noriega developed close commercial relationships with Mexican merchants (Duggan 2023).[36] His cousin Nicolas de Noriega acted as a purchasing agent in Mexico City "remitting to California goods which had been special ordered or for which José anticipated a prospective market. Many of the goods handled in this fashion were purchased by the missions because of their sound credit" (Archibald 1978:128). In 1810, while still stationed at San Diego, José De la Guerra y Noriega along with his wife, a daughter, and a brother-in-law, undertook a journey to Guadalajara where he negotiated with commercial interests and Peruvian and Panamanian ship captains to assure California's inclusion on coastal import and export routes (Trejo Barajas and Duggan 2018:43; Duggan 2023). These relationships continued through the following two decades. So substantial was his influence that in 1819 Governor Sola sent de la Guerra y Noriega, who by then was a captain at Santa Barbara, back to Guadalajara to further negotiate for California supplies (Trejo Barajas and Duggan 2018:43).

The period from 1810 to 1821 also saw contraband trade by English and Boston ships and some Russian vessels grow in importance.[37] Spanish mercantilist policies still prohibited trade with foreign vessels, but the scarcity of manufactured goods, in spite of cargos delivered by legitimate coastal traders, made dealing with smugglers a necessity for government officials as well as missionaries. In addition, legal traders from other Spanish colonies continued to offer lower prices for California produced resources than "Boston" captains, encouraging California's residents to often prefer transactions with the latter (Archibald 1978:123-125).

---

[36] For a detailed account of De la Guerra y Noriega's commercial activities and relationships see Duggan 2023.
[37] Russian vessels actively traded between Fort Ross and San Francisco (Archibald 1978:136).

Disintegration of the Spanish Empire and the consequent disruptions of traditional supply lines after 1810 forced changes in attitude toward contraband trade by government officials. At San Blas, Hispanic and Anglo-U.S. merchants forged open commercial alliances that ushered in an unprecedented business boom (Trejo Barajas and Duggan 2018:41-45). In California attitudes remained ambiguous. Although officially opposed by the authorities, needs of the troops forced a more lenient enforcement of regulations. If ship captains met with the provincial governor, and agreed to certain conditions that assured a portion of the cargo purchased by the missionaries would be delivered to the presidios, an informal agreement allowed commercial interchange (Archibald 1978:137). In January 1817 Capitan James Wilcox of the schooner *Traveler* obtained such an agreement and sold $700 of textiles to Governor Sola for distribution to the four presidios (Archibald 1978:138). José de la Guerra y Noriega often acted as the presidios' agent for these actions in the same manner as he did for the legitimate coastal traders (Archibald 1978:137). The practice was not confined to California. In 1808 the American frigate *Dromo* received permission from authorities to trade along the Sonora and Sinaloa coast (Trejo Barajas 2006a:23).

Spanish-American merchants resented smugglers and occasionally took steps to stop them. In May 1813 Captain Nicolás Noé of the Lima merchant vessel *Flora* seized the *Mercury* under command of Captain George Eayrs. Eayrs was arrested and the cargo confiscated. A Lima ship also seized the *Traveler*, but because of Captain Wilcox's agreement with authorities, Governor Sola came to his defense (Bancroft 1885a:292; Archibald 1978:137-138; Miller 2001:29).

In assessing the consequences of contraband trade on Alta California between 1810 and 1821 Robert Archibald (1978:139-140) concluded:

> An assessment of the extent and impact of contraband trade upon the missions is beyond the realm of possibility. At least twenty American ships as well as a number of Russian vessels . . . were in good position to conduct trade along the California coast between 1810 and 1821.

> Evidence suggests that this would be a conservative estimate since many unidentified ships are mentioned particularly from 1817 to 1821. No estimate of the cash value of contraband activity by the missions would be accurate since the evidence upon which to base such a conclusion is unavailable. Since most illegal trade, including that carried on with the military, was ultimately based upon the economy of the missions, an accurate estimate would have to determine what proportion of military requisitions were for local consumption and which were to be used as trade goods.

Ultimately, through legal coastal and contraband trade the missions succeeded in compensating for the loss of their own stipends, salaries of the military, and all necessities that had been purchased in Mexico with those funds (Archibald 1978:123-124, 137-138).

The Hide and Tallow Trade 1822 - 1848

The acquisition of Mexican Independence in 1821 resolved the issue of contraband and opened the door to the establishment of all trade on a legitimate, stable, regular basis. The newly founded government opened ports on the west coast, including Monterey and San Diego, to foreign exchange. Now for the first time, commerce with Alta California by nations other than Spain or Spanish Colonies was legal. Former smugglers could operate without fear of repercussions and openly compete with the Peruvian and Panamanian traders. The province's exports to foreign markets significantly accelerated. By this time the population of fur bearing animals along the Pacific coast had been substantially depleted and cow hides and tallow replaced otter pelts as California's main export product (Forbes 1839:282, 284; Fritzsche 1968:467; Francis 1976:522-526; Hackel 1997:130-131).

Coinciding with these events was the growth of the American shoe industry, which, by 1815, had become so large that its needs could no longer be met by U.S. rawhide production. Cowhides, one of the few products California produced in abundance, were

now in demand. Thus the foundations were laid for the hide and tallow trade, participated in by ships from Peru, Panama, Mexico, England, Boston, and the Hawaiian Islands. Hides were sent to England and Boston, and the tallow mostly sold in Peru to be made into candles and soap for that country's mining industry (Forbes 1839:282; Ogden 1927, 1929; Dallas 1955; Fritzsche 1968:467; Francis 1976:522-526; Hackle 1997:131-132). For the entire 1822 to 1848 period California missions and ranchos exported more than six million hides and seven thousand tons of tallow (Hackle 1997:131-132).

McCulloch and Hartnell, a subsidiary of the Lima-based English trading house John Begg and Company, who was in turn a subsidiary of the Liverpool trading firm of James Brotherson and Company, sent the first "foreign" ships to California's coast after its ports had been declared open to outside trade.[38] William Hartnell and Hugh McCulloch, two clerks in the employment of John Begg, entered into a five year partnership with the parent firm. The contract called for establishment of a base in California to exchange British and South American goods for products of the region. In June 1822 Governor Sola granted McCulloch and Hartnell exclusive trade rights with the California missions (Forbes 1839:282; Ogden 1927; Hackel 1997:130-131). No sooner had the English traders received their contract than the ship *Sachem*, of the Boston firm Bryant Sturgis and Company, arrived on the coast. The New England traders offered higher prices than the Englishmen, and McCulloch and Hartnell's monopoly could not be enforced. The two firms competed until 1828, when McCulloch and Hartnell dissolved (Ogden 1927, 1929; Dallas 1955:75-161; Francis 1976:521; Barger 2000:126-127). By this time the hide and tallow trade had become the center of California economics. Cattle were raised on a commercial basis specifically for these two products.

Opening ports to foreign trade did not bring a complete end to smuggling activities. In order to avoid high import tariffs charged by Mexican customs, some foreign ships first anchored at offshore islands or secluded areas of the coast and unloaded a significant portion of their cargo. They would then continue, declare, and pay tariffs on the reduced

---

[38] John Begg and company, along with numerous other British and American merchants established in Lima shortly after the port of Callo was opened to foreign trade in 1820 (Igler 2004:709).

portion of the goods remaining on the ship, return to reboard their merchandise left on shore, and begin trading (Bancroft 1885b:133, 135, 139; Davis 1889:141-146; Ogden 1929:364).

Three basic traffic patterns characterized the hide and tallow industry. One distinct type consisted of English merchandise shipped via Lima to California in exchange for hides that were carried directly to England. Another followed the pattern of the coastal traders established in the early nineteenth century and included commerce between California, Lima, Valparaiso, Panama; the Mexican ports of Mazatlán, San Blas, and Acapulco; and the Hawaiian Islands (Dallas 1955:159, 229). The third involved direct exchanges between California and Boston (Ogden 1929; Dallas 1955:229; Hackel 1997:130-132). McCulloch and Hartnell traded largely in English goods acquired from John Begg and Company in Lima, and then sent shiploads of hides directly back to England. The difficulty in packing cow hides so that they could withstand the long ocean voyage across the Atlantic was a major factor that caused the downfall of this company in 1828 (Ogden 1927: Dallas 1955:159).

Coastal traders involved in commerce between California, Lima, Valparaiso, Panama, and the Mexican ports of Mazatlán, San Blas, and Acapulco principally dealt in tallow but also trafficked in hides, soap, wheat, candles, and other items. Many Hawaiian-based ships carrying Asian, as well as United States and English goods made regular trips to California and the west coast of Latin America (Dallas 1955:229, 232). Sandwich Island craft became the most active in the Pacific Coast commerce, making more voyages to California than vessels from South America or the United States. Due to the close proximity of the Islands, these coastal vessels could complete a passage from Honolulu to California in about eighteen days, making possible numerous voyages by the same ship in a single year. Loaded with merchandise stored in commercial warehouses on the Islands, Hawaiian ships traded for a variety of products, including hides, tallow, soap, horses, dried jerky, and the few otter furs that were still available. They then continued to Mexican and South American ports for further business transactions. Between 1822 and 1846 more than 100 vessels made voyages between Honolulu and California for the

express purposes of trading (Davis 1889:1-4; Ogden 1929:298-299; Dallas 1955:231-239, 249-250.) Occasionally ship captains opted to bypass the Hawaiian Islands and continue to Manila, where a "better assorted cargo" could be obtained (Thompson 1836).

Commerce between California and Mexico constituted another important aspect of the coastal trade. German entrepreneur Henry Virmond, who established in Acapulco and Mazatlán, owned or was associated with five different craft that made regular trips between Acapulco, San Blas, Mazatlán, and California: the *Catalina*, *Clarita*, *Maria Ester*, *Vulture*, and along with San Diego merchant Henry Fitch, the *Leonor* (Arnez 1878:4; Bancroft 1885a:383, 689, 713, 1885b:35, 48, 142, 147, 149). In August 1828 the *Maria Ester* carried $6,801 in goods to the California missions (Bancroft 1885c:89). The following January 1829 Virmond supplied merchandise valued at $3000 from the same ship to presidal commanders (Bancroft 1885b:58). The brig *Catalina* made trips between California and Mazatlán in the early 1830s and brought government stores to the province in 1831 (Bancroft 1885b:381). In 1832, "the padres entered into an agreement with Enrique Virmond to furnish goods or money and take drafts on the government to the amount of their stipends" (Bancroft 1885b:313). Other ships also delivered California supplies from Mexico. Mission cargo was salvaged from the brig *Bravo* after it wrecked at Acapulco in 1827 (Bancroft 1885b:89). The padres at Mission Santa Barbara owned the schooner *Santa Apolonia*, which they regularly dispatched to San Blas to exchange California products for manufactured merchandise (Bancroft 1885a:402, 477, 518, 619, 1885b:146). Other vessels recorded as having traveled from Mazatlán to California include the English brig *Jura* (1830) and the Mexican vessels *Santa Barbara* (1833) and *Jóven Guipuzcoana* (Arnez 1878:8-9; Bancroft 1885b:147, 384). Individual California merchants also obtained goods in Mexico. Thomas Larkin of Monterey and Henry Fitch at San Diego did regular commerce with Mazatlán suppliers (*Maria Ester* Account Book 1829-1831; Bancroft 1885b:739-40; Hauge and Langum 1990:59). William Heath Davis recorded:

> In 1840 or '41 there arrived at Yerba Buena from Mazatlan two Americans, one named Hirman Teal, a merchant; the other Mr. Titcomb,

> his clerk. Teal brought on a vessel about twenty thousand dollars' worth of Mexican goods; such as silk and cotton rebosas, serapes, ponchos, mangos, costly and ordinary; silver mounted and gilt spurs, saddles, ornamented and ordinary, armas de pelo, or riding robes for protecting the legs and body up to the waist; silver headstalls for horses, hair bridle reins, and other fancy and ornamental goods, an assortment of Mexican products (Davis 1889:229).

That same year (1840) Henry Virmond's frigate *Clarita* carried an almost identical cargo to Southern California. It had been obtained by first conveying a shipload of tallow ("sebo") from California to Lima where it had been exchanged for goods that were then taken to Acapulco. Here the Peruvian merchandise was exchanged for cotton goods ("algodones"), Mexican goods, and some foreign goods ("efectos mexicanos y algunos estranjeros"). The Mexican merchandise included serapes; fancy dresses ("vetstidos charros") trimmed with gold and silk thread; men's and women's silk, calf skin ("gamouza") and cotton shoes; hats; cowboy boots ("botas vaqueras"); saddles, common and expensive, the latter costing $300; armas de pelo (riding robes as per Davis in text above); and "many other manufactured articles of less importance" [39] (Arnez 1878:2-3). The latter, along with what Davis describes above as "an assortment of Mexican products," probably included ceramics.

The firm of Bryant, Sturgis and Company, pioneers in the China Trade, carried out direct exchanges between Boston and California[40] (Griffin and Drummey 1988). Boston ships brought cargos of largely English manufactured goods, but also carried items made in France, Germany and the United States. After the approximately 100-day voyage from Boston to California, a vessel would sail the coast for 18 months or more, trading at various ports and collecting hides and tallow in exchange for their on-board merchandise.

---

[39] "Y muchos otros effectos manufacturados, de menos importancia" (Arnez 1878:3).

[40] William Sturgis, first sailed in 1798 in the ship *Eliza*. In 1810-1811 he joined with John Bryant to form the firm Bryant, Sturgis and Company (Morrison 1921a:176; Griffin and Drummey 1988:132).

The firm's permanent resident agent on the coast, originally William Gale and later Alfred Robinson, traveled with these ships negotiating sales and collecting debts (Dana 1840, 1869; Phelps 1840; Robinson 1846; Ogden 1929; Ogden and Robinson 1944; Pourade 1961:169-208). Between 1822 and 1840, Bryant, Sturgis and Company sent fifteen or sixteen vessels to California and exported approximately 500,000 hides.

Between 1840 and 1846 other Boston firms, composed in part of former employees of Bryant and Sturgis, and with partial financial backing from that company, continued the direct Boston to California exchange. Joseph B. Eaton and Company shipped around 90,000 hides, while Benjamin T. Reed exported between 90 and 95 thousand, and Edward Appleton and Company acquired about 125 thousand (Ogden 1929:296-297; Dallas 1955:251; Fritzsche 1968). Boston ships regularly exchanged their tallow with Latin American traders for hides (Dallas 1955:257).

Through Richard Henry Dana's Classic *Two Years before the Mast*, and Alfred Robinson's well-read narrative *Life in California*, Bryant and Sturgis are the best remembered of the Boston hide and tallow trade firms, and their vessels the *Brookline*, *Pilgrim*, *Alert*, and *California*, are part of West Coast folklore (Dana 1840, 1869; Robinson 1846). Yet, at least twelve other independent voyages originated in Boston for the purpose of pursuing California trade while Bryant, Sturgis and Company operated. Some of these followed a triangular route. In 1831 the *Louisa*, owned by J. C. Jones, "who was a Boston merchant engaged in trading to ports on the Pacific Coast and Islands" sailed from Boston with a cargo of general merchandise (Davis 1889:2). It stopped at Honolulu and then Sitka, Alaska, continuing to California and trading at Monterey, Santa Barbara, San Pedro, and San Diego. Here the captain rendezvoused with Jones' bark, *Volunteer*, and loaded hides that craft had collected. The *Louisa* left California with around 25,000 hides, and a deck load of horses. The horses were sold in Honolulu and the ship took the hides back to Boston (Davis 1889:1-2; Dallas 1955:233). In 1833 the "Boston Bark'" *Volunteer* again sailed the California coast arriving at Monterey, San Luis Obispo, Santa Barbara, San Pedro, and San Diego (Davis 1889:3-4).

The American schooner *Loriot* traded along the coast from 1833-1837 (Bancroft 1885a:722; 1885b:383; Krase 1979:84, 1981:137). In May 1838 the *Don Quixote*, a frequent trading bark along California's coast, "arrived in Santa Barbara from Boston via Honolulu" (Davis 1889:13).[41] Via ships trading in the Western Pacific between Hawaii and Canton, the Honolulu trade became another connection between California and China.

San Diego played a pivotal role in hide and tallow collecting operations. Boston, Mexican based, and other coastal trade ships constructed and maintained storage depots, commonly called "almacenes de deposito" or "hide houses," at La Playa near the mouth of San Diego Bay (Figure 30) (Arnez 1878:7). After trading along the coast, ships returned and off -loaded tallow and hides, the latter to be cured by a crew who resided at the hide house. The ships then continued back north along the coast, returning to deposit another batch when enough product had been collected. Exchanges of hides for tallow between coastal traders and Boston ships took place amongst the warehouse crews at La Playa. After sufficient hides had been cured and stored or enough tallow accumulated to complete a full cargo, Boston vessels returned to New England and coastal craft continued their travels to the rest of Latin America (Dana 1840, 1869; Phelps 1840; Arnez 1878:7; Ogden 1929:292-293, 304-305; Dallas 1955:163-183; Pourade 1961:209-226).

The variety of avenues for commerce involving direct trade with Boston, and coastal traders based in Honolulu, Mexico, and Central and South America, brought a diverse assortment of ocean craft to California's shores. Nineteen vessels were reported in 1831, and included the *Ayacucho*, *Baikal*, *California*, *Catalina*, *Convoy*, *Dryad*, *Eliza*, *Fanny*, *Fibian*, *Globe*, *Guadalupe*, *Harriet*, *Leonor*, *Louisa*, *Marcus*, *Margarita*, *Pocahontas*,

---

[41] Jean Krase (1979:84, and 1981:137) noted: "Two other vessels from the East Coast of the United States should be mentioned, not only because they brought ceramics to San Diego, but also because the recipient in both cases was Henry Delano Fitch. Fitch was a trader and shopkeeper and a highly respected citizen of the town. Listed on the manifest of the Loriot in 1835 was "one dinner set for Henry Delano Fitch," in account with Dr. Thompson, March 18, 1835. Attesting to Fitch's increasing affluence was a second memorandum regarding ceramics that arrived in San Diego aboard the bark Don Quixote on August 11, 1836. This notice listed "a large quantity of splendid crockery purchased by Fitch." As noted in the text above, the Don Quixote was based in Boston and Honolulu (Bancroft 1885b:382; Davis 1889:13).

Urup, *Volunteer*, *Whalehound*, and *William Little*[42] (Bancroft 1885b:363). The next year the fleet "numbered twenty-four vessels" (Bancroft 1885b:364).

William Heath Davis recalled that in 1833:

> . . . there were trading on the coast at different points the ship "Alert," of Boston, Captain Thompson ; ship "California," of Boston, Captain James Arthur, supercargo Alfred Robinson; the English brig "Arecucha," Captain John Wilson, supercargo James Scott, both being owners; the American brig " Bolivar Liberator," Captain Nye; the Boston bark "Don Quixote," Captain John Meek, supercargo William S. Hinckley; and the Mexican brig "Leonidas," formerly U. S. vessel of war "Dolphin," Captain Juan Malarin, owner and supercargo Don Jose Antonio Aguirre" (Davis 1889:3-4).

Historian Hubert Howe Bancroft's documents recorded thirty-one vessels for the same year, amongst them were "six whalers and five doubtful names." His list included the *Alert*, *Ayacucho*, *Bailcal*, *Barnstable*, *Bolivar*, *California*, *Catalina*, *Chalcedony*, *Charles Eyes*, *Crusader*, *Don Quixote*, *Dryad*, *Enriqueta*, *Facio*, *Fukeja*, *Friends*, *General Jackson*, *Harriet Blanchard*, *Ilclvetius*, *Isabel*, *Iloxana*, *Kitty*, *Lagoda*, *Leonidus*, *Leonor*, *Loriot*, *Margarita*, *North America*, *Polifemo*, *Santa Barbara*, and *Volunteer* (Bancroft 1885b:365).

Secularization of the missions in 1835 radically changed the nature of trade. Large ranchos and local merchants replaced the former institutions as the economic center of the province and chief producers of hides and tallow (Hackel 1997:133-134; Barger 2000:127-131). The hide and tallow trade continued to the end of the Mexican era. It ceased with the conquest of California by the United States in 1846, and the Gold Rush of 1848 – 1849. These two events so drastically changed the region's social and

---

[42] "The *Guadalupe* was a schooner of 6 tons, framed by Joseph Chapman at S. Gabriel, hauled in carts to S. Pedro, where she was put together and launched" (Bancroft 1885b:363).

economic systems that former patterns of commerce never returned (Dallas 1955:292-299; Hackel 1997).

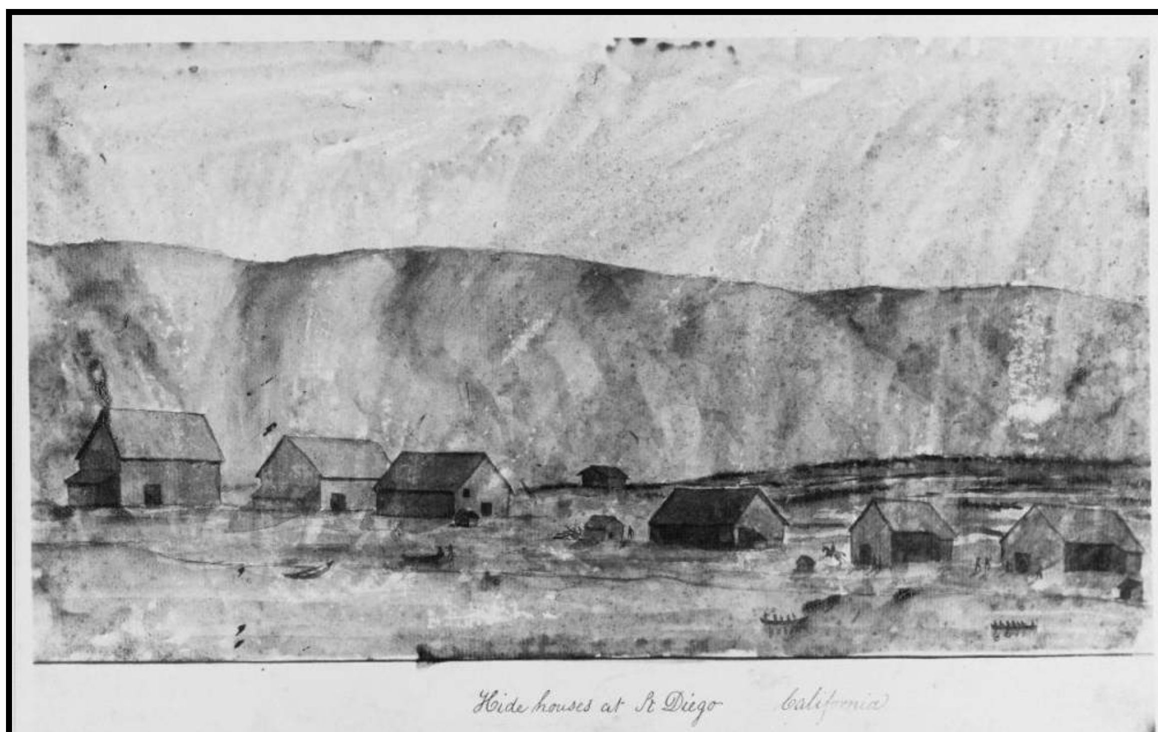


Figure 30: The Hide Houses at San Diego. Copied from the journal of a cruise on the *USS Cyane*, 1842-1843 by William H. Myers, Public domain from Naval History and Heritage Command, Catalog #: NH 2031. https://www.history.navy.mil/bin/imageDownload?image=/content/dam/nhhc/our-collections/photography/images/NH%2002000/NH%202031&rendition=cq5dam.thumbnail.319.319.png

CALIFORNIO FOODWAYS

By Stephen R. Van Wormer

Introduction

> From the tortilla of Mesoamerica and the bread of Europe, the garlic of Spain, and the chile of Mexico a new culinary tradition was born (Anonymous).

By far, the principal use of the majority of the ceramics identified in this study was for the preparation and consumption of food. In order to provide a focused cultural context for those activities this chapter presents a narrative discussion of the development of, and an emic understanding of, Mexican foodways as practiced in Northern Mexico and California during the eighteenth and nineteenth centuries. It relies on recorded observations of food preparation and consumption by Californios, ethnographic studies conducted in central and Northern Mexico, historical and archaeological studies also undertaken in Mexico, and finally the author's own experiences from having spent many years, both growing up and as an adult, while living with relatives in Southern Baja California.

Perhaps as much as anything else, Mexican Colonial Society's cooking, which became "distinct from both indigenous American and Iberian diets, but had traits in common with each,"[43] reflected the blending of native Mesoamerican and European traditions (Deagan 1996:148; Pilcher 1996:198-199, 215-215; 1998:27, 42; Reynoso Ramos 2015:312-313). In spite of largely unsuccessful attempts of the Spanish elite to keep tortillas and other native foods from their tables, the corns, beans, squash, tomatoes, and chile of central Mexico united with European grains, vegetables, and livestock, resulting in the unique cuisine we all know as Mexican Food. Rich and poor alike consumed corn tortillas and

[43]. Quoted from Deagan 1996:148.

tamales, beans, and other foods of indigenous origin adapted to colonial palates. Differences in economic resources, rather than ethnic background, became the deciding factor in what types of foods a household consumed. Wealthier people, for example, could afford lamb and goat, while the more common classes tended to eat more beef and other less expensive meats (Fournier 1998:16, 1999:156; Pilcher 1998:3, 6, 12, 38-40, 49; Super 1988:29-30; Crosby 1994:285-286; Reynoso Ramos 2004:136, 154-155, 174, 215, 307-308; Earle 2010; Quiróz 2014:29-34, 53). Although regional differences evolved, such as the sopapillas of New Mexico, the sea food of Veracruz, the mole of Puebla, or the carne seca (machaca), queso, and flour tortillas of the north, the basic underlying ingredients, cooking methods, vessels, and utensils were common throughout Colonial Mexico (Pilcher 1998:31, 49, 132; Morton 2014:66-70; Reynoso Ramos 2015:312-313).

Some examples of foods in the northern regions included: carne seca or tasajo (the main ingredient of machaca), chile con carne, chile rellenos, broth-based sopas and caldos (soups), pucheros, ollas, and guisados (stews) - including pozole and menudo,[44] bread, rolls, fresh cheese, candied fruits and preserves, and a variety of corn-based dishes including tamales, atoles (porridge), and pinole.[45] Both corn and flour tortillas were consumed. Although eaten at meals as bread, corn tortillas were mostly used in preparing dishes such as tacos, tostadas and enchiladas. Flour tortillas were also used for cooking but were more often consumed as bread with a meal.[46] If food is wrapped in a flour tortilla for consumption it the item is called a "burrito" rather than a taco. Both served as eating utensils (Lee 1887:18-25; Bourke 1895:60-63; Crosby 1994:285-286; Morton 2014:66-70). These foodways, along with other characteristic traits of Mexican Colonial gente de razón cultural identity were brought to California by early settlers, and maintained by subsequent contact with Mexico (Bancroft 1888:368; Strehl 2003:35;

44 Pucheros and "ollas" are stews, when made of tripe the dish is called "menudo" (Bourke 1895:62).

45 For a more complete example of traditional corn based Mexican dishes see Fournier 1998.

46 For a more complete list of northern regional foods see Bourke 1895:60-63. Some of these descriptions are based on the author's experiences while living in rural Southern Baja California for a number of years, especially the observation that corn tortillas were used largely for cooking while flour tortillas are eaten with a meal like bread.

Guerrero 2010; Fournier García and Zavala Moynahan 2014:2).[47] The basic underlying ingredients, cooking methods, pottery, and utensils used, such as mano and metate, comal, and earthenware ollas, cazuelas, jarros and other ceramic vessels,[48] remained common in California and throughout Colonial Mexico.

The kinds of food individuals choose and the way they prepare and eat it are indicative of cultural preferences that extend well beyond the satisfaction of hunger and nutritional needs (Holt 1991; Twiss 2007). Food for the Californios was a strong cultural identifier (Strehl 2003:31). Conservative in nature, culinary practices in Alta California remained strongly connected to those of Mesoamerica and northern Colonial Mexico. The ancient Mesoamerican Grinding Complex constituted a central foundation of meal preparation. The grinding of corn and wheat dictated the nature of many foods and their method of cooking. The resulting tortillas, atoles, tamales and pinoles, along with numerous broth-based dishes and consumption of large quantities of meat and cheese characterized Californio diets.

This section discusses the types of foods eaten by gente de razón in Colonial California. It is divided into two main categories: Grinding Complex Foods and Non-Grinding Complex Foods. Major food types and means of preparation for each category are presented. In many sections recipes are included. Since detailed descriptions of pre-1850 Californio cooking techniques have not come to light, those used here are from two late nineteenth century sources. The first is *El Cocinero Español* by Encarnación Pinedo, a descendant of the Berryessa family whose ancestors came to California with Anza (Pinedo 1898). Published in Spanish in 1898, this work is considered to be the first cookbook written by a Hispanic in the United States (Strehl 2003:19). More than a record of the culinary traditions of Pinedo's ancestors, *El Cocinero Español* is a contemporary late nineteenth century work that explored various traditions. It includes not only Mexican Californio dishes but also foods of Italian, French, and German

---

[47] Fournier Garcia and Zavala Moynahan (2014:2) make this observation for other areas of the northern frontier "The residents along the Royal Road used material culture, including everyday life objects related to the preparation, storage and serving of foods, to construct and reaffirm aspects of their social identity and status."

[48] For a definition of these ceramic vessels see the following Mexican Folk Vessel Typology chapter.

immigrants, who had settled in the state after 1850 (Guidotti-Hernández 2008). This cosmopolitan approach does not detract from the fact that it is one of the few recipe-specific sources of "Mexican cuisine as prepared by Spanish speaking peoples born in California" during the middle to late nineteenth century (Strehl 2003:19). Encarnación's recipes are given in the original Spanish, followed by an English translation.

The second source is the 1894 publication by the Los Angeles Ladies' Social Circle entitled *How We Cook in Los Angeles* (Ladies' Social Circle 1894). This work consisted of a collection of recipes submitted by local individuals. In addition to Anglo-American foods it had French, German, and "Spanish" departments. Recipes for the "Spanish Department" were submitted by women from many Californio families, as well as others who had spent most of their lives among native Hispanics in California or the southwest. Attempts to indentify the individual contributors were made through internet searches and the resulting information is included as a footnote the first time the name appears in the text. These recipes are presented in their original English versions. Since both books were written for late nineteenth century middle class housewives, the instructions reflect the technology of a modern kitchen of that time, including wood burning ranges and ovens, and Pinedo's recommendation of an Enterprise grinding mill rather than the old fashioned metate.

Grinding Complex Foods

> I have often watched Petronila kneeling behind her metate, alongside to the right hand on its rest - a ring of bamboo, her jar of nixtamal, the shelled corn which has been boiled with lime. She feeds a handful or two at a time to the metate, below which is a wooden tray to take the meal. Like most housewives, Petronila keeps her grinding stones – the metate and Muller, which is its "child" – in the cook shed with the rest of the cooking and eating equipment. Nearby are the lime jar, from which she puts a pinch to boil her corn and another into her meal to make it cohere, and the basket for her tortillas (Parsons 1936:31).

> The last sound at night, when all other sounds but the braying of burros and the barking of dogs have failed, is the slap-slap of the tortillera and the subdued, wet, rubbing sound of the maize-grinder. A large share of the woman's life and interests is taken up with the metate, that ancient grinding-stone that has not changed in form or function for thousands of years (Redfield 1930:85-87).

> The heavy stone metate is the symbol of thousands of years of settled agricultural life (Redfield 1929:182).

> . . . cuatro o cinco tienen el encargo de moler tortillas, pues aquí vienen tantos visitas que tres molineras no bastan para dar que alcance a todos, unos seis o' siete están destinadas al servicio de la cocina (. . . four or five are in charge of grinding tortillas, because so many visitors come here that three millers are not enough to make sufficient for everyone, about six or seven are assigned to the service of the kitchen) (Vallejo 1844).[49]

> Of these visitors, sometimes fifty of them would light upon a place together, when the tortilla-makers would get no rest day or night (Bancroft 1888:370).

