

Two Californias, Three Religious Orders and Fifty Missions: A Comparison of the Missionary Systems of Baja and Alta California

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Abstract

The two Californias, Baja and Alta, were the setting for the ambitious establishment of a chain of missions by three missionary orders during the Spanish Colonial Period (1697–1821). There appear to be systemic and individual differences in the success of the missions in terms of neophyte populations, agricultural production, and building programs. These differences are examined in terms of general environmental richness, care in selection of location, native social organization, political relationships with secular authorities, differences among the missionary orders, and personalities of the individual padres. The Jesuit missions of southern and central Baja California (1697–1768), the Dominican missions of northern Baja California (1772–1850), and the Franciscan missions of Alta California (1769–1834) are compared.

Abstracto

Las dos Californias, Baja y Alta, fueron dispuestas por una cadena de misiones por tres órdenes misioneras durante el período de la colonia española (1697-1821). Allí parece ser sistemático e individual diferencias en el éxito de las misiones en términos de poblaciones neofáticas, producción agrícola, y construcción de programas. Estas diferencias son examinadas en términos generales de la riqueza del medio ambiente, cuidado en la selección de las localidades, organización social nativa, relaciones políticas con autoridades seculares, diferencias sobre órdenes misioneras y personalidades individuales de los padres. Las misiones jesuitas del sur y centro de Baja California (1697-1768), las misiones dominicanas del norte de Baja California (1772-1850), y las misiones franciscanas de Alta California (1769-1834) son comparadas.

Introduction

The state of California (Alta California) and the peninsula of Baja California, including the modern Mexican states of Baja California and Baja California Sur, were the focus of a remarkable process of missionization and acculturation during the Spanish colonial period. Beginning in 1697, the Jesuits established the first permanent mission establishment at Loreto. Expanding southward and northward from this base, they established a contiguous chain of missions among the native population in all but the far north of the peninsula. Following the expulsion of the Jesuits in 1767, the old missions of the peninsula were briefly under the authority of the Franciscans, who also established an additional mission at San Fernando

Velicatá. In 1768, the Franciscans were given the responsibility of missionizing Alta California and in 1772, they relinquished the peninsula of Baja California to the Dominicans. The Dominicans completed the mission chain in northern Baja California and rebuilt many of the former Jesuit missions farther south in stone.

It may be useful here to define the meaning of the term *mission* in this paper. It includes much more than a single building for worship. The church that the public often sees today is usually the only surviving component of the mission. *Reducción* is more properly the type of social system that characterized most missions. This was the concentration of a scattered population at one location to facilitate conversion and training. Not all missions were reductions. Missions San Juan Capistrano, San Luis Rey, and San Diego had more dispersed native populations and padres that visited backcountry chapels regularly to perform religious rites. For purposes of this study, mission is used in two senses—first as the entire community of inhabitants, and secondly as the entire complex of buildings, structures and resources associated with the community. Missions included church, housing, shops, corrals, fields, pastures and outlying ranchos.

The purpose of this study is to provide a comparison of the missionary programs of the three religious orders and to examine the various variables that effected material success. Due to the archaeological and geographical focus of this study, material success will be measured by permanency of occupation, size of neophyte population, agricultural production, and livestock herds. The nature of the physical environment, the composition of the native population, the practices of the religious orders and their relationship to government authorities, and even the individual personalities of the missionaries were determining factors. As we celebrate the 300th year of missions in California, we hope that this paper will stimulate additional studies on the subject of Spanish colonial archaeology in all the Californias.

The Physical Environment

Baja California

The Baja California peninsula is the fourth longest in the world, extending a length of 806 miles (1,300 km) from north to south and ranging in width from 144 miles (230 km) to 28 miles (45 km) (Fig. 1). Baja California, like most of coastal Alta California, is part of the North Pacific Plate, a land mass moving northward at a rate of between one and two inches per year. This tectonic movement has created the Sea of Cortez (Gulf of California) that separates the peninsula from the mainland.

The peninsula is formed by a series of fault-block mountain ranges forming a spine that dips gradually to the west and more abruptly to the east. Major ranges include the Sierra Juárez, the Sierra de San Pedro Mártir, the Sierra de la Giganta, and the Sierra de la Laguna. Sedimentary plains have formed from erosion from the mountains or from uplifted marine deposits. There are some volcanic deposits, notably near San Ignacio (Cummings 1992:1–11).

Baja California is a generally arid land with a great deal of local variation in rainfall. The northern region, like Alta California, receives rain from December through April. At eleva-

tions reaching 10,154 feet (3,095 m), the San Pedro Mártir Range has a winter snowpack of three to four feet. The central desert is dry most of the year, as it is out of range of both northern and southern storm tracks, though it does receive a great deal of Pacific fog. The southern region of the peninsula receives rain principally from August to November in the form of tropical storms. The Sierra de la Laguna may have 40 inches (100 cm) of rain annually.

Temperatures in Baja California are generally warmer to the east, south and at lower elevations. Cooler temperatures predominate to the west, north and at higher elevations. In general, the Pacific coast experiences lower temperatures than other parts of the peninsula. Special Gulf weather conditions include *coromuels*, afternoon offshore breezes in summer and fall, *cordonoyos*, fierce brief summer storms, and *chubascos*, major tropical storms at the Cape.

Sixty-five percent of the Baja California peninsula receives less than 10 inches (25 cm) of rain per year. This aridity is modified by high elevations and surrounding seas. The San Felipe

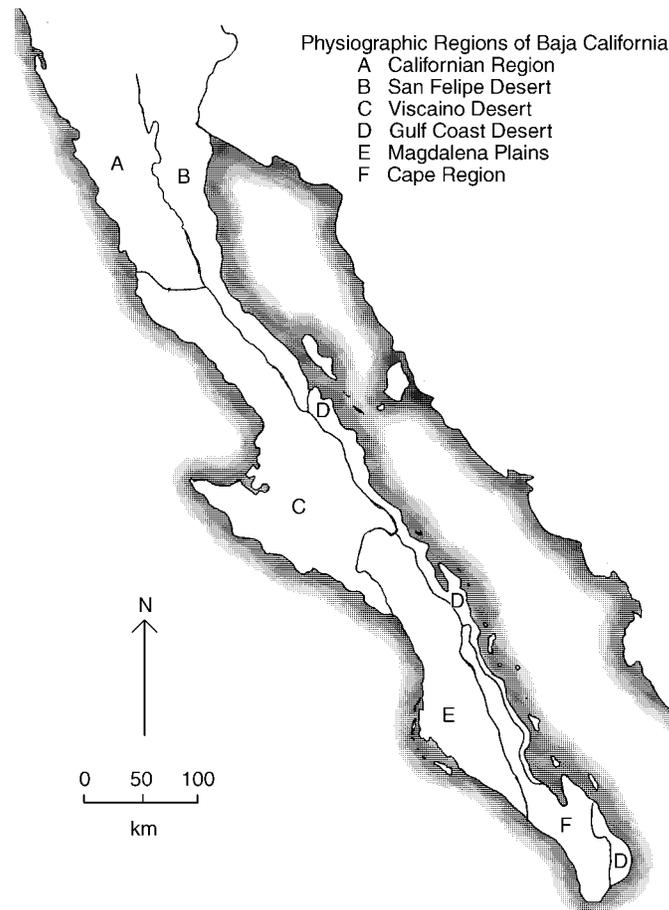


Fig. 1. The Physiographic Regions of Baja California

Desert of northern Baja California is similar to the Mojave Desert of the United States. It consists of sand dunes and salt flats receiving less than 2 inches (5 cm) of rain per year and supporting creosote bush (*Larrea tridentata*).

The Gulf Coast Desert on the eastern side of the southern and central part of the peninsula gets higher rainfall due to higher elevations and tropical storms. It contains some perennial streams. The vegetation is classified as part of the Sonoran Life-zones. Acacias (*Acacia spp.*) inland and mangroves (swamp community, including *Rhizophora spp.*) at the coast are common.

The Vizcaino Desert occupies the Pacific side of the central peninsula. It also receives little rainfall, but morning ocean fog supports yucca (*Yucca spp.*), cirio (*Idria columnaris*), agave (*Agave spp.*), and cholla (*Opuntia spp.*).

The Magdalena Plains at the southwestern tip of the peninsula receives still more rain and contains mangroves, introduced date palm (*Phoenix dactylifera*), palo verde (*Cercidium spp.*), palo blanco (*Lysiloma candida*) and mesquite (*Prosopis spp.*).

