Between Mountains, Plains, and Sea: Prehistoric Cultural Adaptations and Climatic Regions in the Sierras de San Francisco and Guadalupe, Baja California Sur

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Abstract

Archaeological research conducted for more than three decades in the Sierras de San Francisco and Guadalupe has produced important information about the social processes and cultural adaptations that mobile hunter-gatherer groups successfully developed over millennia. These groups traveled between the Gulf of California, the mountains, and the Pacific Ocean in search of food, raw materials, and water. The availability of fresh water for long periods led to longer stays around ideal dwelling places, as well as the possibility that certain lineages might meet periodically to exchange goods of all kinds, to socialize, and to develop group rituals.

Knowledge of both sierras’ archaeology represents an opportunity relevant to the objective of this article, because although there are very marked similarities in the material culture and subsistence and mobility patterns, interesting differences have also been detected. Through climatic, ethnohistoric, archaeological, and symbolic evidence, the latter detected in rock art, an effort will be made here to identify the existence of enduring pan-regional cultural elements that may have been related to the Yumans of the peninsula’s extreme north, as well as evidence of cultural adaptations based on these elements that derived from the conditions imposed by the different climatic regions where these two mountain ranges are located.¹

Linguistic Prehistory and Social Identity

Linguistic data are an important source of evidence for inferring the distribution of specific social entities and their antiquity in peninsular prehistory. This text follows the categorizations and distributions proposed by Laylander in 1987 and revised in 2016, which state that at the time of contact, languages of at least four linguistic families were spoken on the peninsula: Yuman; Cochimí, closely related to Yuman; Guaycura; and Pericú (Laylander 1987:237, 2016).

Cochimí speakers occupied the entire central portion of the peninsula, from near the 26th to the 31st parallel. Jesuit missionaries referring to the indigenous people who spoke this language identified them as Cochimí (Aschmann 1959). However, Massey (1949:288) points out that Cochimí was originally a tribal term that later became a generic name assigned to the groups that spoke Yuman and lived from the 30th parallel to north of Loreto.² This linguistic family was made up of two sister languages: Northern Cochimí and Southern Cochimí. In turn, Northern Cochimí included three well-differentiated dialects, Juigrepa, Ignacieño, and Borjeño, while Cadegomeño and Javiereño belonged to the Southern Cochimí language (Laylander 1987:195). Figure 1 shows the distribution of linguistic groups at the time of European contact.

The relatively small differentiation of dialects that manifested itself in this extensive territory has been attributed to strategic patterns of intergroup relations that took place in the peninsula’s Central Desert, where population densities were low and consequently mobility was higher than farther north or south (Aschmann 1959:56–57). The greatest differentiation within Cochimí occurred at its northern and southern
is the language closest to the Cochimi and shows “an archaic and stable residence on the peninsula” (Mixco 1978:76).

Without being conclusive, there are multiple implications derived from these linguistic data that essentially relate to the possibility of assigning ethnic affiliations to the archaeological evidence. However, this is not to equate languages with isolated geographical regions or to assume that these regional patterns are in any event exclusive.
Several chronological separations based on glottochronology have been proposed for the Yuman languages of Baja California (Robles 1965; Ochoa 1982a, 1982b; Laylander 1987). These suggest that the separation of Proto-Yuman into its descendant lines probably began more than 2,500 years ago. This may indicate that the separation of Yuman-Cochimí into Proto-Cochimí and Proto-Yuman may have taken place at a period not yet determined but considerably before 2,500 years ago.

In summary, the available evidence suggests that “in both Yuman and Cochimí, linguistic archaism is to be found in the peninsula” (Mixco 1978:76). Likewise, the certainty of greater linguistic differentiation puts the place of origin for Proto-Yuman-Cochimí on the peninsula and not in the basin of the Colorado River, as had commonly been assumed (Mixco 1978:76; Laylander 1987:245). It is here that the unusual geography of the almost insular nature of Baja California plays a clearly relevant role; in this elongated strip of land, frequent migrations from the outside were not as possible as they were in continental settings. As Massey (1949:304–305) noted, it is “extremely doubtful that it can be argued that the Peninsular Yumans [Cochimí] represent a very late invasion of Baja California.”

These linguistic data have multiple implications for the prehistory of Baja California, particularly in discussing the possibility of assigning an ethnic or cultural affiliation to the archaeological evidence, or at least trying to do so. In light of the recently delineated linguistic patterns and their chronological implications, the likelihood is high that part of the Baja California peninsula’s archaeological record, at least for the second half of the Holocene, concerns the Yuman-Cochimí, Guaycura, and Pericú groups.

**Constantly Coming and Going: Patterns of Regional Settlement and Mobility**

The region under discussion occupies an area of approximately 18,000 km², generally between the 24th and 27th parallels and the 112th and 113th meridians. Within it are located the Sierras de San Francisco and Guadalupe, whose canyons and tablelands were systematically reconnoitered (Gutiérrez and García 1983b, 1990; García and Gutiérrez 1984; Gutiérrez 1991a, 1991b). However, the investigations were not limited to the mountains. For the Sierra de San Francisco, some portions of the Vizcaino Desert, some intermontane mesas, sections of the Sierra’s eastern foothills, and a strip of the Gulf of California’s coast were investigated (Hyland 1997; Gutiérrez and Hyland 1998, 2002). For the Sierra de Guadalupe, the archaeological investigations included, in addition to its numerous arroyos and tablelands, the Sierra’s eastern and western foothills, some portions of the Pacific coastal plains, and the western portion of the Concepción peninsula (Gutiérrez 2013). This constitutes a major cultural region, where numerous archaeological and historical localities are present. The systematic reconnaissance of such a vast region made it possible to include great topographic and ecological diversity, as well as recording food resources, deposits of raw materials, and water sources (Hyland 1997; Gutiérrez and Hyland 1998, 2002; Gutiérrez 2013) (Figure 2).

In the region, a large number of sites with petroglyphs, both abstract and representational, made using diverse techniques (incised, pecked, scratched), have been identified. It is likely that some are very old, because of the patina covering the images and making them difficult to recognize. Also recorded have been some petroglyphs that are possibly later, including some that show conventions characteristic of the Great Murals, including their large size. In addition, sites have been found with paintings whose style differs completely from the Great Murals. It is sufficient to say here that the human and animal figures tend to be schematic and moderate in size; the analysis of the pictorial styles that differ from the Great Murals is still ongoing (Gutiérrez 2013).

The timely recording of the rock art sites was essential for identifying the general and specific contexts within
which the production of the Great Mural painting tradition and the other painted and engraved styles took place, as well as for making comparisons at the regional level. This aspect has been fundamental for the recognition and characterization of the indigenous trends of representation in rock art imagery and the definition of its boundaries and transitional areas (Gutiérrez 2013).

The analyses developed so far concerning the pattern of settlement in the Sierra de Guadalupe make it possible to affirm that there are abundant and strong similarities with the pattern recognized in the Sierra de San Francisco. These similarities are manifested above all in the typology of the archaeological sites and their distribution, especially in the mountainous area.