> Cada una de las mugeres que allí habia, con la misma confianza que si estuviesen en su propia casa, se ocupaban en diferentes que haceres, una ponía la lumbre, otras molían el "nistamal" (o sea el maíz cocido) para las tortillas (Each of the women who were there, with the same confidence as if they were in their own home, were busy with different things to do, one started the fire, others ground the "nistamal" (that is, cooked corn) for the tortillas) (Híjar 1877a:40, 1877b:25, 61).

As throughout Colonial Mexico, food preparation in Alta California was based on the Mesoamerican Grinding Complex - a process of milling corn, and also wheat in the Northwestern provinces, centered on two simple utensils, the mano and metate grinding stones - which determined "the nature of the food, the methods of eating, [and] the daily round of labor" (Redfield 1929:186, 173-174). The following account of the use of mano and metate in California by William Heath Davis (1889:251-252), is remarkably close to depictions of the same process in Mesoamerica and other parts of Mexico (Redfield

---

[49] Also cited in Engelhardt 1915:136; Sanchez 1929:195-196; Cleland 1969:30 and note 35, and Silliman 2004:70. Unless otherwise noted translations are by the author with occasional assistance from Spanish speaking friends and Google Spanish - English translator.

1929:186, 173-174; Redfield 1930:39; Parsons 1936:31; Brand 1951:180; Morton 2014:9-12). Davis described the metate as:

> . . . a flat stone, about 12 x18 inches, with a little rim on the two long sides, and supported on three legs five or six inches high of unequal length, the flat surface inclining at an angle of about thirty-five degrees. The operator, resting on his knees, crushed and abraded the grain by moving a handstone forcibly downwards over the flat surface until the grain was well cracked. At the foot of the incline it fell into a dish placed beneath. The process was repeated several times and until the grain was sufficiently pulverized for use. If corn was crushed for tortillas, or tamales, the whole of the grain was made use of. The metate was also used for grinding chile pepper, when dry for seasoning; also for meat, instead of chopping (Davis 1889:251-252).

Grinding was a major occupation of women. Accounts of Mexican households document that a wife's daily grinding took from 4 to 6 hours (Redfield 1929:182; 1930:87; Parsons 1936:31; Brand 1951:180; Morton 2014:8). In order to be ground into masa - the dough for tortillas, tamales, or atoles, - corn grains must first be processed into nixtamal (hominy) by an ancient Mesoamerican technique in which the grains are boiled in an earthen pot with lime, which loosens the hulls and softens the kernels (Redfield 1930:39; Parsons 1936:31; Brand 1951:180; Morton 2014:9-12).[50] Similar routines of preparing nixtamal and daily grinding were followed in California (Vallejo 1844; Híjar 1877a:40, 1877b:25, 61; Arnaz 1878:18; Bancroft 1888:370; Pinedo 1898:166, 2003:134; Van Wormer and Walter 2012[51]) (Figures 31 - 33).

---

[50] Also spelled nistamal or niztamal, which appears to be a Californio usage (Híjar 1877a:40; Pinedo 1898:166). For a detailed description of preparing nixtamal see Brand 1951:180.

[51] Lime deposits detected archaeologically in a kitchen context at the Casa de Bandini in Old Town San Diego (Van Wormer and Walter 2012) strongly suggest the use of nixtamal.

In the century prior to the settlement of California, Jesuit missionaries successfully cultivated wheat in Sonora where the gente de razón incorporated it into the traditional Mesoamerican mano and metate Grinding Complex and it became as significant a crop as corn (West 1993:37). Wheat and corn were some of the more important crops grown in California missions and ranchos (Robinson 1846:47, 73, 220; Lugo 1877b:228; Bancroft 1888:357, 364; Webb 1952:57-58; Archibald 1978:168-169; Duggan 2000:314-323; Smith et al. 2017:154). Although wheat dominated California mission agricultural production, corn was the second most important crop, constituting 40 percent of total harvests in 1785. Even though Spanish missionaries preferred wheat, and its production increased over corn throughout the mission period, in 1821 maize still made up 20 percent of the total harvest and 25 percent of the combined total for wheat and corn (Archibald 1978: 167, 170-171). Corn yields for amount of grain sown, at 182 to 1, were much higher than wheat, at 37 to 1 (Archibald 1978:163). This provided missionaries with a bountiful commodity they could use in trade and as payment for services. Corn was provided to supply vessels and was a major component of artisan and presidial escolta and mayordomo rations (Archibald 1978:145-146, 151). Mission economic historian Robert Archibald noted: "Documentation suggests that when foodstuffs were requisitioned by the military the missions most often responded by supplying maize. This was to their advantage since with extensive irrigation systems corn was easily cultivated and the missionaries preferred to keep the wheat for their own consumption" (Archibald 1978:171). It would appear, therefore, that Californio presidio families ate more corn than mission neophytes.

In addition to mano and metate, wheat and corn were also processed by hand operated and animal powered grist mills. Some missions had water driven mills (Webb 1952:164; West 1993:37). William Heath Davis left the following description of a Californio mule powered mill:

> The ranchero made his flour by crushing the wheat by means of an apparatus composed of two circular stones, a yard in diameter, set up out of doors near the kitchen of his house, a shaft being affixed to the upper

> stone and turned by mule power. The grain thus ground fell upon a platform about eight or ten feet in diameter under the lower stone; a hopper was affixed to the upper stone, into which the wheat was poured. After a quantity had gone through this process it was ground over again two or three times in the same manner; the flour was then sifted out in hand sieves, and was ready for use (Davis 1889:251-252).

In Alta California four major types of foods resulted from corn and wheat processed with the grinding complex: tortillas, tamales, atoles, and pinole - esquite. In addition, other ingredients ground with mano and metate included carne seca, chile, and coffee and cacao beans.

Recipes

Niztamal

Encarnación Pinedo

A un cuartillo de maíz se pondrán dos cucharadas de cal fuerte y agua suficiente. Se pone a hervir el maíz y si no se pizca se le añade mas cal. Tan luego como el maíz se empieze a poner blanquizco se aparta y se lava en varias aguas para retirarle bien la cal y hollejo. En seguida se muele el maíz para tamales y tortillas. El maíz blanco y chico es el mejor para tamales. Hay para moler el maíz unas nuevas Maquinas de Enterprise que son excelentes y superiores a todas otras y much más cómodas que el antiguo *metate* mexicano (Pinedo 1898:166).

Niztamal

To one quart of corn add two tablespoons of strong lime and enough water. Put the corn on to boil and if it [the skin] is not loosened, add more lime. As soon as the corn begins to turn whitish it is removed from the fire, set aside, and rinsed various times to remove the lime and skin. Next grind the corn [into masa] for tamales and tortillas. The small white corn is the best for tamales. There are new Enterprise Machines to grind the corn

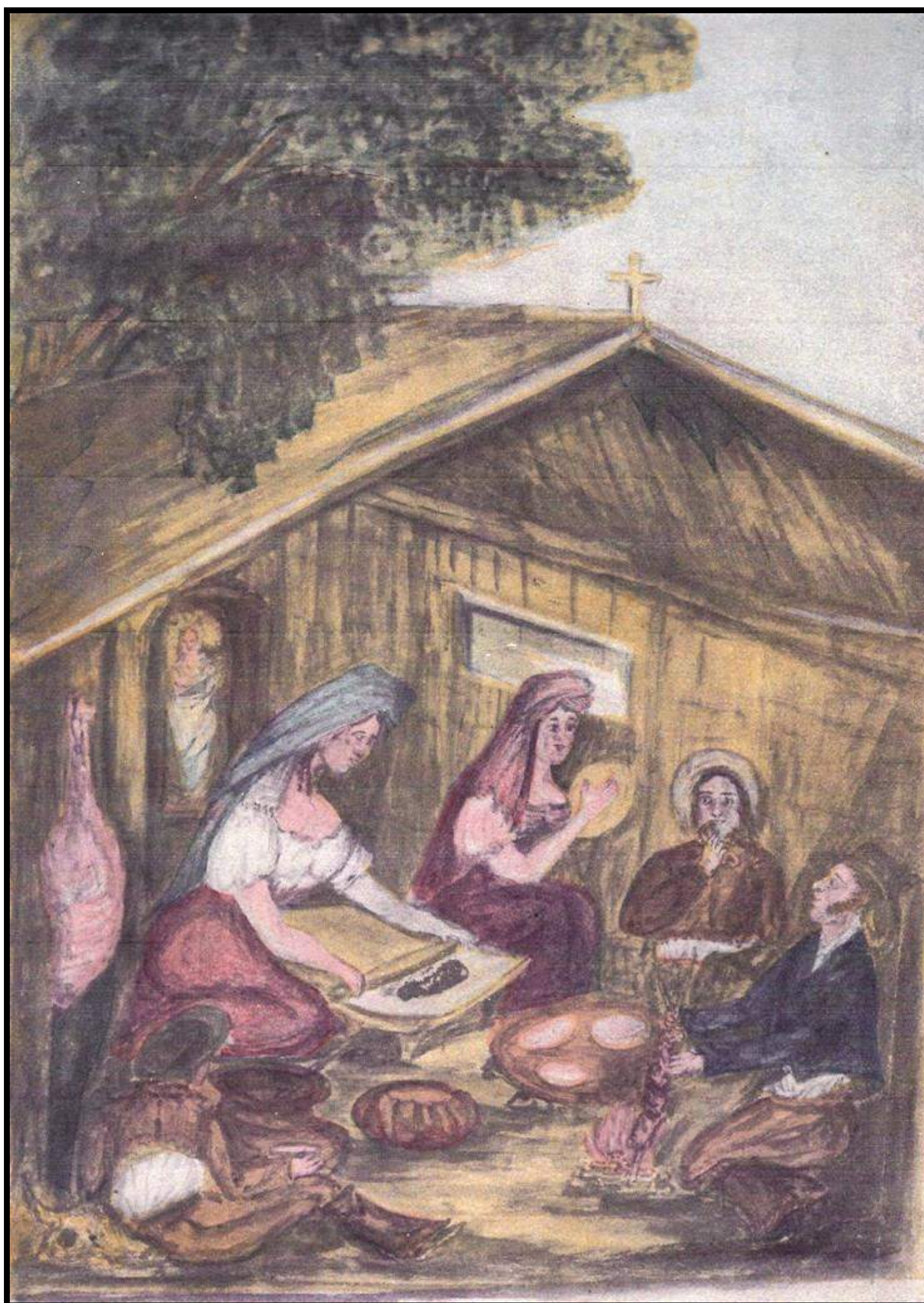


Figure 31: "Sketch of a Kitchen and Dining Room on a Farm in California" (Sandels 1843: Front piece). In this 1843 sketch of a Californio rancho kitchen a woman grinds masa with mano and metate while her companion pats out tortillas which are toasting on a circular clay comal over the fire built on the earthen floor. The comal is resting on a wrought iron grid iron trivet, the curved black feet of which can be seen protruding out from under it on the left side. A trough to catch the ground masa is between the metate and comal and a brown ware bowl to the left of the comal appears to have nixtamal. The gentleman against the back wall beside the tortillera is eating food wrapped in a tortilla. He may be enjoying carne asada, which is being roasted on a wooden or iron skewer by the gentleman on the far right in front of a second fire. Another large brown ware pot with a protruding utensil handle sits in front of the man on the lower left corner. A large cut of meat for future use hangs above him.

Figure 32: A Family in a Small Village in Oaxaca Mexico Gathers in the Kitchen for the Evening Meal Circa 1940 (Steinbeck 1941:35). Similarities between this scene and the one depicted in Figure 31 illustrate the Mesoamerican origins of Californio kitchens and cooking. They include the mother grinding masa with mano and metate and patting out tortillas while her daughter tends them while they toast on a circular comal over the fire built on the earthen floor. The father is spooning beans from a pot on the ground into a tortilla. Numerous earthenware vessels sit on the floor around the metate. The conservative nature of Mexican foodways is demonstrated by the fact that the scenes depicted in Figures 31 and 32 are almost exactly 100 years apart.

Figure 33: Late Nineteenth Century Photograph Entitled "Making Tortillas" (Willard 1901: Following Page 104). This depiction is reminiscent of Francisca Benicia Carrillo Vallejo's recollection that ". . . four or five are in charge of grinding tortillas, because so many visitors come here that three millers are not enough to make sufficient for everyone. . ." (Vallejo 1844).

that are excellent and superior to all others and much more comfortable than the old Mexican metate (Pinedo 1898:166, see also 2003:134).

Tortillas

> Más vale tortilla dura que hambre pura (Hard tortillas are better than hunger).

> La mujer y las tortillas, calientes han de ser (A woman and tortillas should both be hot).

> Mucho, lo que daba lugar á otra clase de música, cual eran las palmadas que daban las mujeres al hacer las tortillas de maíz para el desayuno de sus familias, pues ese era el pan que usaban la mayor parte de las gentes, así en el campo como en las poblaciones (Something, which gave rise to another kind of music, was the slaps of the women's hands when making corn tortillas for the breakfast of their families, since that was the bread that most of the people used, thus in countryside as well as in towns) (Arnaz 1878:16).

> Their tables were frugally furnished, the food clean and inviting, the bread was tortillas; sometimes it was made with yeast (Davis 1889:78).

> "Do you think" I said to her "it is buying too dearly the pleasure of eating tortillas made by your pretty little hands?" (Duhaut-Cilly 1834:241).[52]

> Unas veces pan, otras, tortillas de máiz (Sometimes we had bread, and other times corn tortillas) (Amador 1877a:115, 1877b:140-141).

That the Californios ate corn (maize) is overwhelmingly documented in historical records, especially in contemporary nineteenth century accounts as well as recollections (memorias and testimonies) dictated by native Californios.[53] Preparation and consumption of corn tortillas in Californio households prior to 1850 are specifically documented by Sandels (1843:37), Amador (1877a:115, 1877b:140-141), Híjar (1877a:40, 1877b:25, 61), Lugo (1877a:88; 1877b:218), Arnaz (1878:16, 23), Davis (1889:83, 251-252), and Vallejo (1844). Indeed, although the flour tortilla is also documented, the mention of corn tortillas is so prominent in food and cooking descriptions that unless tortillas of flour are specified, contextual connotation of the word tortilla without reference to the grain used appears to mean the corn variety (Duhaut-Cilly 1834:241; Lugo 1877a:88, 1877b:218; Davis 1889:78, 83;). Flour tortillas were made from a masa of wheat flour and fat. They were patted out by hand and cooked on a comal like the corn tortilla (Arnaz 1878:23-24; Bancroft 1888:363; Shinn 1891:397; Pinedo

---

[52] While at the San Francisco Presidio in 1827.

[53] This is in contrast to assertions by Voss (2008 & 2015:243-245, 291) and echoed by others (Skowronek et al. 2014:178) that Californios avoided consumption of corn because it was associated with Indian diets. As documented in sources cited in the text, Californios consumed both corn and wheat, as was common throughout Colonial Mexico and the territories of the northern frontier. Voss' alternate explanation, that colonial households were using corn already ground elsewhere, seems a more reasonable reason for the small amount of corn in some archaeological deposits at the San Francisco Presidio. As with all archaeological deposits, there could also be preservation issues. If corn kernels were soaked and or boiled before grinding, as would have been the case with nixtamal, any chance of preservation would have been eliminated (Sillman 2004:174; Popper 2016:14).

Voss also feels that a scarcity of clay comales at the San Francisco Presidio was evidence that people residing there did not make tortillas (2002:490-491, 697; 2005). As cited in the text, documentation for tortilla consumption among Californios is plentiful. The lack of clay comales at San Francisco can be explained by the fact that iron comales (comales de fierro / griddle irons) were commonly used and regularly imported on San Blas supply ships (Perissinotto 1998:52-53, 58-59, 66-67, 258-259, 300-301, 342-343; Simons and Turley 2007:117-118). This seems a more reasonable explanation, to this author, than the rejection of a basic food item.

1898:268, 2003:67). Flour tortillas were generally eaten as bread, while the corn tortilla could be consumed as bread, or used in cooking.

In Mexican Colonial California, as in the rest of Mexico, “the importance of the tortilla in daily life cannot be overestimated” (Redfield 1929:175). Carlos N. Híjar (1877a:24, 1877b:18) stated “El pan eran las ‘tortillas’ que por nada del mundo hubiera presindido” (The bread was the “tortillas” that for nothing in the world would they have given up). Consumed at every meal, they served not only as food but as eating utensils (Bancroft 1888:369; Sanchez 1929:370-371). José María Amador recalled [the] “utensils were the very same tortillas, and they would hold their plates in their hands because here were no tables; hence after every mouthful, they would make a new spoon”[54] (Amador 1877a:116, 1877b:142-143), while José de Carmen Lugo recollected that at meals diners “... made a spoon for every mouthful by loading the meat, or beans, or whatever they had, on a piece of tortilla, and all went together to the stomach[55] (Lugo 1877a:88, 1877b:218). These descriptions are remarkably close to ethnohistoric documentations from Mesoamerica and other regions of Mexico. For example “Broken off pieces of tortilla are used as a scoop to convey beans or chile sauce to the mouth” (Redfield 1930:39), or: “The tortilla, the inevitable griddle bread which accompanies every meal both as a food and as an eating utensil” (Redfield 1929:175), and from the northern state of Chihuahua at the end of the nineteenth century: “Among the rustic Mexicans, especially those living in the remoter mountain regions, knives, forks, and spoons are dear and scarce; food is generally dipped out of the dish with a piece of folded tortilla” (Bourke 1895:63).

Other types of corn tortillas eaten in California included niscayote, and totopo. Niscayote, which from its Nahuatal name speaks to its Mesoamerican origins,[56] had a coarse texture. Fat was added to the dough along with sugar, panocha, or honey to sweeten it (Lugo 1877a:88, 1877b:218; Sanchez 1929:370-371). They closely resembled

---

[54] “Esos cubiertos eran la misma tortilla y el plato a la mano – no habia mesa - asi es que a cada bocado se tenia cuchara nueva” (Amador 1877a:116, 1877b:142).

[55] “. . . se fromaban la cuchara con cada bocado porque se cojean la carne, o frijol, o la que fuera en un pedazo de tortilla y todo iba junto para el estomigo” (Lugo 1877a:89).

[56] For Mesoamerican origins of niscayote and totopo see Moreno de Alba and Perissinotto 1988:176-177 and note 15.

gorditas popular in Mexico today (Fournier 1998:32).[57] Totopo, also of Nahuatal genesis, were corn tortillas with yucca added to the masa. These were dried in ovens and would last several months. Presidial soldiers carried them as campaign rations (Vallejo 1875:125; Sanchez 1929:370-371). The corn tortilla was also used to wrap food. Any food wrapped in a corn tortilla is a taco. If these are covered in a sauce they become an enchilada. The later are documented for nineteenth century California (Pico 1878:303; Pinedo 1898:93-94, 2003:127; Sanchez 1929:370-371). If the corn tortilla is fried and then covered with beans and meat it is a tostada. Food wrapped in a flour tortilla is a burrito. Left over corn tortillas could be cooked in a chile sauce to make chilaquiles, which is a popular dish in present-day Mexican restaurants (Pinedo 1898:58).

Commonly used to celebrate Christmas, buñuelos were deep fried flour tortillas or fritters sweetened with honey and other syrups. In describing a rather intense conflict with natives while serving at the San Francisco presidio José María Amador recalled "me llovian flechas como buñuelos en noche buena (arrows rained down on me like buñuelos on Christmas Eve) (Amador 1877a:28, 1877b:52-53). In addition to corn and flour tortillas Californios regularly ate wheat bread baked in beehive shaped adobe ovens (Amador 1877a:115, 1877b:140-141; Lugo 1877a:88, 1877b:218; Bancroft 1888:274, 363).

Recipes

Tortillas de Maíz
[De una receta para Enchiladas de Maíz]
Encarnación Pinedo

Hágase el niztamal con cinco libras de maíz blanco y dos cucharadas de cal. Se deja hervir el maíz hasta que adquiera un color blanco, revolviendo muy frecuentemente para que tome buen color. Se retira entonces del fuego y se lava varias veces en differentes

---

[57] "Gorditas, o tortillas de maíz redondeadas, hechas en comal, combinando la masa con miel" (Fournier 1998:32).

aguas frescas, frotando el maíz con las manos para retirarle lo hollejos. Se muele el niztamal y á cinco libras de maíz molido, se le añadirá media libra de harina, una poca de sal, un pedazo de manteca y agua tibia. Se amasa la pasta dejándola en buena consistencia. Se forman las bolitas y se van colocando sobre una servilleta para dejarlas orear por cinco minutos. Untese entonces el comal ó la tapa de la estufa con manteca y se pone la tortilla; tan pronto como se cuaje se le dará vuelta retirándola al momento para que solomente se sancoche. Las tortillas se irán poniendo en un plato . . . (Pinedo 1898:93-94).

Corn Tortillas

[From a recipe for Corn Enchiladas]

Encarnación Pinedo

Make the niztamal with five pounds of white corn and two tablespoons of lime. The corn is boiled until it acquires a white color, stirring very frequently so that it takes on a good color. It is then removed from the heat and washed several times with clean water, rubbing the corn with the hands to remove the skins. The niztamal is ground until five pounds of corn have been used, then add half a pound of flour, a little salt, a piece of lard, and warm water. The dough is kneaded, until it has attained a good consistency. The balls are formed and they are placed on a napkin to let them air for five minutes. Then cover the comal or the stove top with fat and put on the tortilla; As soon as it sets [puffs] turn it over, removing it at the moment [quickly] so that it can only boil [cook –not toast or burn]. Put the tortillas on a plate. . . (Pinedo 1898:93-94; see also 2003:126).

Chilaquiles

(A la mexicana)

Encarnación Pinedo

El chile molido se fríe muy bien y cuando esté así preparado se le pondrá el agua que sea necesario. Cuando haya hervido hasta quedar en estado regular el caldillo, se le despedaza tortilla de maíz hecha el dia anterior, dejando todo hervir por segunda vez y cuando esté casi seco, se estrellan unos huevos dentro de la cazuela, aregándoles un poco

de queso rallado y acetunas. Se servin con fritura de longanzia o macaron si quiere (Pinedo 1898:58).

Chilaquiles
(A la Mexicana)
Encarnación Pinedo

Fry ground chile very well, add water as necessary. When the broth has boiled until it is in a regular [thickened] state, add corn tortillas made the previous day that have been torn into pieces, let everything boil for a second time and when it is almost dry, break [and cook over medium] some eggs inside the cazuela, adding a little grated cheese and olives. It can be served with fried loganzia or macaroni if you like (Pinedo 1898:58, see also 2003:120).

Flour Tortillas
Spanish Lady[58]

One quart flour; 1 cup milk; salt; 2 tablespoons lard. Make dough and knead thoroughly. Take pieces of the dough and pat between the hands until it makes a large round cake, and cook on griddle until brown [turning it once when it puffs] (Ladies' Social Circle 1894:275).

Tamales

> A delicious dish was made of chicken and green corn, partly cooked and put together, then wrapped in the green leaves of the corn, tied with the same and boiled called tamales (Davis 1889:78).

Tamales, a filled pastry of nixtamal based masa mixed with fat, are an ancient Mesoamerican food that predates the tortilla. A ball of masa is wrapped in corn husk and steamed. As is still the case in Mexico, they were primarily a food for holidays and

---

[58] The identity of the "Spanish Lady" has not been determined.

special occasions. Fillings in Alta California included beef, chicken, turkey or beans. Although no direct reference to pork was found in the research for this project it was probably also used. Red chile was often added and other meats may have been used. Eaten as desserts and treats, sweet tamales (tamales dulces) had sugar added to the masa. Some had fillings of sweetened egg yolk or highly sugared fruit and vegetable preserves (Arnaz 1878:23-24; Davis 1889:8; Pinedo 1898:259-264, 2003:139-142; Sanchez 1929:370-371).

Recipes

Green Corn Tamales [Tamales de Elote]

Maria de los Reyes Dominguez de Francis[59]

Two dozen ears sweet corn; 1 tablespoon fresh lard; a little salt. Grate the corn, (saving the inside husks), beat it smooth with the lard, and salt. Put a tablespoon of the mixture into a husk and double it over. Put some of the cobs in a kettle with sufficient hot water to cover them. Lay the tamales on the cobs, with a plate on top to keep them in place. Cover the kettle, and steam them half an hour. Serve hot, with butter (Ladies' Social Circle 1894:273).

Chicken Tamales

S. Machado de Bernard[60]

Take two quarts yellow dried corn, boil in water mixed with 1/2 teacup lime. Let it boil till well cooked, then wash thoroughly and grind on the metate, three times till it becomes very fine. Take two full-grown chickens and boil in water enough to cover them; season with a little salt; let boil till quite tender, then remove and let cool; then cut in small pieces. Mix with the corn (which has been rolled on the metate) enough of the water in which the chickens were boiled, to make it soft, and add about two cups lard. Season with a little salt, and knead thoroughly. After this take three dozen red chiles, remove

[59] Maria de los Reyes Dominguez, born in Los Angeles County 1847, daughter of Manuel Dominguez and Maria Engracia Cota Dominguez of Rancho San Pedro.

[60] Susana Machado de Bernard, baptized in Los Angeles 1839, daughter of Augustin Machado and Ramona Sepulveda Machado.

seeds then roast in a moderate oven for a few seconds. [Originally this would have been accomplished by roasting on a comal]. Take out and place in tepid water, then grind on the metate several times, together with almost a head of garlic, then strain well. In a stewing pot place some lard, and when hot drop in one onion, cut fine, and about a spoon of flour, let cook a little while, then drop in the chile; let come to a boil, then add the cut chicken, a cupful of raisin, a cupful of olives, about a teaspoon of sugar, a little salt and pepper, and let come to a boil again, then take away from the fire. Let soak in cold water, dry corn leaves. When well soaked, shake them well and apply a thin layer of the corn dough on the half of each leaf, then put a spoon of the stew on the prepared leaf, and cover with the prepared leaves, tie the ends with strings made of the same leaf
If liked, boiled eggs cut in halves may be placed in each spoon of stew. When the tamales are finished, place them in a large pot with a little boiling water and boil one hour. Any other meat can be used if desired. The metates can be purchased at any Mexican store (Ladies' Social Circle 1894:273-274).

Atole, Pinole, and Esquite

> On the south side of Carquinez strait was the Rancho Pinole, . . . This rancho derived its name from the parched corn, ground up, known as pinole, and which was used everywhere and especially by the Mexican troops as food in their campaigns against the Indians; it was commonly mixed with a little panocha (sugar) and water, and was very palatable and nutritious. This food, together with the game killed by the soldiers, such as elk, deer, antelope and beef, constituted their whole fare when in the field (Davis 1889:30).

Based in ancient Mesoamerican traditions, atoles are boiled gruels or porridges of nixtamal masa, modified on the northwestern frontier to also be made with wheat flour. They are served warm and made with a variety of ingredients and seasonings including sugar, brown sugar, cacao, syrups, and various fruits. Many are milk based. Currently, one of the most popular on both sides of the U.S. - Mexican border is the chocolate flavored champurado (Lugo 1877a:100, 1877b:225; de la Guerra 1878:281-282; Bancroft

1888:364; Redfield 1929:180; Redfield 1930:40; Parsons 1936:34; Fournier 1998:19-20; Earle 2010:698; Morton 2014:34). Californios ate both masa and wheat flour based atoles (Bancroft 1888:232, 364; Shinn 1891:397). Served at festive occasions such as weddings (Híjar 1877a:47), they also made up a regular part of daily consumption. José María Amador mentioned drinking sweetened "atole de pinole made with milk" for breakfast (Amador 1877a:115; 1877b:140-141). Angustias de la Guerra and José de Carmen Lugo also had atoles as part of the morning meal (Lugo 1877a:88, 1877b:218; de la Guerra 1878:281-282). In addition, Amador's family had corn masa based atole with their evening supper. They also ate migas, described as a type of atole cooked in lard "with corn partly cracked" (Amador 1877a:115; 1877b:140-141). This is apparently different from the dish called migas that is currently served in Mexico, which consists of strips of corn tortillas with other ingredients. Based on the use of "partially cracked" corn it may actually have been a form of pinole.

Pinole consists of kernels of corn or wheat toasted on a comal and then ground into flour on the metate. So although a product of the Grinding Complex, the corn variety is not based on nixtamal masa. This appears to differentiate pinoles from atoles, in that the latter are masa or wheat flour based while the former are from the milling of previously parched seeds. The resulting meal could be mixed with other ingredients and then added to water or milk with sugar or brown sugar panocha for consumption (Valesco 1850:134; Fournier 1998:19-20). Another very similar preparation of ground toasted corn seeds mixed with a liquid base for eating was esquite (Fournier 1998:19-20). At this point, distinguishing between pinoles, esquites, and atoles becomes confusing since all are mentioned along with "atoles de pinole" as meal items in Californio households. Like atole, pinole and esquite are often associated with breakfast. They seem to be more associated with "the poor" (Amador 1877a:116, 1877b:142-143; Lugo 1877a:88, 1877b:218; Bancroft 1888:363; 364), although why beverages of nixtamal masa would be significantly more costly that those from a ground meal of toasted kernels is unclear and problematical, especially given the lack of real economic differences amongst most Californios prior to mission secularization and the establishment of a ranchero

aristocracy. As with the tortilla, Californio references to corn based atole and pinole far outnumber those of preparations based on wheat.[61]

Non - Grinding Complex Foods

Corn

Corn was also eaten in a number of ways that did not include grinding. Pozole was a stew of whole nixtamal processed corn kernels with vegetables and meat (Lugo 1877a:100, 1877b:225; Bancroft 1888:364; Fournier 1998:19-20). Pozole prepared at the missions also contained large quantities of wheat mixed with corn (Duggan 2000:316). Californios ate ears of corn (elotes) roasted, baked, and boiled. Cut into short segments, they often made up part of the ingredients in broth based soups and stews (sopas, caldos, ollas, sanochados, and pucheros). Whole kernels were boiled in water with lard, salt, and chiles (Amador 1877a:116, 1877b:142-143; Bancroft 1888:366).

Beans (Frijoles)

> I went up to the house to supper. We had frijoles (the perpetual food of the Californians, but which, when well cooked, are the best bean in the world (Dana 1869:109)[62]

As has been the case throughout Mexico for centuries, beans in California were served at every meal, which meant the Californios consumed them three to four times a day. If this routine seems monotonous, let the writer, who lived in Mexico for a number of years and partook of frijoles three times or more a day, confirm from personal experience that it was not. He never became tired, but on the contrary looked forward to them at every meal with relish, as did the Mexican natives who had consumed them at least three times

---

[61] In addition to the above, corn bread was made in southern Baja California. Given the similarity in regional cooking, it could very likely also have been made in Alta California. A batter of eggs, sugar, and corn flour was formed into “shapes like several kinds of rice cakes,” which were put on a copper sheet and placed into a preheated earthen oven. It is not clear if this was made from ground nixtamal or unprocessed ground corn (Hatsutarõ 1844:66- 67).

[62] Also cited in Hector 2020:5.

a day for their entire lives. It must be understood that so flavorful were they - just as Mexican frijoles are to the present-day - that even the arrogant, ethnocentric, upstart New Englander Richard Henry Dana, who tried in the most thorough way possible to never say anything favorable about the Californios and their culture, had to surrender and admit that frijoles were “the best bean in the world” (Dana 1869:109). The three main ways of preparation included boiled or stewed (de la olla), or first boiled and then mashed, or after mashing “refried” (fritos), or used with other vegetables as ingredients in soups and stews (Robinson 1846:79; Amador 1877a:115-116, 1877b:140-143; Lugo 1877a:88, 1877b:218; Arnaz 1878:23-24; de la Guerra 1878:281-282; Bancroft 1888:363-364, 370; Davis 1889:78, 83; Pinedo 1898:107-108, 2003:132). Although no record has been found indicating what types were grown, the most likely candidate is the pinto bean (Hector 2020:5).

Recipes

Frijoles Con Queso - Beans with Cheese [Refried]

Mrs. W. S. Moore[63]

One quart red beans; 4 tablespoons lard; salt; pinch of cayenne; 1/2 pound good cheese. Boil the beans until soft, then drain and turn into a frying pan with the lard. Salt to taste. Pepper and cheese grated. Stir until cheese dissolves and thoroughly blends. Serve hot (Ladies’ Social Circle 1894:270-271).