The California Region in the northwest portion of the peninsula is an extension of the Peninsular Ranges of San Diego County. The higher elevations contain conifer forests, while

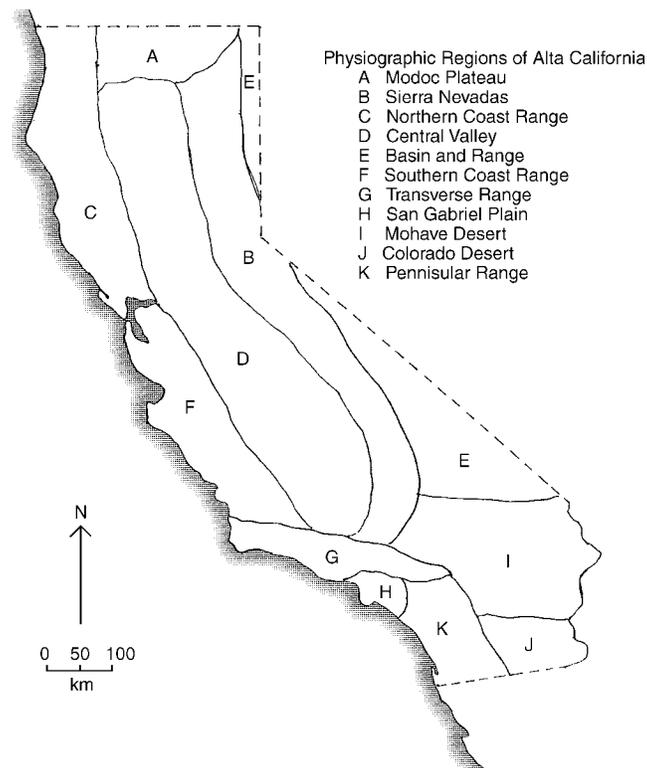


Fig. 2. Physiographic Regions of Alta California

piñon–juniper and oak woodlands predominate at intermediate elevations. Chaparral of manzanita (*Arctostaphylos spp.*), sage (*Artemisia spp.*), and scrub oak (*Quercus spp.*) is found below 900 meters, with native palms in canyons. Along the Pacific, fog supports a coastal scrub community consisting of chamise (*Adenostoma fasciculatum*), jojoba (*Simmondsia chinensis*), cholla, barrel cactus (*Ferocactus spp.*), agave and jimson weed (*Datura metaloides*).

The Cape region receives relatively heavy rainfall and combines traits of arid lands and tropical forests. Several layers of tree canopies are mixed with succulents like the cardon (*Pachycereus pecten-aboriginum*). The higher elevations contain madrone (*Arbutus spp.*), cape oak (*Quercus spp.*), and piñon pine (*Pinus edulis*).

Coastal wetlands, located at various spots around the peninsula include salt marshes and mangrove swamps. The microenvironments provide special food sources to the native animal populations (Cummings 1992:14–33).

Taken as a whole, the physical environment is more harsh than that of coastal Alta California. Baja California generally has higher average temperatures, receives less annual rainfall and consequently has sparser vegetation.

Alta California

The culture area of California, as defined by Kroeber (1925) is an area of coast and valleys, excluding the desert regions of the Colorado River, Mojave Desert and Basin & Range Province (Figure 2). As such, it is somewhat smaller than the modern political boundaries of the state. It is characterized by two great parallel mountain ranges running north to south with a 500-mile-long central valley separating them, which drains into the San Francisco Bay. The more westerly Coast Range is a complex geological formation reaching 8,900 feet (2,700 m) in elevation and trapping some of the moisture moving in from the Pacific Ocean. This factor creates a rain shadow effect in the Central Valley. The easterly Sierra Nevada Range is a much higher formation, reaching 14,000 feet (4300 m) and trapping the remaining maritime moisture. The two ranges join at the northern and southern ends of the Central Valley.

A Transverse Range of 10,000 feet (3000 m) in elevation extends west to east from Point Conception to San Bernardino, creating the mild sheltered coastal environment of the Santa Barbara Channel. Further south, the Peninsular Ranges continue in a north to south direction from San Bernardino to the Mexican border, separating the coastal plain from the Mojave Desert.

Rainfall is generally heavier to the north and west of California, as prevailing storms approach from the northwest over the Pacific Ocean. Rainfall is usually confined to the months between December and April, with summer drought typical of the remainder of the year. California is an area of remarkable environmental diversity. Small zones with different climate, vegetation and animal life abound over very short distances. This variation is especially apparent on an east-to-west transect. Tribal groups occupying several of these environmental niches were fortunate enough to have a year-round resource base with careful scheduling of seasonal movement.

The Native Population

Baja California

According to radiocarbon dates, Baja California has been occupied by humans for at least 7,000 years. The peninsula formed a geographical cul-de-sac that absorbed successive waves of immigrants from the north. These small migratory bands lived by hunting, fishing and collecting edible plants. With time, each group adapted to its own environmental zone (Crosby 1984).

At the time of missionization, the peninsula south of Loreto was inhabited by the Guaycurá, who included the Guaycurá proper near Loreto, the Huchiti of La Paz, and the Pericu of the Cape region (Figure 3). Due to higher rainfall in the region, the Guaycurá lived in larger bands by hunting small game or gathering shellfish, while the women gathered roots, seeds and fruits. Insects were also eaten. They used canoes, hardwood arrows, blowguns, and buried their dead. Under the loose control of headmen, Guaycurá bands spoke various dialects and frequently fought with each other over resources. Prior to 1697, they had experienced nearly 200 years of sporadic European contact by sea, much of it hostile. The Guaycurá proved to be the most resistant and rebellious of native groups to the missionaries for this reason (Baegert 1952:150–156; Taraval 1931).

The Cochimi lived in the more arid environment of the central half of the peninsula. Thus, they were more nomadic and lived in smaller bands to adjust to scarcer resources. Their migrations were not random, but followed a regular seasonal round, taking advantage of the appropriate resources at the time and place that they became available. The fruit of the pitahaya cactus was an important food resource, and settlement was always dictated by the availability of fresh water. The Cochimi cremated their dead. As with other people in harsh environments, they appear to have been a peaceful group. The further north the Jesuits traveled in Cochimi territory, the more receptive the natives were to missionization (Crosby 1994:93). This may have been a function of the scarcity of natural resources and the seeming abundance of food within the mission community. Neither Guaycurá nor Cochimi made pottery, had domestic dogs or built permanent shelters (Mathes 1981).

The Yuma, occupying the northern fourth of Baja California, included the Tipai of the San Diego region, the Paipai of the Sierra, the Kiliwa of the Gulf coast and the Cocopa of the Colorado River delta. These groups were closely related to their neighbors in Alta California. They made pottery, kept dogs, and cremated their dead. They proved to be moderately receptive to missionization, although the Spanish had serious problems with the Tipai of Mission San Diego and the Cocopa of the San Felipe Desert. The Yuman language family included the warlike Mojave and Yuma of Alta California, so perhaps this tradition was characteristic of the larger grouping. The Yuma developed sophisticated hunting and fishing equipment and practiced simple floodwater cultivation along the Colorado River.

Hunters and gatherers in all but the richest environments are typically organized in small, loosely-organized bands of 50–75 people. These bands migrated seasonally to take advantage of local plant resources. The seasonal availability of wild game and the presence of fresh

water were also factors in this movement. Often such movement was vertically transhumantic, that is the group moved to different elevations in different seasons to use different locally available resources. In Baja California, material needs were simple, and trade seems to be very rudimentary. Indeed, accumulation of possessions is not advantageous to nomadic peoples. Roasted agave heart, chamise and mesquite seed, and the fruits of cardón, cholla and pitahaya were eaten. Small animals were hunted, but marine resources provided a more stable year round food supply. Clam, mussel, sea snail, turtle, abalone, crab, sea mammal, and fish were important in the native diet.