However, it should be pointed out that just as there are similarities, there are also important differences, largely determined by variables that derive from the physiography and climate that prevail in each mountain range. For example, in the region of Bahía Concepción, east of the Sierra de Guadalupe, Ritter (1979:426) observed evidence suggesting the existence of two independent, permanently settled populations, one on the coast and the other in the mountains. Subsequently, in 1995 he recorded a similar pattern in the area of Bahía de los Ángeles, in the state of Baja
California. Later, Ritter (2010:140) mentioned that at Bahía Concepción there was exchange between the coastal and interior groups, primarily to give access to different food resources throughout the year in different habitats.

In contrast, to the north, on a strip of Gulf of California coastline near the eastern foothills of the Sierra de San Francisco, which was reconnoitered as part of the “Arte Rupestre de Baja California Sur” project (Hyland 1997; Gutiérrez 1991b; Gutiérrez and Hyland 1995, 1998, 2002), a pattern of settlement and mobility comparable to that discussed by Ritter was not found. On this coastline, relatively continuous sites were recorded, with few artifacts and shellfish remains. This evidence was not sufficient to suggest that a permanent population, or one that at least could have subsisted for a short or medium term, could have settled there. It should also be noted that there are no sources of fresh water in this area (Hyland 1997; Gutiérrez and Hyland 1998, 2002).

The preceding evidence indicates that for the Sierra de San Francisco, the exploitation of the resources on the Gulf of California shoreline was accomplished on an ongoing basis by groups that practiced great mobility between the mountains and the coast, remaining on the shore for only brief periods. This was possible thanks to the availability of intermediate habitation sites in the range’s foothills. An example of this mobility is Los Corralitos, a site located near a shallow arroyo with a large *tinaja* (natural tank) that could keep fresh water for several months. Shellfish remains were found at this site, which is approximately 15 km from the Gulf coast (Hyland 1997; Gutiérrez and Hyland 1998, 2002).

A similar case is represented by the mobility of these same groups between the Sierra de San Francisco and the area of the Tres Virgenes volcanoes. Intermediate sites with fresh water have been recorded, which made it possible for the Native groups to travel to the sources of obsidian and mineral pigments that are located near the volcanoes, when they went to acquire these very important (and symbolic) raw materials (Gutiérrez 2013).

As Ritter (2010:140) points out, the Pacific coastal plains within this cultural region have been little investigated. However, it is appropriate to mention that in the western foothills of the Sierra de Guadalupe, including the series of tablelands that descend gradually to the coast, numerous open-air archaeological sites have been recorded, with and without rock enclosures, as well as petroglyph sites and rock alignments resembling geoglyphs. Also, in some areas of the coastal plains, abundant archaeological material on dunes have been observed that show relative continuity.

Most of the Sierra de Guadalupe’s arroyos drain to the Pacific Ocean and constitute optimal natural landforms for movement to the west coast when the season was right for exploiting marine fauna. Once beyond the mountainous areas, the land becomes more open and the valleys become easier to travel. The beds of the main arroyos have been considered ideal routes between the coast and the interior. Even though climatic conditions have changed considerably during the last ten millennia, channels of such magnitude may decrease or increase in some points but do not dry easily, and their water table is always very shallow. Mountain-coast mobility could be fluid but strategic, depending on the most productive time of year for collecting marine resources (Gutiérrez 2013).

In both sierras, the densest distributions of open-site archaeological materials were located on the terraces of the main arroyos and their tributaries, particularly in the interior of the mountains and in the Vizcaino Desert. These concentrations may extend uninterruptedly for kilometers. In general, this correlates with the distribution of water sources and the density and diversity of vegetation cover. The relationship between these factors does not require much attention, since it
is a logical correspondence. Dense concentrations of materials are associated with *tinajas*, pools, or wells. Rocky mesas and desert plains were preferential locations for settlements with *corrallitos* (rock enclosures) (Hyland 1997; Gutierrez and Hyland 1998, 2002).\(^4\)

As expected, the sites and artifacts found in the Sierra de Guadalupe show a strong typological affinity with the sites and artifacts described for the Sierra de San Francisco and other areas of the central peninsula.

**Spaces and Places Significant for Rock Art**

The distribution of cave pictographs and petroglyphs follows the same pattern in the two sierras. The paintings were produced on the walls of rock shelters and caves, usually located along the margins of these mountains’ many canyons.

In addition to coexisting with cave paintings on the painted panels or on huge, well-protected blocks inside caves and rock shelters (Figure 3), petroglyphs were also produced on rock faces, cliffs, or walls along ravines in the badlands located on the slopes of the hills (Figure 4) and on the abundant mesas that flank canyons and valleys (Figure 5).

Petroglyphs are also often associated with *tinajas*, which were, and still are, highly appreciated for supplying this scarce resource (Figure 6). *Tinajas* played an important role in mobility and settlement patterns, when the groups split into small family units to obtain resources within the large exploited territories, far from the scarce sources of year-round water (Gutiérrez 2013).

**Living in the World**

As noted above, the objective here is to identify the cultural adaptations derived from the conditions imposed by the different climatic regions where these groups lived. To do this, the archaeological, ethnohistoric, ethnographic, and symbolic evidence has been reviewed, the latter through the iconography present in the rock art. This has been to search for surviving pan-regional cultural elements that link, to a greater or lesser degree, the Cochimí (Peninsular Yuman) groups with the Yuman groups of the peninsula’s north.

The above involves an exercise that seeks to understand how people, through their cultural tradition, articulated their actions and met their needs, organized the spaces and representative places where they periodically lived, and how they socially and
symbolically built the landscape that in turn shaped them, in the process of founding and consolidating their identities.

The archaeological data indicate that peninsular groups participated differentially in the adoption and exchange of material culture. Large technological developments such as the bow and arrow were adopted on the peninsula, just as happened on the continent. Likewise, many types of peninsular projectile points show strong affinities with typological sequences from farther north, and some styles of petroglyphs in this region seem to be closely related to the traditions of the Great Basin. On the other hand, south of the 30th parallel there was no prehistoric production of ceramics, and the Type I atlatls (W. Massey 1961; L. Massey 1972; Kowta 1984) found in the southern Cape Region certainly may represent the survival of this technology, which was widespread in remote periods.

In any case, many of the peninsular cultures’ distinctive features must be interpreted as entirely autochthonous developments and innovations, of variable and in some cases perhaps very considerable antiquity. A set of related distinctive features defined as the Peninsular Ceremonial Complex (Hyland 1997; Gutierrez and Hyland 2002) represents the most conspicuous and enduring cultural development; this will be discussed later.

Below is a brief summary of the Native lifeways as they were perceived by the first explorers and missionaries who arrived in the peninsula. It might be argued that this description is subjective and biased, since it relates a world observed and interpreted from the Western perspective at a time when Native culture was undergoing dramatic changes. However, the present analysis of the sources has been cautious, especially as related to the impressions that the environment and the Natives’ living standard generated in the minds of these chroniclers and that in certain occasions conceal the reality. In addition, there is no compelling reason or evidence to suggest that the indigenous world and the actions of the Native people in it were very different at least during the periods immediately prior to European contact. In fact, many of the objects of indigenous material culture described in the sources have been found in archaeological contexts, and from these objects and their positions in these contexts, it is
possible to infer activities, customs, and behaviors that were also referred to in the documentary sources.