Frijoles [De La Olla]

E. Benton Fremont[64]

One cup beans; 1 long red pepper; 1/2 clove garlic; 1 small thin slice bacon. Soak the beans over night. Cook slowly from eight to ten hours, as big hominy is cooked. Like hominy, they are even better the next day (Ladies’ Social Circle 1894:271).

---

[63] Amenaida Raphela LanFranco, daughter of María Petra Delores de Pilar Sepulveda born May 21, 1837 in Los Angeles, and granddaughter of José Loreto Sepulveda and Juana Cesaria Pantoja. José Loreto was born in the Pueblo of Los Angeles in 1815.

[64] Elizabeth Benton "Lily" Fremont, daughter of John C. Freemont (1842-1919). Beginning in the 1870s when her father became Governor of Arizona, she lived for many decades among Hispanic people in the Southwest.

Meat

> We found him rather a lover of good eating, and, indeed, one would suppose that this remark might apply to all Californians, for the lowest personage must have his three or four different dishes. Their ollas, azados, guisados, and frijoles, are found at every board (Robinson 1846:79).

> Their meat stews were excellent when not too highly seasoned with red pepper (Davis 1889:78).

> He provided, among other things, several bullocks and calves, which were prepared as carne asada, meat roasted on spits over a bed of coals, this being much superior to other modes of cooking the meat (Davis 1889:271).

> It would seem a small affair, at first sight, to get a piece of beef of any size, but you will learn to the contrary if you go to a Spanish or Mexican butcher. He knows nothing about side pieces or plate pieces or quarters. He goes in for stripping the meat off the bones just as he does the skin, by cutting and tearing, making the whole into shreds and patches (Sandels 1843:27).

A diet high in meat constituted one of the main distinctions between foodways of gente de razón on the northwestern frontier, including Alta California, and those in the Mesoamerican core. References to Californio carnivorous consumption are frequent and include beef, mutton, pork, and goat, as well as chickens, turkeys, and geese (Amador 1877a:116, 1877b:142-143; Lugo 1877a:113, 1877b:230; Híjar 1877a:40, 47, 1877b:25, 61; Pico 1878:303). Archaeological studies have encountered similar patterns of utilization from examination of faunal remains as well as an occasional wild species such as deer and wild birds, including quail, and ducks, as well as jack rabbits and cottontails (Cheever 1983:108-169; Voss 2002:469-473; Blind et al. 2004:145; Lucido 2013:62-63; Buitenhuys 2014:89-122; Chace 2015; Smith et al. 2017; Sasson and Arter 2020).

Beef

Beef dominated the types of meats consumed in California. The immense size of cattle herds allowed plentiful access to all gente de razón and missionized natives (Sandels 1843:42; Amador 1877a:115; 1877b:140-141; Lugo 1877a:88, 1877b:218; Arnaz 1878:23; Bancroft 1888:363-364, 370; Gust 1982:105; Voss 2002:469-471; Blind et al. 2004:145; Buitenhuys 2014:89-122; Smith et al. 2017:152). Slaughtered cattle tended to be between three and six years old (Davis 1889:47; Gust 1982:119). "The steer was lassoed by the hind legs, thrown over and killed, . . . The skin was laid back on the ground as it was taken off, and the creature was cut up on the skin" (Davis 1889:47). Unlike Anglo-European techniques, Mexican cooking and butchering practices are not based on large cuts of meat. Flesh was cut away from the bone in strips with knives, cleavers or axes, and stone tools (Sandels 1843:27; Gust 1982:122-126, 133; Blind et al. 2004:145; Lucido 2013:62-63; Chace 2015:204).

A Swedish traveler, G.M. Waseurtz af Sandels, while journeying about California in 1842 and 1843, wanted to treat a number of fellow voyagers then on the coast to a regular Continental style dinner. Through significant effort he acquired a large "hunk" of beef that he hoped to have prepared in manner resembling a European roast. Not knowing how to render palatable such a bulky piece "The cook . . . slashed it into strips, behind the mistress' back . . . ," thereby destroying the Swede's hopes for a fancy dinner. He "was satisfied ever afterwards to eat frijoles and everything else in the California fashion" (Sandels 1843:27). Archaeologically, faunal assemblages consisting of highly fragmented bone pieces predominantly cut with knives and cleavers, rather than definable cuts of meat executed with a bone saw, are considered to represent a pattern characteristic of Mexican food preparation, not only for pre 1850 Mexican Colonial and Republic period sites (Gust 1982:105; Cheever 1983; Voss 2002:470; Blind et al. 2004:145; Lucido 2013; Sasson 2014; Buitenhuys 2014:110-112; Smith et al. 2017), but for Mexican occupied sites dating into the twentieth century (Christenson 1993; Arter 2001, 2011, 2012a, 2012b, 2014; Sasson 2011).

Californios prepared beef in various ways. Roasting or broiling (asada) was popular. First to be removed when butchering, the layer of meat covering the rib cage, called the fresada, was thrown on top of coals and after sprinkling with salt (Davis 1889:47). “They would just turn it over a bit on the coals to partially roast it, and then they ate it with great enjoyment and considered it a delicacy” (Arnaz 1878:23).[65] Carne asada could also be prepared by roasting pieces over a fire on wooden or iron skewers (Lugo 1877a:88, 1877b:218; de la Guerra 1878:281-282; Bancroft 1888:363-364; Davis 1889:78, 83, 271; Pinedo 1898:18-21, 2003:100) (See Figure 31). Served daily, soups and broth-based stews known as sopas, ollas, guisados, sancochados, adobados, and caldos, consisted of pieces of beef or other meat cooked slowly with a variety of spices and vegetables in an earthen pot (Robinson 1846:79; Amador 1877a:115; 1877b:140-141; de la Guerra 1878: 281-282; Bancroft 1888:363-364, 366; Davis 1889:78). Other preparations included cubes of beef cooked in chile sauce (carne en chile colorado) (Amador 1877a:115; 1877b:140-141; Ladies’ Social Circle 1894:267-268), pounded beefsteak (beefsteak ranchero) fried and simmered in a gravy of onions, chiles, garlic and other seasonings (Davis 1889:93; Ladies’ Social Circle 1894:266), and boiled tongue seasoned with chiles and salt. Beef, along with other meats, also served as filling for empanadas (Bancroft 1888:274, 369; Ladies’ Social Circle 1894:267). Entire heads of cows and other animals were baked in pits in the ground or in earthen ovens (Hatsutarõ 1844:66- 67; Pinedo 1898:38, 2003:98). The resulting barbacoa is still popular in northern Mexico. Archaeological excavations of the San Diego Presidio Chapel Complex encountered remains of a pit oven (Ezell and Ezell 1980).

---

[65] “Apenas de acoloclarse un poco en las brasas a medio asar, la comian con grande apetito, y la tenian por un bocado esqusito” (Arnaz 1878:23).

Recipes

[Carne Asada] De Buey a la Mexicana

(En Asador)

Encarnación Pinedo

La carne en asador tal vez es la más sabrosa, y el modo más primitivo para cocinarla. Se toma la carne en tiras que se ensarta en dobleces en una barilla de hierro cuadrilateral y casi chata, con punta aguda en un extremo. Una vez colocada la carne se extiende al travéz de unas brasas y se vigilará contiuamente dando vuelta al asador para que las viandas queden jugosas y bien doradas (Pinedo 1898:19).

[Carne Asada] Mexican Style Grilled Beef

(On a Skewer)

Encarnación Pinedo

Meat grilled on a skewer [carne asada] is perhaps the tastiest, and the most primitive way to cook it. The meat is taken in strips that are threaded in folds on a quadrilateral and almost flat iron rod, with a sharp point at one end. Once the meat is placed on the skewer, it is spread across some embers and it is then monitored continuously by turning the spit so that the piece becomes juicy and well browned (Pinedo 1898:19, see also 2003:100).

Spanish Steak

Mrs. E. A. Pruess[66]

One and one-half pounds round steak; 6 red chiles; 1 table spoon flour; 2 cloves garlic; a little thyme; lard. Vein, and seed the chiles, cover them with boiling water, soak until tender, then scrape the pulp into the water. Cut the steak in small pieces, fry it brown in hot lard, add the flour and brown it, cover with the chile water, add garlic, and thyme. Simmer until the meat is tender, and the gravy of the right consistency (Ladies' Social Circle 1894:266).

---

[66] Mary A. Pruess, born in California in 1856.

Chili Con Carne [Chili Colorado]

Mrs. J. L. Slaughter[67]

Beefsteak - round; 1 tablespoon hot fat; 2 tablespoons rice; 1 cup boiling water; 2 large red peppers - dry; 1/2 pint boiling water; salt; onions; flour. Cut the steak in small pieces. Put in frying pan with the fat, hot water and rice. Cover closely and cook slowly until tender. Remove the seeds and part of the veins from the peppers. Cover with half pint of boiling water, and let them stand until cool, then squeeze them in the hand until the water is thick and red. If not thick enough, add a little flour. Season with salt and a little onion, if desired. Pour the sauce on the meat and serve (Ladies' Social Circle 1894:267-268).

Tongue Piquante

Senorita Epitasia Bustamente[68]

Boil a beef tongue till tender; skin and cut, like lyonnaise potatoes. Sauce - seed and vein 15 chile peppers. Boil half an hour with a little salt, changing water three times. Take out chiles and mash to a red pulp. Add one pint cold water. Roast one pound pumpkin seed ten minutes in a hot oven; skin and run them through a coffee mill [traditionally these would have been toasted on a comal and ground on a metate]. Add 1/2 pint cold water, and run through strainer. Mix with chiles. Add one tablespoon pork fat, tablespoon flour, and tablespoon salt. Boil, stirring carefully. Add the prepared tongue and cook for half an hour (Ladies' Social Circle 1894:267).

Barbacoa

(Carne asada en un hoyo ó cabeza tatemada)

Encarnación Pinedo

Se descuelga la cabeza muy cerca del cogote[69] y se agujera el cuero por todas partes mechándose en seguida con chiles enteros secos, dientes de ajo, pedazos de cebolla, y de

---

[67] Unidentified.

[68] Unidentified, a Miss. "Epitacia" M Bustamante is listed in the 1895 Los Angeles City Directory.

carne de puerco gorda o de jamón que haya estado por doce horas en el chile, ajo, vinagre, sal, ajengibre y toda clase de especias agreandole lima en torzos. También se mecha la lengua hasta donde se puede con orégano.

Una vez preperada la cabeza que se desea tatemar, se tendrá el hoyo, que debe tener por lo menos unos tres pies de profundidad, bien ardiendo con fuego vivo y piedras de un tamaño regular en el fondo. Cuando se noten que éstas y el foso están candentes, se extrae los restos de los leños y sacando la mitad de los piedrones se envulve la cabeza en un saco, se pone dentro del hoyo, y se le colocan las piedras calientes encima y por los costados y se cubre todo con un mazo de yerba buena. En seguida sobre este se pone un pedazo de estéra o saco y después ceniza y tierra encima. La tatema se deja permanecer toda la noche en el hoyo y a la mañana siguiente, cuando todo esta preparado para el almuerzo, se sacará la cabeza tatemada que es deliciosa, y se sirvira con la salsa correspondiente.

Barbacoa [Baked Meat]

(Meat baked in a hole or roasted head)

Encarnación Pinedo

The head is severed [from the body] very close to the nape of the neck and the skin is pierced everywhere, immediately insert into the piercings whole dried chiles, garlic cloves, pieces of onion, and fat pork meat or ham that has been for twelve hours in [a mixture of] chile, garlic, vinegar, salt, ginger and all kinds of spices and lime in slices. Also cover the tongue as far as you can with oregano [At this point the tongue is often pierced and then covered with oregano].

Once the head to be roasted has been prepared, the pit should be readied, which must be at least three feet deep, well burning with live fire and have stones of a regular size at the bottom. When it is noticed that these and the pit are red-hot, the remains of the fire wood is extracted along with half of the stones, the head is wrapped in a sack, placed inside the

[69] Usually spelled "cogóte," this word is without the accent mark in the original text.

hole, and the hot stones are placed on top and through the sides and everything covered with a layer of mint. Immediately cover with a piece of matting or sack and then ash and earth. The roast is left for overnight in the hole and the next morning, when everything is ready for almuerzo, the roasted head, which is delicious, will be removed and served with an appropriate sauce (Pinedo 1898:38, 2003:98).

Carne Seca

> The mode of cooking dried beef is to pound it up fine and then put it into a pan with a little hot lard, stir and moisten with a little water. A little boiled potato, & onion cut fine, with a little red chile and tomato mixed with it makes a very fine dish (Sterns 1861).
>
> Good beef cured in this way is, in my opinion, perfectly delicious. And I would rather have a good string of it right now than a porterhouse steak (Kelly 1925:8).

Making carne seca, essentially dried beef jerky, was the most common way to preserve beef for later eating. "It formed an indispensable part of the diet of the Californians, from the humblest peon to the proudest don" (Cleland 1969:63).

> When a steer was killed the hide was spread out, hair side down, and used as a receptacle for the meat. The latter, cut into strips about an inch thick, five or six inches wide, and from one to three feet long, was dipped in brine and hung on a rope or reata in the hot sun, and turned every twenty-four hours. In four or five days the meat was hard, black, and dry. . .. Sometimes the meat, instead of bring treated in this fashion, was stripped from the body of the steer and dried in thin sheets (Cleland 1969:63 from Kelly 1925:7-8).

After drying, the carne seca would be taken down and tied in bales with rawhide thongs, or placed in canvas sacks and kept in a cool, dry place until it was used. For preparation it was usually finely shredded by grinding on a metate or in a mortar and then sautéed

with a small amount of lard and water along with red chile, tomato, onion, garlic, and other seasonings, resulting in what in modern Mexican restaurants is often called machaca. It could also be cut into pieces and boiled, especially as an ingredient of the popular broth-based stews, caldos, guisados, and ollas (Sandels 1843:42; Sterns 1861; Lugo 1877a:88, 1877b:218; Pico 1878:304; Davis 1889:251-252; Ladies' Social Circle 1894:265; Kelly 1925:7-8; Cleland 1969:63; Pinedo 2003:99).

Recipe

Dried Beef with Peppers [Machaca]
Mrs. W. S. Moore

Two pounds jerked, dried beef; 2 ounces lard; 1 onion; 6 red peppers; brown flour. Place the beef in pan in hot oven ten minutes, then shred. Place in a frying pan with lard and onion, and fry for five minutes. Pour boiling water over the peppers. Pass them through a sieve, and mix with the beef. Thicken with brown flour. Season to taste. Cook twenty minutes, and serve piping hot (Ladies' Social Circle 1894:268).

Pork, Goat, Mutton

Sheep, pigs, and goats were also used for meat but to much lesser extent than beef. This is documented in contemporary literature (Robinson 1846:201; Lugo 1877a:113, 1877b:230; Pico 1878:303; Davis 1889:78),[70] as well as archaeologically (Cheever 1983:108-169; Blind et al. 2004:145; Lucido 2013:58-60; Buitenhuys 2014:93-94; Smith et al. 2017:152, 156). Preparation followed the usual means used for beef and included roasting on skewers and broiling, and as ingredients in broth based pozoles, ollas, caldos, and sancohados. Entire heads were roasted as well (Hatsutarõ 1844:66- 67; Bancroft 1888:264, 362-363; Davis 1889:78).

---

70 Arnaz stated: "Los Californios no acostumbrabán comer carne de oso, ni de cochino, ni de borrego – la unica carne de que les gustba era la res. (The Californios were not accustomed to eating the meat of bears, pigs, nor of sheep. The only meat that they liked was that of beef) (Arnaz 1878a:22). In the case of pork and mutton this statement is contradicted by sources cited in the text.

Sea Food and Poultry

Fish and Shellfish

> Fish was plentiful and excellent (Sandels 1843:42).

> During Lent, when fasting was observed, people did not have their first meal until twelve o'clock at noon, and the second at eight in the evening. These two meals, at midday and at night, generally consisted of fish, abalone, . . . (Lugo 1877a:88, 1877b:218).

As is universal throughout the shoreline regions of Mexico, fish and shellfish were common in Colonial and Mexican period Californio diets. Given the coastal orientation of the entire province this is hardly surprising. As with other meat sources there are literary references (Sandels 1843:42; Hatsutarõ 1844:66- 69; Lugo 1877a:88, 1877b:218; Bancroft 1888:363-365, 369), and archaeological documentation (Gust 1982:143-144; Voss 2002:471-472; Blind et al. 2004:145; Arter 2012a, 2012b; Chace 2015:206; Lucido 2015:107-108; Smith et al. 2017:153,157, 160; Marquez 2020). Fish was fried, roasted over coals (Bancroft 1888:369; Arter 2012a, 2012b), and undoubtedly used as ingredients in the daily broth based dishes. Species identified from the Chapel excavations are shown in Table Four.

Although there is less contemporary documentation for shellfish utilization (Lugo 1877a:88, 1877b:218), archaeological evidence for their consumption is overwhelming and occurs at all four California Presidios. California Bay Mussel (*Mytilus)* and, Red Abalone, were found in the Building 13 Midden at the San Francisco Presidio (Voss 2002:472-473). Red and Black Abalone (*Haliotis rufescens* and *Haliotis cracherodii*,) mussels, and clams were identified from excavations at the Monterey Presidio (Smith et al. 2017:153-154). Species identified from the San Diego Presidio include Pismo clams, Cockles (*Chione fluctifraga)* and Scallops (*Plagioctenium circularis*) (Chace 2015206-207). It is highly probable that Native Americans, familiar with procurement methods and locations, provided marine food resources (Chace 2015:206-207).

Table 4: Fish Species Identified From the Chapel Excavation[71]

Common Name
California Sheephead
Shortfin Corvina
Eel
Pacific Mackerel
Shovelnose Guitarfish
Bat Ray
California Halibut
Rockfish
Thornback Guitarfish
White Seabass
Pacific Angel Shark
Pacific Barracuda
Skipjack Tuna
Horn Shark
Sargo
Sardine/Herrings
Small Wrasse
Senorita
Kelp Bass
Spotted Sand Bass
Barred Sand Bass
Specklefin Midshipman
Shark/Ray

Poultry

Poultry raised by Californios included chickens, turkeys, ducks, and geese (Hatsutarõ 1844:66- 69; Robinson 1846:201; Lugo 1877a:113, 1877b:230). Chickens constituted household staples raised for their meat and eggs (Pico 1878:303; Bancroft 1888:274, 363; Davis 1889:8). Common means of cooking fowl included roasting and broiling (Robinson 1846:201). To broil chicken, the cook split the back, coated the whole carcass with salt and other spices and butter or lard, and placed the whole over coals (Ladies'

[71] From an ongoing analysis by Zaria Marquez of the San Diego Natural History Museum (Marquez 2020).

Social Circle 1894:263). Chicken is still prepared this way in Mexico and has become very popular in the United States in the last few decades through such commercial vendors as El Pollo Loco. Often eaten boiled or as omelets, chicken eggs also provided ingredients for sweet tamales, and corn bread batter, as well as shells for confetti filled cascarones (Hatsutarõ 1844:66-69; Robinson 1846:136; Davies 1889:83; Ladies' Social Circle 1894:268-269; Pinedo 1898:123-130, 259-261).

Archaeologically, chicken remains have been recovered at the Presidios of San Francisco (Voss 2002:471), Monterey (Lucido 2013:58-60; Smith et al. 2017:153, 156) and San Diego (Buitenhuys 2014:73, 91-93, 99, 109). A study of chicken remains from the San Diego Presidio identified two breeds of chickens: a smaller (bantam) breed alongside a standard-size species. "The percentage of juvenile chickens (23%), the rooster/hen ratio (1:8.5), and high proportion of medullary bone point to on-site chicken husbandry focusing on meat and egg production," indicating small-scale household poultry husbandry, likely managed by women and children (Sasson and Arter 2020). Turkey bones are also "present but rare" in San Diego Presidio faunal collections (Chace 2015:206).

Recipes

Broiled Chicken

Mrs. A. F. Coronel[72]

Cut the chicken open on the back. Salt it, inside and out, rub it with butter or lard. Broil over coals, keeping it well covered with butter or lard (Ladies' Social Circle 1894:263).

[72] Mariana Williamson de Coronel, who married Antonio Francisco Coronel in 1873. Antonio and his parents arrived in California in 1834 as members of the Híjar-Padrés Colony. Born in Texas in 1851, Mariana came to California in 1859 with her parents. Her mother was from Mexico.

Sopas, Caldos, Ollas, Guisados, Pucheros, and Sancuchados

> Their meat stews were excellent when not too highly seasoned with red pepper (Davis 1889:78).

Many meats, along with vegetables, rice, and noodles were used as ingredients in the ever popular broth-based sopas, caldos, and stew like ollas, guisados, pucheros, and sancuchados. These dishes are mentioned by almost every writer who experienced Californio cooking and the women were celebrated for their rich soups and stews (Robinson 1846:79; Híjar 1877a:24, 1877b:18; Arnaz 1878:23-24; Davis 1889:380-381; Ladies' Social Circle 1894:264-266; Pinedo 1898:167, 219-221, 2003:133). They have both Mesoamerican and Iberian origins. Bancroft, after reviewing several of the Californio testimonios, concluded that a meal could consist of:

> . . . good broth . . . made usually of beef or mutton, and to thicken the broth rice, garbanzos, good cabbage, etc., were boiled with it. After the broth came soups a la Española, made with rice, vermicelli, tallarines, maccaroni, punteta, or small dumplings of wheaten flour, bread, or tortilla de maíz. The next course was the puchero, which usually was the meat and vegetables from which the broth had been made, with sauce to stimulate the appetite. This sauce was generally confectioned in summer with green peppers and red tomatoes, minced onions, parsley, or garlic. In winter the sauce was made with dried peppers (Bancroft 1888:363).

Ethnographer of Baja California ranching traditions Harry Crosby also noted the importance of "sopa:"

> A staple of Baja California sierra cooking is the sopa, a dish of such varied contents that its only constant ingredients seems to be warmth and wetness. Sopas may consist of watery rice containing sautéed bits of peppers, onion, and dried meat or fish, or a sopa may have a base of pasta, such as elbow or shell macaroni and much the same seasonings as the rice.

> Still other sopas contain chunks of meat, potato, squash, or chayote, a squash like member of the cucumber family (Crosby 2015:26).

Sancocho or olla podrida was described as “a dish of meats, potatoes, and other vegetables, boiled together, and seasoned.” As noted previously pozole was a stew composed of corn, pigs' feet, squash, and peppers (Bancroft 1888:366).

Recipes

Olla Buena
Encarnación Pinedo

Se lava la carne y se pone en una olla con agua hirviendo y sal. Conforme suba la espuma se le quitará y se le agregan garbanzos, una o dos cabezas de ajo enteras, jamón, patitas de puerco, un pedazo de papada, unos salchichones, aves, una col, una calbacita, chícharos y cebollas. Se sazona con un poquito de asafrán (Pinedo 1898:167).

Olla Buena
Encarnación Pinedo

Wash the meat and put it in a pot with boiling water and salt. Remove the foam as it rises. Garbanzos [chickpeas], one or two whole heads of garlic, ham, pork legs, a piece of jowl, some sausages, poultry, a cabbage, a squash, peas and onions are added. It is seasoned with a little bit of saffron (Pinedo 1898:167 see also 2003:111).

Olla Podrida a la española
Encarnación Pinedo

Póngase en una olla agua en cantidad sufciente para el puchero, un pedazo de carnero ó de ternera, una tajada de jamón crudo y los menudillos de ave o de caza: se pone al fuego y se espuma la olla para añadirle una tajada de saladillo, garbanzos y sal si fuera preciso. Se le agregarán a la olla los legumbres que se quiera, calabacitas tiernas, ejotes, helotes, peras, una col patida por la mitad, papas, puerco, cebolla, dos cabezas de ajo, enteras,

tomate y perejil. Al momento de servirla se colocarán las viandas y los legumbres en una fuente (Pinedo 1898:167).

Olla Podrida a la española

Encarnación Pinedo

Put enough water in a pot for the stew, a piece of mutton or veal, a slice of raw ham and the giblets of fowl or game birds: put on the fire and froth the pot [ie as the foam rises] add a slice of salt pork [saladillo], chickpeas and salt if necessary. Add to the pot the vegetables that you want, tender squash, green beans, segmented corn on the cob [helotes], pears, a cabbage cut in half, potatoes, leek, onion, two whole heads of garlic, tomato and parsley. At the time of serving, meats and vegetables should be placed in a bowl (Pinedo 1898:167 see also 2003:111).

Stewed Partridges

Mrs. Juan Foster.[73]

The partridges after being dressed, are put over a slow fire in a round earthen pot (olla), with fried bacon cut in squares, onions quartered (plenty of them), two heads of garlic, all kinds of spices, salt and lard. Let the whole boil slowly - covered with another smaller round earthen pot (olla), full of water, putting between the two pots a piece of wrapping paper (Ladies' Social Circle 1894:264).

Stewed Rabbit

A. Sepulveda de Mott[74]

Prepare it, without wetting it, then cut in slices and put in the "olla" with cooking oil, parsley, garlic and pepper, and keep it over a slow fire; then add some hot water, and when it is half cooked put in a few leaves of laurel, cloves and pulverized cinnamon (Ladies' Social Circle 1894:265).

---

[73] Josefa Del Valle De Foster, daughter of Ygnacio Ramón de Jesús Del Valle and Maria Eufemia Isabel Varela del Valle of Rancho Camulos near Ventura California.

[74] Ascension Sepulveda, born February 15, 1844, daughter of José Antonio Sepulveda who owned Ranchos Cienega de las Ranas and Bolsa de San Joaquin in present-day Orange County.

Veal a la Mode

A. Sepulveda de Mott

Cut in small pieces the veal. Fry some bacon, and in this fry the veal; then put in the olla. Fry some onion, well chopped, and put on the meat: also, a little vinegar, two heads crushed garlic, salt, sprig parsley, and a few leaves of laurel. Put the whole over a slow fire, covered by a paper, on the top of which set a cup of water, to prevent evaporation. Let it boil two hours (Ladies' Social Circle 1894:266).

Other: Rice, Vegetables, Noodles, Etc.

Rice

Rice, an important food stuff, was imported on San Blas supply ships (Perissinotto 1998: 249, 357, 398). It was used in broth based dishes and fried. One method described frying in fat mixed together with garlic, onion, and other vegetables. Another description is very close to the way Mexican rice is made today by frying with vegetables and then adding a small amount of water (Hatsutarõ 1844:66- 67; Amador 1877a:115; 1877b:140-141; Ladies' Social Circle 1894:271). Rice was included as a staple for soldiers' rations (Pico 1878:304).

Recipes

Rice a La Valencia

Mrs. Juan Foster

Put the rice, with sweet oil, chopped onions, garlic, parsley and tomatoes in a pot, and fry all for awhile. Add water and rice in the proportion of five of water to one of rice, and let it boil until the water is absorbed by the rice. Let it cool and if it is done properly you will find the grains of rice entirely dry and separate from each other (Ladies' Social Circle 1894:275).

Fried Rice

Mrs. A. F. Coronel

Rice, lard, onions, garlic, salt, black pepper, hot water, tomatoes. Wash the rice, brown it in hot lard, then add onions, tomatoes, garlic. Cover the whole with hot water. Season with salt and pepper. Let the rice cook thoroughly, adding water as needed, but do not stir it (Ladies' Social Circle 1894:275).

Vegetables

> Vegetables grew in the greatest abundance and a few enterprising persons brought them in from great distances….They had the finest Irish potatoes (Sandels 1843:42).

> Most kinds of vegetables are raised in gardens, and there is hardly a house in the country that has not its small patch of ground devoted to that purpose (Robinson 1846:220).

> La comida corriente era sopa de arroz o fideos, olla de carne cocida con verduras, [y] frijoles. (The main dish was rice or noodle soup, a pot of boiled beef with vegetables, [and] beans) (Amador 1877a:115; 1877b:140-141).

> . . . plowing lands for wheat, barley, beans, corn and small vegetables, onions, peas, cabbages, calabazas, lantejas [lentils], and melons (Davis 1889:34).

Vegetables included the aforementioned corn and beans, as well as garbanzos (chickpeas), cabbage, carrots, onions, potatoes, sweet potatoes, chile, peas, lentils, and especially squash[75] (Hatsutarõ 1844:66-67; Amador 1877a:116, 1877b:142-143; Bancroft 1888:365-366; Davis 1889:78; Monroy 1990:149-150). Ways of preparing squash included cooking in milk with brown sugar panocha or refined sugar, and also baking (Hatsutarõ 1844:66- 67; Amador 1877a:116, 1877b:142-143; Lugo 1877a:88, 1877b:218; de la Guerra 1878:281-282; Bancroft 1888 362-366). Native greens and amaranths (quelities) were also eaten (Lugo 1877a:88, 1877b:218; Bancroft 1888:365). Many

[75] de la Guerra (1878: 281-282) states: "They did not raise many vegetables. There was no tea except at my father's house, and in case of sickness they would come and ask for some there." Amador (1877a:115, 1877b:140-141) also stated "Las papas fueron tambien desconocidas aqui hasta veneering de Colombia o Oregon." ("Potatoes were also unknown here until they were brought from Colombia or Oregon"). Both of these statements are contradicted by sources quoted in the text.

vegetables along with rice and noodles made up ingredients in the ever popular broth-based sopas, caldos, and stew-like ollas, guisados, pucheros, and sancochados.

Recipes

Sopa a la Jardiniere
Encarnación Pinedo

Córtense en tiras o en cuarditos zanahorias, nabos, papas, puerro, apio, cebollas, tomates, iguales partes de cada cosa; una chirivía y perejil. Póngase todo el picadillo en marmita con agua hirviendo, un buen pedazo de mantequilla, pimeienta sal y extracto de carne o unas cucharadas de consumado (Pinedo 1898:257).

Soup à la Jardiniere
Encarnación Pinedo

Cut carrots, turnips, potatoes, leek, celery, onions, tomatoes, equal parts of each into strips or small pieces; a parsnip and parsley. Put all the picadillo in a kettle with boiling water, a good piece of butter, pepper, salt, and extract of meat or a few tablespoons of consommé [bouillon] (Pinedo 1898:257).

Milk, Curdled Milks, Cheese, and Butter

> El alimento general de los rancheros era carne asada y leche, queso y azaderas, frijoles y tortillas de maíz (The general diet of the ranchers was grilled meat, milk, cheese and fresh melted cheese [azaderas], beans and corn tortillas) (Arnaz 1878:23).

> His wife gave us some milk, with bread and cheese, of which we partook (Robinson 1846:111).

> La ordeña de vacas se hacía indistintamente ya por los manones por los indios sirvientes. Por lo regular alguna mujer de la familia iba a tener cuidado de la oredeña para que la leche estuviera limpia y sana. Las mujeres y los indios sirvientes bajo la dirección de aquéllas hacían asaderas, queso, mantequilla, requeson, quejada molida compuesta para tomar con frijoles (The milking of cows was done without distinction by the hands of the

> Indian servants. Usually, a woman in the family was in charge of the milking to assure that the milk was clean and healthy. The woman and the Indian servants under her direction made asaderas, cheese, butter, cottage cheese, and ground curds to be eaten with beans) (Lugo 1877a:76-77, 1877b:215).[76]

> In the spring of the year, when the grass was green, the wives of the rancheros made from the milk *asaderas*, a fresh cheese, in small flat cakes, which had to be eaten the day it was made (Davis 1889:37).

European and American visitors, whose cultural origins came from Northern European societies with strong dairy traditions, often commented on the lack of milk and butter in Californio households (Bancroft 1888:364). Eliza Farnham, upon visiting a rancho near San Francisco in the early 1850s remarked "These people were the owners of a great estate here, and another up the coast, on which were hundreds, if not thousands, of horned cattle and horses. Not a drop of milk nor an ounce of butter could be had in their house. Their chief articles of food are beef and beans" (Farnham 1856:130). Yet the Californios had a well established dairying tradition albeit largely unrecognized by people of Northern European descent who hoped for fresh milk to drink. During the rainy season when green grass was available, every presidio, pueblo, and ranch had corralled cows numbering from a single animal to large herds. José María Amador stated that at the San Francisco Presidio and later in San José pueblo he and his siblings milked "sixty cows daily to make cheese" (Amador 1877a:115; 1877b:140-141; Davis 1889:37). Rather than as a beverage for drinking, women used the milk from these animals to cook with, and make cheese, cottage cheese, curds and, in spite of comments like those of Mrs. Farnham, butter (Lugo 1877a:76-77, 1877b:215).