Alta California

The cultural groups of California are more diverse and have a more complex history than those of Baja California (Figure 4). As hunters and gatherers living in one of the world's most abundant natural environments, many were able to develop traits of a complexity far beyond that of peoples at their same level of subsistence in other parts of the world. In addition to

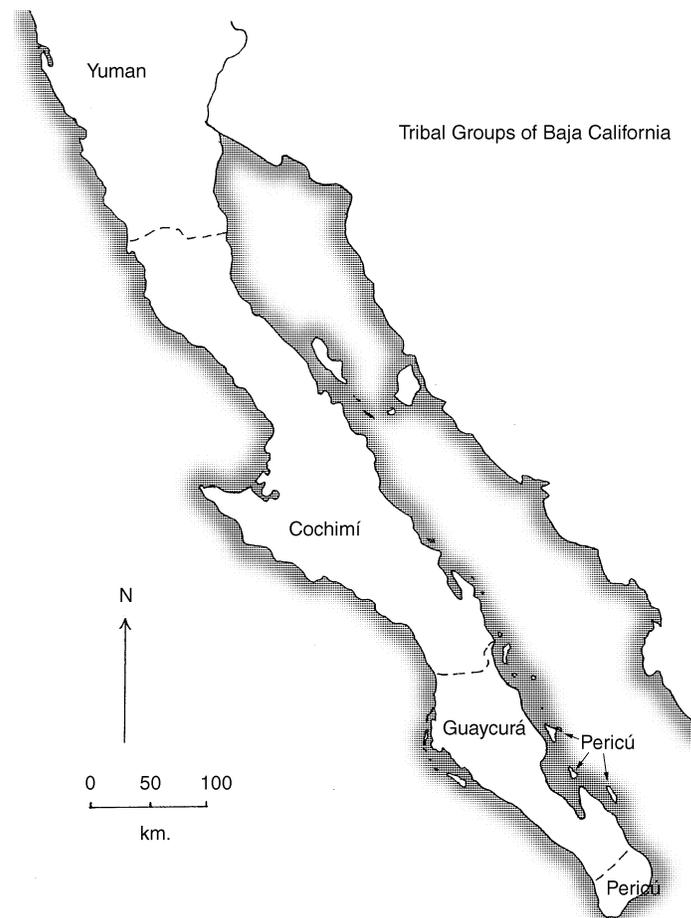


Fig. 3. Tribal Groups of Baja California

abundant resources, California Indians never felt the pressure of farming and herding groups before the arrival of the Spaniards (Kroeber 1925).

Notable among California societies were the Chumash of the Santa Barbara Channel, who became specialists at the utilization of marine resources, developed regional chiefdoms, and were noted for their elaborate technology. A lively trade by plank canoe was established between the mainland and the Channel Islands. The Indians of the San Francisco Bay area—Costanoans and Coast Miwok—made extensive use of bay resources such as fish, shellfish and migratory birds to supplement a mainly plant diet. The Yokuts of the Central Valley supported very large villages sited around internally draining lakes. They moved seasonally into the Sierra Nevada foothills or out on the grassy plains.

The native languages of California developed in complex ways. For the part of California affected by Spanish missionization, there were three distinct language families. Hokan ap-

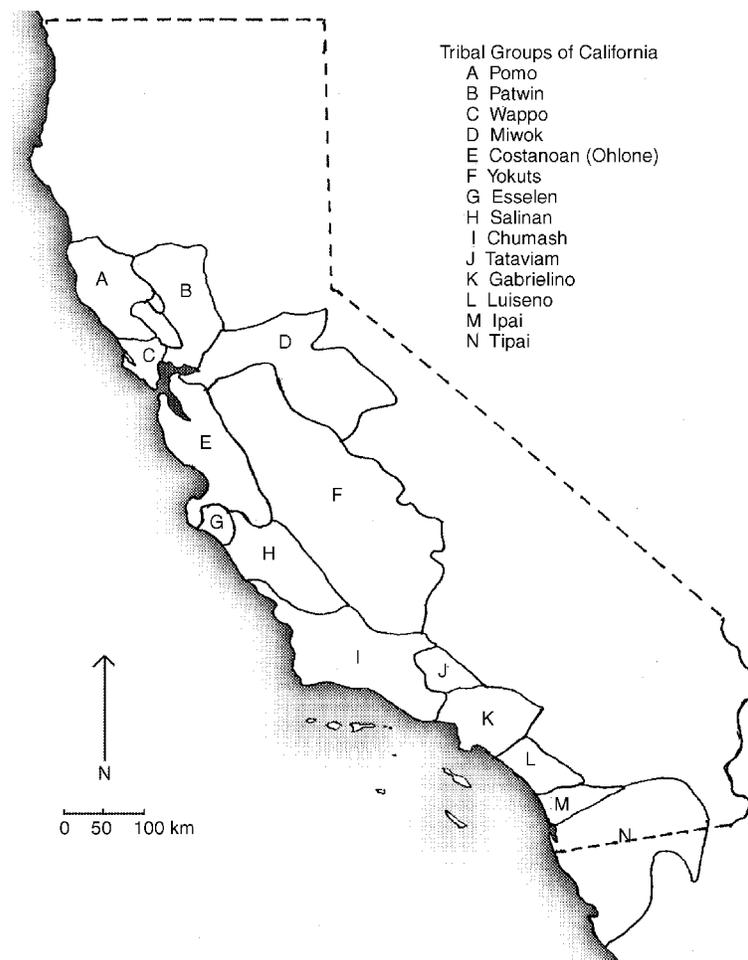


Fig. 4. Tribal Groups of Alta California

pears to be the earliest and is represented by the Pomo, Esselen, Salinan, Chumash and Ipai–Tipai language groups. Penutian speakers arrived later and scattered the Hokan speakers. Penutians are represented by Miwok, Patwin, Costanoan and Yokuts. The latest arrivals were members of the Shoshonean family from the Great Basin, represented by Tatavian, Gabrielino, and Luiseño. Cultures were shaped more by local environment than by language affiliation. For example, the Chumash and Gabrielino shared many common coastal adaptive traits. Often Spanish missions encompassed several different language speakers, therefore reducing the utility of preaching in a native tongue.

Religious Orders

Introduction

The northern frontier of Spain's American empire was secured by means of three major institutions—the presidio (military post), the pueblo (civil settlements), and the mission (religious establishment) (Brinkerhoff and Faulk 1965; Faulk 1971; Moorhead 1975). With time, the mission proved to be the most successful and cost-effective of these institutions (Bolton 1917). The objectives of the missionary program were (1) the creation of one universal church of one flock and one shepherd, (2) the actualization of evangelical poverty and Christian martyrdom (especially among the Franciscans), (3) the establishment of a native church loyal to monarchy and papacy, (4) the maintenance of temporal peace and order, and (5) the replacement of losses suffered during the Reformation in Europe (especially important among the Jesuits). The several religious orders were assigned various regions in the New World to convert and acculturate the native population (Sylvest 1975:134).

Jesuits

The Society of Jesus was the earliest missionary order active in Baja California, yet it was of relatively recent formation. Organized in 1540 by Ignatius of Loyola along military lines, the Jesuits were the elite force of the Counter-reformation. They had centralized organization headed by a padre general who was elected to serve for life and was unaccountable to earthly powers. Jesuits maintained no choir or special habit, but emphasized absolute obedience to their superiors. They moved freely about. Schools were established to train a scholastic elite. Definitely not a democratic organization, the Jesuits were ranked according to stages in their careers (Polzer 1976).

The Jesuits became very active in missionary work in Asia and the Americas both within and without the Spanish and Portuguese colonial empires. Japan, India, China, Paraguay and Sonora were areas of major missionization. Their centralized organization made coherent and focused planning possible. Their wide experience in missionary endeavors in the New World since 1566 caused them to emphasize the learning of and instruction in native languages. They did not always equate spiritual conversion with the complete acculturation of native peoples to a European lifestyle. Baja California under the Jesuits, while part of the Spanish empire like Sonora, was different in a very important way. From the first, the Jesuits funded the missionization of Baja California without royal support. They were in control of both military

and civilian governments on the peninsula. Soldiers stationed in Baja California were paid directly by the Jesuits. Other civilian settlements of *gente de razón* were severely restricted. The Jesuits successfully missionized the central and southern parts of the peninsula between 1697 and 1767, the year of their expulsion. They were responsible for founding twenty-one missions in Baja California (Robertson 1978; Aguilar Marco *et al.* 1991; Coronado 1987 Taylor 1971).

Franciscans

The Order of Friars Minor or gray friars was founded in 1210 by Saint Francis of Asisi. The order was dedicated to service in poverty and simplicity, both individual and corporate. While certain communal property was allowed, Franciscans were expected to be spiritually detached while being physically involved with the world. They earned a reputation as church reformers, urban social workers and in active preaching and missionary work. The most numerous of the mendicant orders, brothers traveled about freely, were not associated with a particular monastery, and vied with the Dominicans in University instruction (Sylvest 1975).