In this way, what is seen in the ethnohistoric sources concerning the indigenous world may be similar to what was perceived and experienced by the contact-era Natives’ ancestors in generations going back several millennia, as attested by the chronology that has been documented for the region (Hyland 1997; Gutiérrez and Hyland 2002).

The Social Environment and Everyday Life

Subsistence

The Native diet in the study area was composed of a broad spectrum of plant resources and terrestrial and marine animal resources. In an annual average, plant foods clearly occupied the largest portion of the indigenous diet (Aschmann 1959:61, 102–105).

The Natives counted on a great diversity of vegetal species whose availability fit into an annual harvesting pattern that was determined by the processes and seasons of maturation for diverse fruits and seeds from annual and perennial plants. The process to turn plant resources into edible foods was simple and did not require sophisticated tools; seeds, roots, buds, and fruits were cooked.

The extensive list of animals reported in the chronicles suggests that virtually any animal might be hunted, trapped, collected, or recovered for consumption (Aschmann 1959).

The marine fauna along both coasts formed an indispensable component of the aboriginal diet (Aschmann 1959:97–102). The collection of these resources was focused on two settings: one developed around fishing and hunting of marine mammals, birds, and reptiles on the open ocean, and the other around fishing and collecting species whose habitats were estuaries, marshes, and beaches. As in the case of terrestrial resources, marine species present a range of cyclical fluctuations.

Given the Jesuits’ keen interest in the Natives’ subsistence strategies, it is unlikely that their observations regarding the widespread lack of storage techniques were in error. Corroborating this assessment, no evidence of this technology has been found in the archaeological record, such as the manufacture of ceramics or appropriate basketry (Hyland 1997, Gutiérrez and Hyland 2002). In summary, ethnohistoric and archaeological data indicate a minimum emphasis on food storage. The social, economic, and political implications of storage or the absence of storage are obviously profound.

Material Culture for Subsistence

The material culture is indicative of a high level of mobility for the appropriation of seasonal resources. The only known basketry for this region is a tightly woven, shallow type of basket (Figure 7). Turtle shells and the intestines and stomachs of large mammals made it possible to transport small amounts of water.

In contrast to the limitations of their basketry, the Cochimí were skilled producers of vegetable fiber cord of multiple diameters by means of various twisting techniques. Cords were woven and knotted to manufacture a wide variety of lightweight items such as nets, backpacks, and finely woven bags for transporting small items (Aschmann 1959:63) (Figure 8).

Women’s clothing consisted of a skirt made of two pieces, the front part formed by a series of strings of reed beads, very thin, perforated, and threaded in a cord made of agave fiber. The back of this kind of skirt consisted of the skin from a deer or other animal (Barco 1988:186–187).

The material culture associated with the exploitation of marine resources included agave fiber nets for
fishing in shallow waters, traps to catch fish at low tide, and harpoons with one or two points or stingers (Aschmann 1959:73–74). Simple rafts were made with freshwater reeds, allowing fishing near the coast and the harpooning of marine turtles (Aschmann 1959:72).

Social Organization

The nuclear family was the basic social unit in economic matters. Marriage relationships were governed by monogamy, and sources also mention the practice of the levirate and sororate (Aschmann 1959:120). There is some evidence of polygamy exercised by certain leaders or guamas (shamans). Marriage was exogamous, and residence was patrilocal (Spier 1923:330–334, 1933; Aschmann 1959:121–123).
The division of labor by sex and age was very pronounced. The sources are unanimous in indicating that the woman was almost the only harvester and processor of food products, although during some periods of resource scarcity or abundance (in the case of the pitahaya dulce), the men may have participated in the collecting (Aschmann 1959:120–121).

During late summer and autumn, the temporary surplus provided by the fruit of the pitahaya dulce and the seeds of amaranths and leguminous trees allowed the normally dispersed rancherias to come together at traditional meeting places. These good times correspond to the ceremonial season.

The evidence from the ethnographic record suggests the likelihood that Cochimí rancherias consisted of related families belonging to one or more patrilineal clans (Aschmann 1959:123). To some extent, such a pattern would be consistent with modern ethnographic data from related Yuman groups such as the Kiliwa and Diegueño, located in the northern part of the peninsula (Spier 1923; Meigs 1939; see Gutiérrez 2013).

The Symbolic Environment: Worldview

Some ethnohistoric sources are relatively productive in terms of the description of elements that may be related to the Cochimí worldview at the time of contact, especially with some aspects of the cosmogony and mythology of different groups that present surprising affinities throughout the peninsula. However, although these descriptions include the specific contexts in which various elements of the ritual paraphernalia were used, there is absolute silence regarding the role that rock painting may have played as a result of practices that originated in or are related with the indigenous belief system. Given the natural curiosity that the Jesuits showed about other aspects of Native culture, the general absence of matters related to the production of this abundant cultural manifestation is paradoxical. However, in contrast, there is a great symbolic, metonymic, and metaphoric richness contained in the rock art imagery, which seem to reflect transcendent segments of the worldview of these communities. The prototypes of cave paintings that have been identified were the object of diverse discursive practices, planned and carried out by social agents who were able not only to perceive reality and to be aware of it, but to assign meaning to its different components and materialize its discourses through the inherent symbolism of the cave paintings, especially those that make up the Great Mural tradition. These social agents created this shared code and thus were able to give structure to society, direct its activities, and guide people to experience the reality of their world, impacting their way of being in it with the imagery and its meaning (Gutiérrez 2013).

About 1,150 sites with rock art have been recorded so far in the Sierras de San Francisco and Guadalupe. The painted panels and the sites that contain them present an enormous diversity, and various types have been recognized, although their categorization is still ongoing. However, a preliminary classification has been proposed based on the number of human and animal figures that the panels contain, the size of the enclosures in which they are located, and their geographical location. Thus we have:

- sites of enormous dimensions, in whose panels human figures predominate and a great diversity of head shapes or headdresses can be identified;
- medium-sized sites whose panels are dominated by animal figures, and human figures are sporadic;
- medium-sized sites whose panels are dominated by male human figures;
- medium or large sites in whose panels the numbers of human and animal figures have a certain balance;
Below is compiled what can be extracted from the old chronicles about the beliefs and the symbolic environment of the Cochimi. The issue of their cosmogony and myths of creation will be addressed in depth later, given that myth and ritual in these societies were related, almost exclusively, to death, the dead, and the ancestors.