As already noted, milk was an important ingredient in the preparation of atoles, pinoles, cooked squash, and esquite. It could be an ingredient in chocolate, and mixed and consumed with whole parched corn kernels. Léchetele, eaten during lent, consisted of

---

[76] This alternate translation is given in Lugo 1877b:215: "The milking of the cows was done by the men or the Indian servants. Ordinarily some woman had charge of the milking, to see that the milk was clean and strained. The women and the Indian servants under them made the small, hard, flat cheeses, the cheese proper, butter, curds, and a mixture made to use with the beans."

wheat cooked in milk with "plenty of panocha" (Amador 1877a:115-116, 1877b 140-143; Lugo 1877a:88, 1877b:218; de la Guerra 1878: 281-282).

Although made and consumed in the Mesoamerican core of Mexico, cheese, like meat, became a much more important, and relished, component of gente de razón diets on the northern frontier, undoubtedly as a result of the expansion of ranching (Hewes 1935:291-292; Heyman 1991:84-85; Hewes and Nina Veregge 1996:25; Crosby 2015:156-159). This is still so in the present-day. A commonly heard comment in the arid regions of Baja California at the beginning of the rainy season is "viene la lluvia, va a ver queso" ("rain is coming, there will be cheese").

The traditional cheese making process begins by adding rennet, the scrapings from the dried after stomach of a deer or cow, along with salt to the fresh milk. The rennet contains an enzyme that causes the milk to quickly curdle. The resulting curds are placed in wooden frames lined with cheese cloth. When these molds are full, the cloth is folded "neatly over the top" of the mass of curds and a board with a weight on top - usually a rock - is placed over it to press the excess liquid whey out of the curds. After a few hours the cheeses are removed. Those not eaten immediately are cured for "a day or two" until a rind develops on the surface (Crosby 2015:156-159).[77]

In addition to finished cheeses, curdled milk (clabber), and curds, undoubtedly with the whey – yes, just like Miss Muffet - were eaten (Lugo 1877a:76-77, 88, 1877b:215, 218; Bancroft 1888:364). Californios made a distinction between the fresh "asadereas," and "queso" which were hard flat cheeses that had aged somewhat so that they cured and formed a rind. These could be kept for several months (Lugo 1877a:76-77, 1877b:215; Bancroft 1888:364). The fresh cheese was often eaten roasted which gave it its name asadera (Amador 1877a:115; 1877b:140-141; Lugo 1877a:76-77, 88, 1877b:215, 218;

[77] For a detailed description of the cheese making process see Crosby 2015:156-159.

Bancroft 1888:364, 370)[78]. Cheese is still made today on Mexican Ranchos and served at most meals during the cheese making season. It is common in Mexican markets on both sides of the border where it is designated as panela, queso fresco, and queso casero. Cheese was, and still is, used as an ingredient for other dishes, such as enchiladas, or eaten with sweets as a desert (Amador 1877a:116, 1877b:142-143; de la Guerra 1878:281-282; Pico 1878:303). Ground curds were eaten with beans (Lugo 1877a:76-77, 1877b:215).

Sweets and Snacks

> Al llegar a la casa se daba a los concurentes todos, algún panecito hecho en profuso, alguna tajada de sandía, o culalquer otra cosa, eso constituirá lo que se llamaba "volo" (Upon arrival at the house, everyone was given some sweet bread, which had been made in profusion, a slice of watermelon, or something else, that constitutes what was called "volo.") (Híjar 1877a:37, 1877b:22).

> En los bailes públicos o de invitación siempre se servía un espléndido ambigú con ricos vinos y licores de todas clases. Las mesa cubiertas de manjares y dulces de diferentes especies (In public or private invitation only dances a splendid variety of dishes was always served with rich wines and liquors of all kinds. The tables covered with delicacies and sweets of different types) (Arnaz 1878:39).

> Me llovían flechas como buñuelos en noche buena (Arrows rained down upon me like buñuelos on Christmas Eve) (Amador 1877a:28, 1877b:52-53).

> The panocha sold readily to the California people, who had a liking for sweet things, and were very fond of it, the children eating it in lumps like candy, the grown people doing the same (Davis 1889:246).

> Para postre los más usaban queso, y algunas veces asaderas con panocha. (For dessert the majority used cheeses and sometimes asaderas with panocha) (Amador 1877a:116, 1877b:142-143).

---

[78] In southern Baja California the fresh cheese made that day is called panela, a product that can also be purchased in Mexican markets. The term asadera is still used in Sinaloa where it seems to be synonymous with panela. https://www.youtube.com/watch?v=iQnCLKNt2Qk

Hispanic foodways do not have the tradition of dessert that is common for Anglo-American meals. Pies, cakes, cobblers, cookies, assorted rich pastries with sweet filings and sugary frostings, along with all manner of confectionary, do not exist in Mexican cooking to the extent they do in the culinary traditions of Europe and the United States. Nevertheless, simple snacks and sweets are part of Mexico's culinary heritage and were regularly partaken of by the Californios. At festive gatherings a table of volo or vols (snacks) consisting of fruit, sweet breads, and other treats, greeted the arriving guest (Robinson 1846:201; Híjar 1877a:37, 1877b:22; Arnaz 1878:39; Bancroft 1888:329, 363). Sweets could also be part of daily meal routines and took the form of fruit, sweet breads, (panecitos), dried and candied fruits (dulces cubiertos), fruit preserves, (conservas), sweet tortillas and tamales, and brown sugar panocha eaten like candy.

Any available fruit could be eaten as a snack. Watermelon (sandia), and musk melon (melón), are two mentioned specifically as serving in dessert-like capacities (Hatsutarõ 1844:66-67; Híjar 1877a:37, 1877b:22). Dried fruit was supplied by the San Blas ships (Perissinotto 1998:231, 305, 311, 327, 357). Sweet bread (panecito) was also regularly served (Amador 1877a:115; 1877b:140-141; Híjar 1877a:37; Bancroft 1888:329). Although detailed descriptions are lacking, these would probably not have been the French influenced pastry like pan dulce popular in Mexico today, which came into being during the later nineteenth century. A plain sweetened roll similar to the Sonoran pan de mujer seems more likely.[79]

Dulces is an inclusive term for sweet flavored things in general. It included panocha - small domed cakes of coarse brown sugar formed in wooden molds used, along with honey and refined sugar, as sweeteners in numerous dishes.[80] The raw hard lumps could also be eaten like candy (Amador 1877b:122-123; Lugo 1877a:88, 1877b:218; Bancroft 1888:362-366; Davis 1889:246; Crosby 2015:115-117, 193). It was a regular item of import on the San Blas supply ships, along with white refined sugar (azucar), and

---

[79] See Sinaloa, Pan, Claudio Castro. https://revistahojasanta.com/nos-quedamos/2019/2/18/pan-de-mujer .

[80] Although panocha is the traditional name for the lumps of unrefined brown sugar, the word has a vulgar meaning in Mexican slang. For this reason the term piloncillo is now more often used among polite company and in markets and grocery stores.

assorted confectionaries (confite gruesos y medianos) (Perissinotto 1998:348, 353, 354, 363, 402). Azucarillos, a white sugar biscuit of Spanish origin popular throughout Latin America, could be melted in iced water to make a beverage (Bancroft 1888:369).

Another major category of dulces are fruit-based. One type, known as dulces cubiertos or dulces cristalizados, takes the form of fruits soaked in sugar solutions or syrups until they become “crystalized.” Any variety of fruit can be used. Squash (calabasa) and sweet potato (camote) are some of the most popular. Along with these two, crystallized citrus fruit is documented for California (Ladies’ Social Circle 1894:276-278). Dulces cubiertos also appear on San Blas ship records (Perissinotto 1998:348, 354-357). Another type of fruit dulce popular throughout Mexico and documented for California consists of conservas - a fruit pulp cooked into a concentrate resembling preserves. Sometimes sugar is added, at other times the natural sweetness of the fruit suffices (Pinedo 1898:72-80; 2003:167-169; Sanchez 1929:370-371). Cheese accompanied many of these dulces when eaten as a dessert during meals (Amador 1877a:115-116, 1877b:122-123, 141-143). Both could be wrapped together in a tortilla. The salty pungent cheese provides a contrastingly agreeable taste to the strong sweetness of the dulces.

Already discussed under the uses of corn and flour, but reviewed here because they were deserts and snacks, were the sweet tortillas and tamales. Sweet tortillas included niscayote, a tortilla of nixtamal masa and lard eaten with sugar, panocha, or honey. Deep fat fried fritters or flour tortillas also eaten with syrup or honey, buñuelos were served at Christmas. Sweet tamales were eaten for dessert on festive occasions (Amador 1877a:28, 1877b:52-53; Lugo 1877a:88, 1877b:218; Bancroft 1888:365; Pinedo 2003:139).

Recipes

Conserva de Calabasa

Encarnación Pinedo

Se corta la calabaza en pedazos y á estos se les quita la cáscara y las pepitas. Estos se echan en agua de cal bien asentada por algunas horas. Se saca la calabaza y se enjuaga bien en varias aguas. Se pone almíbar clarificado, aguado y frio. Se conserva á fuego manso, avirtiendo que para cada calabaza mediana se pondrán tres libras de azúcar en almíbar (Pinedo 1898:76).

Squash Preserves

Encarnación Pinedo

Cut a squash into pieces and remove the peel and seeds. Put the pieces into well-settled lime water for a few hours. Remove the squash and rinse several times, using fresh water for each rinsing. Put in a thin, clear, cold syrup. Cook over a low heat, remember that for each medium squash three pounds of sugar will be required for the syrup (Pinedo 1898:76; see also 2003:169).

Recipe for Preserving Oranges

Sister Immanuel[81]

Five dozen oranges; 10 gallons water; 2 pounds common salt. The oranges should be of good size - thick skinned, and not too ripe. Grate the surface lightly. Place them in a hollow vessel, so that they are not crowded, and let them come to a boil in the water and salt. Take out carefully, and throw [drop or immerse] them into fresh cold water. Set them in a cool place, changing the water every two hours, for three days. The second day remove the seeds and juice, but not the pulp. This can be done by making an incision in one end of the oranges. Continue to change the water every two hours, wiping each orange dry with a coarse towel, and pressing out the water after each change. Do this gently. Prepare a syrup as follows: Syrup—first day. Five gallons water; 3 1/2 pound white sugar to one pound fruit. Boil over a slow fire three hours, then take out the fruit

[81] Unidentified.

and let it drip. Second day - Make a new syrup. Five gallons water; one pound sugar to one pound fruit. The oranges must be put in the syrup when it is cold, then brought to a boil (If fruit is put in hot syrup, the surface is toughened like leather). Take out fruit and let drip. Third day - Make a new syrup. Pound for pound, boil to the consistency of thick molasses. When cold put in the oranges. They are now ready for use or for jars. Lemons and citrons are prepared in the same way (Ladies' Social Circle 1894:277).

How to Make Crystallized Chinese Oranges.

Mrs. Juan Foster

Take oranges not quite ripe, cut off the colored part of the rind carefully with a sharp knife; cut a hole where the stem has been, sufficiently large to take out all the inside. Be careful not to change the form of the orange. When they are clean inside and outside, cover them with water and salt for 24 hours. Then change the water, but this time omit the salt. Do this for five or six days, or until all the bitterness has disappeared. Then put them in boiling water and boil for twenty minutes; then put them immediately in cold water; then allow them to drain while preparing the syrup. The syrup is made by putting equal quantities by weight of sugar and fruit in enough water to give the consistency of ordinary syrup. Boil the fruit in the syrup over a slow fire until the syrup attains the consistency of honey. Take the fruit out and let it dry in a convenient place. Small lemons or limes are crystallized by the same process, except that they are simply cut in two before being placed in the brine (Ladies' Social Circle 1894:277).

Preserve of Muskmelon [Melón]

Mrs. Juan Foster

Take a melon not quite ripe, cut it into longitudinal pieces; cut away the rind and the white nearest to the rind and throw away; soak what is left for three days in salted water. Then put them in clear water for six days, changing the water every day. Then boil them until they are tender, rub them in cold water, drain them until all the superfluous moisture has disappeared. Then put them in a round earthen vessel (olla), cover them with clarified sugar (common syrup), and leave them for eight days, so as to absorb the syrup. After this boil them in the syrup for about one hour over a slow fire and keep them in a

proper place. If you wish you can put any kind of essence you prefer, or none at all (Ladies' Social Circle 1894:278).

Beverages

Beverages consumed in Colonial and Mexican California included chocolate, coffee, a variety of teas, aguas frescas, and liquors.

Chocolate, Coffee, and Tea

> The Californians were fond of cocoa and chocolate; the manufacture of the latter from the cocoa was done by the women, who prepared a choice article with the hand-mill or a metate (Davis 1889:254).

Both hot chocolate and coffee, either with or without milk, enjoyed popularity as breakfast drinks and could also be consumed at other times of day (Hatsutarõ 1844:66-67; Amador 1877a:115; 1877b:140-141; Lugo 1877a:88, 1877b:218; Bancroft 1888:363; Davis 1889:83). Imported on San Blas supply ships and later on hide and tallow period coastal trade vessels, cacao and coffee beans were both ground on a metate and prepared as hot drinks. Chocolate could be made with either milk or water (Amador 1877a:113, 1877b:138-139; Davis 1889:254; Pinedo 1898:64-65; 2003:165-166; Perissinotto 1998: 207, 237, 243, 247, 251, 269, 285, 357, 385; Graham and Skowronek 2016).

Coffee appears to have been less popular during the Colonial period. Documents of San Blas supply ships for the Santa Barbara Presidio from 1775 to 1810 have only one listing (Perissinotto 1998:335). It is, however, regularly mentioned in later Mexican period records of goods aboard ships, as well as in Californio testimonios[82] (Amador 1877a:115; 1877b:140-141; Davis 1889:10, 247, 254). At times, it was made from roasted peas, which eliminated dependence on foreign imports (Davis 1889:83). To make coffee, after roasting and grinding the beans, the resulting powder was dropped into hot water and left

[82] Amador claimed coffee was not known in California until 1828 (El cafe no se conocía aqui hasta 1828) (Amador 1877a:115; 1877b:140-141). Listings on San Blas supply ships and coastal trade vessels cited in the text suggest it was known, even if not popular during earlier times.

to steep. Sometimes sugar was added (Hatsutarõ 1844: 66- 67; Pinedo 1898:42, 2003:165-166).

Californio women prepared chocolate in the same manner as has been customary throughout Mexico for centuries. After grinding the imported cacoa beans they formed the powder into small round cakes called tablillas or tablitas (Pérez 1877a:19, 1877b:108; Pinedo 1898:64-65, 2003:165-166; Parsons 1936:34). Made in an olla, jarro, or individual pocillo-cups in which it would be served, the chocolate making process started by putting water and tablitas in the same vessel. The contents were brought to a boil over the fire, then whipped with the chocolatero - a carved stick designed specifically for this purpose. The process was repeated several times. To get added frothiness an egg white could be added before the final whipping (Bourke 1895; Pinedo 1898:64-65, 2003:165-166; Redfield 1930:41). Mexican chocolate is still made this way and the tablitas and chocolatero can be purchased in many Mexican markets or grocery stores.

Hot teas, made from numerous substances, have always been popular in Mexico. On rural Mexican ranchos a pot of tea along with a pot of coffee are often present at most meals. Many garden herbs such as mint (hierbabuena or yerba buena) are used as well as citrus peels, cinnamon bark, and wild herbs such as chamomile (manzanilla). Californios drank tea made from garden herbs and wild plants as well as imported Chinese tea (Hatsutarõ 1844:66-67; Amador 1877a:115; 1877b:140-141; Bancroft 1888:363; Davis 1889:37, 296).

Recipes

Chocolate

Encarnación Pinedo

Se pone la tablilla en jarro o marmita pequeña sobre el fuego, y cuando haya dado el primer hervor se retirará. Se deshacen perfectamente las tablillas con el molino. Se vuelve al fuego y se le añade el agua hirviendo en cantidad suficiente. Se bate recio y se vuelve al fuego dejándolo dar algunos hervores. En seguida se coloca el jarro o marmita

al bordo de la estufa y se cubre. Estando ya cociando el chocolate se baten dos claras de huevo hasta que estén bien duras añadiendo a esto tres cucharadas de azúcar en polvo. Esto se bate para echarlo en seguida en el chocolate sin dejarlo hervir. Al sevirlo también se batirá (Pinedo 1898:64).

Chocolate

Encarnación Pinedo

Put the tablet in a jarro or small pot [olla] over the fire, and when it has given the first boil it will be removed. The tablets are perfectly broken [ground or pulverized] with the mill. It is returned to the fire and boiling water is added in sufficient quantity. It is beaten hard and returned to the fire, letting it boil. Then the jarro or pot is placed on the stove and covered. While the chocolate is already cooking, beat two egg whites until they are very hard [stiff], adding to this three tablespoons of powdered sugar. This is beaten and immediately poured into the chocolate without letting it boil. Beat again when serving (Pinedo 1898:64, see also 2003:165).

Café

Encarnación Pinedo

Hay muchos modos de hacer café, y aquí adoptamos el medio más sencillo para hacerlo con perfección, sin que pierda el aroma. Poned dos tacitas de café en una cafetera [olla o jarro] en la que se vertirá agua hirviendo y se revolerá el café con una cucharaita para impedir que al subir se derrame; retírese un momento la cafetera del fuego y luego se vuelve a poner enchándole media tacita de agua fresca. Se coloca la cafetera al bordo de la estufa para que destile el café por diez minutos, sin dejarla hervir, pues esto le haría perder todo su mérito (Pinedo 1898:42).

Coffee

Encarnación Pinedo

There are many ways to make coffee, and here we adopt the simplest means to do it with perfection, without losing the aroma. Put two cups of coffee in a coffee pot [olla or jarro], add boiling water while stirring with a spoon to prevent it from spilling when

rising; take the coffee pot off the fire for a moment and then put it back in with half a cup of fresh water. The coffee pot is placed on the stove to steep for ten minutes, without letting it boil, as this would lose all its merit [it will get bitter] (Pinedo 1898:42, see also 2003:162).

Aguas Frsecas and Other Soft Drinks

> Ese refresco estaba hecho de agua con vinagre y azúcar, y otras veces con limón y azúcar (This refreshment was made of water with vinegar and sugar, and other times with lemon, and sugar) (Pérez 1877a:17-18, 1877b:108).
>
> Allí se sentaban las mujeres y empenzaban a buscar algunas yerbas refregirantes para apagar la sed del cansameio [cansancio]. Estas yerbas eran “cambre,” “tuchi,” “lengua de vaca,” o “caña agria” apis silvestre, rabanitos, jicamitos, “camotes,” y otros ingerediantes frutales de los arboles como “tollones,” “islais,” “sollozos,” “pitallitos,” etc. etc. ... (There the women sat and began to look for some refreshing herbs to quench the thirst resulting from fatigue. These herbs were “cambre,” “tuchi,” “lengua de vaca, o caña agria” apis silvestre, rabanitos, jicamitos, “camotes,” and other fruity ingredients from trees “tollones,” “islais,” “sollozos,” “pitallitos,” etc. etc. …)[83] (Híjar 1877a:31; 1877b:21).

The most common traditional soft drinks of Mexico are the aguas frescas, known as refrescos or refrigerantes by the Californios. Made by mixing water, to which sugar has been added, with fruit pulps and juices, vegetables, seeds, flowers, grains and cereals, they are sold in most Mexican markets and restaurants, where they are kept in large barrel shaped glass jars with ice (Redfield 1929:184, 193). Some of the most popular in the present-day are agua de jamaica, limon, naranja (orange), tamrindo (tamarind) and horchata (rice water). The term aguas frescas (fresh or refreshing waters) referred to the fact that these beverages had originally been stored in clay pots (cántaros), which kept temperatures cooler than the surrounding air. Their origins date to pre-conquest Mesoamerica. Californios drank aguas frescas made from various fruits, especially

[83] Native plants known as Pore leaf, Desert Mallow, Spineless Prickly Pear, Wild Celery, Wild Radishes, Indigo Bush, Wild Tiger-Lily, Toyon, Islay [holly leaf cherry], Huckleberry, Hedgehog Cactus, etc (Híjar 1877B:21 note 7).

citrus, as well as wild herbs and berries. One of the simplest consisted of a mixture of water, vinegar, and sugar (Híjar 1877a:31, 1877b:21; Pérez 1877a:17-18; 1877b:108). Documentation of other types of soft drinks consumed is scarce but does include apple cider. Another was made by melting azucarillos, crystallized sugar biscuits already mentioned under Snacks and Deserts, in ice water, which “forms a delightful drink, being sweet, with a delicate, aromatic flavor" (Bancroft 1888:369).

Liquor

> The people were sober, sometimes using California wine, but not to excess. They were not given to strong drink, and it was a rare occurrence to see an intoxicated Californian (Davis 1889:78).

> The poor . . . had neither wine nor aguardiente because these were articles that were very expensive, especially the latter (Amador 1877a:116, 1877b:142-143).

Liquor consumption in Alta California consisted largely of wine and aguardiente, with minor mentions of other hard liquors. Undoubtedly tinged with a bit of nostalgia, more than one recollection claims that, although Californios regularly indulged in liquors, they generally remained sober and seldom drank to the point of over intoxication. Limited availability from excessive regulations and high cost were given as partial reasons (Amador 1877a:116, 1877b:142-143; Bancroft 1888:364; Davis 1889:78). Liquors appear to have been most often consumed during or after meals and on special occasions such as weddings or funerals (Amador 1877a:115; 1877b:140-141; Híjar 1877a:47; Davis 1889:171, 349, 433, 437, 527).

Wine and Aguardiente

> The wine which they made at the Missions was of a superior quality and equal to any that I have drank elsewhere (Davis 1889:72).

> I considered the aguardiente as vastly superior to the brandy made in those days. Some of it is probably still kept at Los Angeles (Davis 1889:171).

Wine and aguardiente were the most common and popular liquors in Colonial and Mexican California. Several types of wine, some designated specially for Mass, are regularly listed as imports of the San Blas supply ships. These included Carlón, Castile, Malaga, sherry, and white (Perissinotto 1998:405). Most missions and many ranchos also had vineyards and produced wine and aguardiente. The latter are strong alcoholic beverages obtained by distillation of fermented fruits, usually grapes, or other highly sugared substances. In Latin America sugar cane is often used. Like wine, aguardiente was also imported on San Blas supply ships. Listings included both Mexican and Catalan varieties (Perissinotto 1998:405). José Amador recalled being served Spanish aguardiente while growing up at his parent's house (Amador 1877a:115; 1877b:140-141). Imports from Mexico may have been made from sugar cane, while Spanish varieties could have had other fruit or vegetable based origins. The California produced product was manufactured from the fermented grapes of California vineyards (Davis 1889:171, 349, 433, 437, 527).

According to William Heath Davis, aguardiente:

> Was considered by the old settlers as a superior article when three or four years old. Beyond that, it still further improved in quality, being of a finer flavor, entirely pure, and was regarded as a wholesome drink. It was made from the old Mission grapes. When first produced it was clear and colorless, like gin or alcohol, but gradually assumed a slight tint with age, and when six, eight, or ten years old, became of fine amber color, and was then a rich, oily liquor, very palatable (Davis 1889:171).

California wine and aguardiente were highly sought after and produced in sufficient quantity for market sales. They became a regular commodity on hide and tallow era coastal trade vessels. Production of both is documented for many California missions as well as the Pueblo de Los Angeles, Rancho Santa Margarita, Rancho Santa Ana, and

Rancho Jesus María,[84] along with other ranchos in northern Baja California (Híjar 1877a:34, 47, 1877b:22, 42; Davis 1889:171, 349, 433, 437, 527). Other than wine and aguardiente, only a few other liquors are mentioned by contemporary observers. These include pisco, a Peruvian brandy; California produced brandy, and whisky (Pico 1878:303; Bancroft 1888:364; Davis 1889:171, 249).

Condiments

Typical of Mexican cuisine, seasonings in Californio cooking relied heavily on chiles, onions, tomatoes, and garlic. Chiles were used fresh in season when they were green, or dried for later use when they turned red. As referenced earlier, when dry they were ground with the mano and metate (Lugo 1877a:88, 1877b:218; Bancroft 1888:369, 363-364; Davis 1889:60: 251-252).

Meal Routines

Californios followed an eating routine common for gente de razón throughout Mexico, who "from the beaches of Veracruz to the deserts of Sonora" practiced almost identical eating schedules (Pilcher 1998:53). It included four meals a day: the desayuno, almuerzo, comida, and cena, with a mid-afternoon break for snacks and tea or coffee, la merienda (Bourke 1895:67-68; Pilcher 1998:53). Meal times were not regulated by specific hours but the general time of day and who was around to partake of the meal (Híjar 1877a:24, 1877b:18).[85]

El desayuno, a light breakfast and the first meal of the day taken upon rising in the morning, included chocolate, coffee, or tea, accompanied by bread and corn or flour tortillas. At other times pinoles or atoles could be served (Hatsutarõ 1844:66- 67;

---

[84] Rancho Jesús María was located in present-day northern Baja California, on the eastern edge of what is now the city of Tijuana.

[85] Nunca tenian hora fija para comer. Pues por lo regular lo hacían a la hora que les daba hambre estuviron o no reunida todos de la familia. A la hora que el hombre llegaba, alguen de las mujeres le daban de comer o no segun los deseos de el (They never had a set time to eat. Well, usually they did it when they were hungry whether or not all of the family was together. At the time the man arrived, some of the women fed him or not according to his wishes) (Híjar 1877a:24).

Amador 1877a:113-117; 1877b:140-143; Lugo 1877a:88, 1877b:218; de la Guerra 1878:281-282; Bancroft 1888:362-365; Davis 1889:83: Sanchez 1929:370-371).

Almuerzo or regular breakfast came next, some time in the mid morning. This had the usual tea or coffee, beans and tortillas, along with a variety of other dishes that could include carne asada, beefsteak with gravy, and eggs (Amador 1877a:113-117; 1877b:140-143; Bancroft 1888:362-363; Davis 1889:83).

La comida, the dinner or main meal, was served at midday and could resemble breakfast. It started with lighter broth-based soups (sopas or caldos), followed by roasted meats or a more stew like olla, or puchero. Sometimes a side dish such as baked squash could be added. The usual beans, tortillas, tea and coffee also accompanied this meal. Wine or aguardiente, along with sweets, cheese, or light snacks might be served afterwards (Amador 1877a:113-117; 1877b:140-143; de la Guerra 1878: 281-282; Bancroft 1888:362-363; Davis 1889 83; Sanchez 1929:370-371).

La merienda, a snack taken in the late afternoon, and indulged chiefly in summer, could consists of panecito sweet breads or other sweets, and cheese, along with tea, coffee, or a small glass of liquor (Bancroft 1888:362-363; Pilcher 1998:53).

La cena, a light supper, occurred anytime between dusk and bed time. It essentially repeated the earlier meals and consisted of food often left over from them. Reheated beans and tortillas, of course, with tea, coffee, cheeses, roast meat, beef in chile sauce, or ollas, guisados, or pucheros, followed by sweets and liquors (Amador 1877a:113-117; 1877b:140-143; Bancroft 1888:362-363; Davis 1889:83).

Poorer people, a term often mentioned but never well defined in contemporary accounts, had slightly less variety in their food choices, and followed a schedule of three meals a day.[86] Instead of a light desayuno the larger almuerzo became the first meal of the

---

[86] This meal routine is very close to that described by Redfield for Tepoztlan in the state of Morelos, Mexico in the 1920s. “Usually three meals are taken, one at about seven or eight o'clock, another an hour or more after noon, and a third at

morning, which could include pinole, atole, esquite, frijoles, meat, and tortillas. This heartier meal served those who would not eat again until late afternoon (Amador 1877a:116, 1877b:142-143; Lugo 1877a:88, 1877b:218; Bancroft 1888:365). The second substantial meal, la comida, consisted of "meat, milk, beans, and tortillas." Instead of soup, "they would boil corn or wheat until it burst and with hot water, a little lard, salt, and chiles, they would cook it. For dessert the most they would have was cheese, and on some occasions, asaderas with panocha, those who could afford panocha." For evening meals "they would have cooked meat or roasted meat, beans, corn atole, or migas . . . They had neither wine nor aguardiente because these were articles that were very expensive, especially the latter"[87] (Amador 1877a:116, 1877b:142-143).

During fasting for Lent Californios ate only two meals a day, the first at noon and the second in the evening. They included fish and shellfish and dishes such as colachi (finely chopped and boiled squash), quelites (native herbs or amaranths) well boiled and mixed with beans, léchetele (wheat cooked in milk with panocha), or squash cooked with milk and panocha, curds, cheese, cottage cheese and clabber, cornmeal tortillas, and niscayote. Taboos include tea, coffee, and meat. Exceptions for the latter could be made in cases of sickness (Bancroft 1888:365; Lugo 1877a:88, 1877b:218).

Conclusions

In conclusion, the culinary traditions of the Californios were those of the mestizo folk culture of Northwestern Colonial Mexico's gente de razón, who brought their foodways, along with other characteristic traits of cultural identity, to California where they were maintained by subsequent contact with Mexico. The blending of native Mesoamerican and European traditions in Mexican Colonial Society was reflected in its cooking, which

---

seven or eight at night. Some people, for whom the night is cool and the bed hard, stir themselves once during the night to eat once more before returning to rest" (Redfield 1930:85-86).

[87] "Esa comida consestia de carne, leche, frijoles y tortilla. En lugar de sopa solian hever maíz o trigo hasta que reventara y con agua caliente, un poco de manteca, sal, chile le guisaban. Para postre los mas usaban queso y algunas veces asadreas con panocha, el que tuviera panocha. A la noche guisado de carne, o carne asada, frijoles, atole de maíz, o migas, . . . Vino ni aguradiente, no tenian porque eran articulos muy caros, especialmente el ultimo" (Amador 1877a:117, 1877b:142-143).

was “distinct from both indigenous American and Iberian diets, but had traits in common with each” (Deagan 1996:148). Conservative in nature, culinary practices in Alta California remained strongly connected to those of Mesoamerica and northern Colonial Mexico. The ancient Mesoamerican Grinding Complex constituted a central foundation of meal preparation. The grinding of corn and wheat dictated the nature of many foods and their method of cooking, resulting in tortillas, atoles, tamales, and pinoles. Served daily, the broth-based stews and soups, known as sopas, ollas, guisados, sancochados, abodados, and caldos, cooked in earthen ware pots, also harkened back to Mesoamerican and Iberian origins of these dietary practices. A wider variety of vegetables, along with vigorous consumption of meat, especially beef, as well as cheese, and the adoption of wheat to supplement corn reflected modifications to the basic Cultural Mestizo diet as it was adapted to the arid and demographically sparse environment of the northern frontier. In spite of these modifications, the basic underlying ingredients and cooking methods remained common in California and throughout Colonial Mexico. They dictated the nature of the utensils, such as mano and metate, as well as the types of pottery vessels used, such as comal, and earthenware ollas, cazuelas, jarros and other ceramic containers. The following chapter on Mexican folk vessels explains the uses of these different ceramic shapes.

MEXICAN FOLK VESSEL TYPOLOGY

By Stephen R. Van Wormer

Introduction

As noted in the last chapter, foodways in Colonial California used the same basic underlying ingredients and cooking methods common throughout Mexico. These techniques dictated the nature of utensils and pottery vessels. This chapter explains the forms, and uses of these different ceramic containers. It presents a typology of basic Mexican folk vessel forms used for cooking, serving, eating, storage, and water containers that are represented in the Chapel ceramic collection. Terms used are based on ethnological and archaeological studies conducted in Mexico. Because many of these vessels are extremely multifunctional, assigning use is a question of determining the most probable tasks the vessels were used for. Shape, presence or absence of soot and burning, and rim diameter are some of the major attributes taken into consideration when assigning function. Extremely helpful in this capacity is the work done by George Foster in the 1940s at Tzintzuntzan, Mexico. He recorded rim diameters and associated uses for major vessel types commonly produced and sold in the local markets (Foster 1948b:84-85).