Franciscan missionaries arrived in the New World in 1502 and were active in Mexico, northeast Brazil, the Amazon and Florida. They were governed by ministers provincial, who were elected at periodic general meetings. The Franciscan colleges, especially those of San Fernando and Queretaro, supplied missionaries to northern Mexico. In 1768, the Franciscans were given authority over the ex-Jesuit missions of Baja California and were soon authorized to expand missionary activities into Alta California. Theoretically operating in close conjunction with Spanish civil and military authorities, the Franciscans often clashed in practice with government officials over policies toward the natives, and the siting of new missions. They relinquished control of Baja California to the Dominicans in 1772, after founding a single mission at San Fernando Velicatá (Sauer and Meigs 1927), and concentrated solely on Alta California between 1769 and 1834. There they founded twenty-one coastal missions (Engelhardt 1929a). The two brief establishments on the Colorado River were La Purísima Concepción and San Pedro y San Pablo de Bicuñer (Fontana, 1994).

Dominicans

The Friars Preacher or black friars were founded by the Spaniard, St. Dominic, in 1215. The goal of missionization and education through a trained body of preachers was designed to disseminate learning. The Dominicans were the guardians of orthodoxy, operating in the Inquisition to stamp out heresy. General, provincial and conventual chapters elected their master-general and other representatives in periodic meetings. Officials reverted to ordinary status at the end of their terms of office. Dominican priories were houses of study and learning, with emphasis on liturgy and choir. They were famous for their austere lifestyle.

Dominican missionaries arrived in the New World as early as 1512. One of the first to decry the inhumane treatment of natives was the Dominican priest Bartolomé de las Casas who published in 1540, "A Brief Account of the Destruction of the Indies" (Fontana 1994:5-6, 8) They maintained fewer missions than either Jesuits or Franciscans. Most of these were in Oaxaca and Guatemala. In 1772, they were given responsibility for operation of the ex-Jesuit

missions of the south of the peninsula and projected new missions in northern Baja California. They founded nine missions on the peninsula (Barron Escamilla 1992:95–103).

Comparison of Mission Systems

Siting

The process of siting the missions reveals important differences between the religious orders. The first effort by the Jesuits to establish missions in Baja California was in 1683 when an expedition led by Almirante Atondo landed on the eastern shore at San Bruno, approximately 30 miles from the present town of Loreto. Atondo, as military leader, had hopes of finding riches in pearls and good prospects for future colonization. Eusebio Kino, new to New Spain, was assigned to the expedition as missionary and geographer. The missionization of California was to become his passionate goal. Several expeditions were launched from San Bruno, crossing overland to the Pacific, encountering several groups of natives. However, due largely to the poor conditions of the site (lack of water, infertile soil, and difficulty in resupply) the venture failed, with all parties returning to the mainland in 1685.

Kino went on to serve in the arid and mountainous Pimeria Alta of Sonora, founding numerous successful missions among the Upper Piman Indians (Polzer 1982). He led several land expeditions from Arizona towards California, one of the last unexplored territories, considered beyond the “Rim of Christendom.” Yet, none of these resulted in any permanent missions. The landscape of Baja California has many similarities to northern Sonora. It is likely Kino recognized the potential to utilize many of the same methods of missionization employed in Sonora. These included the absolute need for water, and the potential for irrigated agriculture and grazing livestock. Although the mission at San Bruno failed after a short while, the experience gained by Kino was to prove valuable in the next expedition.

When the Jesuits returned to Baja California in 1697 they had full control of the endeavor. As a Jesuit-funded enterprise, they selected the civilian and military participants and more importantly established the pace and objectives of missionization. At the beginning, military agendas and the pressure for civilian colonization were largely absent. Unlike the succeeding orders, the Jesuits were able to focus on religious goals rather than territorial ones.

The first permanent Jesuit mission was established at Loreto Conchó in 1697 after a new expedition revisited and rejected the site at San Bruno. Kino was directly involved in the preparations, although it was his friend Juan María Salvatierra, with similar missionary experience in the Tarahumara, that led the expedition. The mission at Loreto was initially sited at the mouth of a small creek. The location offered a defensible height and a small but reliable water supply. The limited water supply and the poor soil alongside the creek proved inadequate for their crops. For many years Loreto, and other new missions, were provisioned with foods from mainland Jesuit missions. As the Loreto mission grew, the chapel and other buildings were relocated a short distance away for better access to fresh water.

From the base at Loreto, the Jesuits almost immediately began to scout for new mission sites. There are many accounts of padres Ugarte and Piccolo making long journeys along the

coast and into the sierra of the peninsula. These accounts relate that the padres sought locations that met an explicit set of criteria (Clavijero 1937; Crosby 1994:74–5, 193–96). They are, in loose order, a defensible position, proven permanent supply of potable water, adequate area of tillable soil, firewood, timber for limited construction, nearby pasturage, and the presence of natives. Water was the single most critical factor. Typically, and to the advantage of the Jesuits, native populations were already utilizing the often seasonal water sources of the lower peninsula. This simplified the process of mission siting considerably. However, early explorations consistently overestimated the availability of water in quantities sufficient to sustain a large permanent agriculturally-based settlement. Five of the first nine missions had to be relocated (Crosby 1994:196).

In general, the Jesuits avoided siting missions directly on the coast due to the threat of piracy. However, they actively sought a strategic Pacific port, eventually at Cabo San Lucas, to serve the Manila galleons. In this matter one can see that royal objectives were not entirely absent. There are references expressing the desire for missions at certain latitudes, suggesting that geographic position was another criterion (Weber 1968:47). Apart from the Laws of the Indies, there were few written rule books for mission development (Polzer 1976).

Few suitable sites were identified in the harsh southern Baja California landscape. As a result the Jesuits advanced slowly. The second mission was founded after two years at San Javier Biaundó, a mountainous valley quite near Loreto. It was moved twice, each time upland, closer to the source of water feeding the area. San Javier Biaundó prospered. However, the next two missions at Liguí and Londó (perhaps only a *visita*) had little water to support permanent settlement and in a few years were depopulated.

Later missions seem to have benefited most from the Jesuit scouting expeditions. These included the oasis missions of Mulegé and San Ignacio Kadakaaman, already inhabited by the natives who encountered the Jesuit expeditions and invited the padres to return and establish new missions among them. The padres arrived several years in advance of founding San Ignacio Kadakaaman to instruct and baptize the locals. Gifts were distributed. These two missions were very successful, although Mulegé had to be relocated to higher ground out of the floodplain. In general, the pattern of expansion was radial or star-shaped, with Loreto at the center. This seems to reflect the strong hierarchical organization of the Jesuits, and greatly facilitated the administration of the missions.

In contrast to the slow pace and contiguous, radial pattern of growth around Loreto is the growth of the missions farther to the south. Under pressure to demonstrate their progress across the lower peninsula, several sites were hastily developed without the benefit of proper preparation, including geographic reconnaissance. For example, the mission at Todos Santos initially was sited at the edge of a marsh exposing the missionaries to swarms of pests and poor quality water. It proved uninhabitable (Clavijero 1937:278; Crosby 1994). This may have adversely affected the attitudes of the Pericú Indians (Taraval 1931) as much as the presence of civilians and ships' crews in the area.

The Franciscans' approach to siting missions was informed by, but very different from the Jesuits' approach. Officially charged to settle the designated territory of Alta California they were continuously under pressure to advance and show results. Their activities were financed by royal funds and they shared control with the military (Guest 1996:87–114). The Franciscans initially did less scouting than the Jesuits. This in part is result of the pioneering work of the Jesuits in identifying promising sites on the peninsula and that of Cabrillo and Portolá in Alta California. Led by Serra, a veteran of the Sierra Gorda, but with little experience in the arid west, the Franciscans advanced in tandem with a lay party to secure key geographic positions largely of imperial importance. The first mission was sited at San Fernando Velicatá in 1769, a previously identified oasis midway between the northernmost Jesuit mission on the peninsula, Santa Maria, and the great bay at San Diego. With a stable water source this desert mission became a way station for travel to Alta California.

The first action of the expeditions in Alta California was the establishment of a presidio and mission at San Diego. Long in planning, this was achieved in 1769. The mission was initially sited adjacent to the presidio on the brow of a hill strategically overlooking the bay and river valley. Five years later, the mission was moved to a site six miles up the river that afforded greater agricultural prospects (land and water), and removed some of the negative influence of the soldiers on the neophytes and missionaries.