Ornaments and Body Painting

Personal ornamentation included headdresses of feathers (Figure 9), animal skins, and plants, used particularly by leaders or guamas, as well as wrappings or bands to hold the hair, necklaces, and pectorals of Olivella and mother-of-pearl. The term guama was used in the Cochimi area to designate the shaman, doctor, or healer of each rancheria. This specialist’s function was to cure diseases or physical or spiritual discomforts. Body and facial painting were widespread practices throughout the peninsula,

- medium or large sites in whose panels the number of human and animal figures have a certain balance, but which also contain abstract elements in “hidden” places of the enclosures.

This preliminary classification of site types of shows that rock art had to fulfill diverse functions. Identifying these functions is very complex because elements that show sufficient evidence of the past reality are required to unravel the conditions in which the cave paintings were created, as well as to identify and understand the motivations that drove these peoples to generate this symbolic system, which undoubtedly conceals ambiguous and highly mimetized discourses. The intention, then, is to detect the context in which the pictorial event occurred, to recreate the scenarios in which a group of individuals gathered to interact, communicate (Guiddens 1995:394), and become aware of their existence.  

Figure 9. Personal ornamentation in the form of headdresses of feathers or perhaps formed by firmly woven and worked hair. Some headdresses are unique, while others are repeated frequently.
and the pigments were pulverized and mixed with animal fat or plant resin (Aschmann 1959:110–111). Concerning this practice, the ethnohistoric sources indicate that its use was restricted to certain people and certain circumstances. Leaders or guamas are specifically cited as the persons who practiced this custom, especially in funeral ceremonies or other rituals (Figure 10).

There are some descriptions relating to this interesting custom. Although these accounts do not refer to encounters with Natives from the central peninsular area, the possibility should not be discounted that some of the described patterns were also used by the Cochimí of the study area (Gifford 1933:277–279; Clavijero 1937:256–257; Meigs 1939:52, 54; Venegas 1943(3):61; Sales 1960:36; Álvarez 1973:21).

At present, the scarcity of excavations in the region and of absolute dates obtained from diverse archaeological contexts prevents certainty that the Cochimí practiced body painting in periods before European contact. However, it is important to mention that in areas far from the mountains and lacking cave paintings, sites have been found with metates having traces of red pigment, which suggests that people produced paint that could have been used to paint their faces and bodies.

Because direct historical interpretation requires as a prerequisite a close chronological contiguity between the ethnographic or ethnohistoric source and the archaeological phenomenon, the chronological imprecision which has been noted could be considered an impediment to establishing analogies. However, what are important to consider in drawing archaeological inferences by analogy, whether they are general or directly historical as in this case, are the significant relationships that arise between the analogy’s source and its subject (Wylie 1985). Here, these deductive steps involve arguments that allow us to postulate relevant historical and cultural continuities without depending on a chronological contiguity (Hyland 1997; Gutiérrez and Hyland 2002).

From a conservative perspective, the reliable chronological evidence that is available suggests that the period of production of the Great Murals took place during the last 5,000 years. Despite its chronological imprecision, when this range is considered along with other evidence, it can be assumed that it presents sufficient resolution to link the cave paintings with specific cultural practices and long-term ideological structures (Hyland 1997; Gutiérrez and Hyland 2002).

However, the expectation or inference of cultural continuity should not be considered an argument that
supposes cultural immobility. Long-term continuities in the domain of ideas are well documented worldwide (von Gernet 1992, 1993; Whitley 1994:92), and the unique cultural-historical constrictions of the Baja California peninsula can make such expectations even more sustainable (Hyland 1997; Gutiérrez and Hyland 2002). The Great Mural pictorial tradition as a symbolic system definitely incorporated slight or profound changes, but it is postulated that as a social construct it persevered as an identifying, recursive, and relational practice.

Funeral Rituals

Rituals related to death caught the explorers’ and missionaries’ attention. Consequently, their description is relatively frequent in the old chronicles.

Both cremation and inhumation were practiced. Aschmann (1959:117) records that in cremation, the belongings of the deceased were also burned, specifically the utensils characteristic of their sex: sandals, bows, and arrows for men, and sandals and nets for women. Even so, it is not known that in the case of the cremation of leaders or guamas their paraphernalia was destroyed, because apparently its preservation was very important for the successors. Sometimes relatives of the deceased would amputate their fingers and, less frequently, portions of the ears as a sign of mourning (Aschmann 1959:111).

Ritualized Eating Practices

According to the old chronicles, the study area was the scene of two peculiar alimentary practices: the second harvest of the pitahaya, and a custom known as the maroma (Aschmann 1959:77, 81, 95). The second harvest refers to the recovery of undigested pitahaya dulce seeds from feces, a practice that impressed the Jesuits as seen in the repulsion they expressed in virtually every source that refers to this practice. The pulp of this fruit is full of tiny black seeds that are very difficult to separate; consequently, both the pulp and the seeds were eaten together. Most of the small seeds, rich in protein, cannot be digested, so the second crop was an optimal means to take advantage of this food resource through the recovery of the seeds from dry feces (Barco 1988:204–205). The maroma consisted of tying a piece of meat with a string made from agave fiber or human hair. The meat was chewed slightly, swallowed for a while, and then regurgitated from the stomach by pulling the string. The partially digested meat was then passed from person to person, who followed the same procedure until there was no meat left on the string. Ethnohistoric descriptions of the maroma make clear the social and ritual, rather than subsistence, context of this custom. Its distribution in the Central Desert was limited roughly to the area north of San Ignacio (Aschmann 1959:94–95).

Another possible ritual related to food refers to the gathering of the seeds of the tree called dipúo, a legume much appreciated by the Natives. Although its maturity coincided with that of the most valued fruits, the seeds were not left to be lost. The Cochimí identified it as medeza (or medesá), and in Loreto it was called dipúa (Aschmann 1959:84; Barco 1988:67–68). The importance of this seed was such that it was even a fundamental part of certain rituals, as in the case of a funeral ceremony observed by some members of the Isidro Atondo y Antillón’s expedition in the area of San Juan Bautista Londó in 1684. The seeds of medesá were arranged in piles around a “roof” that housed an “idol,” and when the ritual ended, the medesá was eaten (Mathes 1974).

Ritual Specialists: Cosmology

While daily decisions related to movement and obtaining resources seem to have been democratic and left to individual families, substantial political and religious authority resided in the ranchería leader and/
or guama (Aschmann 1959:124). The readiness with which the Jesuits referred to the rancherias’ leaders as guamas suggests that the leader and the guama were, in general, the same individual, and in some sources it is clear that it was a hereditary position. In addition to performing cures, these individuals conducted ceremonies, and it is mentioned that the elements that constituted their ritual paraphernalia were jealously guarded, inherited, and sometimes subject to assaults (Aschmann 1959:127).

**Mnemonic Structure and Ritual Paraphernalia**

Probably there are no other elements of the material culture so distinctive in separating the Baja California peninsula from the rest of North America as the human hair cape, or pachugo, and the wooden ceremonial tabla (board). These and other associated artifacts make up a consistent set of related elements that presumably were linked to an essential aspect of the indigenous worldview: the veneration of dead, ancestors, and mythical figures. A brief description of these elements from ethnohistoric sources, their geographical distribution, and their archaeological and ethnographic correlates will be presented next followed by a discussion of the importance that this group of objects may have had with respect to these communities’ cosmogony.