During the early Colonial period, Native women working for Spanish settlers in central and southern Mexico perpetuated prehispanic food preparation practices while adopting new foods introduced by the colonizers (Fournier 1999:153). This resulted in a continuation of basic prehispanic Mesoamerican vessel types such as ollas, cazuelas, and comales into the historic period. In addition, many basic native vessels such as the cazuela, olla, and cántaro had their counterparts in Spain so that various native and Iberian cooking methods and vessels were quite compatible (Lister and Lister 1976; Ness 2015; Reynoso Ramos 2015:308).

Complex typologies based on manufacturing method and size have been developed for Mexican vessel types. In addition, native terminologies can be quite complex (Foster 1948b:81-88, 1955:11; Kaplin 1994:31; Mindling 2015:113-182). Yet most of these systems are based on just a few basic standard shapes: for cooking the olla, cazuela, cajete and comal (Foster 1948b:81-88, 1955:11); for table serving the cajete, jarro, and serving olla; for individual serving the cajete, plato, and escudilla, along with the jícara, taza, and pocillo, or other small cups; and for storage and water containers the cántaro, botellón, tina, tinaja, and olla (Foster 1948b:81-88, 1955:11; Whitaker and Whitaker 1978:52-71; Reynoso Ramos 2004:84-88). These types will be discussed in detail below.

The aesthetic quality of Mexican folk wares lies in their conformance to form, rather than their uniqueness. The shapes evolved over generations to perform their specific tasks (Whitaker and Whitaker 1978:68). Not only do these standard forms serve basic needs, they were and are "graceful and esthetically satisfying primarily because they do well the job for which they are intended" (Foster 1948b:98). Because they are made according to long established principles, they are truly classic (Whitaker and Whitaker 1978:68). The persistence of certain ceramic forms over time is not simply the result of function, but also of other influences such as gender, social and cultural identity, status, and eating practices (Reynoso Ramos 2015:303). Vessel forms used in this typology are listed on Table 13. They are based on studies by Foster 1948b:81-88, 98; Lister and Lister 1976; Kaplin 1994:28-29, 66-67, 88; Reynoso Ramos 2004: 84, 88; Newman 2013; Mindling 2015; and Ness 2015, and 2017:24-35.

Table 5: Mexican Folk Vessel Typology

CATEGORY	VESSEL TYPE
COOKWARE	
	Cajete - Cazuela
	Comal
	Olla
SERVINGWARE	
	Cajete
	Jarro
	Olla
	Plato
	Escudilla - Tazón
	Taza, Pocillo, Jícara Cups
WATER AND STORAGE WARES	
Water Serving - Transportation	
	Cántaro
	Botellón
Water Storage	
	Tinaja, Tina, Olla, Barril
HOUSEHOLD AND OTHER UTILITARIAN	
	Not identified

Cookware

> La olla, el comal, y el cajete o cazuela, son los tres piezas más comunes y neccesarias fabricadas en las comunidades alfararias para ser usadas en cualquier cocina rural (The olla, the comal, and the cajete or cazuela are the most common and necessary pieces made in pottery communities and are used in any rural kitchen) (Mindling 2015:115).

Cookware consists of those vessels that were employed to prepare meals, usually but not always, on the open fire. They were used continually and are closely linked with the hearth and kitchen. These were "some of the most humble ceramics in form and

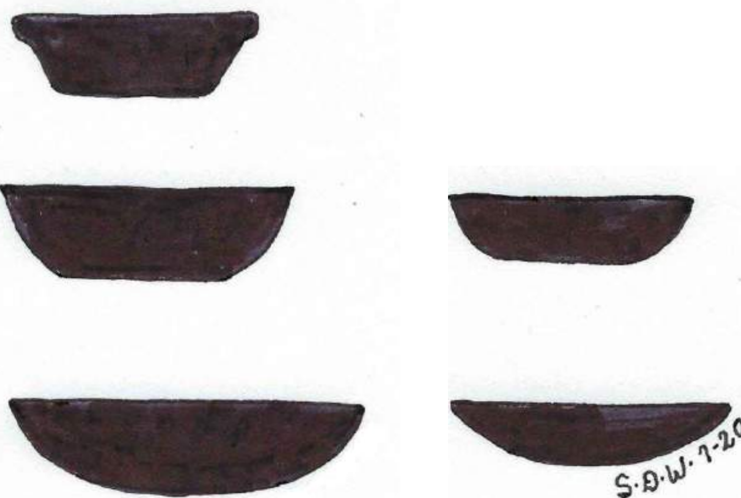
decoration, yet among the most important vessels in food preparation"[88] (Reynoso Ramos 2015:261).

Cajete and Cazuela

Introduction

The cajete and cazuela are wide-mouthed multi-purpose bowls. Some researchers have defined the difference between cajete and cazuela by the presence of handles on the latter (Kaplin 1994:73; Mindling 2015:126). On the other hand, Reynoso Ramos included the conical cajete, and conical cajete with handles, among her vessel definitions for ceramics in Puebla (Reynoso Ramos 2004:84-88). Since the point at which a multifunctional cajete transitions into a multifunctional cazuela is not clear, the types have been combined in this typology and considered subtypes of a single vessel.

Cajete



[88] La vajilla de fuego se define como utensilios que fueron empleados para cocinar, cuya línea de vida está estrechamente vinculada con el fogón y la cocina. La vida de estos enseres transcurrió cercana al fuego, eren los objetos empleados contidianamente a los más humildes, pero a la vez, los más significativos en la producción alimentara (Reynoso Ramos 2015: 261).

Cajetes are wide mouthed bowls (Newman 2013). They are simple, short, open vessels with globular or direct straight walls and convex or flat bottoms (Kaplin and Levine 1981:876; Reynoso Ramos 2004:84-88). Reynoso Ramos defined three kinds from sites at Puebla: the conical cajete, conical cajete with handles, and hemispherical cajete (Reynoso Ramos 2004:84-88). [89] Given the similar uses possible for both cajetes and cazuelas, this typology will apply Foster's (1948b:84-85) rim diameters for cazuela sizes to cooking to cajetes (See Figure 34). Any cajete with a rim diameter of 7.5 inches or greater is considered a cooking ware vessel unless attributes suggest otherwise. Their uses as serving and individual eating vessels will be discussed below in those sections.

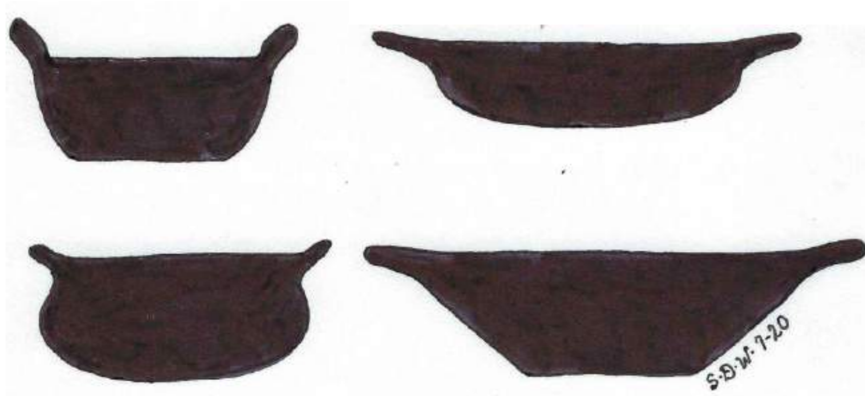
In spite of the fact that they are often defined as serving or eating dishes (Reynoso Ramos 2004; Newman 2013:84-88; Ness 2015:309-333; 2017:24-35), these multifunctional bowls were also used for cooking (Mindling 2015:126). They frequently appear as vessels for food preparation in depictions of Mexican kitchens, where they can be seen, along with small ollas, as containers for small amounts of water as well as receptacles for tasks such as grinding salsas and masa (See Figures 37 - 41) (Marquiena 2016).[90] One of their more common uses appears to be as lids for cooking pots where they would have become sooted over the fire (Fournier García 2016:283-288). Given their versatility, they certainly would have been used to warm or cook food over a fire.

---

[89] A number of terms have been used for these simple bowls including Ataifor (Ness 2015, 309-333; 2017:24-35) and. hollowware cooking vessels (Voss 2002:445). Works from Mexico tend to favor the term cajete (Reynoso Ramos 2004; Newman 2013; Mindling 2015:126; Fournier Garcia 2016). However, as noted above, there are cajetes with handles and cazuelas without handles, so the point at which a small cazuela becomes a cajete or a large cajete becomes a cazuela is not clear (Mindling 2015:126).

[90] . For demonstrations of cookware vessel use in food preparation see Marquiena 2016, all episodes. https://www.youtube.com/watch?v=MjTbCi7gzY0&list=PLeIASCZ53iJGcwt2Hnz7DQxawh5v2ZYLq&index=1

Cazuela



A cazuela of beans over the charcoal (Pilcher 1998:51).

Paloma que vuela, a la cazuela; Ave que vuela, a la cazuela; Todo lo que corre, nada o vuela, a la cazuela (Flying dove, to the cazuela; Flying birds, to the cazuela; Anything that runs, swims or flies, to the cazuela). These three versions of the same refrain basically say "if it moves eat it."

No te calientes cazuela (don't get hot cazuela i.e. stay cool, calm down, keep your pants on).

Cazuelas are large open-mouthed bowl-shaped cooking pots with flat or rounded bottoms and outward leaning to straight walls. The direct straight or everted rims often exhibit a scalloped edge. Usually, but not always, there are two opposing handles projecting from the outer rim (Foster 1948b:81-88; Lister and Lister 1976:27, 33; Reynoso Ramos 2004: 84-88; Newman 2013; Ness 2015:309-333, 2017:24-35).

Among the versatile cazuela's primary functions are mixing bowl, stewing pot, food steamer, slow cooker, deep fat fryer, sauce pan, and frying pan.[91] It serves to boil liquids, prepare stews (guisados and caldos) and cook, stew, steam or fry such things as beans, rice and other grains, mole, meats, poultry, fish, eggs, potatoes, fruit preserves and

---

[91] . Some researchers have translated cazuela as skillet (Perissinotto et al. 1998:216-217, 328-329; Voss 2012:49). It has also been translated as a pan. Although skillet - frying pan is one function of the cazuela, as noted in the text it has many more uses. In addition, ceramic cazuelas are usually significantly deeper than a metal skillet. Skillet in Spanish is sarten. In actuality, there is no English equivalent for cazuela in either language or function.

marmalades. Other uses include deep frying bunuelos, steaming tamales, and mixing ingredients, as well as preparing corn dough masa (Foster 1948b:81-88; Whitaker and Whitaker 1978:55; Pilcher 1998:51; Reynoso Ramos 2004:84-88, 143, 2015:253, 271-278, 316, 324; Mindling 2015:126-131; Ness 2015:309-333; 2017:24-35; Fournier García 2016:291; Marquiena 2016). Larger sizes also served as household utilitarian wash basins (Parsons 1936:29). At Tzintzuntzan, Mexico, Foster (1948b:84-85) recorded cazuelas commonly made with rim diameters as large as 23 inches (58 cm.) (Figure 34). Those normally used for cooking descend in size to a rim diameter of 7.5 inches (19 cm.). Consequently, cazuelas 7.5 inches in diameter or greater are considered cooking vessels, especially if sooted on their exteriors. Smaller vessels will be considered handled cajetes used for serving and eating, unless sooting or other conditions suggest otherwise.

Cazuela

Size name	Diameter	Depth	Capacity
	Cm.	Cm.	Liters
Chuchería	5.0–7.5	2.5	0.04
Pajarera (olla chica)[4]	8.3	3.8	.08
Pajarera (½ bolera)[4]	10.0	5.0	.25
Turquera (bolera)[4]	12.7	5.0	.50
Mantequera (atolera)	15.2	5.7	.75
De a 10	19.0	6.4	1.00
De a 8	23.0	7.6	1.75
De a 6	26.7	7.6	2.75
De a 4	31.7	9.0	3.50
Kuicha	35.5	10.0	5.00
Tacha	38.0	11.5	7.00
Buñuelera (de a medio)[4]	43.0	12.0	10.00
Sopera (de a un real)	50.0	12.7	14.00
Guajolotera (de a dos reales)	58.0	16.5	24.00

Figure 34: Cazuela Dimensions Recorded by Foster at Tzintzuntzan, Mexico (1948b:85).

Comal

> El comal le dijo a la olla: “mira que tiznada estás” (The comal said to the pot "look how black and sooty you are").
>
> Dale la vuelta a la tortilla [en el comal] (Turn the tortilla [on the comal,] i.e. get with it).
>
> No te calientes comal, que no es para ti la tortilla (Don’t get so hot (anxious) comal, this tortilla is not for you, i.e. calm down “keep your pants on”).
>
> The comal, the simplest and humblest of forms, is little more than a slightly depressed disc of clay. Yet for the experienced foreign potter who has never seen one, ... a [large] comal atop a blazing fire is an astonishing sight. For a tourist who has never worked with clay it may be only a curiosity, and for the Mexican who is so accustomed to it, mundane and unworthy of note. The foreign potter can react with admiration. These giant circles of clay are austere and often crude, but they possess an ascetic beauty (Whitaker and Whitaker 1978:69).[92]
>
> El comal más antiguo que se conce fue creadeado hace unos 2,700 años y lógicamente se relaciona con la evolución de la tortilla.... El sabor de las tortillas preperadas en discos de metal no sbaen igual a las del comal de barro (The oldest comal known was created about 2,700 years ago and logically is related to the evolution of the tortilla .... The flavor of tortillas prepared on metal discs is not the same as that of the clay comal) (Mindling 2015:122).

The comal is a circular, flat to slightly dished, thin, ceramic griddle. The thin design transfers heat quickly (Foster 1948b:81-8; Reynoso Ramos 2004:84-88; Newman 2013; Morton 2014:xvii). It is a multifunctional form of prehispanic origin most closely

---

[92]. Also quoted in Fournier 1998:13.

associated with making and cooking tortillas and thus, by default, evidence of the process of nixtamal for preparing corn to make masa (Foster 1948b:81-85; Fournier 1998:18, 31; Reynoso Ramos 2004:85, 173, 2015:253, 262; Newman 2013; Morton 2014:xvii; Mindling 2015:122; Marquiena 2016).

In addition to tortillas, comales have traditionally been used for roasting or slow heating and steaming of a wide variety of foods (Fournier 1998:18; Marquiena 2016). Reynoso Ramos defined three areas of comal use: for meat and fatty products, for roasting chiles, condiments and herbs, and for toasting seeds and bread (Reynoso Ramos 2015:252-253). Meat and fatty products included meat, fish, poultry, eggs, and amphibians (Reynoso Ramos 2015:262-263, 265; Marquiena 2016). Chiles, condiments and herbs consisted of ancho, pasilla, and serrano chiles, cilantro, tomato, garlic, mushrooms, cocoa beans, and peanuts, as well as numerous other herbs and flavoring agents grown in gardens and gathered in the wild (Fournier 1998:18; Reynoso Ramos 2004:85, 2015:266; Marquiena 2016). Toasting of seeds and bread on the comal served as a means of preservation, or the modification of texture and flavor. Roasted seeds included squash, melon, watermelon, wheat, amaranth, and corn kernels, many of which were used to prepare pinole or drinks such as atoles (Fournier 1998:18-20; Reynoso Ramos 2015:268; Marquiena 2016). Bread toasted on a comal had a variety of uses especially as a thickener and the main ingredient in soups such as bread with garlic and onion, bread and rice, bread and wine, and bread with cheese and chile, and common toasted bread (Reynoso Ramos 2015:268; Marquiena 2016).[93] Finally, the comal could be used as a base or grill over a fire, on which pots and other vessels were placed for heating (Fournier 1998:19; Reynoso Ramos 2004:85; Marquiena 2016).

Comales up to 35 inches in diameter (90 cm.) have been recorded (Mindling 2015:122). Foster's (1948b:87) largest recorded size was 22 inches (56 cm.) (Figure 35). Sizes down to around 12 inches (29 cm.) were used in kitchens for making and heating tortillas.

---

[93]. For a detailed list of foods prepared on the comal see Fournier 1998:19-20. For demonstrations of the comal in use see Marquiena 2016.
https://www.youtube.com/watch?v=MjTbCi7gzY0&list=PLeIASCZ53iJGcwt2Hnz7DQxawh5v2ZYLq&index=1

Diameters of 9.5, 8 and 6 inches (24, 20, and 16 cm.) were called tapderos “since they are of the right dimensions to cover pots” (1948b:87). Smaller sizes included 6, 5 and 4.5 inches (15, 12.7 and 11.5 cm.) which were termed platoncitos (small plates). The final diminutive sizes were 4 and 2 inch diameters (9.5 and 5.0 cm.).

Comal

Size name	Diameter	Depth
	Cm.	Cm.
Chuchería	5.0–7.5	0.6
Cuatro por cuartilla	9.5	1.2
Platoncito ½ bolera	11.5	1.2
Platoncito bolera	12.7	1.2
Platoncito atolera	15.3	1.9
Tapadero	16.5	1.9
Do	20.3	2.5
Do	24.0	2.5
(5)	...	..
Calentador	29.0	2.5
Do	38.0	2.5
Tortillero	43.0	2.5
(5)	...	..
Tortillero	56.0	2.5

Figure 35: Comal Dimensions Recorded by Foster at Tzintzuntzan, Mexico (1948b:85).

Olla

. . . y la olla le respondió “mírate tú por detrás” (... and the pot replied [to the comal] "look at your back side").

Sólo la cuchara sabe lo que hay en la olla (only the spoon knows what’s in the pot).

Solo las ollas saben los hervores de su caldo (only the pots know what boils in their stew).

A darle que es mole de olla (let's get to it, it's mole in the pot, get down to work, i.e. get with it).

Más vale una cuchara de suerte que una olla de sabiduría (a spoonful of luck is worth a pot of wisdom).

The olla is a round, wide-mouthed, globular pot, with or without handles. It has a variety of rim forms from direct straight to everted and flared. Bases can be flat or convex. Some exhibit an annular base ring. These vessels are usually “low and chubby to acquire

stability, with a wide belly that gives them more volume" (Mindling 2015:115). They have short wide necks, with a gradual narrowing of the shoulder to the neck, a base approximately the same diameter as the neck, and wider belly (Foster 1948b:85; Lister and Lister 1976:66; Reynoso Ramos 2004:84-88; Ness 2015:309-333, 2017:24-35). The mouth is wide enough to receive ingredients, for example beans, onions, and pieces of meat, but narrow enough to keep in the heat from the fire. These pots cook food quickly at low temperatures ranging between 600 and 1050º centigrade (1100 – 1900º F). This ability to function at reduced levels of heat keeps the vessels from becoming brittle, allowing them to remain flexible and resistant to thermal shocks (Mindling 2015:115).

Ollas were used to boil and steam food in water or to prepare beverages including atoles, teas, and coffee. This included boiling beans (frijoles) or grains, or a combination of ingredients like meat, eggs, fish, and vegetables in stews such as sancochados, caldos, guisados, and ollas pucheros, and podridas (Robinson 1846:79; Amador 1877:141; Bancroft 1888:362; Whitaker and Whitaker 1978:55, 60; Reynoso Ramos 2004:84-88, 143-144; Fournier García 2016:284; Marquiena 2016). Cooking sizes range from that "of a large grapefruit to heat a person's breakfast, to that of a bathroom tub to cook a whole beef and serve 300 guests" (Mindling 2015:115). The most common sizes have rim diameters of from around 4.5 to 9.5 inches (11.3 to 24 cm.) (Foster 1948b:84-85; Van Wormer personal observation)[94] (Figure 36). Their uses as serving and storage containers will be discussed below in those sections. In Figures 37 through 41 functional cajetes, cazueals, comales, and ollas, along with other vessels, are depicted in eighteenth and nineteenth century paintings of Mexican kitchens.

[94]. Foster 1948a:85 noted, "The most common pot is de a medio." This had a rim diameter of 24 cm. (9.5 inches). He continued "any pot of the size commonly used in cooking de a sies, ocho, diez [19-14 cm.; 7.5- 4.5 in] may be called an olla lumbrera." Measurements of ollas de barro commonly sold for cooking in Mexican markets in National City, and Chula Vista, Southern California range in rim diameter from 6 to 8 inches (Van Wormer personal observation).

Size name	Olla			
	Diameter	Depth	Neck diameter	Capacity
	Cm.	Cm.	Cm.	Liters
Chuchería [2]	....	....	....	....
Olla Chica	5.0	6.4	4.4	0.07
Menos de ½ bolera	7.0	9.0	5.0	.10
½ Bolera	8.3	9.0	5.0	.17
Bolera	10.0	11.5	7.6	.50
Atolera	12.0	12.7	9.0	.75
De a 10	14.0	15.2	10.0	1.50
De a 8	15.3	16.5	11.5	2.25
De a 6	19.0	20.3	12.7	4.00
De a 4 (tlaco)	23.0	24.0	15.3	7.00
De a 3 (kuicha)	25.5	28.0	17.8	10.00
De a cuartilla (tacha)	29.0	31.7	20.3	15.00
De a medio	34.3	38.0	24.0	25.00
De a cuártila [3]	39.5	42.0	24.0	34.00
De a dos reales [3]	46.0	48.8	28.0	45.00

Figure 36: Olla Dimensions Recorded by Foster at Tzintzuntzan, Mexico (1948b:85).

Figure 37: Mexican Cooks Grind Masa on a Metate and Cook Tortillas on a Comal Over a Fire Built Directly on an Earthen Kitchen Floor. This lithograph is of an 1836 painting, *Tortilleras*, by Carl Nebel (Public domain image originally printed in Nebel 1836, https://commons.wikimedia.org/wiki/File: Tortilleras_Nebel.jpg). Note the small cajete beside the metate holding a white substance, perhaps nixtamal processed corn. A water tinaja can be seen between the two women. A smaller tinaja - shaped vessel is being heated on the front side of the fire. The man at the rear is drinking from a blue on white Mayolica plato.

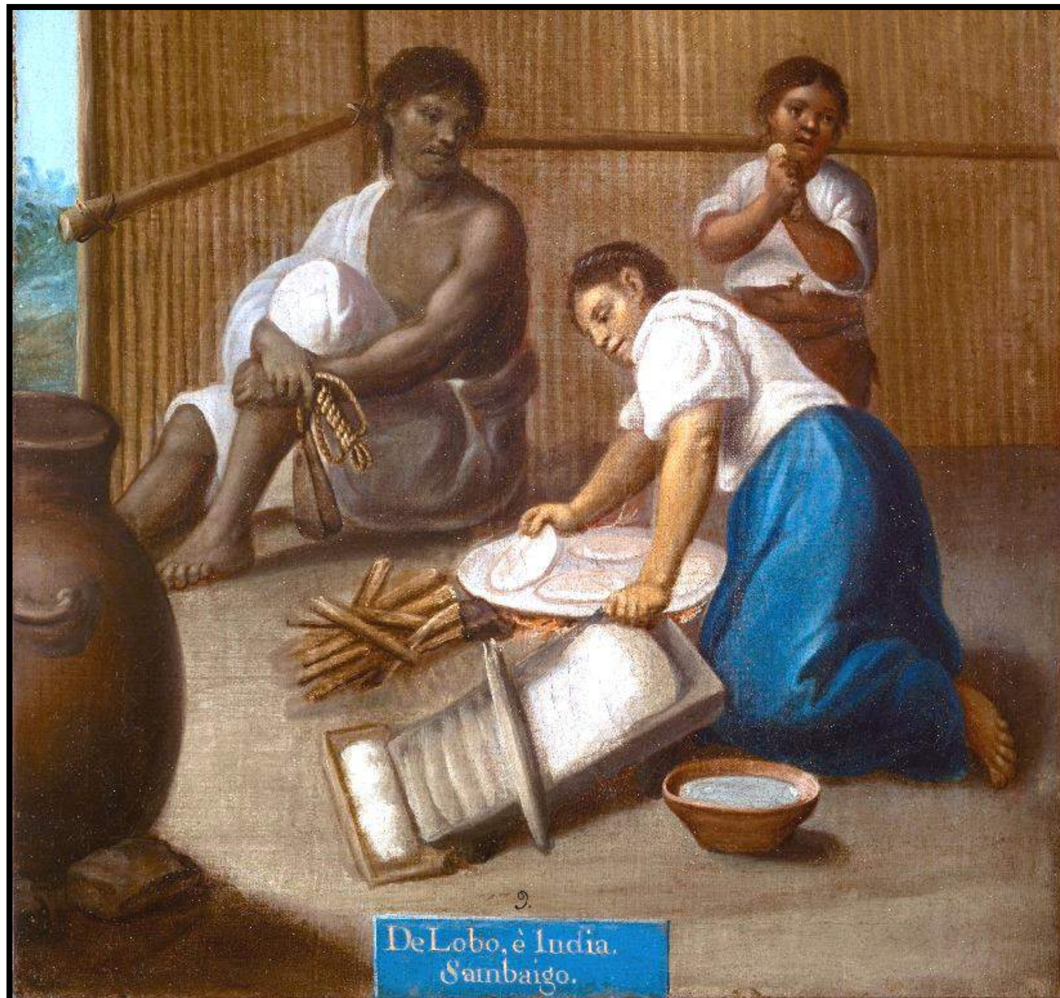


Figure 38: Detail From an Eighteenth Century Casta Painting *De Lobo y Indio Sambaigo* by Francisco Calpera (About 1775, photgraph courtesy Denver Art Museum, gift of the Collection of Frederick and Jan Mayer, 2011.428.9.). This is similar to the previous figure by Nebel but much earlier. A woman cooks tortillas on a comal over a fire on the floor, while her daughter pats them out behind her. A conical - shaped cajete with a white substance, perhaps nixtamal processed corn is on the ground next to the metate. A large water tinaja is in left foreground.

Figure 39: Eighteenth Century Casta Painting *De Cambujo y Mulata Albarazado* by Francisco Calpera (About 1775, photograph courtesy Denver Art Museum, gift of the Collection of Frederick and Jan Mayer, 2011.428.11). Food is simmering in three large lead glazed cazuelas over hearths on the floor in the foreground, while a man drinks from an unglazed brown ware cántaro and his wife hands him his meal in a Mayolica blue on white plato.

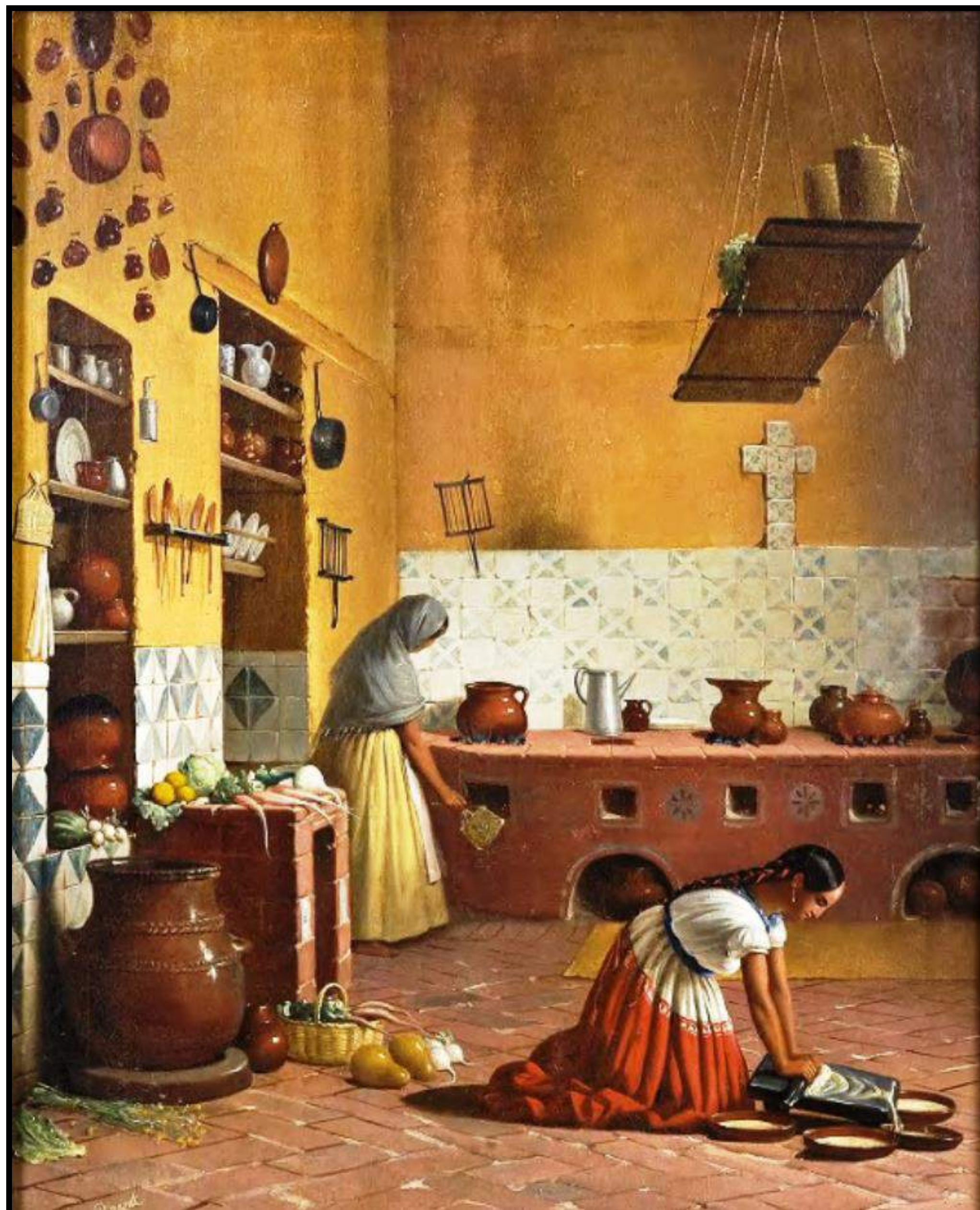


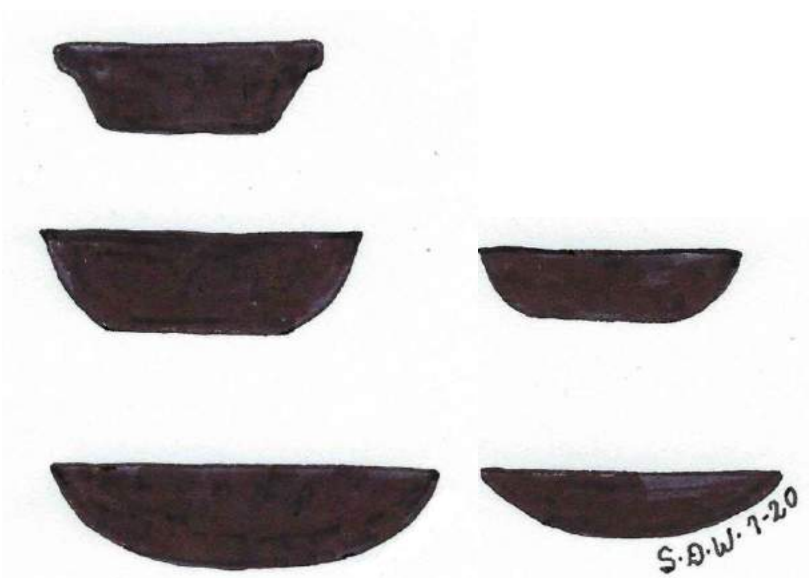
Figure 40: *Cocina Poblana* Circa 1850-1855 by Édouard Pingret, (Courtesy INAH Mediteca Public Domain (CC) .mx/islandora_74/islandora/object/pintura%3A4109. In this scene of an elite well-to-do household kitchen in Puebla, the woman in the foreground on the tile floor is in the classic pose of grinding masa with mano and metate. There are several cajetes around her. A large tinaja reservoir for kitchen water is directly behind her against the wall. A cooking olla is on the stove against the back wall where a woman is fanning the fire. Note iron and copper skillets on the walls, the small cazuelas, ollas, pocillos and other vessels on the wall for decoration, and the numerous pots turned upside down in storage under the stove and on shelves, as well as the plato serving as a lid, covering the pot in the center of the stove.