Their next objective was Monterey which, like San Diego, possessed a good harbor already targeted for a presidio. The mission at Monterey, founded adjacent to the presidio in 1770, followed much the same fate as at San Diego. The foggy cool climate and military personnel at the presidio were exchanged for autonomy in the relatively fertile Carmel Valley in 1771.

Plans for an early mission midway between San Diego and Monterey were put on hold due to a perceived shortage of personnel, much to the displeasure of Serra. This is an early indication of the compromised autonomy of the Franciscans. It also had the effect of making the Franciscan missions a discontinuous chain with poles to the north and south. The task was largely to bridge the gap between Monterey and San Diego.

Some of the most revealing evidence of the Franciscan method of siting new missions is in the account of Mission San Antonio. In July of 1771, Serra led a party from Monterey in search of a site for the third mission of Alta California. He amazed his companions by declaring the location rather abruptly, without an explicit survey of the area. Mission San Antonio lies in a long valley, at the foot of the tree-covered Santa Lucia Mountains. Much of it is a well-watered, park-like oak woodland. Serra's hasty act suggests two things. First, the rich environmental bounty of Alta California was apparent to him. In comparison to Baja California this landscape dripped with milk and honey. There was more water, timber, a more genial climate, and in the oaks Serra may have recalled the fertility of the Mediterranean. He readily perceived that less precision was necessary in siting missions here than in Baja California (Engelhardt 1929a: II, 88).

A second idea hypothesizes that Serra, recognizing that this landscape could support a mission, had already decided that he needed a mission in this geographic position to meet his

royal obligations. San Antonio may have seemed like a good first step toward infilling the zone between the two poles of Monterey and San Diego. It is revealing to note that no natives had been seen in the vicinity of San Antonio, and in fact, few had been persuaded to visit the missions at San Diego and Monterey. Perhaps Serra reasoned that such a rich landscape must include a rich population. San Antonio proved to be one of the more successful northern missions with a population near 1,300 neophytes in 1805, a vast array of crafts and a broad agricultural base. The mission was moved up the valley the following year to better access permanent water (Engelhardt 1929a: II)

Engelhardt's account of San Gabriel, the fourth Franciscan mission, reports the availability of water for irrigation, an elevated position and proximity to an oak forest (presumably for firewood and timber) as criteria for its siting (1929a:II, 91). He indicates that the padres, at the direction of Serra, made a "close examination of this region," suggesting that Serra's haste at San Antonio was not the established *modus operandi*. Their criteria seems consistent with that of the Jesuits.

However, conflicting evidence can be seen at San Luis Obispo, the fifth mission, founded in 1772. Serra's interest in founding the mission appears to have been to secure access to the grizzly bears encountered by Portolá in 1769, as a food source for San Antonio mission. This proved to be an ephemeral resource. Padre Serra is recorded as spending only one day in its founding, but notes the quality of the stream. In this light, geographic position may be again the most important criterion guiding Serra's siting of Alta Californian missions. Serra intended to punctuate the gap between Monterey and San Diego. Particular site qualities were observed, but regarded as secondary factors.

Reinforcing the hypothesis that siting was guided more strongly by political factors and regional geography rather than site resources, each of the first five missions was relocated some distance from their original positions. The reasons include conflict with the presidios, lack of water and land for crops, poor climate, hostile native populations, and flooded crops. The sixth mission, San Juan Capistrano, was devastated by an earthquake, as were several later missions including La Purísima. The seventh, San Francisco Asis, suffered from a severe climate and was rarely visited by natives, but was not moved. Perhaps the reason was its connection to the nearby presidio. Santa Clara, the eighth mission, and sited by de Anza (not Serra) was forced to higher ground following a flood and was relocated four times. Only at Buenaventura, in 1782, the ninth mission, is it clear that all the criteria cited by the Jesuits were met. It was near a prominent Chumash village, had ample fresh water, fertile soil and good access to timber. It is ironic that Serra scouted this location much earlier, and had planned to establish a mission there on his way from San Diego to Monterey.

Like the Franciscans, the Dominicans were charged with settling a well-defined territory. This zone extended from San Fernando Velicatá to San Diego. Missionization of this territory was contemporary with that of the Franciscans in Alta California, and shared the same sense of urgency. In many ways the efforts of the Dominicans were in support of the Franciscans, although they had the additional responsibility of caring for the former Jesuit missions on the peninsula (Velazco 1981; Meigs 1935).

The Dominicans established their first four missions in linear sequence, extending the padres influence northward from Velicatá toward San Diego. These first four were all sited along the Pacific coast, each on a marine terrace at the edge of a broad valley with a good water supply, access to upland trees and commanding views of the area. The first, Rosario Viñadaco, was sited in 1774 in the first big valley north of San Fernando Velicatá.

The fifth, Santo Tomás de Aquino (1791), began to infill between earlier missions, but like the others, is also sited in a large valley with a river flowing to the ocean. In this regard, the Dominican missions differ from the landlocked or oasis-like quality of most Jesuit missions, bearing more similarities to the missions of Alta California. Another similarity to the Franciscan missions was the presence of small military camps at several missions, notably San Vicente Ferrer and El Descanso.

In general, it appears the Dominican missions were sited to control the largest valleys of the northern peninsula. Their positions in these valleys also made them easily identifiable to the overland supply and communication couriers making transpeninsular trips. For example, Santo Domingo was located at the base of a conspicuous red volcanic hill at the inland edge of the broad marine terrace—an unmistakable landmark. In addition to the important coastal route, a sierra trail connected Loreto with Alta California through two mountain missions. Connecting trails ran from the coast up the interior canyons. Each mission was also the hub of trails to rancherías and resource areas.

There are several additional siting criteria identified by Weber (1968:54). These include water, firewood and stone for construction. Weber notes that by locating missions within 1 - 2 miles (2 - 4 km) from the ocean, the diet could be supplemented by seafood resources. Two later missions, Santa Catarina and San Pedro Mártir, were sited in the central mountainous spine for defensive purposes. They served as lookouts, protecting the coastal missions from hostile natives from the Colorado River delta.

Unfamiliar with the landscape, with little guidance from local tribes and little time for scouting, the Dominicans selected sites that soon proved to be inadequate. All but one of the original coastal Dominican sites were subject to either flooding or lack of water. Most were moved inland several miles to higher and wetter sites. Only San Vicente Ferrer (1780), sited on a bluff looking out on a relatively large river, was not relocated.

Physical Design

Despite different approaches to siting missions, the three orders designed and constructed the principle buildings in a similar manner (Figure 5). The first phase usually consisted of a small chapel soon followed by quarters for the resident padre. These were temporary *jacal* shelters, constructed of poles, reed, thatch, twigs and other local materials. No physical evidence of these remain. Parallel to building these first shelters, the founding padres initiated agricultural practices and gathered local populations to the site. As a mission prospered and a labor force became available, the *jacal* structures were rebuilt in adobe brick. Roofs were initially of thatch over a wooden frame, later being replaced by clay tile. This adobe phase is evident in most of the Dominican and Franciscan missions. With continued success, and the develop-

ment of skilled craftsmen, the adobe structures were replaced by larger stone buildings. In general, the stone work is of high quality, with carefully carved detail adorning stone cut and finished to regular dimensions. At San Borja the adobe structures are still evident alongside