**Human Hair Capes, or Pachugos**

As Aschmann (1959:113) noted, the “use by shamans of capes or mantles made from human hair as an integral element of all professional performances is perhaps the most distinctive cultural trait of the Indians of Baja California.” The capes were made of woven hair; toward the north of the peninsula, it was common to tie the locks of hair to a network or mesh of fibers (Aschmann 1959:115). To the south in the Cape region, other elements such as feathers and the tails of animals were often added (Aschmann 1959). Placed from the head, the length of the capes might vary, reaching to the waist or to the ground (Aschmann 1959:114; Clavijero 1990:68).

The capes are known from archaeological (Massey and Osborne 1961:349–350) (Figure 11), ethnohistoric (Venegas 1943(1):95; Baegert 1952:88, 90; Dunne 1952:253; Longinos 1961; Burrus 1966:51, 1967:47; Mathes 1974:100; Sales 1956:44–51; Clavijero 1990:64, 68), and ethnographic (Meigs 1939:52) contexts. The geographic distribution suggested by the ethnohistoric reports indicates the continuous presence of this cultural feature from Guaycura territory in the south to the northern limit of Cochimí territory (Aschmann 1959:114). In the twentieth century, its use was discovered among the Kiliwa (Meigs 1939:50–59). The human hair cape is apparently an exclusively

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**Figure 11. Human hair cape.**
peninsular trait, having been present among three linguistic groups: the Guaycura and the closely related Cochimí and Kiliwa.

Eighteenth-century ethnohistoric reports indicate that hair capes were manufactured, used, and stored by the leaders or guamas (Aschmann 1959:114). The hair for the capes was obtained from the dead and from cuttings of the mourners, and it also seems to have been the payment to the guama for administering remedies and carrying out rites of healing and initiation (Baegert 1952:88; Aschmann 1959:114; Clavijero 1990:68).

At pictograph and petroglyph sites in the study area, some human figures have been recorded that apparently are wearing a type of cape. One of them was found in a set of petroglyphs linked to a large tinaja (Figure 12).

**Ceremonial Tablas**

Wooden tablas, although not as unusual as human hair capes, constitute an essential element that was apparently associated with the peninsular ritual paraphernalia. Like the hair cape, the tabla has been known through archaeological (Aschmann 1968;

The geographical distribution of the tablas nearly coincides with that of the hair capes, but it seems to extend a little farther to the north and south on the peninsula, although the formal attributes in the south are not entirely comparable with those of the peninsula’s center and north. Tablas have been reported well to the south of Loreto, possibly within the Pericú territory (Massey 1972:26–27; Molto and Fujita 1995:26–29) and even in Diegueño territory in the north (Hedges 1973b:6).

The typical dimensions of the tablas were 2.5 cm thick, 75.6 cm long, and 37.8 cm wide (Aschmann 1959: 115). They may have biconical holes drilled and appear to be painted or inscribed with geometric designs (Clavijero 1937:112; Venegas 1943(1):95; Sales 1956; Aschmann 1968:47; Davis 1968:52; Massey 1972; Hedges 1973b). In general terms, the tablas of the northern part of the peninsula had a sharp extension that presumably was used as a handle or as a spike to hold the tabla vertically on the ground (Hedges 1973b:5) (Figure 13). Tablas similar to those described have been recorded at some sites with paintings and petroglyphs in the Sierra de Guadalupe (Gutiérrez 2013) and in the northern state of Baja California (Figure 14).

As with the hair capes, the tablas were created and used by the leaders or guamas, and they seem to have been associated with each ranchería (Aschmann 1959:115). In relation to their use, various ethnohistoric descriptions are worth noting. According to Clavijero (1937:113), “These little boards were their books, in which they professed to read the nature of illnesses, the remedies suitable for them, the future changes of the atmosphere, and even the destiny of men.” Sales (1794[1]:70–71) indicates that these were particularly associated with funeral ceremonies. Two mission reports suggest that the tablas’ designs served a mnemonic function, helping the specialist to recite prolonged mythic-ritual accounts (Hostell cited in Aschmann 1959:116; Sales 1794[1]:70–71).

**Effigies**

Called “idols” by the missionaries, effigies seem to have had a distribution quite similar to that of the hair capes and the tablas. Like those, they have been recognized in archaeological (Hedges 1973b), ethnohistoric (Ducrue 1765:91; Burrus 1967:46–50; Mathes 1974:100–103; Barco 1988:282, 310; Clavijero 1990:68), and ethnographic (Meigs 1939) contexts.

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Figure 13. Wooden tablas.
They have been reported from the southernmost portion of Cochimi territory and are known archaeologically and ethnographically in Kiliwa territory in the northern peninsula; the Kiliwa report their use also among the Paipai (see Meigs 1939). Apparently, there were two types: effigies carved in wood and painted in red and black, and ones made with grass, having a wooden frame or a net as a base (Meigs 1939; Burrus 1967:46–50; Hedges 1973b; Clavijero 1990:68) (Figure 15). The effigies measured between 50 and 70 cm in height (Aschmann 1959:116) and were adorned with feathers, shells, human hair, and even with small hair capes. When they were not in use, they were wrapped in mats and hidden in the effigies’ houses, which were usually secret caves (Meigs 1939; Aschmann 1959:115–116, 1966:64). Concerning the role of the figurines, Clavijero (1990:68) reports their association with ceremonies commemorating death.
On the ceiling panel of Cueva San Borjitas rock art site, an anthropomorph was detected who holds with his right hand what may be the pictorial representation of an effigy (Gutiérrez 2013) (Figure 16).

**Stone Pipes, or Chacuacos**

Stone pipes, or *chacuacos*, were another integral part of the peninsula’s ritual paraphernalia and are known through archaeological (Massey and Tuohy 1960; Massey and Osborne 1961:34; Massey 1966:4–6, 62–63; Hedges 1973b:9; Álvarez 1975:9; Massey 1976:24–27; Tuohy 1978:72–73; Ritter 1979:326; Gutiérrez and Hyland 1995, 2002), and ethnohistoric (Venegas 1943(1):93–95, 97; Baegert 1952:78; Aschmann 1959:45, 1966:66; Barco 1988:237) contexts. Archaeologically, they are found from the far south of Cochimi territory to the territory of the Diegueño in the north, while from the ethnohistoric perspective they had a universal distribution in the peninsula (Ducrue cited in Massey 1976:21). The pipes were drilled biconically in sandstone, steatite, basalt, pumice, or volcanic tuff; this represented a considerable
investment of work (Massey 1976:24). North of the 30th parallel, pipes were made of ceramics. 

The pipes were used for two purposes: (a) smoking wild tobacco in ceremonial contexts (Ducrue 1765:91; Venegas 1943(1):93–95; Baegert 1952:78; Aschmann 1959:112–113, 1966:66; Massey 1976:23; Barco 1981:42–43, 1988:187; Clavijero 1990:60, 65–68), and (b) curing by blowing smoke towards the patients or sucking out their illness (Venegas 1943(1):93–94, 97; Barco 1988:237).