Figure 41: Another Painting by Édouard Pingret Circa 1850-1855, Also Titled *Cocina Poblana*. In this much humbler kitchen many of the same types of vessels are used in the same manner as in the elite household kitchen in the previous image. Here two women work at manos and metates with cajetes beside them, while one also cooks tortillas on the comal placed on a small circular ladrillo (brick tile) stove. Cazuelas of various sizes hang on the back wall. Ollas and cajetes sit on the shelf and on a large broken ceramic vessel below them. A large ewer sized Tonalá Bruñida jarro sits in front of a large water reservoir tinaja in the corner. A smaller cántaro or botellón covered with a cloth on a board on top of the reservoir probably holds drinking water (Artes de México https://twitter.com/artesdemexico/status/835232439903617025).

Serving Ware

Table and individual serving ware consists of those vessels that were employed to serve and consume meals. Their use is closely linked with food consumption and table setting in a kitchen or dining room (Figures 42 - 44).

Cajete



As noted in their description under cookware, cajetes are wide mouthed bowls (Newman 2013). They are short vessels with globular or straight walls and convex or flat bottoms (Reynoso Ramos 2004; Ness 2015, 309-333; 2017:24-35). Reynoso Ramos defined three kinds: the conical cajete, conical cajete with handles, and hemispherical cajete (Reynoso Ramos 2004:84-88). The conical cajete with handles would also be considered a miniature cazuela. Based on the previously referenced analysis of cazuela rim diameters by Foster (1948b), this typology considers any cajete, with or without handles, that has a rim diameter greater than 3 and less than 7.5 inches to have been used for serving and consuming food and beverages, unless soot or other attributes indicate otherwise. Serving cajetes would have been used for liquid based broths or stews and more solid fare such as tamales, vegetables, rice, beans, or meat dishes (Reynoso Ramos 2004 84-88; Newman 2013; Ness 2015:309-333; 2017:24-35;

Marquiena 2016). Those 3.5 inches (9 cm) in diameter or less are considered to have functioned as cups (See tazas below).

Jarro

> Está como agua para chocolate (it's like water for chocolate – which is heated in a jarro, used to express anger: boiling mad, pissed off).
>
> Jarrito nuevo, ¿dónde te pondré? jarrito viejo, ¿dónde te aventaré? (New pitcher, where will I put you? old pitcher, where will I throw you? e.g. Out with the old in with the new).
>
> De poquito en poquito, se llena el jarrito (little by little the small pitcher fills).
>
> Jarra nueva hace el agua fresca (A new pitcher makes the water fresh).
>
> Todo cabe en un jarrito, sabiéndolo acomodar (everything fits in one little jarro if you know how to pack it).

The jarro is a globular bodied pot with a long straight neck and usually, but not always, with at least one handle. Some have a beaked spout to aid in pouring liquids. This class

of vessels essentially constitutes pitchers for preparing and serving beverages. Jarro is used here to encompass a number of terms used in Mexico and the archaeological literature including jarro, jarra, chocolatero, olla chocolatero, and chocotero. Depending on the source, differences between these vessels are determined by the presence of one or two handles and if they have or do not have a beaked spout for pouring (Foster 1948b:87; Lister & Lister 1976:53-54; Voss 2002:447; Reynoso Ramos 2004:84-88; Newman 2013; Mindling 2015:166; Ness 2015:309-333; 2017:24-35; Marquiena 2016). Since there is little agreement upon definition, and determining the presence of spouts or multiple handles from broken sherds is often problematical, the single term jarro is used for all members of this class of vessel in this typology. Rim diameters greater than 3.5 inches (9 cm) are used to distinguish jarros from pocillo cups.

Serving Olla

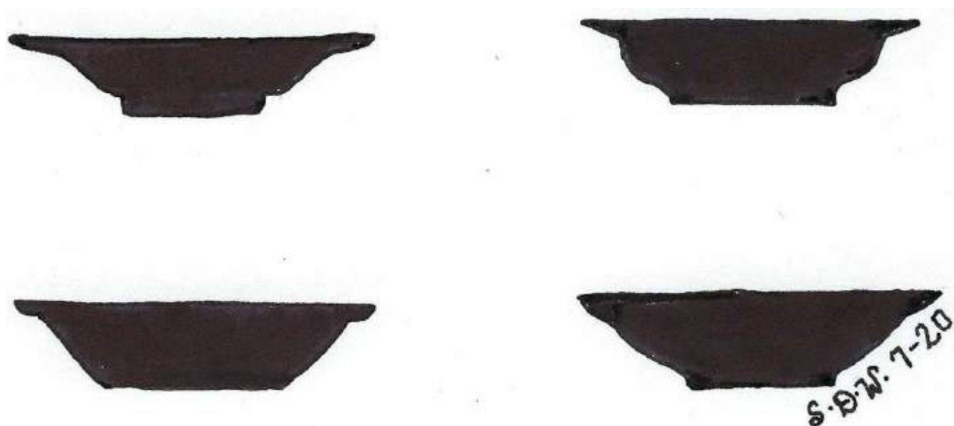
As noted in the description under cookware, the olla is a round, wide-mouthed, globular pot, with or without handles. It has a variety of rim forms from direct straight to everted and flared. Bases can be flat or convex. Some exhibit an annular base ring. These vessels have short wide necks, a base approximately the same diameter as the neck, and

wider belly (Foster 1948b:85; Lister and Lister 1976:66; Reynoso Ramos 2004:84-88; Ness 2015:309-333, 2017:24-35).

Serving ollas could be used for serving beverages, soups, stews, other foods and liquids. Reynoso Ramos defined serving ollas found in seventeenth and eighteenth century Puebla as having cylindrical necks, everted rims and annular ringed bases (2004:84-88). At the ex-hacienda San Miguel Acocotla in Atlixco, Puebla, Mexico only six percent of olla sherds exhibited burning on the outer surface, indicating that a minority were used for cooking (Newman 2013). Other uses such as serving and water storage are thus implied.

Figure 42: Detail From an 1865 Painting by José Agustín Arrieta, Also Titled *Cocina Poblana.* Here a woman stands at a stove, stirring a beverage in a lead glazed jarro. Food is cooking in the lead glazed cazuela and olla on the stove in the foreground. Note the steam coming from the olla that is covered with a white plate (Courtesy INAH Mediteca Public Domain (CC) https://mediateca.inah.gob.mx/repositorio/islandora/object/pintura%3A4135).

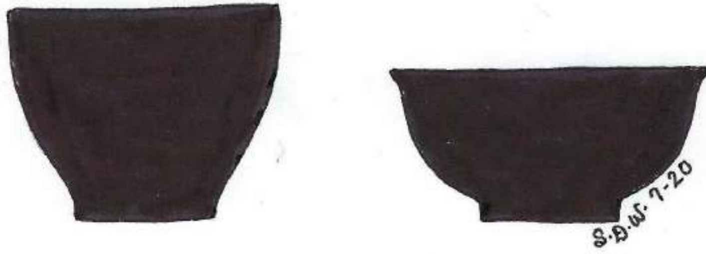
Plato



> Ya mi plato esta lleno (my plate is full).
>
> Del plato a la boca se cae la sopa (soup falls from the plate to the mouth).
>
> Carne que se lleva el gato, no vuelve al plato (meat the cat takes doesn't return to the plate, i.e. what's done is done, no use crying over spilt milk).
>
> El plato rajado es el que más dura (the cracked plate lasts the longest).
>
> El que no lava platos, no rompe platos (only those who don't wash dishes don't break them).
>
> Jamás en el mismo plato, comen el ratón y el gato (the mouse and the cat never eat on the same plate).

Platos are circular vessels, almost bowl-like in shape, with flat bottoms, out-flaring walls, and everted rims of various widths ranging between 6 and 12 inches in diameter (15 - 30 cm.). Many have an annular ringed base. They were used as serving ware for individual consumption of liquid and solid foods (Reynoso Ramos 2004:84-88; Newman 2013; Ness 2015:309-333; 2017:24-35). These vessels have also been called brimmed platos, soperos, soperas, and soup plates (Cohen-Williams 1992; Cohen-Williams and Williams 2004; Jenks 2013; Newman 2013; Williams 2014).

Escudilla - Tazón



¡Al que no quiere caldo, tres tazas [tazones] llenas! (to those who don't want broth, three cups [bowls] full!).

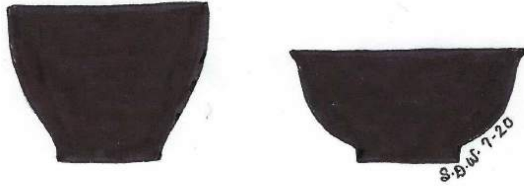
The escudilla or tazón is a bell to half-sphere - shaped bowl with an annular base and no handles. Rims are straight to slightly everted. A single vessel will usually fit in one hand. It was used for consuming soups and broths, atoles, and undoubtedly stews and beverages. In actuality it is an oversized taza-cup, so was easily held while drinking (Reynoso Ramos 2004:84-88; Newman 2013; Ness 2015:309-333, 2017:24-35). In this typology escudillas are differentiated from tazas by having a larger than 3.5-inch (9 cm) rim diameter.

Taza, Pocillo, Jícara - Cups

Introduction

Three different shaped cups - taza, pocillo, and jícara - are present in the collection. All three are part of the Mexican Folk Ceramic universe, and were used for the individual consumption of hot and cold beverages, especially chocolate, tea, and coffee (Newman 2013; Ness 2015:309-333; 2017:24-35). They are described individually below.

Taza



> Aquí se rompió una taza, cada quien para su casa (a cup is broken, let's get out of here, i.e. run, get away).
>
> La mujer es como una buena taza de café: la primera vez que se toma, no deja dormir (a woman is like a good cup of coffee, once drank you can not sleep).

The taza is in fact a small escudilla (See above). Therefore, it is a bell to half-sphere -shaped bowl with an annular base and no handles. Rims are straight to slightly everted (Lister and Lister 1976:83; Newman 2013; Ness 2015:309-333; 2017:24-35). Tazas were differentiated from escudillas by exhibiting rim diameters of 3.5 inches (9 cm.) or less.

Pocillo

A pocillo is a handled mug or cup (Newman 2013). It is essentially a small jarro for individual servings. As such it is a globular bodied vessel with a long straight neck and usually, but not always, at least one handle. The small globular body helped conserve heat. Rims can be straight or everted. Pocillos were differentiated from jarros in this

study by having a rim diameter of 3.5 inches (9 cm.) or less[95] (Reynoso Ramos 2004:84-88; Newman 2013).

Jícara

A jícara is diminutive cup traditionally used for drinking chocolate. The term was originally applied to cups made of gourds for the same purpose. Ceramic jícaras do not in any way resemble their half gourd bowl - shaped namesakes. They have a rim diameter of 3.5 inches (9 cm.) or less, a tapering elongated bell or flat bottomed “V”-shaped profile, and a narrow annular base. The term pocillo is also used to designate this vessel in some studies (Lister & Lister 1976:54, 73; Ness 2015:309-333; 2017:24-35).

[95] Reynoso Ramos (2004:84-88) defines this vessel as a jarro.

Figure 43: Detail From an Early Nineteenth Century Casta Panting *De Indio, y Torna Atrás, Lobo*, by an Unknown Painter. In this scene, a woman dips a tortilla into a cajete with food. Two additional cajetes in front of her, one with a scalloped edge, appear to hold chiles. Still another containing chiles covers an olla. The shelf on the back wall has unglazed brown ware ollas placed upside down for storage. For this meal, the Mayolica blue on white platos also remain on the shelf. A copper cazo hangs on the wall below the shelf (Courtesy of Museo Nacional de Historia INAH Mediteca Public Domain (CC) http://artecolonialamericano.az.uniandes.edu.co:8080/artworks/4227).

Figure 44: Detail of the Casta Painting *De Español y Negra, Mulato*, Painted by José de Páez in the 1770s. In this scene, a woman whips chocolate in a copper jarro-chocolatero. The shelf on the wall holds brown-orange lead glazed cazuelas. Mayolica escudillas and jícaras are in front of these to left. On the right side behind the bottle are blue on white Mayolica platos. On the corner of the stove, in the foreground, sits a stack of blue on white Mayolica platos, with a single plato serving as a saucer for a jícara next to them. A cooking olla sits to the rear of the stove (Courtesy of Museo Nacional de Historia INAH Mediteca Public Domain (CC) http://52.183.37.55/artworks/13234).

Water and Storage Wares

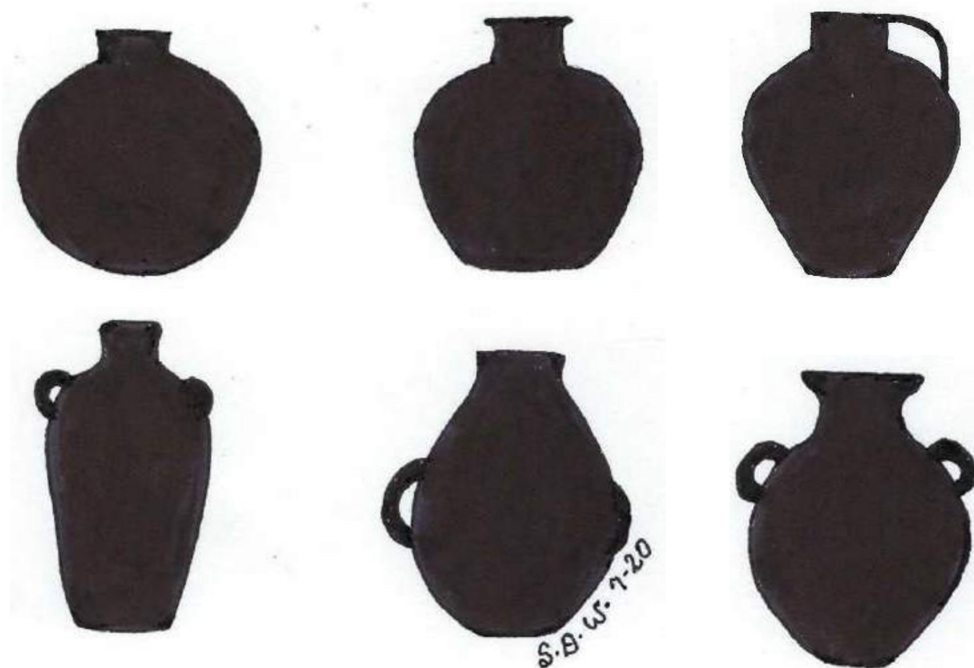
> Because of their purity of form, the most admired corriente forms are those associated with water, the tinajas, and the cántaros. Their shapes are free of any deception, and every element contributes to their basic function. Each curve is intellectually conceived, but is based on the potter's intuitive sense of sound engineering construction and the use of the pot as a container (Whitaker and Whitaker 1978:69).

Water and storage wares consist of those vessels used to transport, store, and serve water. Many of these vessels in larger sizes were also used to store other commodities, both solid and liquid, like grains, olive oil, honey, liquors, aguas frescas, and other beverages. (Voss 2012:48; Reynoso Ramos 2015:215-16, 292) (See Figures 47 - 50).

Water Transportation and Serving: Cántaro, Botija, Botellón

> Jars for the portage of water and other liquids vary greatly in size and form according to regional customs, the distance to be carried, and the mode of transportation. Women carry relatively small round water cántaros on the shoulders or head from the nearest stream, pond, or village fountains. Cántaros designed to be carried in this manner are handless. For longer distances larger jars backpacked by the ancient tumpline or, ... four of these jars are strapped to the side of a burro. Most large jars have loop handles through which a rope may be passed for ease in carrying (Whitaker and Whitaker 1978:65).

Cántaro



> Como el burro del aguador, cargado de agua y muerto de sed (Like the water carrier's donkey, loaded with water and dying of thirst).
>
> Es una de las vasijas que a la gente de los pueblos les gustaría ver desaparecer, pues está asociada con viaje diario al arroyo o el pozo (it is one of the vessels that people in the villages would like to see disappear, since it is associated with a daily trip to the stream or well) (Mindling 2015:135).

Cántaro in Mexico refers to a clay vessel used for transporting water, and sometimes other beverages such as liquors, and aguas frescas. They are usually identified by their small mouth in relation to the vessel's size. Neck diameters can range from 3 to 10 cm. (1 to 4 in.) (Foster 1948b:81-88) (Figure 45). Shapes can vary. The two general shapes are globular pots with round to flat bottoms, some with elongated necks, and botija-like jars with sloping shoulders, tapered sides and rounded to flat bottoms. The globular to semi-globular vessels may or may not have handles. Smaller sizes with annular bases were also used as household and table serving vessels (See botellones, below).

The tapered jars appear to be based on Spanish "olive jar" botijas. Botija - shaped cántaros usually have up to three ring - shaped handles used for carrying the vessels with a tumpline, or tying them to a cart or pack animal for transportation. Smaller vessels are carried on the shoulder or head. Globular - shaped cántaros were transported in the same manner[96] (See Figures 47 - 48) (Parsons 1936:29; Foster 1948b:85; Whitaker and Whitaker 1978:65-71; Reynoso Ramos 2004:84-88; 2015:116-117, 292, 316, 324; Voss 2012:48; Mindling 2015:134-139; Ness 2015:309-333; 2017:24-35; Fournier García 2016:286). Chinese Brown Ware jars and Spanish "olive jar" botijas, originally used as shipping containers for a variety of products, were often reused as cántaros.

Cántaro			
Diameter	Depth	Neck diameter	Capacity
Cm.	Cm.	Cm.	Liters
....	....	....	....
5.0	5.0	3.2	0.05
7.0	7.0	3.8	.07
9.0	9.0	4.4	.14
10.0	10.0	5.0	.40
12.7	12.0	6.4	.75
14.0	13.4	7.0	1.25
17.8	16.5	7.6	2.00
20.3	19.0	9.0	3.50
24.0	23.0	9.5	6.00
26.7	25.5	9.5	9.00
29.0	28.0	9.5	12.00
33.7	30.5	10.0	15.00
....	....	....	....
....	....	....	....

Figure 45: Cántaro Dimensions Recorded by Foster at Tzintzuntzan, Mexico (1948b:85).

[96] For an illustration of a woman carrying a ceramic water vessel on her head in California see the depiction of the painting *California Rancho*, 1849, by Alfred Sully that is reproduced in Vallejo 1875 page 804 and on line at https://collections.museumca.org/?q=collection-item/a6542.

Botellón

The botellón is a globular - shaped vessel for storing and serving water in a household environment, such as kitchen table or bedroom. They have elongated necks and annular bases. Body diameters are around 8 inches (20 cm.) or less with neck diameters of less than 4 inches. Often they have an accompanying cylindrical clay vaso – drinking glass. The best known and easily recognized are the bruñido/canela ware water serving pots made in Tonalá Jalisco (Figure 46). Foster (1948b:84-85) noted neck diameter ranges of 4 to 10 cm. (1.5 to 4 inches) for smaller cántaros. These sizes could have been used as botellones. Indeed, most seem too small to be practical for water transportation.

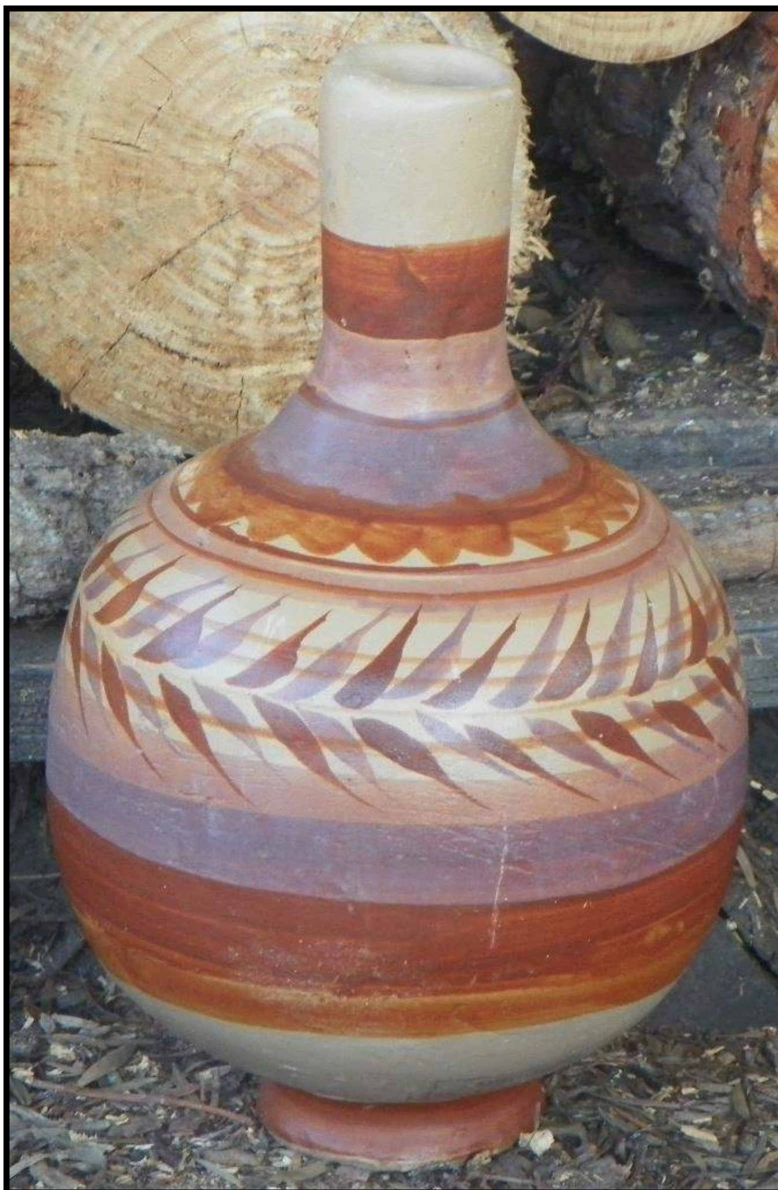


Figure 46: Bruñido/Canela Ware Botellón Produced in Tonalá, Jalisco (Collection of S.R. Van Wormer).

Water Storage: Tinaja, Tina, Olla, Barriel

Containers that store water for household and kitchen use include the olla-shaped tinaja or tina and the barrel-shaped barril. They were also used for keeping grains, other food stuffs, liquors, beverages, and other liquids (Whitaker and Whitaker 1978:60; Reynoso Ramos 2015:116, 285, 288).

The tinaja or tina is simply a large olla sometimes with a flat or annular base. Since the most common cooking sizes for ollas have rim diameters of from around 4.5 to 9.5 inches (11.5 - 24 cm.) (Foster 1948b:85; Van Wormer personal observation 2020), ollas that show no signs of sooting and have rim diameters greater than 9.5 inches are considered tinajas in this typology. Literally used as reservoirs for holding water, these vessels had a dramatic size range and could be up to around three feet in height and hold many gallons (See Figures 40 - 41). In addition to acting as reservoirs, smaller sizes also served as table service water containers similar to the botellón (Reynoso Ramos 2015:116). As noted above in the discussion on serving ollas, at the ex-hacienda San Miguel Acocotla in Atilixco, Puebla, Mexico only six percent of olla sherds exhibited burning on the outer surface, indicating that a minority were used for cooking (Newman 2013). Other uses such as serving and water storage are thus implied.

The barril is wide-mouthed like the tinaja, but is shaped more like its barrel namesake, with rounded to almost no shoulders, sloping, rounded, or outflaring sides, and a flat base. Although barril is the term used for these ceramic vessels in Mexico (Whitaker and Whitaker 1978:60), the terms tinaja, tina, and others such as tinaco are also applied (Mindling 2015:140-143).

Household and other Utilitarian Wares

Many types of utilitarian vessels are not present among the Mexican Folk Ware identified in the Chapel Complex collection, including chamber pots, wash basins, and water ewers, among others. It is assumed that other pieces were adapted to these uses. Larger ollas would have worked as chamber pots, large cajetes and cazuelas could serve as wash basins and botellónes or smaller cántaros as ewers. Parsons (1936:29) documented the use of large cazueals as wash basins at the Oaxacan community of Milta in the mid-1930s. Also lacking are lids in any form. As already noted, small comales, as well as cajetes, and platos were often employed as covers (Foster 1948b:84-85; Reynoso Ramos 2004:84-88, 2015:270; Fournier García 2016). In addition to ceramic containers, wooden bowls and troughs (batiques) were used as mixing bowls and wash basins (Steinbeck 1941:29-30, 35).

Figure 47: Las Aguadoras. Top: woman with small cántaro on her head in Tehuantepec, Oaxaca, México, circa 1910. Bottom: a group of women transporting water in cántaros on their heads, Oaxaca, Oaxaca, México, 1905 (Courtesy of Museo Nacional de Historia INAH Mediteca Public Domain (CC) https://www.mediateca.inah.gob.mx/islandora_74/islandora/object/fotografia%3A477904 https://www.mediateca.inah.gob.mx/islandora_74/islandora/object/fotografia%3A395735).

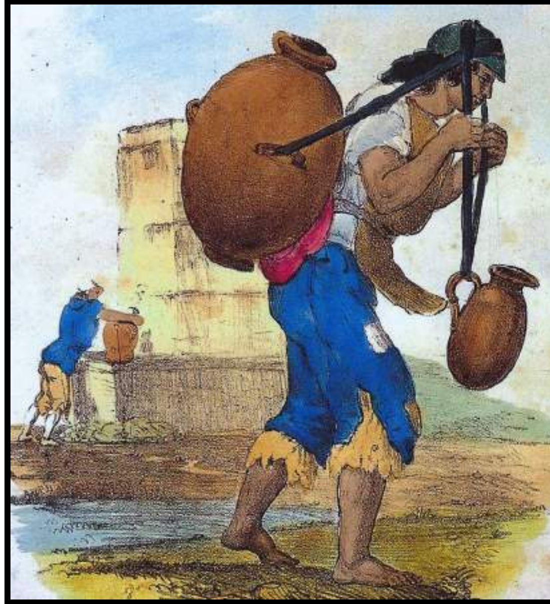
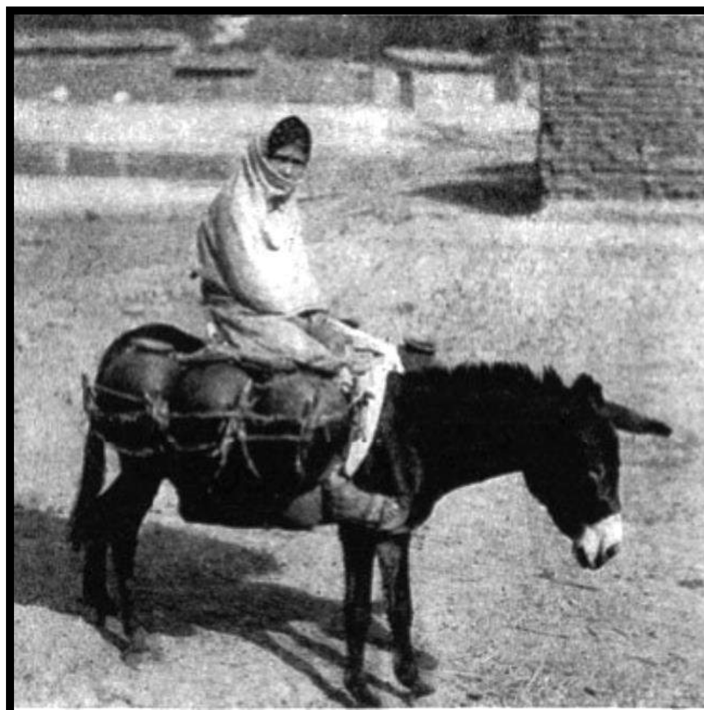


Figure 48: Los Aguadores. Top, detail of water carrier with botija - shaped cántaro on his back with a tumpline (Linati 1828; Public Domain Wikimedia Commons Linati, Costumes... Mexique; aguador or water-carrier Wellcome L0021249.jpg). Bottom, detail of a painting titled *Cocina Poblana* (yes once again!!!!), by Manuel Serrano, 1855. The aguador carries a large globular cántaro on his back that closely resembles a Chinese Brown Ware jar (Courtesy of Museo Nacional de Historia INAH Mediteca Public Domain (CC) https://www.mediateca.inah.gob.mx/islandora_74/islandora/object/pintura:3667).



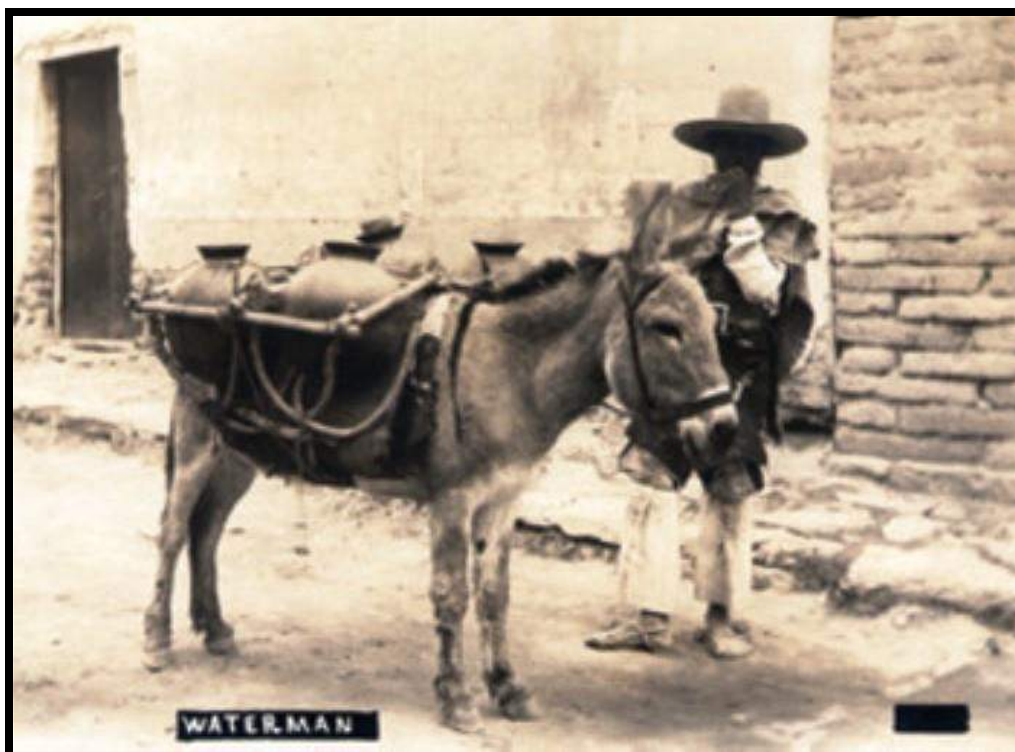


Figure 49: Burros Loaded with Water Cántaros. Top, a young woman probably in Sonora, 1911. Bottom, gentleman with his burro, location unknown, ca 1900 (Courtesy of Museo Nacional de Historia INAH Mediteca Public Domain (CC) https://www.mediateca.inah.gob.mx/islandora_74/islandora/object /fotografia%3A311921, https://www.mediateca.inah.gob.mx/islandora_74/islandora/object/fotografia%3A139246).