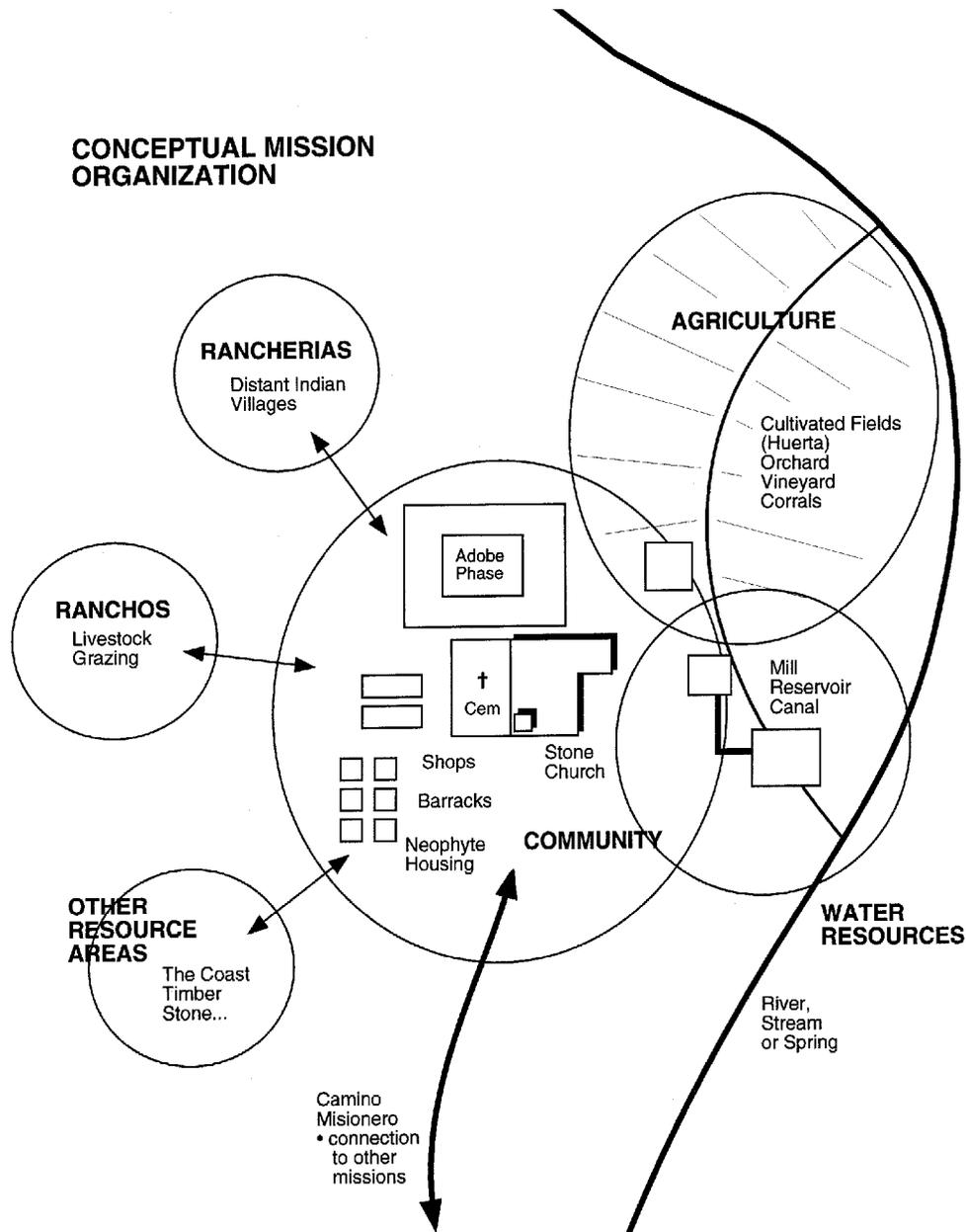


Fig. 5. Conceptual Mission Organization

the newer stone masonry, suggesting that they may have been used concurrently. In most other Jesuit locations the adobe has been lost or built over.

Given this process of development, it is possible to classify the adobe missions as representing an interim, transitory stage. It is instructive to note that few Franciscan and no Dominican missions in northern Baja California were built of stone. However, the Dominicans rebuilt most of the former Jesuit missions out of stone between 1772 and the mid 19th century. Several of these, such as San Javier Biaundó, had already been completed by trained neophytes in the Jesuit period. The stone-built Franciscan missions were at Carmel (the headquarters of the Alta California chain), and at prosperous Santa Barbara and San Juan Capistrano. The absence of stone structures in Dominican northern Baja California may be attributed to the scarcity of labor in combination with time lost in relocating the missions to better sites. Weber cites that 13 Dominican missionaries resigned in 1791, further slowing mission development (1968:60).

Most California missions were built in the form of a quadrangle. This offered the practical benefits of being defensible and modifying climactic extremes. It also perpetuated the pattern of employing cloisters as the appropriate building type for religious complexes. The quadrangle form is also consistent with 16th century Spanish architecture and city planning that emphasized uniformity and geometry. These were codified in the Laws of the Indies, shaped strongly by the royal architect Juan de Herrera.

The need for defensibility usually decreased with the success of the mission. Consequently, most of the stone missions of southern Baja California do not exhibit a quadrangular form. The Franciscan mission at La Purísima was destroyed by an earthquake in 1812. It was rebuilt in a linear form at a nearby site, reflecting the relative safety the Franciscans had achieved by that time (1815–18).

Several mission sanctuaries exhibit architectural forms and details that reflect the origins of missionaries assigned there. For example, San Ignacio Kadakaaman has baroque motifs influenced by Croatian Padre Consag. Other design influences can be attributed to pattern books, such as Vitruvius', that could be found in many mission libraries.

Most missions grew to include numerous structures beside the quadrangle and sanctuary. These range from agricultural complexes like mills, reservoirs, cisterns, walled vineyards, threshing floors, and tanneries to remote shelters supporting timber cutting and ranching. The epidemics that took many lives at all missions made cemeteries a necessary component of the mission complex, often in close association with the quadrangle and sanctuary. Evidence of supportive facilities remain at many missions in Baja California. Of the Franciscan missions in Alta California, San Antonio contains the greatest number of these features, many in good condition. Where these resources remain, a richer understanding of the scope of mission activities can still be gained. (Engelhardt 1929b)

The construction of a network of trails connecting each mission with the other required great amounts of labor in California. In the Jesuit period, these trails often preceded the founding of new missions. The rugged geology of the lower peninsula made the building of

these trails, or the *camino misionero*, quite difficult. One writer observed in 1730, “in opening trails... more labor has been expended in California in 34 years than in the whole of New Spain from the beginning of the conquest through the centuries” (Weber 1968:34–5). These segments eventually linked Cabo San Lucas with Sonoma, and with the assertion of royal control in 1768 served as the *Camino Real*, or King’s Highway. (Crosby 1974)

Operation

The daily operation of the California missions was quite similar in all three religious orders. The missionaries provided a complete ministry that involved conversion and full participation in mission life, not just preaching, education and social work. Of course, there was a self-conscious attempt to eliminate all traces of non-Christian ritual, though these were sometimes reinterpreted as Christian rituals. While establishing a radical new cultic orientation, the missionaries naively thought that the rest of native culture could be maintained. They never viewed themselves as enemies of the Indian or his culture, but only crusaders against the devil.

Missionaries, especially the Jesuits and Franciscans, had a deep interest in the social life of their neophytes and frequently remarked on the amazing intellectual and artistic abilities of their charges. The perceived poverty of the Indians appealed especially to the Franciscans, who paternalistically viewed the neophytes as favored children needing protection and nurturing (Guest 1979: 1-79). The missionaries also emphasized ethnolinguistic studies of native languages in order to preach the gospel more effectively. The Jesuits long had been famous for teaching and preaching in native languages. The Franciscans seem to have continued this practice. However, the Californias contained numerous linguistic groups in varied geographical areas, reducing the utility of learning native tongues. Some missions might contain several language groups in Alta California.

Indian reaction to the missionaries varied. The negative approach to native religion received strong reactions from shamans, whose position of authority was being challenged. Some Indians attempted syncretism by adding Christ to their native pantheon or hiding cult objects beneath altars. On the other hand, many true converts were obtained through the linguistic skills of the padres, the use of pictures and other visual aids, and musical techniques such as orchestras and choirs (Guest 1996:115–182).

There is evidence that conversions normally occurred sequentially in a concentric pattern around Franciscan mission establishments (Johnson 1989). The nearer villages were baptized and relocated at the mission first. The earliest friars concentrated their efforts on community leaders and the young. Music, art and crafts were important attractants to the missions. Fr. Juan Bautista Sancho of Mission San Antonio, a noted musician and composer himself, capitalized on the Indian love of music (Summers 1993). Each mission had its orchestra, choir, and skilled artisans.

Instruction in manual arts also had great appeal. Emphasis was placed on the conversion of the young of chiefly families as the key to conversion of the entire tribe. The difficult resolution of the question of elite polygamous relationships had been settled by Paul III in the bull

Altiudo divini consilii, though it affected only a very few native leaders. Only one's first wife was considered legitimate. The secular arm of the government might be called upon to defend missionaries, the faithful and church property, but restraint was urged by the padres more of the time. (Guest 1996:229–306). While training a cadre of youths using indigenous languages, the missionaries failed to create an indigenous church because of the prejudices of the state and secular clergy.

There were important differences in the organization imposed on neophyte populations. All three orders generally reduced the Indians from areas surrounding the mission, bringing them under centralized control at the mission. Neophyte villages, often portrayed in period maps and sketches as orderly compounds alongside the mission compound were common in most of colonial New Spain. The two rows of neophyte shelters extending from the sanctuary at San Javier Biaundó were typical of Jesuit missions both in Baja California and Paraguay. However, at certain missions, such as San Borja, San Diego, San Luis Rey, and several Dominican missions, Indian groups remained transient, coming to the mission at designated times, in part not to overtax the local resources available at the mission. In such cases, neophyte villages may not have developed or were shared by different groups. The development of *visitass* and *asistencias* as extensions of mission life in areas remote from the mission often grew from jacal chapels to function as full fledged missions.