**Batons of Command, Ceremonial Rods, Feather Fans.**

Another article of the ritual paraphernalia that shows a universal distribution in the peninsula consists of wooden batons, variously termed “spirit sticks,” ceremonial rods, batons of command, or fans. They are known in archaeological (Campbell 1931:24; Treganza 1942:154; Fontaine and Prosser 1965:5; Ritter 1984:53–54), ethnohistoric (Venegas 1759(2):80; Taraval 1931:252; Sales 1956; Aschmann 1968:48; Clavijero 1990:68), and ethnographic (DuBois 1907; Meigs 1939:53; Ochoa 1978:224) contexts. Frequently the upper end of the rod seems to have been adorned with feathers or hair (Sales 1956:44–51; Aschmann 1968:48) and/or carved into the form of a human head or face (Taraval 1931:252; Aschmann 1968:48).

Apparently this artifact is one of the elements of the Peninsular Ceremonial Complex that seems to find greater representation in the painted and engraved rock art sites throughout the region. In various sites of the Sierras de San Francisco and Guadalupe, a design is observed that reminds us of the ethnohistoric descriptions of these batons (Gutiérrez and García-Uranga 1990). It is an element that many of the locals identify as an “octopus.” However, it may be the representation of the ceremonial staff with the bunch of feathers tied at one end. The widespread distribution of this motif, either painted or engraved, is striking (Figure 17).

On the other hand, it has been proposed that this ceremonial artifact’s representation had other connotations within the general context of certain rock art panels. Just as the vulva-form, the feminine symbol par excellence, is a very widespread motif in the region, the baton-rod-fan seems to be another motif that can be considered omnipresent. Although the traditional interpretation of this image cannot be dismissed, other possible explanations can be explored and proposed. In a considerable number of the recorded painted and engraved panels, there is a tendency for an association between male anthropomorphs and the aforementioned motif and a general absence of female figures or signs in the general context of the panels. These characteristics suggest that perhaps it may be considered an ambiguous masculine symbol (Figure 18) (Gutiérrez 2007, 2013).9

**Other Items**

Bullroarers are known archaeologically from southern Cochimi territory (Massey 1947:352) and ethnographically among the Kiliwa (Meigs 1939). In the latter case, their use has been associated with funeral ceremonies.

Necklaces and belts of deer hooves are reported ethnographically as other articles of equipment (Venegas 1759(2):80; Aschmann 1959:111; Clavijero 1990:68). Deer hoof rattles are ethnographically known as an integral ceremonial component among the Diegueño (Kroeber 1925:723).

**Myth**

Perhaps the most outstanding feature of this set of elements and ritual performances is the role of myth. In the ethnohistoric references, it is seen that the peninsular myth and cosmogony share a basic structure and
Figure 17. Images known as “batons of command,” or possible phallic symbols.

Figure 18. Ceremonial baton/phallic symbol associated with a male figure with oversized genitalia.
many specific elements, in some cases surprisingly so, with the myths of the Kiliwa and other Yuman groups of the north. On a general level, Yuman mythology is largely related to the actions and events of various heroic mythological figures (Kroeber 1925:788–789; Heizer 1978:656; Lamphere 1983:744). Usually there is reference to two primordial creator figures, sometimes antagonistic: for example, Tuchaipa and Kokomat among the Diegueño (Kroeber 1925:788), Sipa and Komat among the Cocopa (Kelly 1977:115–117), and Metipá and Miakwiak among the Kiliwa (Meigs 1939:66–67). There is a common reference to the creation of the first people using clay (Waterman 1910:338; Kroeber 1925:789).

Yuman creation mythology typically follows the “concept of the dying god,” in which one of the creator figures dies, and invariably the specific preparations and instructions for the first ceremony of cremation and mourning are recounted in the myth (Kroeber 1925:790; Heizer 1978:656). The Kiliwa follow this pattern, and their myths of creation refer to the first ceremonies of cremation, mourning, and the ñiwey ceremony, and to hair capes, ceremonial tablas, smoking tobacco, the houses of the deceased, and songs for the dead (Meigs 1939:52, 80, 78–81; cf. Laylander 1987). Thus, the support for every ceremony is found in myth, and the chant cycles intoned during the ceremonies are mythological in nature (Kroeber 1925:784). Correspondingly, the Yuman ritual leader’s power is derived directly through contact with the creator figures (Kroeber 1925:852).

General references to this duality of creator figures are found within the ethnohistoric corpus of peninsular California: “The most general belief among the northern tribes was that the Great God or Lord was engaged in a continuing war and persecution with another God of life, or with life itself” (Aschmann 1966:67). But even more specific references can be identified within partial creation myths recorded for the Pericú, Guaycura, and Cochimi. The names of several mythological figures are mentioned, and for each myth a primary pair is identified. Niparaya and Wac-Tuparan are identified for the Pericú, Gumongo and Guayiagui for the Guaycura, and Menichipa and Emai-cuano for the Cochimi (Sales cited in Álvarez 1975:40–41; Venegas 1979(4):523–530). There are also references to the creation of the first people using clay (Sales cited in Álvarez 1975:40–41; Clavijero 1990:67).

Similarly, there are references to the first mourning ceremony in the Jesuit accounts of peninsular creation myths. In the creation myth recorded by Sales (Álvarez 1975:40–41) in the north of the Cochimi area, the creator figure “ordered the execution of dances and ceremonies, and invited them to make offerings to the dead.” And calling to mind the primal hair cape mentioned in the Kiliwa creation myth (Meigs 1939:52, 80), the creation myth recorded in the eighteenth century for the Guaycura in the south of the peninsula mentions both the first hair cape and the first tabla.

It is obvious how the ethnohistoric and ethnographic sources that exist for the peninsula of Baja California not only describe in great detail the peninsular Natives’ lifestyles but also mention many pan-peninsular features related to the myth held in common by the ethnic groups that shared this long and narrow strip of land. It should be noted that some of the aforementioned artifacts have been found in archaeological contexts, corroborating what was reported in the old chronicles. In addition to describing the diverse exclusive cultural features that resulted from the relative isolation of the Baja California peninsula, the sources also documented the adaptations and adjustments that these communities developed for a very unique desert, mountain, and sea environment.

**The Kiliwa Ñiwey Ceremony**

The ñiwey constitutes the unique funerary ritual recorded ethnographically among the Kiliwa at the end of the nineteenth century and during the first half of
the twentieth century. It supports much of the ethno-
historic sources’ testimony, which in turn is validated
by the existing archaeological information.

Meigs reported on what he considered to have been the
last ñiwey ceremony among the Kiliwa in 1893, whereas Ochoa (1978:253) indicated that the ñiwey continued to be celebrated well into the twentieth century. Both researchers accurately sketch the specific uses and role played by the human hair cape, effigies, the feathered baton, the chacuaco, and the tabla (Meigs 1939:50–57; 1974:37–38; Ochoa 1978:253–255).