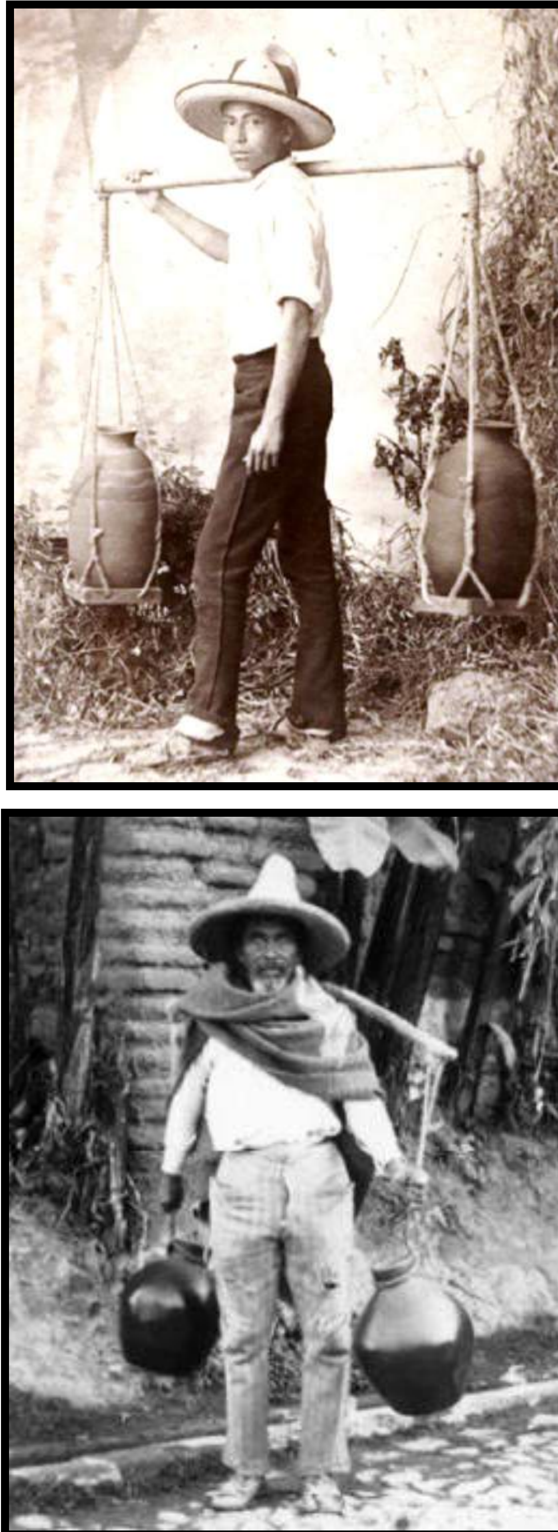


Figure 50: Water Carriers with Shoulder Poles. Top, young man with two botija - shaped cántaros, circa 1870, location unknown. Bottom, gentleman with two semi-globular cántaros, 1906, location unknown (Courtesy of Museo Nacional de Historia INAH Mediteca Public Domain (CC) https://www.mediateca.inah.gob.mx/islandora_74/islandora/object/fotografia%3A392528 https://www.mediateca.inah.gob.mx/islandora_74/islandora/object/fotografia%3A139784).

REFERENCES CITED

Aguilar, Blas
1874 Interview published in the *San Diego Union*, July 2, 1874, page 3. San Diego Union Publishing Company.

Amador, José María
1877a José María Amador, Memorias Sobre la Historia de California. Bancroft Library MS. https://oac.cdlib.org/ark:/13030/hb500007d5/?brand=oac4

1877b *Californio Voices: The Oral Memoirs of José María Amador And Lorenzo Asisara*; Translated and Edited by Gregorio Mora-Torres. University of North Texas, Denton, 2005.

Archibald, Robert
1978 *The Economic Aspects of California Missions*. Academy of American Franciscan History, Washington D. C. https://digitalcommons.csumb.edu/hornbeck_spa_2/1

Arnaz, José
1878 Recuerdos de José Arnaz … los dicto a Thomas Savage. MS, Bancroft Library. On line Archives of California: https://oac.cdlib.org/ark:/13030/hb396nb3kx/?brand=oac4

Arreola, Daniel D., William E. Doolittle, Lindsey Sutton, Arianna Fernandez, John Finn, Claire Smith, and Casey Allen
2009 Huépac Revisited: Cultural Remapping of a Sonoran Townscape. *Journal of the Southwest* 51(2):137-164.

Arter, Susan
2001 *Aguirre Adobe Faunal Analysis.* In: *Casa de Aguirre 1853-1914: Data Recovery Program: San Diego, California 96-7903, edited by D. Gallegos.* Gallegos & Associates. Carlsbad, California. Report on File at South Coastal Information Center, San Diego State University.

2011 *Faunal Material. Archaeological Investigation at the Jolly Boy Saloon Remodel, Old Town San Diego State Historic Park, San Diego, California*. EDAW, Inc., San Diego California. Report on File at California State Parks, San Diego Coast District.

2012a *Faunal Remains.* In: *Architectural and Archaeological Investigations at the Casa de Bandini/Cosmopolitan Hotel (CA-SDI-17,862), Old Town San Diego State Historic Park, San Diego, California: Volume 2, Subsurface Archaeology and Material Culture*. Prepared for California Department of Parks and Recreation, Sacramento, and Old Town San Diego State Historic Park by ASM Affiliates, Carlsbad, California. Report on File at California State Parks, San Diego Coast District.

2012b Faunal Remains from Casa de Bandini/Cosmopolitan Hotel: Continuity and Change in Mid-19th Century Old Town San Diego. Society for California Archaeology Annual Meetings. San Diego, California.

2014 Fauna at the Crossroads: Food Consumption at the Carrizo Creek Overland Stage Stop. In: *Proceedings of the Society for California Archaeology* 28:86-104.

Bancroft, Hubert Howe
1884 *History of California, Vol. I. 1542-1800*. A. L. Bancroft and Company, Publishers, San Francisco.

1885a *History of California, Vol. II. 1801-1824*. A. L. Bancroft and Company, Publishers, San Francisco.

1885b *History of California, Vol. III. 1825-1840*. A. L. Bancroft and Company, Publishers, San Francisco.

1885c *History of California Vol IV:1840-1845*. The History Company, San Francisco.

1888 *California Pastoral 1769-1848:The Works of Hubert Howe Bancroft, Volume XXIV*. The History Company, San Francisco. https://www.biblio.com/book/california-pastoral-1769-1848-works-hubert/d/835404845.

Bannon, John Francis
1979 The Mission as a Frontier Institution: Sixty Years of Interest and Research. *Western Historical Quarterly* 10(3):303-322. https://www.jstor.org/stable/967373.

Barbolla-Roland, Diane Evert
1983 Maiolica at the San Diego Presidio Gateway Search Excavation: A Preliminary Analysis. *Journal of San Diego History* 29(3):193-213.

1992 Alta California Troops: Acculturation and Material Wealth in a Presidio and Mission Context, 1769-1810. Ph.D. dissertation, Department of Anthropology, University of California, Riverside.

Barger, William J.
2000 The Merchants of Los Angeles: Economics and Commerce in Mexican California. *Southern California Quarterly* 82(2):125-144. Stable URL: https://www.jstor.org/stable/41172005

Bartel, Brad
1991 Archaeological Excavation and Education at the San Diego Royal Presidio. *Journal of San Diego History* 37(1):1-29.

Beals, Ralph
1952 Notes on Acculturation. In: *Heritage of Conquest: The Ethnology of Middle America* by Sol Tax and Members of the Viking Fund Seminar on Middle American Ethnology, pp. 225-232. Free Press Publishers, Glencoe, Illinois.

Beilharz, Edwin A.
1971 *Felipe de Neve: First Governor of California*. California Historical Society, San Francisco.

Black, Samuel T.
1913 *San Diego County, California: A Record of Settlement, Organization, Progress and Achievement*. S. J. Clarke, Chicago.

Blind, Eric Brandan, Barbara L. Voss, Sannie Kenton Osborn, and Leo R. Barker
2004 El Presidio de San Francisco: At the Edge of Empire. *Historical Archaeology*, *Presidios of the North American Spanish Borderlands* 38(3):135-149. https://www.jstor.org/stable/25617186

Bolton, Herbert E.
1917 The Mission as a Frontier Institution in the Spanish-American Colonies. *The American Historical Review* 23(1):42- 61. https://www.jstor.org/stable/1837685.

Bonialian, Mariano
2017 Comercio y Atlantización del Pacífico Mexicano y Sudamericano: La Crisis del Lago Indiano y del Galeón de Manila, 1750-1821: Trade and Atlantization Mexican Pacific and South America. The Crisis of lago Indiano and Manila Galleon, 1750-1821. *América Latina en la Historia Económica* 24 (1):7-36. doi: 10.18232/alhe.v24i1.791.

Bourke, John G.
1895 The Folk-Foods of the Rio Grande Valley and of Northern Mexico. *The Journal of American Folklore*, 8 (28): 41-71. Stable URL: https://www.jstor.org/stable/533082

Brand, Donald D.
1951 *Quiroga: A Mexican Municipio*. Smithsonian Institution, Institute of Social Anthropology Publication, no. 11. U. S. Government Publishing Office, Washington D. C.

Brockington, D. L. and R. Brandes
1965 The First Season's Work at "the Silent City...." *Times Gone By: Journal of San Diego History* 2(4):1-29.

Broell, Percy G.
1938 Topography of Ground Plan - Exploration of the Old Ruins of the Spanish Presidio. Manuscript on file, San Diego History Center Library and Archive, Balboa Park, San Diego.

1978 Transcription of Interview by Nan Cuthberth, June 14, 1978. San Diego History Center Research Archives, San Diego.

Buitenhuys, Connor
2014 Investigating Faunal Remains from The San Diego Presidio Chapel: Problems of Ethnicity and Creolization During the Mexican Era. Master's thesis, California State University, Chico.

Calderón Quijano, José Antonio
1953 *Historia de las Fortificaciones en Nueva España*. CSIC - Escuela de Estudios Hispano-Americanos, Sevilla, Spain. http://hdl.handle.net/10261/248189.

California Mission Documents (CMD)
1811-1816 Various California Mission Documents listed in text by date and accession number on file the Santa Barbara Mission Archives, Santa Barbara California. California Mission Documents Finding Guide.

Callis, Marc
2020 *Tucson's Spanish Colonial Fort: Presidio San Augustín del Tucson and the People Who Shaped its History, 1691-1856*. Independently published by the Author.

Camacho, Josef
1778 Description of San Diego in 1778, Manuscript Report Published in the *San Diego Union*, January 31, 1965, page G-1. San Diego Union Publishing Company.

Campbell, L. G.
1972 The First Californians: Presidial Society in Spanish California, 1769-1822. *Journal of the West* XI(4):582-595.

1974 The First Californians: Presidial Society in Spanish California, 1769-1822. In: *The Spanish Borderlands: A First Reader*, edited by J. Oakah L. Jones and L. L. Morrison, pp. 106-118. L.L. Morrison, Los Angeles.

1977 The Spanish Presidio in Alta California During the Mission Period 1769-1784. *Journal of the West* 16:63-77.

Carmen Velázquez, María del
1984 Sirvientes de Punta de Guijarros. In: *Notas Sobre Sirvientes de Las Californias y Proyecto de Obraje en Nuevo México*. Colegio de México, México D. F.

Carrico, Richard L.
1972 The Presidio de San Diego 1769 – 1937: From Fresh Adobe to Excavated Ruins. Manuscript, San Diego History Center Research Archives, San Diego.

1997 Sociopolitical Aspects of the 1775 Revolt at Mission San Diego de Alcalá. *The Journal of San Diego History* 43(3):142-157.

2014 *Strangers in a Stolen Land: Indians of San Diego County From Prehistory to the New Deal*. Sunbelt Publications, San Diego.

2019 Death and Burials at the Royal Presidio de San Diego, Alta California. *Pacific Coast Archaeological Society Quarterly* 55(1):7-39.

Carrico, Richard L. and Randi Hawkins
1980 Conceptual Drawing of the San Diego Presidio Chapel. In possession of Richard Carrico, San Diego, California.

Casteneda, Antonia I.
1990 Presidarias y Pobladoras: Spanish-Mexican Women in Frontier Monterey, Alta California, 1770-1821. PhD dissertation, Department of History, Stanford University. Proquest (ATT 9102238).

2000 Hispanas and Hispanos in a Mestizo Society. *OAH Magazine of History* 144:29-33. http://www.jstor.org/stable/25163381.

Chace, Paul
2015 Animal Bones Can Talk. *Boletin* 31(1):203-211.

Chapel Complex Excavation Master Catalogs
1964-1975 Manuscript Copies of Four Volumes of San Diego Presidio Chapel Complex Excavation Master Field Catalogs. Collections Management Department, San Diego State University Department of Anthropology, San Diego, California.

Chapman, Charles E.
1915 The Alta California Supply Ships, 1773-76. *The Southwestern Historical Quarterly* 19(2):184-194. Stable URL: https://www.jstor.org/stable/30234669

Cheever, Dale. M.
1983 An Historical Faunal Analysis: Large Mammal Utilization at the San Diego Presidio (Gateway). Master's thesis, Department of Anthropology, San Diego State University.

Christenson, Lynne E.
1993 Appendix A: Analysis of Faunal and Botanical Remains and Inferences on Hedges/Tumco Dietary Habits. In: *Hedges/Tumco: Historic Mining Traditions of Southeastern California* by Michael Burney and Stephen R. Van Wormer. Burney and Associates, Boulder Colorado, 1993. Submited to USDI-Bureau of Land Managament, El Centro. https://www.researchgate.net/publication/335600925

Christenson Newell, Lynne, Susan Hector, Stephen Bouscaren, and Stephen R. Van Wormer
2016 *Pieces of History: Prehistory and History of Rancho Peñasquitos*. Friends of Peñasquitos Canyon Preserve, San Diego.

Christiansen, Paige W.
1969 The Presidio and the Borderlands: A Case Study. *Journal of the West* 7(1):29-37.

Cleland, Robert Glass
1969 *The Cattle on a Thousand Hills; Southern California, 1850–1870.* Huntington Library, San Marino, California.

(CMD) California Mission Documents
1811-1816 Various California Mission Documents listed in text by date and accession number on file the Santa Barbara Mission Archives, Santa Barbara California. California Mission Documents Finding Guide

Cohen-Williams, Anita G.
1992 Common Majolica Types of Northern New Spain. *Historical Archaeology* 6:119-130.

Cohen-Williams, Anita. G. and Jack. S. Williams
2004 Reconstructing Maiolica Patterns from Spanish Colonial sites in Southern California. Paper presented at the California Mission Studies Association Meetings, San Luis Obispo, California.

Costello, Julia G.
2014 A Typology of Mission Pottery: Drawings and Descriptions of Low-Fire Earthenwares from Mission San Antonio de Padua, California. In: *Ceramic Production in Early Hispanic California: Craft, Economy, and Trade on the Frontier of New Spain*, by Russell K. Skowronik, M. James Blackman, and Ronald L. Bishop, pp. 69-92. University of Florida Press, Gainesville.

Coughlin, Magdalen
1967 Boston Smugglers on the Coast (1797-1821): An Insight Into the American Acquisition of California. *California Historical Society Quarterly* 46 (2):99-120. Stable URL: https://www.jstor.org/stable/25154204

Crosby, Harry W.
1994 *Antigua California: Mission and Colony on the Peninsular Frontier*, 1697-1768. University of New Mexico Press, Albuquerque.

2015 *Californio Portraits: Baja California's Vanishing Culture*. University of Oklahoma Press, Norman.

Dallas, Sherman F.
1955 The Hide and Tallow Trade in Alta California, 1822-1846. PhD dissertation, Indiana University, Bloomington.

Dana, Richard Henry Jr
1840 *Two Years Before the Mast: A Personal Narrative*. Harper & Brothers, New York. https://books.google.com/books?id=JyyPAQAACAAJ&printsec=frontcover&source=gbs_ge_summary_r&cad=0#v=onepage&q&f=false

1869 *Two Years Before the Mast and Twenty-four Years After: A Personal Narrative*. Sampson Low, Son and Marston, London. https://books.google.com/books?id=aVKPZQbKev4C&printsec=frontcover&source=gbs_ge_summary_r&cad=0#v=onepage&q&f=false

Darling, J. Andrew and B. Sunday Eiselt
2017 *Aquí me Quedo*: Vecino Origins and the Settlement Archaeology of the Rio del Oso Grant, New Mexico. In: *New Mexico and the Pimería Alta: The Colonial Period in the American Southwest*, edited by John G. Douglass and William M. Graves, pp 187-212. University Press of Colorado, Boulder.

Davis, William Heath
1889 *Sixty Years in California, A History of Events and Life in California; Personal, Political and Military, Under The Mexican Regime; During the Quasi-Military Government of the Territory by the United States, and After the Admission of The State Into the Union ....* A. J. Leary, San Francisco.

de la Guerra, Angustias
1878 Recuerdo. In: *Testimonios: Early California Through the Eyes of Women, 1815-1848. Translated with an Introduction and Commentary by Rose Marie Beebe and Robert M. Senkewicz*. Heyday Books, Berkeley, California, 2006: 193-296.

Deagan, Kathleen A.
1996 Colonial Transformation: Euro-American Cultural Genesis in the Early Spanish-American Colonies. *Journal of Anthropological Research* 52(2):135-160. Stable URL: https://www.jstor.org/stable/3630198

Derby, George H., Lieutenant
1853 *Survey of San Diego River and its Vicinity*, Portions of Original Field Map by Geo. H. Derby, Lieut., Topogl. Engrs., Assisted by Chas.H. Poole, C.E. MS. The National Archives, Washington D.C. https://commons.wikimedia.org/wiki/File:Derby_Map_Presidio_Hill.jpg.

Douglass, John G. and William M. Graves
2017 New Mexico and the Pimería Alta: A Brief Introduction to the Colonial Period in the American Southwest. In: *New Mexico and the Pimería Alta: The Colonial Period in the American Southwest*, edited by John G. Douglass and William M. Graves, pp. 3-48. University Press of Colorado, Boulder.

Duflot de Mofras, Eugène
1844 *Exploration du Territoire de l'Orégon, des Californies et de la mer Vermeille, Exécutée Pendant les Années 1840, 1841, et 1842*. A. Bertrand, Paris. https://doi.org/10.5962/bhl.title.62171

Duggan, Marie Christine
2000 Market and Church on the Mexican Frontier: Alta California, 1769–1832. PhD dissertation, New School for Social Research, New York.

2004 *The Chumash and the Presidio of Santa Barbara: Evolution of a Relationship, 1782–1823*. Santa Barbara Trust for Historic Preservation, Santa Barbara, California.

2016 With and Without an Empire: Financing for California Missions Before and After 1810. *Pacific Historical Review* 85(1):23–71. https://doi.org/10.1525/phr.2016.85.1.23

2023 From Bourbon Reform to Open Markets in California, 1801-1821. *Journal of Evolutionary Studies in Business* 8(1):43-80. https://www.academia.edu/98752321/From_Bourbon_Reform_to_Open_Markets_in_California_1801_1821.

Duhaut-Cilly, Auguste

1834 Duhaut-Cilly, and Charles Franklin Carter. Duhaut-Cilly's Account of California in the Years 1827-28. *California Historical Society Quarterly* 8(2):130-66 (1929). Accessed April 4, 2020. www.jstor.org/stable/25178004.

Dunbier, Roger

1968 *The Sonoran Desert: Its Geography, Economy, and People*. The University of Arizona Press, Tucson.

Earle, Rebecca

2010 "If You Eat Their Food …": Diets and Bodies in Early Colonial Spanish America. *The American Historical Review* 115(3):688–713. https://doi.org/10.1086/ahr.115.3.688

Elliott, Wallace W.

1883 *History of San Diego County, California, With Illustrations*. Wallace W. Elliott and Company, San Francisco, California. Copy on file at the San Diego History Center Research Archives. Republished in 1965 as *History of San Bernardino and San Diego Counties* by Riverside Museum Press, Riverside, California.

Engelhardt, Zephyrin, O.F.M.

1912 *The Missions and Missionaries of California*, Vol. I. The James H. Barry Company, San Francisco. https://digitalcommons.csumb.edu/hornbeck_spa_2/9.

1920 *San Diego Mission*. The James Berry Company, San Francisco.

Ezell, Greta S.

2009 The Adobe Church of the Presidio of San Diego and its Predecessors. In: *Something Resembling an Anthropoloigst, Papers in Memory of Paul H. Ezell*, edited by Russell L. Kaldenberg. *San Bernardino County Museum Association Quarterly* 54(4):17-43.

Ezell, Paul. H.

1961 The Hispanic Acculturation of the Gila River Pimas. *Memoir*, no. 90. *American Anthropologist* (63) 5 part 2.

1968 Report on Presidio Excavation, 1967. *Journal of San Diego History* 14(2):20-24.

1970 Chapter From the Logbook (an Unusual Burial From the San Diego Presidio). *Journal of San Diego History* 16(4):20-24.

1976 The Excavation Program at the San Diego Presidio. *Journal of San Diego History* 22(4):1 -20.

Ezell, Paul H. and Greta S. Ezell

1980 Bread and Barbecues at the San Diego Presidio. *Spanish Colonial Frontier Research, Spanish Borderlands Research, No. 1*. Center for Anthropological Studies, Albuquerque, New Mexico.

1986 Vallejo's Plan of The San Diego Presidio. *The Journal of San Diego History* 32(3):192-208.

Fages, Pedro
1773 An Historical, Political, and Natural Description of California. Translated and Edited by Herbert J. Priestley. *The Catholic Historical Review*, 4(4):486-509 (Jan. 1919). https://www.jstor.org/stable/25011601.

1782 The Colorado River Campaign, 1781 - 1782 by Pedro Fages. Translated by Herbert Ingram Priestly. *Academy of Pacific Coast History* 3(2):230-236 (1913).

Farnham, Eliza W.
1856 *California, In-Doors and Out; or How We Farm, Mine, and Live Generally in the Golden State*. Dix, Edwards, and Co., New York. https://catalog.hathitrust.org/Record/001605785.

Farris, Glenn J.
2003 Early Views of Old Town San Diego. MS. Resource Management Division, California State Parks, Sacramento.

2006 Peopling the Pueblo: Presidial Soldiers, Indian Servants and Foreigners in Old San Diego. Paper presented at the Society for Historical Archaeology Annual Conference, January 13, 2006, Sacramento California, as part of a symposium entitled "Mexicans, Indians and *Extranjeros* in San Diego, 1820-1850." https://www.parks.ca.gov/pages/22491/files/peopling_the_pueblo_sha_2006_glenn_farris.pdf.

Faulk, Odie B.
1969 The Presidio: Fortress or Farce? *Journal of the West* 49(January):22-28.

1971 *The Leather Jacket Soldier: Spanish Military Equipment and Institutions of the Late 18th Century*. Socio-Technical Publications, Pasadena, California.

Faulk, Odie B., and Sidney B. Brinckerhoff
1966 Soldiering at the End of the World. *The American West* (3)3:28-37.

Felton, Larry, Glenn Farris, and Eloise Richards Barter
2014 Native American Cermaics Found at Old Town San Diego: Trade or Local Manufacturer ? In: *Early Hispanic California: Craft, Economy, and Trade on the Frontier of New Spain* by Russell K. Skowronek, M. James Blackman, and Ronald L. Bishop, pp. 218-241. University Press of Florida, Gainesville.

Field Books
1965 - 1976 Presidio Chapel Excavation Student Field Books Cited in Text. On file at Collections Management, San Diego State University Department of Anthropology.

Forbes, Alexander Esq.
1839 *California: A History of Upper and Lower California from Their First Discovery to the Present Time....* Smith, Elder and Co., London. https://digitalcommons.csumb.edu/hornbeck_usa_3_d/17

Foster, George M.
1948a The Folk Economy of Rural Mexico with Special Reference to Marketing. *Journal of Marketing* 13(2):153-162. http://www.jstor.com/stable/1246824

1948b *Empire's children: the people of Tzintzuntzan, Smithsonian Institution. Institute of Social Anthropology Publication No. 6*. Imprenta Nuevo Mundo, Mexico.

1953 What Is Folk Culture. *American Anthropologist*, New Series, 55(2) Part 1:159-173. https://www.jstor.org/stable/664584

Fournier, Patricia,
1998 El Complejo Nixtamal/Comal/Tortilla en Mesoaménca. *Boletín de Antropología Americana* (2):13-40. Pan American Institute of Geography and History. https://www.jstor.org/stable/40978113. Accessed: 23-07-2019 01:32 UTC comal

1999 Ceramic Production and Trade on the Camino Real. In: *El Camino Real de Tierra Adentro* Volume 2, Gabriella Palmer and Stephen Fosberg, compilers, pp. 153–176. Bureau of Land Management, New Mexico State Office, Santa Fe. https://mafiadoc.com/trade-on-the-camino-real_5b9c3cba097c47581d8b4723.html

Fournier García, Patricia
1997 Tendencias de Consumo en México Durante los Períodos Colonial e Independiente (Consumer Trends in Mexico During the Colonial and Independent Periods). In: *Approaches to the Historical Archaeology of Mexico, Central, and South America*, edited by J. L. Gasco, G. C. Smith, and P. Fournier-Garcia, pp. 49–58. Institute of Archaeology, University of California, Los Angeles.

2016 Sistemas Identitarios, Castas y Vasijas en la Capital De la Nueva España. In: *Desenterrando Fragmentos de Historia. Siglos XVI al XIX*, edited by María de Lourdes López Camacho, pp. 277-295. Instituto Nacional de Antropología e Historia, México. https://www.researchgate.net/publication/315028162

Fournier García, Patricia and Bridget M. Zavala Moynahan
2014 Bienes de Consumo Cotidiano, Cultura Material e Identidad a lo Largo Del Camino Real en el Norte de México (Everyday Life, Consumption Goods, Material Culture, and Identity Along the Royal Road in Northern Mexico). *Revista Xihmai* IX(18):31-54. https://www.academia.edu/8277265/Bienes_de_consumo_cotidiano_cultura_material_e_identidad_a_lo_largo_del_Camino_Real_en_el_norte_de_M%C3%A9xico_Fournier_Zavala_2014

Francis, Jessie Davies
1976 *An Economic and Social History of Mexican California, 1822-1846: Volume I, Chiefly Economic*. Arno Press, New York.

Frederick, Jake
2011 Without Impediment: Crossing Racial Boundaries in Colonial Mexico. *The Americas* 67(4):495-515. doi:10.1353/tam.2011.0072

Fritzsche, Bruno
1968 On Liberal Terms: The Boston Hide-Merchants in California. *The Business History Review* 42(4):467-481. https://www.jstor.org/stable/3112529

Graham, Margaret A. and Russell K. Skowronek
2016 Chocolate on the Borderlands of New Spain. *International Journal of Historical Archaeology* 20:645-665. https://doi.org/10.1007/s10761-016-0370-5.

Griffin, Katherine H. and Peter Drummey
1988 Manuscripts on the American China Trade at the Massachusetts Historical Society. *Proceedings of the Massachusetts Historical Society*, Third Series 100:128-139. Stable URL: https://www.jstor.org/stable/25080995

Guerrero, Vladimir
2010 Caste, Race, and Class in Spanish California. *Southern California Quarterly* 92(1):1-18. Stable URL: http://www.jstor.org/stable/41172505

Guidotti-Hernández, Nicole M.
2008 Gender, Epistemology and Cooking: Rethinking Encarnación Pinedo's El Cocinero Español. *Women's Studies International Forum* 31(6):449-456.

Gust, Sherri M.
1982 Chapter 10: Faunal Analysis and Butchering. In: *The Ontiveros Adobe: Early Rancho Life in Alta California* by Jay D. Frierman, Roberta S. Greenwood Principal Investigator. Prepared for the Redevelopment Agency, City of Santa Fe Springs, California.

Hackel Steven W.
1997 Land, Labor, and Production: The Colonial Economy of Spanish and Mexican California. *California History*, *Contested Eden: California Before the Gold Rush*, 76(2 & 3):111-146. University of California Press, Berkeley in association with the California Historical Society. Stable URL: https://www.jstor.org/stable/25161664
Also published in 1998 as: Land, Labor and Production: The Colonial Economy of Spanish and Mexican California. In: *Contested Eden California Before the Gold Rush,* edited by Ramón A. Gutiérrez and Richard J. Orsi, pp. 111-146. University of California Press, Berkeley.

Hass, Lisbeth
1995 *Conquest and Historical Identities in California: 1769 – 1936*. University of California Press, Berkeley.

Hastings, James Rodney
1961 People of Reason and Others: The Colonization of Sonora to 1767. *Arizona and the West* 3(4):321-340. http://www.jstor.com/stable/40167702

Hatsutarõ
1844 *Kaigai Ibun: A Strange Tale from Overseas, Or, a New Account of America, Compiled by Maekawa Bunzō and Sakai Junzō, from the Narrative of Hatsutarō, a Japanese Castaway*. Translated by Richard Zumwinkle, Assisted by Tadanobu Kawai. Baja California Travels Series, Dawson's Book Shop, Los Angeles, 1970.

Hauge and Langum
1990 *Thomas O. Larkin: A Life of Patriotism and Profit in Old California*. University of Oklahoma Press, Norman.

Hayes, Benjamin I.
1929 *Pioneer Notes from the Diaries of Judge Benjamin Hayes 1849-1875*. Edited and Published by Marjorie Tisdale Wolcott. McBride Printing Company, Los Angeles, California.

Hector, Susan M.
2020 *Economic Plants of the San Diego Californios 1821–1850.* Center for Research in Traditional Culture of the Americas, San Diego. https://www.academia.edu/44387889/Economic_Plants_of_the_San_Diego_Californios_1821_1850

Hector, Susan M. and Stephen R. Van Wormer
1986 *Broken Fragments of Past Lifeways: Archaeological Excavations at Los Peñasquitos Ranch House Resource Area, San Diego*. Prepared by RECON, San Diego.

Heizer, Robert
1978 Impact of Colonization on the Native California Societies. *The Journal of San Diego History* 24(1):121-137.

Hennessey, Gregg Robert
1986 George White Marston and Conservative Reform in San Diego. *Journal of San Diego History* 32(3):230-250.

Hewes, Leslie
1935 Huepac: An Agricultural Village of Sonora, Mexico. *Economic Geography* 11 (3):284-292. Stable URL: https://www.jstor.org/stable/140413

Hewes, Leslie and Nina Veregge
1996 Sonora, 1931. *Journal of the Southwest* 38(1):23-36 Stable URL: http://www.jstor.com/stable/40169965

Heyman, Josiah.
1991 *Life and Labor on the Border: Working People of Northeastern Sonora, Mexico, 1886 -1986.* University of Arizona Press, Tucson. http://hdl.handle.net/10150/632276

Híar, Carlos N.
1877a California en 1834: Recuerdos de Calos N. Híjar. MS, Bancroft Library. https://oac.cdlib.org/ark:/13030/hb9w10115p/?order=3&brand=oac4

1877b California in 1834: Recollections of Carlos N. Híjar. In: *Three Memoirs of Mexican California*, Translated by Vivian C Fisher, pp. 9-79. Friends of the Bancroft Library, University of California, Berkeley, 1988.

Holt, Cheryl A.
1991 Faunal Remains and Human Behavior: What is Being Measured. *Historical Archaeology* 25(2):46-61.

Holterman, Jack
1956 José Zuñiga, Commandant of Tucson. *Kiva* 22(1):1-4. Stable URL: https://www.jstor.org/stable/30246963 JSTOR

Humphrey, Norman D.
1948 The Generic Folk Culture of Mexico. *Rural Sociology* 8(4):364-377.

Igler, David
2004 Diseased Goods: Global Exchanges in the Eastern Pacific Basin, 1770-1850. *The American Historical Review* 109 (3):693-719.
Stable URL: https://www.jstor.org/stable/10.1086/530552

Ives, Ronald L.
1950 The Sonoyta Oasis. *The Journal of Geography* 49(1):1-14. https://www.tandfonline.com/doi/abs/10.1080/00221345008982426?journalCode=rjog20

Jackson, Robert H.
2021 Regional Conflict in the Rio de la Plata Borderlands and the Militarization of the Jesuit Missions Among the Guarani: A Historic and Cartographic Record. *Boletin* 37(1):5-46.

James, Stephen R., Jr.
1988 A Reassessment of the Chronological and Typological Framework of the Spanish Olive Jar. *Historical Archaeology* 22(1):43-66.

Jelinek, Lawrence
1979 *Harvest Empire: A History of California Agriculture*. Boyd and Fraser Publishing Co., San Francisco.

Jenks, Kelly L.
2013 An Analysis of Majolica Ceramics from the Hispanic Presidio Community at Tubac, Santa Cruz County, Arizona. *The Journal of Arizona Archaeology* 2(2):117–139.

2017 Becoming Vecinos: Civic Identities in Late Colonial New Mexico. In: *New Mexico and the Pimería Alta: The Colonial Period in the American Southwest*, edited by John G. Douglass and William M. Graves, pp. 213-238. University Press of Colorado, Boulder.

Kaplan, Flora S.
1994 *A Mexican Folk Pottery Tradition: Cognition and Style in Material Culture in the Valley of Puebla*. Southern Illinois University Press, Carbondale, Illinois.

Kaplin, Flora S. and David M. Levine
1981 Cognitive Mapping of a Folk Taxonomy of Mexican Pottery: A Multivariate Approach, *American Anthropologist* 83(4):868-884.