From their founding, the Dominican missions uniformly declined in population. On average, population hovered around 250 neophytes at each establishment, with many neophytes living in surrounding communities. Although the Dominican missions varied according to local conditions, some individual characteristics can be noted. Rosario Viñadaco was the most prosperous and peaceful of the chain. Santo Domingo consistently grew more wheat than corn. San Vicente Ferrer was the capital of the Dominican chain and housed a presidial company. It was there that the junction on *El Camino Real* was located for Santa Catalina to the east and the beginning of a proposed road to the Colorado River. Santo Tomás primarily produced livestock and had an excellent water supply. San Miguel and its successor, Descanso, were located near the native population of the coast. Pasturage and dry farming was excellent there. Guadalupe was for six years the residence of the presidente of the Dominican missions. Santa Catalina and San Pedro Mártir were the interior missions with sparse populations and rudimentary economies. Goods produced for export were traded through San Diego (Meigs 1935:143–150).

Agriculture

The missions were largely agricultural, pre-industrial enterprises. The agricultural practices in California were imported from the Mediterranean and northern Mexico, with variations due to soil, climate, rainfall and neophyte population. The key components were irrigated crops and livestock. Crops included wheat, barley, beans and corn, in places representing half the crop production. These were mostly cultivated by irrigating valley floors, with the exception of a little dry farming in the more northern missions (Tays n.d.). Soils in much of the Baja California peninsula are extremely stony and much effort was necessary to clear areas for cultivation.

Clavijero (1937) and Weber (1968) suggest instances where fertile soil was hauled in to amend poor local conditions.

Crop yields fluctuated, often radically from year to year, depending on rainfall. Irrigation systems were carefully engineered, employing techniques of Roman origin. Several Jesuit missions possess original irrigation works, with stone cisterns and canals with cemented linings. Also cultivated were grapes, pomegranate, dates, olives, oranges, lemons, figs, squash, chilies and tomatoes. Papayas, bananas, avocados, and mangos were grown in the subtropical southern peninsula. Pears were grown in regions of Alta California with cold winters. Agricultural activities complementing crops included tanning, milling and making wine. Principle livestock included cattle, sheep, goats, pigs as well as the horses, mules and burros used in associated labor (Archibald 1978).

Secularization

Missions operated by the Franciscans and Dominicans experienced dramatic and abrupt change when secularized by the Mexican government. Franciscan missions were secularized relatively early, between 1834 and 1836. There had been strong pressure to bring this about since the missions proved the economic potential of Alta California. Settlement of most mission land holdings was rapid. Little of this benefitted the mission Indians, reducing many to poverty and servitude to new masters. The new private endeavors complemented the prospering pueblos and land grants. Eventually, the majority of Franciscan missions were transformed into prosperous civilian communities (Archibald 1978).

In Dominican northern Baja California the process of secularization came relatively late. Santo Domingo was not secularized until 1839, Santo Tomás Aquino in 1849. Considering the scarcity of good land in this region, the Dominican's longer control of the missions may have dramatically slowed the process of civilian settlement. With little opportunity on the peninsula, prospective settlers may have looked to the more temperate lands of Alta California. Aside from lingering Dominican control of the best lands, colonizing expeditions such as DeAnza's likely also influenced the settlement pattern of Baja California. Civilian communities did not develop at either Santo Domingo or Santo Tomás Aquino. The communities at the remaining coastal Dominican sites are quite small (Meigs 1935).

Conclusions

In light of the varied organizations, environments and native peoples of the two Californias it is somewhat remarkable to find common themes in the history of its missionization. What is clear is that each order, largely through a process of trial and error, found ways to establish Christian and European foundations in California. The Jesuits did so as penurious, tenacious pioneers. The Franciscans did so despite a raft of imperial obligations. The Dominicans salvaged the Jesuits' work following their expulsion and served, perhaps more selflessly than the others, in joining the two ends of the California chain together at the middle. Beyond adobe and stone churches, each group has left us precious pieces of a rich culture that was closely tied to the landscape, and a landscape that still is being shaped by their culture. Agri-

cultural practices, settlement patterns and the diverse people of both Californias reflect this heritage.

Examination of the history of the missions of Baja and Alta California should impress upon us the interconnected nature of its settlement. The political boundaries (USA–Mexico, Baja California–Baja California Sur) tend to promote an erroneous concept of isolated colonization. In reality, the process was linked and dynamic, radiating from Loreto in an irregular series of expeditions stretching over 150 years. Reinforcing the notion of isolation are the extreme disparities in wealth and, consequently, in conservation of the missions. Alta Californias missions, especially the churches, are almost all preserved or reconstructed, well-protected and highly visited. In contrast, the Dominican missions in northern Baja California having suffered neglect and vandalism are almost unrecognizable to lay visitors. Fortunately, there are efforts underway to protect and restore these. The efforts include fencing, interpretive signs and archaeological investigations. The Jesuit missions of the southern peninsula are in far better condition. Several of them restored, they represent the highest achievement of the padres and their Indian partners. Together, the missions of Baja California enrich our understanding of the Alta California missions (Figures 6 and 7). They show the humbleness of their roots, and their potential given longer tenure under the care of the padres. Perhaps most importantly, they call for an expansion of our efforts to fully conserve the heritage of the Californias.

Index for Fig. 6. Missions of Baja California

Map ID	Name	Dates	Comments
Jesuit Missions (after Crosby 1994:397–402)			
1	San Bruno	1683–85	Abandoned: lack of water
2	Nuestra Señora de Loreto Conchó	1697–1822	Relocated 1699: lack of soil & water
3	San Francisco Javier de Viggé Biaundó	1699–1817	Relocated 1710: lack of water
4	San Juan Bautista de Liguí (Malibat)	1705–21	Depopulated: lack of water
5	Santa Rosalia de Mulegé	1705–1820	Relocated: flood
6	San José de Comondú	1708–1827	Relocated 1836: poor soil
7	La Purísima Concepción de Cadegomó	1720–1822	Relocated 1735: lack of water
8	Nuestra Señora del Pilar de la Pay Airapi	1720–48	Relocated to Todos Santos: depopulated (run as a visita, 1709–13; when abandoned, endowment used to fund Los Dolores)
9	Nuestra Señora de Guadalupe de Huasinapi	1720–95	Unchanged
10	Nuestra Señora de los Dolores Apaté	1721–68	Relocated 1741, 1748: lack of water (effectively run as a visita 1737–48; moved to Todos Santos 1748)
11	Santiago el Apóstel Ainini	1724–95	Unchanged
12	San Ignacio de Kadakaamán	1728–1840	Unchanged
13	San José del Cabo Añuiti	1730–1840	Unchanged
14	Santa Rosa de Todos Santos	1733–1804	Relocated 1752: swampy. (founded in 1725 as a visita, in 1733 as mission Santa Rosa de las Palmas, in 1749 as N. S. del Pilar de la Paz)
15	San Luis Gonzaga Chiriyahui	1737–68	Unchanged
16	Santa Gertrudis de Cadacamán	1751–1822	Unchanged
17	San Francisco de Borja Adac	1762–1818	Unchanged
18	Santa María Cabujakaamung	1767–69	Relocated 1769: lack of water. (originally at Calamajué, 1766)
Dominican Missions (after Meigs 1935:39)			
19	Nuestra Señora de Rosario Viñadaco	1774–1832	Relocated 1802: flood
20	Santo Domingo	1755–1839	Relocated 1798: lack of water
21	San Vicente Ferrer	1780–1833	Unchanged (became capital of Dominican frontier)
22	San Miguel Arcángel de la Frontera	1787–1834	Relocated 1788: lack of water
23	Santo Tomás de Aquino	1791–1849	Relocated 1794: mosquitos
24	San Pedro Mártir de Verona	1794–1806	Relocated 1794: coldness
25	Santa Catalina de los Paipais	1797–1840	Unchanged
26	El Descanso	1817–34	Re-established 1830 (also called Nuevo San Miguel)
27	Guadalupe	1834–40	Unchanged