The description of the ñiwey among the Kiliwa not only accounts for the unique constellation of ritual paraphernalia found in most of the peninsula, developed around a specific ceremonial context. It also presents other characteristics that are less concrete but that are inherent to the ritual paraphernalia elements described previously, for which additional ethnohistoric and ethnographic references can be found. These characteristics are (1) belief in the immortality of the spirit, (2) communication with dead ancestors, (3) approval and revalidation of myth, (4) the personification of deity and ancestor and the manufacture of images, (5) the possession of the spirit, (6) intoxication with tobacco, and (7) song cycles (Gutiérrez and Hyland 2002).

*Great Mural Imagery and the Peninsular Ceremonial Complex*

In recent years, several works have appeared that describe the “shamanic” orientation of the Great Mural imagery. This has been based on the relationship of some attributes found in certain anthropomorphs in this imagery with ethnohistoric descriptions of the clothing of the peninsular leaders or guamas (Smith 1983, 1985a, 1985b, 1986; Jones 1990; Ritter 1994). While it is difficult to completely refute the general claim that images are shamanic in nature, “the evidence offered by these proposals has not been definitive” (Laylander 1987:520). More information appears to be required to link shamanism, in a strict sense, with the production of all the peninsular rock art, or at least with that which manifests itself in the central sierras.

As mentioned, one of the key characteristics of penin-
sular ceremonialism is the personification of a deity/
ancestor and the elaboration of surrogate images. The production of realistic figures through a medium such as rock art imagery may be considered a practice related to the veneration of ancestors and mythical figures. In this way, it has been postulated that the archetypal anthropomorphs of the Great Murals represent ancestors, real or mythic lineage heads, or leaders or guamas, personifying these social agents (Gutiérrez 2013).

Also identified have been similarities between ethnohis-
toric descriptions of peninsular facial and body painting, particularly during ritual occasions, and the color zoning of human figures in the Great Murals (Meigs 1970; Álvarez 1973; Grant 1974). The association between body painting and funerary ceremonies is particularly recurrent (Burrrus 1966:55, 88; Clavijero 1990:65–66). Sources also directly refer to the specific function of body painting for the personification of the dead.

An additional expectation that derives from the concept of personification of specific ancestors and mythic figures is that in the corpus of the Great Murals, a set of recurring characters must be recognizable. These characters have been identified by various added forms carried on human heads that have been considered as styles of headdresses or crests (Figure 19). The types of headdresses, along with the color patterns on some anthropomorphs’ bodies and faces, have been interpreted as distinguishing diverse lineages linked to the Sierras de San Francisco and Guadalupe (Smith 1983, 1985a, 1985b, 1986; Gutiérrez 2013) (Figure 20).

It is important to emphasize that the peninsular patterns of community organization and the way in
Figure 19. Headdress and facial painting categories representing a recurring set of personages. Headdress designs marked with asterisks were made by Elanie Moore.
which they were constituted geographically cannot be separated from how and where the practices related to the belief system and the ideology that governed the formation of the lineages were developed (Hyland 1997; Gutierrez and Hyland 2002). The role that rock art may have played in building and perpetuating communities’ identities and in consolidating the links that existed between these communities and their territories needs to be analyzed.

**Linguistic Prehistory, Symbolic Landscape, and Social Identity**

Harry Crosby (1975, 1997) originally designated the cave paintings of the Baja California peninsula’s central mountain ranges with the term Great Murals. The term was inspired because some sites contain huge panels painted with large figures, sometimes made in very high areas of the enclosures. Crosby identified five variants within this pictorial tradition: Red-on-Granite, San Francisco, San Borjitas, La Trinidad, and Southern Semi-Abstract.11

According to the distribution of peninsular rock art styles proposed by Ritter (1991), the limits between these styles coincide roughly with linguistic boundaries recorded at the time of contact, especially south of the 30th parallel. In this proposal, the Great Mural area also coincides with the area in which the Cochimí Ignacieño dialect was spoken during the second half

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**Figures**

**Figure 20.** Headdress typology and face and body coloring of anthropomorphs, interpreted as marking distinctions between lineages in the Sierras de San Francisco and Guadalupe.

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of the seventeenth century. Ritter has noted that the border between the Great Mural and Northern Abstract styles is located at approximately the same latitude where San Borja Mission is located and has suggested that “the boundary between the Great Mural and Northern Abstract rock art zones reflects a cultural/dialectal division among the Proto-Cochimí/Comondú peoples” (Ritter 1994:11–12).

To the south, a similar pattern occurs in the transition zone between the Great Mural and Sierra de la Giganta styles, and the borders between Ignacieño and the southernmost dialects of Cochimí: Cadegomeño and Javiereño. However, beyond the fact that these dialectal changes coincide with the borders between these stylistic mega-groups, it is interesting that they also coincide with the changes that the rock imagery of the region gradually undergoes.

In light of the revision of the Great Mural pictorial substyles in the Sierras de San Francisco and Guadalupe (Crosby 1984, 1997; Ritter 1994; Gutiérrez 2013), the distribution of the languages and dialects recorded at the time of contact, and the categorization of lineages affiliated to certain subregions of the central peninsular region, this information must now be systematized and described.

During the second half of the seventeenth century, the Cochimí shared large territories, a common worldview, and a common language. No doubt these elements gave them feelings of belonging, affection, and roots in the spaces and places where they dwelt, which were perceived, valued, and signified in different ways, including through the rock art imagery. In this way, the use of different headdresses and patterns of body paint (markers of distinction) and their manifestation and perpetuation through rock art imagery were essential elements in the identity processes of these communities and show the interrelation that existed between the groups that formed them. Following this logic, the iconography expressed in the human and animal figures at certain representative places ascribed these places, their immediate environments, and even wider territories to various social entities. In part, these premises are based on the identification of certain boundaries between substyles and pictorial tendencies that are manifested in the area and that, although they are diffuse, fluid, and permeable12, allow the approximate demarcation of areas that share, mix, or reject pictorial attributes. It is important to emphasize that the changes in the imagery are more emphatic in direct proportion to their distance from the core of the central peninsular region; the further away from that core, the more rigid and static the boundaries tend to be.

As has happened in other small-scale societies, the adaptations and adjustments developed by the groups that inhabited this region were determined to a large extent by the natural environment and the social relationships that derived from these circumstances (Layton 1992:234). So, how did the Cochimi societies interact in this unique peninsular environment of desert, mountain, and sea?

As noted earlier, the Cochimí rancherias consisted of related families belonging to one or more patrilineal clans whose subsistence was based on a wide range of plant and animal species whose availability conformed to an annual collection pattern. In the region, the distribution of water is restricted and has a pronounced seasonal fluctuation. Therefore, it is logical to suppose that each rancheria recognized a field of activity. To some extent, the deficit of terrestrial plant resources during winter and spring may have been offset by an increased emphasis on marine resources, particularly mollusks. The movement between the interior and the coast is generally well documented archaeologically (Ashmann 1959; Ritter 1979, 2010; Hyland 1997; Gutiérrez and Hyland 2002).