Katzew, Ilona
2004 *Casta Panting: Images of Race in Eighteenth-Century Mexico*. Yale University Press, New Haven Connecticut.

Kelly, John
1925 Life on a San Diego Cattle Ranch, MS Huntington Library, cited in Cleland 1969:63. Available on line as Life on a San Diego County Ranch by John L. Kelly. Great Uncle John Kelly wrote this account in about 1925. Retyped by family members Susan Kelly, Lucia Kelly Sippel, Andrea Pasek, Elaina Blankinship. Copyright 2006. https://www.carlsbadhistoricalsociety.com/Carlsbad%20Historical%20Society_files/LifeonSanDiegoRanch/Life%20on%20a%20

Kessell, John L.
2002 *Spain in the Southwest: A Narrative History of Colonial New Mexico, Arizona, Texas, and California*. University of Oklahoma Press, Norman.

1976 *Friars, soldiers, and reformers: Hispanic Arizona and the Sonora Mission Frontier, 1767-1856*. University of Arizona Press, Tucson.

Killea, Lucy L.
1966 The Political History of a Mexican Pueblo: San Diego From 1825 to 1845, Part I. *The Journal of San Diego History* 12(3):3-35.

1975 Colonial Foundations of Land Use and Society in San Diego, 1769 – 1846. PhD dissertation, Department of History, University of California, San Diego. University Microfilms, Ann Arbor.

Krase, Jean Flaherty
1979 The Old World Ceramic Sherds from San Diego's Presidio: A Qualitative, Quantitative, and Historical Analysis. Master's thesis. San Diego State University.

1981 Ships and Sherds: Ceramics at the San Diego Presidio. *The Journal of San Diego History* 27(2):129-41.

Krober, Albert
1953 *Handbook of the Indians of California*. California Book Company, Berkeley.

Ladies' Social Circle
1894 *How we cook in Los Angeles: A Practical Cook-Book Containing Six Hundred Or More Recipes ... Including a French, German and Spanish Department with Menus, Suggestions for Artistic Table Decorations, and Souvenirs*. Commercial Printing House, Los Angeles, California. https://archive.org/details/howwecookinlosan00losa

Langellier, John Phillip and K. M. Peterson
1981 Lances and Leather Jackets: Presidial Forces in Spanish Alta California. *Journal of the West* 20(4):3-11.

Langellier, John Phillip and Daniel B. Rosen
1992 *Historic Resource Study: El Presidio de San Francisco - A History Under Spain and Mexico, 1776-1846*. Golden Gate National Recreation Area, U.S. Department of the Interior, National Park Service, Denver Service Center.

Larkin, Rita (editor)
1968 A Landscape of the Past: The Story of the Royal Presidio Excavations. *The Journal of San Diego History* 14(4):5-32.

Lee, S. M.
1887 *Glimpses Of Mexico And California*. George. H. Ellis, Printer, Boston. https://play.google.com/books/reader?id=cjMCAAAAYAAJ&hl=en&pg=GBS.PA3

Léon-Portilla, Miguel
1972 The Norteño Variety of Mexican Culture: An Ethnohistorical Approach. In: *Plural Society in the Southwest*, Edward M. Spicer and Raymond H. Thompson, editors, pp. 77-114. University of New Mexico Press, Albuquerque.

Libros de Mission San Diego
1783-1845 Baptismal, Death, and Marriage Records for Mission San Diego. On line through the Huntington Library Early California Population Project.
https://researchguides.huntington.org/ecpp

Lister, Florence C. and Robert H. Lister
1976 *A Descriptive Dictionary for 500 Years of Spanish-Tradition Ceramics [13th Through 18th Centuries]*. Special Publication Series Number 1, Society for Historical Archaeology, John D. Combes, editor.

Loren, Diana DiPaolo
2007 Corporeal Concerns: Eighteenth-Century Casta Paintings and Colonial Bodies in Spanish Texas. *Historical Archaeology* 41(1):23-36. http://www.jstor.org/stable/25617423

Lucido, Jennifer A.
2013 Decoding the Bones: Spanish Colonial Butchering Practices at The Royal Presidio of Monterey. *Boletín* 29(1 & 2):58-75. https://www.researchgate.net/publication/259460536_DECODING_THE_BONES_Spanish_Colonial_Butchering_Practices_at_the_Royal_Presidio_of_Monterey

2015 The Old Stand: A Historic Resource Study of the Royal Presidio of Monterey, 1770–1840. Master's thesis, Sonoma State University, Sonoma, California. https://scholarworks.calstate.edu/concern/parent/j3860762v/file_sets/t722h9449

Lugo, José del Carmen

1877a Vida de un Ranchero, Dictada por Don José del Carmen Lugo. MS, Bancroft Library. https://oac.cdlib.org/ark:/13030/hb8z09p3rp/?order=1&brand=oac4.

1877b Life of a Rancher. *The Historical Society of Southern California Quarterly* 32(3) (September, 1950):185-236. https://www.jstor.org/stable/41168259

Luomala, Katharine

1978 Tipai-Ipai. In: *Handbook of North American Indians*, edited by Robert F. Heizer 8:592-609. Smithsonian Institution, Washington D.C.

Machado Alipaz, Juana

1878 Times Gone By in Alta California: Recollections of Señora Doña Juana Machado de Ridington (Wrington), Bancroft Library, 1878. In: *Testimonios: Early California through the Eyes of Women, 1815-1848*. Translated with introduction and commentary by Rose Marie Beebe and Robert M. Senkewicz, pp. 119-144. Bancroft Library, University of California Berkeley 2006.

MacLachlan, Colin M.

2015 *Imperialism and the Origins of Mexican Culture*. Harvard University Press, Cambridge Massachusetts.

Maria Ester Account Book

1829-1831 Invoices of merchandise shipped and consigned to John A. C. Holmes for sale in California, 1827-29, and accounts with crew members on the brig, Maria Esther, 1829-31. Thomas Oliver Larkin Account Books, BANC MSS C-E 1-25, Volume C-E 1, The Bancroft Library, University of California, Berkeley.

Marquez, Zaira

2020 An Analysis of the Fish Remains from the San Diego Presidio Chapel. San Diego, California. Manuscript on File at San Diego Zooarchaeology Laboratory, San Diego Museum of Natural History.

Marquiena, Rubi

2016 Xilonen, Cocina Prehispánica (La Cocina de Rubi Marquiena), Capítulo 01 – 12. Cooking demonstrations with traditional Mexicn folk ceramic vessels. https://www.youtube.com/watch?v=MjTbCi7gzY0&list=PLeIASCZ53iJGcwt2Hnz7DQxawh5v2ZYLq&index=1Marquez, Zaria

Marston, George W.

1942 Presidio Park: A Statement of George W. Marston in 1942, by Gerald A. Shepherd. *The Journal of San Diego History* 32(2):103-115.

Mason, W. M.

1978 The Garrisons of San Diego Presidio: 1770-1794. *Journal of San Diego History* 24(4):399-424.

1998 *The Census of 1790: A Demographic History of Colonial California*. Ballena Press, Menlo Park, California.

May, Ronald V.

2005 *Archaeology Field Report on the Search for Fort Guijarros*. The San Diego State University Occasional Archaeological Papers, San Diego State University, San Diego. https://soap.sdsu.edu/Volume1/FtGuijarrosSearch/search.htm.

McGrew, Clarence
1922 *City of San Diego and San Diego County: The Birthplace of California*, Vol. I. American Historical Society, Chicago and New York.

McGroarty, John Steven
1910 *The Harbor of the Sun: the History and Romance of San Diego*. Press of the West Coast Magazine, San Diego.

McMurtrie, William
1856 Sketch of the Mouth of the San Diego River from Presidio Hill. Bancroft Library, Berkeley. Call Number: William B. McMurtrie drawings and watercolors 185- BANC PIC 1963.002:1200-1299--A-AX? [San Diego, California] [1856] BANC PIC 1963.002:1203—A. Volume/Container Series groupings William B. McMurtrie drawings and watercolors. View from hills looking over well-established settlement. Ruins in foreground.

Menzies, Archibald
1793 Menzies' California Journal, edited by Alice Eastwood Source. *California Historical Society Quarterly* 2(4):265-340 (Jan. 1924). https://www.jstor.org/stable/25177726.

Miller, Robert Ryal
2001 *A Yankee Smuggler on the Spanish California Coast: George Washington Eayrs and the Ship Mercury*. Santa Barbara Trust for Historic Preservation, Santa Barbara.

Mindling, Eric
2015 *Baro y Fuego: El Arte de la Alfarería en Oaxaca*. Bom Dia, Boa Tarde, Boa Noite, Berlin.

Miranda, Gloria E.
1988 Racial and Cultural Dimensions of "Gente de Razón" Status in Spanish and Mexican California. *Southern California Quarterly* 70(3):265-278. http://www.jstor.org/stable/41171310 .Accessed: 28/09/2014 12:03

Mogilner, Geoffrey
2016 Cosoy: Birthplace of New California. *The Journal of San Diego History* (62) 2:131-158. https://sandiegohistory.org/wp-content/uploads/2016/04/v62-2_Mogilner.pdf

Monroy, Douglas
1990 *Thrown among strangers: the Making of Mexican Culture in Frontier California*. University of California Press, Berkeley.

Moorhead, Max L.
1969 The Soldado de Cuera: Stalwart of the Spanish Borderlands. *Journal of the West* 49(January):38-55.

1975 *The Presidio: Bastion of the Spanish Borderlands*. University of Oklahoma Press, Norman.

Morrison, Samuel Eliot.
1921a Boston Traders in Hawaiian Islands, 1789-1823. *The Washington Historical Quarterly* 12(3):166-201. Stable URL: https://www.jstor.org/stable/40473740

Morton, Paula E
2014 *Tortillas: A Cultural History*: University of New Mexico Press, Albuquerque.

Ness, Kathryn L.
2015 Classification Systems with a Plot: Vessel Forms and Ceramic Typologies in the Spanish Atlantic. *International Journal of Historical Archaeology* 19(2):309–333.

2017 *Setting the Table, Ceramics, DInning, and Cultural Exchanges in Andalucía and La Florida*. University of Florida Press, Gainsville.

Neuerburg, Norman
1980 The Angel on the Cloud, or "Anglo-American Myopia" Revisited: A Discussion of the Writings of James L. Nolan. *Southern California Quarterly* 62(1):1-48. https://www.jstor.org/stable/41170854.

Newman, Elizabeth Terese
2010 Butchers and Shamans: Zooarchaeology at a Central Mexican Hacienda. *Historical Archaeology* 44(2):35–50.

2013 Ceramics Type Collection San Miguel Acocotla, Atlixco, Puebla, Mexico. Copyright © 2013 Elizabeth Terese Newman. http://www.elizabethnewman.org/assets/acocotla-ceramics-rev-jan-2014.pdf

Nolan, James Lee
1978 *Discovery of the Lost Art Treasures of California's First Mission*. Copley Press, San Diego.

Oakley, Eric
2000 "Very Dull & No Business Doing:" A Reassessment of the American Sandalwood Trade between Hawaii and China, 1790-1832. *Configurações* 26:63-81. doi: https://doi.org/10.4000/configuracoes.10036

Officer, James E.
1987 *Hispanic Arizona, 1536-1856*. University of Arizona Press, Tucson.

Ogden, Adele
1927 Hides and Tallow: McCulloch, Hartnell and Company 1822-1828. *California Historical Society Quarterly* 6(3):254-264. Stable URL: http://www.jstor.org/stable/25177893

1929 Boston Hide Droghers along California Shores. *California Historical Society Quarterly* 8(4):289-305. Stable URL: https://www.jstor.org/stable/25178032

1941 *The California Sea Otter Trade, 1784–1848*. University of California Publications in History, Volume 26. University of California Press, Berkeley.

Ogden, Adele, and Alfred Robinson
1944 Alfred Robinson, New England Merchant in Mexican California. *California Historical Society Quarterly* 23(3):193-218. Stable URL: https://www.jstor.org/stable/25155855

Padilla-Corona, Antonio
1997 The Urban Layout of Old Town San Diego. *The Journal of San Diego History* (43)3:176-187.

Parker and Parker
1872 (Photograph of) Kosa'aay Site Below Presido Hill Before 1872. Racine and Laramie Collection. http://www.cosoy.org/.

Parsons, Elsie Clews
1936 *Mitla: Town of Souls and Other Zaptco-Speaking Pueblos of Oaxaca, Mexico*. University of Chicago Press, Chicago.

Pavao-Zuckerman, Barnet
2017 Missions, Livestock, and Economic Transformations in the Pimería Alta. In: *New Mexico and the Pimería Alta: The Colonial Period in the American Southwest*, edited by John G. Douglass and William M. Graves, pp. 289-310. University Press of Colorado, Boulder.

Peelo, Sarah
2014 The Mineralogy of California Plainwares: Technology and Social Reproduction in the California Spanish Missions. In: *Early Hispanic California: Craft, Economy, and Trade on the Frontier of New Spain,* edited by Russell K. Skowronek, M. James Blackman, and Ronald L. Bishop, pp. 152-169. University Press of Florida, Gainesville.

Pérez, Eulalia
1877a An Old Woman and her Recollections, Dictated by Doña Eulalia Pérez, Who Lives at Mission San Gabriel and the Advanced Age of 139 Years. To D. Thomás Savage for the Bancroft Library, 1877, MS Bancroft Library. https://oac.cdlib.org/ark:/13030/hb20000502/?brand=oac4.

1877b An Old Woman and her Recollections, Dictated by Doña Eulalia Pérez, Who Lives at Mission San Gabriel and the Advanced Age of 139 Years. To D. Thomás Savage for the Bancroft Library, 1877. In: *Testimonios: Early California through the Eyes of Women, 1815-1848*. Translated with introduction and commentary by Rose Marie Beebe and Robert M. Senkewicz, pp. 95-118. Bancroft Library, University of California Berkeley 2006.

Perissinotto, Giorgio (editor)
1998 *Documenting Everyday Life in Early Spanish California: The Santa Barbara Presidio Memorias y Facturas, 1779-1810*. Santa Barbara Trust for Historic Preservation, Santa Barbara, California.

Phelps, William Dane
1840 *Alta California, 1840-1842: The Journal and Observations of William Dane Phelps, Master of the Ship "Alert*." Published 1983, edited and Introduction by Briton Cooper Busch. Western Lands and Water Series, 13, The Arthur H. Clark Company, Glendale, California.

Pico, Maria Inocenta
1878 Things about California as told to Thomas Savage in Avila and San Luis Obispo by Dona Maria Inocenta Pico. Widow of Don Miguel Avila, 1878 Bancroft Library. In: *Testimonios: Early California through the Eyes of Women, 1815-1848*. Translated with introduction and commentary by Rose Marie Beebe and Robert M. Senkewicz, pp. 297-320. Bancroft Library, University of California Berkeley 2006.

Pilcher, Jeffrey M.
1996 Tamales or Timbales: Cuisine and the Formation of Mexican National Identity, 1821-1911. *The Americas*, 53(2):193-216. Cambridge University Press. Stable URL: https://www.jstor.org/stable/1007616

1998 *¡Que Vivan Los Tamales!: Food and the Making of Mexican Identity*. University of New Mexico Press, Albuquerque.

Pinedo, Encarnación
1898 *El Cocinero Espanol: Obra que Contiene mil Resetas Valiosas y Utiies para Cocinr con Facilidad en Diferente Estilos.* San Francisco, California. https://content.scu.edu/digital/collection/pinedo/id/1403

2003 *Encarnación's Kitchen: Mexican Recipies from Nineteenth-Century California. Selections from Encarnación Pinedo's El Cocinero Espanol*. Edited and Translated by Dan Strehl with an essay by Victor Valle. University of California Press, Berkeley.

Popper, Virginia S.
2016 Change and Persistence: Mission Neophyte Foodways at Selected Colonial Alta California Institutions. *Journal of California and Great Basin Anthropology* 36(1):5-25. Stable URL: https://www.jstor.org/stable/45155062

Pourade, Richard F.
1961 *Time of the Bells: The History of San Diego*. Union Tribune Publishing Company, San Diego.

1963 *The History of San Diego: The Silver Dons*. Union-Tribune Publishing Company. San Diego.

Presidio de San Diego Memorias
1782- Copies of Memorias for the San Diego Presidio, San Diego History Center, San
1802 Diego.

Quiróz, Enriqueta
2014 Comer en Nueva España. Privilegios y Pesares de la Sociedad en el SIglo XVIII. *Revista Historia Y Memoria*, (8):19-58. Redalyc. https://www.redalyc.org/articulo.oa?id=325131004002

Redfield, Margaret Park
1929 Notes on the Cookery of Tepoztlan, Morelos. *The Journal of American Folklore,* 42(164):167-196. http://www.jstor.com/stable/534920

Redfield, Robert
1930 *Tepoztlan, a Mexican Village: a Study of Folk Life.* The University of Chicago Press, Chicago, Ill.

Reynoso Ramos, Citalli
2004 Consumer Behavior and Foodways in Colonial Mexico: Archaeological Case Studies Comparing Puebla and Cholula. Master's thesis, University of Calgary.

2015 Biografía Cultural de la Cocina y Sus Utensilos: La Especialización del Buen Comer y el Buen Beber a Través De La Basura Arqueológia en Puebla Durante Los Siglos XVIII – XIX. Tesis Para Optar por el Grado De: Doctora en Antropología, Universidad Nacional Autónoma De México, México, D.F.

Ritchie, Cal
1974 San Diego Presidio Chapel Excavations Original Drawing done by Cal Ritchie in 1974, Updated by Richard L. Carrico and Dr. Paul H. Ezell in 1980. Ms. 71 Presidio Park Collection, San Diego History Center Research Archives, San Diego.

Rivera, Julius
1978 *Latin America: A Sociocultural Interpretation*. Irvington Publishers, New York.

Robinson, Alfred
1846 *Life in California During a Residence of Several Years in That Territory ….* Wiley & Putman, New York.

Rodriguez, Manuel
1798 Provincia de California, Jurisdicion de San Diego . . . Padron de fin de este Año de 1798 . . .. Ms. Presdio Documents File, San Diego History Center Research Archives, San Diego. Also printed in Pourade 1961:84.

Roske, Ralph
1968 *Everyman's Eden; a History of California*. Macmillan and Co., New York.

Sanchez, Nellie Van de Grift
1929 *Spanish Aracdia*. Powell Publishing Company, Los Angeles. Reprinted by Arno Press, New York 1976.

Sandels, G.M. Waseurtz af
1843 *A Sojourn in California by the King's Orphan: The Travels and Sketches of G.M. Waseurtz af Sandels, a Swedish Gentleman who Visited California in 1842-1843*. Edited and introduction by Helen Putnam Van Sicklen. Printed for the Book Club of California in arrangement with the Society of California Pioneers, Grabhorn Press, San Francisco, 1945.

San Diego Evening Tribune
1913- Various Issues of the *San Diego Evening Tribune* cited in text. On line at
1937 Geneology Bank: https://www.genealogybank.com/. Microfilm copies at the San Diego History Center Research Archives, San Diego.

San Diego History Center
2018 San Diego Presidio 1790 – Point Map. https://www.presidiosd.org/point-map/.

San Diego History Center Photographs
1872- Photographs from the Collections of the San Diego History Center cited in text by 1900 accession number. San Diego History Center Photographs Collection, San Diego.

San Diego Union
1874- Various Issues of the *San Diego Union* and *Weekly Union* cited in text. On line 1938 at Geneology Bank: https://www.genealogybank.com/. Microfilm copies at the San Diego History Center Research Archives, San Diego.

Sasson, Aharon
2011 Faunal Remains from the Carrillo Ranch House and Warner's Trading Post. In: *Two Forks in the Road: Test Excavations of the Ranch House at Warner's Ranch (Warner – Carrillo Ranch House) and Site of Jonathan T. Warner's House and Store*, by Stephen R. Van Wormer and Susan D. Walter, pp. 30-58. Vol. III. Walter Enterprises, Chula Vista, California. Report submitted to Vista Irrigation District, Vista California. http://sohosandiego.org/warners/archeology.htm, https://www.researchgate.net/publication/334119113

2014 *Faunal Remains from the Central Fountain Area at Mission San Diego De Alcalá (CA-SDI-35), San Diego, California*. Report on File at Mission Basilica San Diego de Alcalá.

Sasson, Aharon and Susan Arter
2020 Earliest Utilization of Chicken in Upper California: The Zooarchaeology of Avian Remains from the San Diego Royal Presidio. *American Antiquity* 85(3):516-534. doi:10.1017/aaq.2020.27.

Schuetz-Miller, Mardith K.
1994 *Building and Builders in Hispanic California 1769-1850*. Southwestern Mission Research Center, Tucson, Arizona.

Shinn, Charles Howard
1891 Pioneer Spanish Families in California. *The Century Magazine*, VXL (XLI), New Series (XIX):377-388.

Silliman, Stephen W.
2004 *Lost Laborers in Colonial California: Native Americans and the Archaeology of Rancho Petaluma*. University of Arizona Press, Tucson.

Simons, Marc and Frank Turley
2007 *Southwestern Colonial Ironwork: The Spanish Blacksmithing Tradition*. Sunstone Press, Santa Fe, New Mexico.

Skowronik , Russell K., M. James Blackman, and Ronald L. Bishop.
2014 *Ceramic Production in Early Hispanic California: Craft, Economy, and Trade on the Frontier of New Spain*. University of Florida Press, Gainesville.

Smith, Emily M., Jennifer A. Lucido, and Scott E. Lydon
2017 Flora, Fauna, and Food Changing Dietary Patterns at The Spanish Royal Presidio of Monterey, 1770-1848. *Boletín* 33(1):146-169. https://escholarship.org/uc/item/078652xg

Smythe, William E.
1908 *History of San Diego*. The History Company, San Diego, California.

Steinbeck, John
1941 *The Forgotten Village with 136 Photographs From the Film of the Same Name by Rosa Kline and Alexander Hackensmid*. The Viking Press, New York. See movie at https://www.youtube.com/watch?v=0Br7qf0m14k

Sterns, Able
1861 Quoted in Cleland 1969, page 62, note 33: Sterns to Col. I.B. West, Oct 7, 1861, Sterns Manuscript.

Strehl, Dan
2003 In Encarnación's Kitchen. In: *Encarnación's Kitchen: Mexican Recipies from Nineteenth-Century California. Selections from Encarnación Pinedo's El Cocinero Espanol.* Edited and Translated by Dan Strehl with an essay by Victor Valle, pp. 19-40. University of California Press, Berkeley.

Super, John C.
1988 *Food, Conquest and Colonization in Sixteenth-Century Spanish America.* University of New Mexico Press, Albuquerque.

Thiel, J. Homer
2017 Life in Tucson, on the Northern Frontier of the Pimería Alta. In: *New Mexico and the Pimería Alta: The Colonial Period in the American Southwest*, edited by John G. Douglass and William M. Graves, pp 311-330. University Press of Colorado, Boulder.

Thompson, Francis A.
1836 Letter to Alpheus B. Thompson from San Diego California, May 5, 1836. Reprinted in an edition of *Two Year Before the Mast* published in 1964 by The Ward Ritchie Press, Los Angeles. Vol. 2, p. 398.

Thurman, Michael Edward
1963 The Naval Department of San Blas: 1767-1797. PhD dissertation, University of Southern California.

1967 *The Naval Department of San Blas; New Spain's Bastion for Alta California and Nootka, 1767 to 1789*. Spain in The West, 11. The Arthur H. Clark Company, Glendale, California.

Trejo Barajas, Dení
2006a El Puerto de San Blas, el Contrabando y el Inicio de la Internacionalización del Comercio en el Pacífico Noroeste. *Tzintzun: Revista de Estudios Históricos* 44 (julio-diciembre):11-48. http://www.redalyc.org/articulo.oa?id=89804402

2006b Implicaciones del Comercio por el Puerto de San Blas Durante la Guerra de Independencia. *Revista de Indias*, LXVI (238): 711-736. https://pdfs.semanticscholar.org/1925/ad129e6905ca050973c794270d440406a3d8.pdf

2014 Pugna por el Libre Comercio en las Postrimerías del Virreinato: La Nueva Galicia y las Provincias Internas Frente a los Comerciantes de la Ciudad de México, 1811-1818. *Estudios de Historia Novohispana* 51(julio-diciembre):107-130. https://doi.org/10.22201/iih.24486922e.2014.51.51426

Trejo Barajas, Dení and Maria Christine Duggan
2018 San Blas and the Californias. *California's Maritime Camino Real, Mains'l Haul A Journal of Pacific Maritime History* 54:28-48. Maritime Museum of San Diego. https://www.academia.edu/38076398/28_47_San_Blas_and_the_Californias_00000002_pdf

Trent, Heidi and Joey Seymour
2010 Examining California's First Palm Tree: The Serra Palm. *Journal of San Diego History* 53(3):105-120.

Twiss, Katheryn C.
2007 We Are What We Eat. In: *The Archaeology of Food and Identity*, Katheryn C Twiss editor, pp. 1-15. Occasional Paper no. 34, Center for Archaeological Investigations, Southern Illinois, University, Carbondale, Illinois.

Velasco, José Francisco
1850 *Noticias Estadisticas del Estado de Sonora Acompañadas de Ligeras Reflecsiones*. Imprenta de Ignacio Cumplido, Mexico. https://books.google.com/books/about/Noticias_estadisticas_del_estado_de_Sono.html?i d=o_I-AAAAYAAJ

Vallejo, Francisca Benicia Carrillo
1844 Quoted in Torres, Manuel, 1876: Peripecias de la vida Californiana: 1843-1850. Dictation, recorded by Henry Cerruti, San Francisco, April 27, 1876. MS, Bancroft Library, BANC MSS C-D 15 (Bneg 92:10), pp. 52-53. On line Archives of California: https://oac.cdlib.org/ark:/13030/hb1r29n9f0/?order=1&brand=oac4

Vallejo, Mariano Guadalupe
1875 Recuerdos Históricos y Personales . . . . Published as *Recuerdos:Historical and Personal Remembrances Relating to Alta California, 1769 – 1849*, in Two Volumes. Edited and Translated by Rose Marie Beebe and Robert M. Sienkiewicz. University of Oklahoma Press, Norman (2023).

Vancouver, George
1801 *A Voyage of Discovery to The North Pacific Ocean, and Around The World . . ., Vol. IV*. John Stockdale, Piccadilly, London. https://ia800205.us.archive.org/10/items/cihm_42062/cihm_42062.pdf.

Van Wormer, Stephen R. and Susan D. Walter
2012 A Mexican Californio Kitchen: Archeological Excavation of Room 105 in the Casa de Bandini, San Diego, California. *Proceedings of the Society for California Archaeology* 26:177-136. https://www.scahome.org/publications/proceedings/Proceedings.26VanWormer.pdf https://www.researchgate.net/profile/Stephen_Van_Wormer/publication/326477580

Velasco, José Francisco
1850 *Noticias Estadisticas del Estado de Sonora Acompañadas de Ligeras Reflecsiones*. Imprenta de Ignacio Cumplido, Mexico. https://books.google.com/books/about/Noticias_estadisticas_del_estado_de_Sono.html?i d=o_I-AAAAYAAJ

Villa de Prezelski, Carmen
1996 Women, Faith, and Family. In: *The Pimería Alta*, edited by James E. Officer, Mardith Schuetz-Miller, and Bernard L. Fontana, pp. 105-109. The Southwest Mission Research Center, Tucson.

Vischer, Edward
1874 Photograph of a Drawing by Edward Vischer Depicting the Ruins of the Presidio of San Diego Outside of Old San Diego at the Entrance to Mission Valley. Public Domain, University of Southern California Libraries and California Historical Society. Digitally reproduced by the USC Digital Library. http://doi.org/10.25549/chs-m8709 .

Voss, Barbara L.
2002 The Archaeology of El Presidio de San Francisco: Culture Contact, Gender, and Ethnicity in a Spanish-Colonial Military Community. PhD dissertation, University of California, Berkeley.

2005 From *Casta* to *Californio*: Social Identity and the Archaeology of Culture Contact. *American Anthropologist*, 107(3):461–474. https://www.jstor.org/stable/3567030

2008 *The Archaeology of Ethnogenesis: Race and Sexuality in Colonial San Francisco*. University of California Press, Berkeley.

2012 Status and Ceramics in Spanish Colonial Archaeology. *Historical Archaeology*. 46(2):39-54. https://doi.org/10.1007/BF03377315

2015 *The Archaeology of Ethnogenesis: Race And Sexuality in Colonial San Francisco*. Gainesville: University Press of Florida. Revision of the 2008 Edition.

Webb, Edith Buckland
1952 *Indian Life at the Old Missions*. W.F. Lewis, Los Angeles. Republished 1982 by University of Nebraska Press, Lincoln.

Weber, David J.
1992 *The Spanish Frontier in North America*. Yale University Press, New Haven.

2005 *Bárbaros: Spaniards and Their Savages in the Age of Enlightenment*. Yale Univiversity Press, New Haven.

West, Robert C.
1993 *Sonora Its Geographical Personality*. University of Texas Press, Austin.

Whetten, Nathan L.
1948 *Rural Mexico*. University of Chicago Press, Chicago.

Whitaker, Irwin and Emily Whitaker
1978 *A Potter's Mexico*. University of New Mexico Press, Albuquerque.

Whitehead, John
1992 Hawaìi: The First and Last Far West? *Western Historical Quarterly*, 23 (2): 153-177. Stable URL: https://www.jstor.org/stable/970443

Whitehead, Richard
1983 Alta California's Four Fortresses. *Southern California Quarterly* 65 (1):67-94. http://www.jstor.org/stable/41171020.

Willard, Charles Dwight
1901 The *Herald's History of Los Angeles City*. Kingsley-Barnes & Neuner Co, Los Angeles.

Williams, Jack S.
1992 The Archaeology of Underdevelopment and the Military Frontier of Northern New Spain. *Historical Archaeology* 26(1):7–21.

1996 *The San Diego Presidio Archaeology Project 1994-1996: A Summary Report Prepared for the San Diego Historical Society and the City of San Diego*. The Center for Spanish Colonial Archaeology, San Diego.

1997a Adobe Ramparts: Archaeology and the Evolution of the Presidio of San Diego. *Pacific Coast Archaeological Society Quarterly,* 33(4):29–56.

1997b *A Tour Guide's Handbook for the Royal Presidio of San Diego*. The Center for Spanish Colonial Archaeology, San Diego.

2003 Vidas Perdidas: The Forgotten Lives of the Women of San Diego Presidio. Paper Presented at the California Mission Studies Association Annual Meeting 2003. Copy on file Collections Management, Department of Anthropology, San Diego State University.

2004 San Diego Presidio: A Vanished Military Community of Upper California. *Historical Archaeology* 38(3):121–134.

2014 Reconstructing Mayólica Use Patterns from Colonial Sites in Southern California. In: *Ceramic Production in Early Hispanic California: Craft, Economy, and Trade on the Frontier of New Spain*, by Russell K. Skowronik, M. James Blackman, and Ronald L. Bishop, pp 301-313. University of Florida Press, Gainesville.

Williams, Jack and Anita Cohen-Williams
1997 *The Center for Spanish Colonial Archaaeology Handbook*. The Center for Spanish Colonial Archaeology, San Diego.

Williams, Jack and Thomas L. Davis
2003 *Soldiers and Their Families of the California Mission Frontier*. Rosen Publishng Group, New York.

2004 *Townspeople and Ranchers of the California Mission Frontier*. Rosen Publishng Group, New York.

2006 *The California Presidios*. Mason Crest, Folcroft, Pennstlvania.

Williams, Mary Floyd
1922 Mission, Presidio and Pueblo: Notes on California Local Institutions under Spain and Mexico. *California Historical Society Quarterly* 1(1): 23-35. http://www.jstor.org/stable/25613566.

Wills 2015, 12
Zúñiga 1790,California Mission Documents (CMD) 1475 San Luis Rey 9/3/1817)., 53

Zúñiga, José de
1790 Letter February 1790 to Doña María Barbara Martinez, translated, paraphrased, and published by Theodore H. Hittell. In: *History of California*, Vol. I. N.J. Stone and Co., San Francisco, 1897:536-537.
https://archive.org/details/historyofcalifor01hitt/page/n6/mode/2up?ref=ol&view=theater.