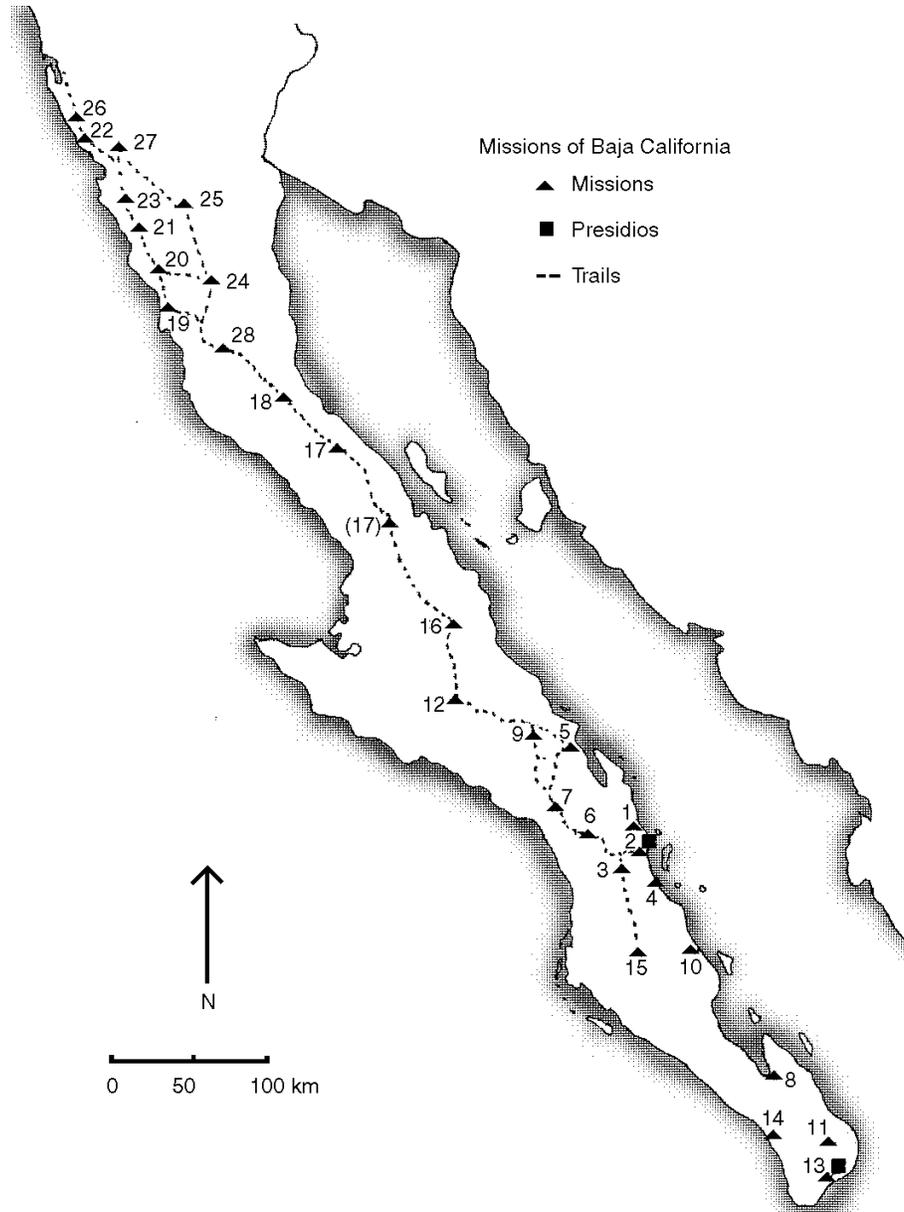


Fig. 6. Missions of Baja California

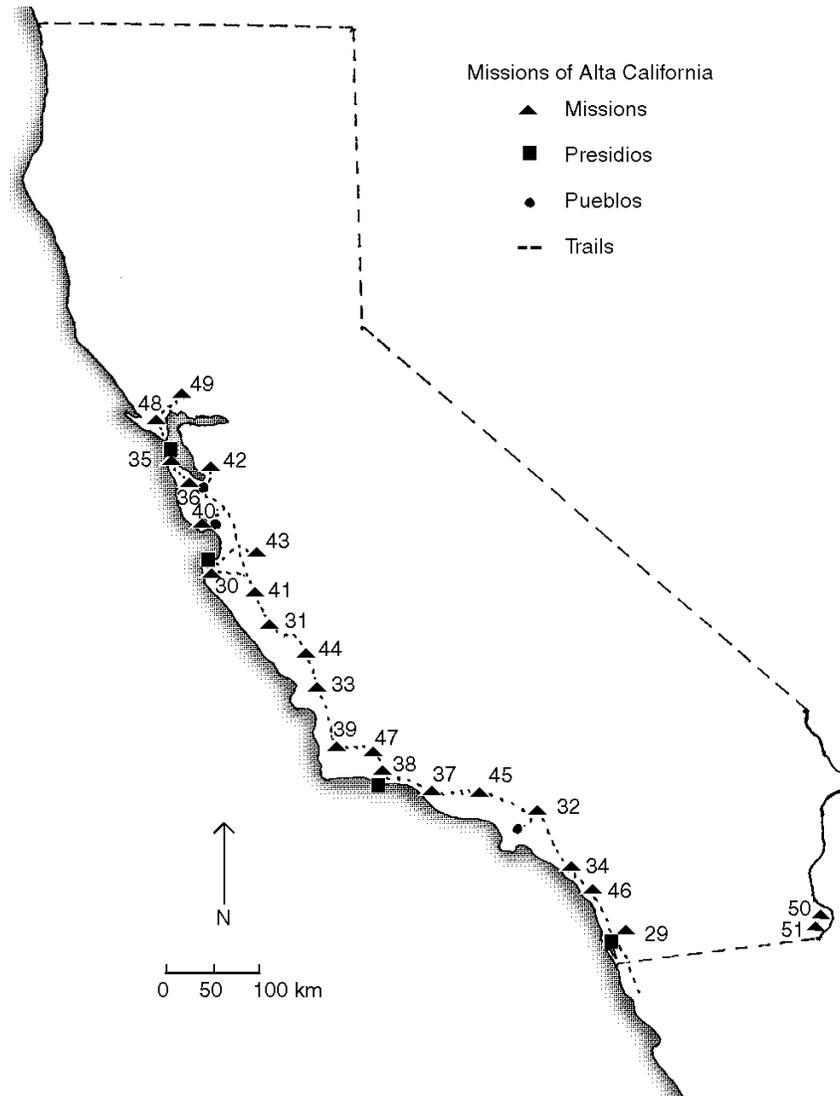


Fig. 7. Missions of Alta California

Index for Fig. 7. Missions of Alta California

Map ID	Name	Dates	Comments
Franciscan Missions (after Hoover 1985:96)			
28	San Fernando Velicatá	1769–1817	Unchanged
29	San Diego de Alcalá	1769–1834	Relocated: limited land area, proximity to presidio
30	San Carlos Borromeo de Carmelo	1770–1834	Relocated: climate, proximity to presidio at Monterey
31	San Antonio de Padua	1771–1835	Relocated 1773: lack of water
32	San Gabriel Arcángel	1771–1834	Relocated 1791: flood
33	San Luis Obispo de Tolosa	1772–1835	Rebuilt 1776: burned by natives
34	San Juan Capistrano	1776–1835	Relocated 1778: lack of water
35	San Francisco de Asís (Dolores)	1776–1835	Unchanged despite poor location and climate
36	Santa Clara de Asís	1777–1836	Relocated 4 times: flooding
37	San Buenaventura	1782–1837	Unchanged
38	Santa Barbara Virgen y Mártir	1786–1834	Unchanged
39	La Purísima Concepción de Maria Santísima	1787–1835	Relocated 1812: earthquake
40	Santa Cruz	1791–1834	Unchanged
41	Nuestra Señora de la Soledad	1791–1835	Unchanged
42	San José de Guadalupe	1797–1836	Unchanged
43	San Juan Bautista	1797–1835	Unchanged
44	San Miguel Arcángel	1797–1836	Unchanged
45	San Fernando Rey de España	1797–1834	Unchanged
46	San Luis Rey de Francia	1798–1834	Unchanged
47	Santa Inés Virgen y Mártir	1804–36	Unchanged
48	San Rafael Arcángel	1817–34	Unchanged
49	San Francisco Solano	1823–35	Unchanged
50	La Purísima Concepción	1780–81	Destroyed by Yumans
51	San Pedro y Pablo de Bicuñer	1781	Destroyed by Yumans

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