According to these ideas, some rancherias would have been able to “appropriate” certain areas with a
greater abundance and diversity of raw materials, food resources, and water, both in the mountains and on the coastal plains, defending these territories with which they may also have had sacred links. However, in less favored regions, it is possible that several rancherias joined their efforts to optimize the collection of food that was distributed over large areas or the acquisition of resources that required the participation of many people to prevent their loss, as is the case of the pods and seeds of leguminous trees.

Throughout the region, the milling of seeds was an activity of great importance for people’s subsistence. Milling stations are found relatively frequently; these are places that concentrate numerous fixed or “portable” metates with their manos. These stations are usually located close to dense stands of mesquite, catclaw, and ironwood. The pods and seeds of these legumes are very abundant during the winter, and their harvest may have drawn together a considerable number of rancherias to take advantage of the greater quantity of this food—activity that, in some cases, may have acquired a symbolic and ritual character, especially during the time when the milling was being done.

On a plateau in the Sierra de Guadalupe, there is a milling station integrated into a huge complex of petroglyphs. One of its concentrations stands out because on the large stone blocks that make up this huge badland there were created hundreds of fixed metates, whose grinding surfaces are iconographically integrated with or related to the petroglyphs and with adjacent densely engraved blocks. As a hypothesis, it is proposed that the reciprocal access of different clans or lineages to strategic places provided a more effective way to take advantage of water, increase the food resource, and develop rituals to strengthen alliances between the lineages involved (Layton 1992:235), rituals that in cases like the one described were fixed and perpetuated in stone.

Following the thread of this hypothesis, the relationships created through the exchange of goods and the necessary matrimonial arrangements in these exogamous societies may have been a palliative measure in the face of the segmentary effects of the lineages (Layton 1992:234). Whatever may have been the circumstances under which these aggregations took place, during them the people were ritually united across clans and lineages. For that they used various formal actions, such as rock painting, rock engraving, and body painting, and recreational activities such as dancing, singing, games, sexual license, etc. The scenarios may have been very diverse, but only in some of them did traces of the described actions remain, “mnemic footprints” (Giddens 1995:396) that reveal part of the Cochimí worldview. Such is the case of representative Great Mural sites and other places of great symbolic importance, such as the petroglyph site mentioned above. New images were added, or the oldest ones were simply rejuvenated; these actions allowed the reactivation of characters or revered symbols that gave validity and recognition to their powerful dead, ancestors, and other spiritual presences. In this way, there is a possibility that people, led by ritual specialists, leaders, or guamas, would have evoked their remote past and gone back in time to the moment of their origins (Gutiérrez 2013).

**Climatic Regions and Cultural Adaptations**

It is necessary to consider briefly the climatic contexts that gave rise to cultural adaptations that were very localized in the central peninsular region but that in their turn had certain similarities with elements of the material and symbolic culture of the northern peninsula’s archaeological and ethnographic Yumans. Emphasis will be placed on the main physiographic features of the sierras and their neighboring coastal plains, focusing attention on those biophysical and biotic variables that dwelt here. The variables shaped the ways indigenous people moved, settled, and took
root in the land, or did not do so, defining their ways of adapting to this world full of contrasts.

**The Central Desert and the Giganta-Magdalena Region**

The peninsula’s Central Desert is a semidesert that extends approximately from the 27th to the 30th parallel (Aschmann 1959:5). The region of La Giganta-Magdalena is delimited to the northwest by the Central Desert, and to the south it extends to the isthmus of La Paz (Laylander 1987).

The Sierra de San Francisco, the Vizcaíno Desert, and the northern foothills of the Sierra de Guadalupe are located toward the southern end of the Central Desert. The central and southern sectors of the Sierra de Guadalupe are located within the La Giganta-Magdalena climatic region, which shows important differences from the Central Desert with respect to its climate and the density of its floral, faunal, and water resources.

The rainfall regime in both sierras depends on the combination of four meteorological events (Hastings and Turner 1965): (1) winter storms of the Pacific Ocean (cold fronts), (2) summer monsoonal storms, (3) the tropical cyclones from the Pacific, and (4) the eastern systems originating in the Gulf of Mexico. This two-season rainfall regime, with all its irregularity and unreliability (Brown 1994:182), makes possible a great diversity of vegetation that is varied, abundant, and predictable (Salinas-Zavala et al. 1991:109; Davis 2010).

Due to these climatic conditions, the presence of water was one of the variables that most affected how these societies organized their way of moving or settling down, congregating or dispersing, and, consequently, developing a greater or lesser attachment to certain places and an emotional bond to those places. Water was the protagonist in the day-to-day reality, either pouring out of the rock, flowing through an arroyo, or held by a *tinaja*, which also allowed them to see themselves in their liquid mirror. Many of these places may have been considered sacred, and some are significant for their rock art. The Natives’ knowledge of the location, seasonal flow, and the quality of the region’s springs, drainages, and *tinajas* obviously had to be familiar to them (Gutiérrez 2013).

**Riparian Ecosystems and Their Importance in Aboriginal Subsistence**

Most of the vegetation classifications carried out in the study area have focused on the description of the abundant and widespread communities of chaparral semidesert and have not addressed plant communities adapted to the more humid conditions found in riparian environments and at higher altitudes. Such habitats have a restricted and very localized distribution within the sierras. In this sense, knowledge of the riparian ecosystems is of fundamental importance in trying to understand the indigenous settlements in the mountainous sector as well as the patterns of settlement, subsistence, and mobility. The human groups that lived here moved constantly and valued their places according to the bonds they developed with the land and the relationships that they created between themselves, the spaces, and the paths they traveled in their constant coming and going. Thus a dynamic landscape was constructed, still full of its immaterial presence and its stony memory.

**Rock Art Imagery and Territoriality**

One of the biggest concerns that arise when comparing and contrasting the different tendencies of visual representation that are manifested in the rock art of the Sierras de San Francisco and Guadalupe relates to the remarkable differences that exist between them. To what are these differences due?

In very general terms, it would seem that the Sierra de San Francisco presents a relative homogeneity in its
imagery, while in the Sierra de Guadalupe the imagery is extremely heterogeneous (Meighan and Pontoni 1983; Smith 1983, 1985a, 1985b; Crosby 1984, 1997; Ewing 1986, 2002; Ritter 1991, 1994, 2010). What variables may have influenced the production of the mosaic of substyles and tendencies in visual representation, apparently chaotic, that is displayed in the Sierra de Guadalupe? Analyzing the differences that exist between the Central Desert and La Giganta-Magdalena climatic regions may be an essential key to answering this question.

As mentioned, the compact Sierra de San Francisco, the extensive plains of the Vizcaíno Desert, and the low mountainous systems of the northern sector of the Sierra de Guadalupe are located toward the southern end of the Central Desert. It is probable that this contrasting geomorphology imposed on those who dwelt in this territory an intensive mobility pattern, to take advantage of seasonal resources, dense in some sectors and dispersed in others, within such a vast region, as well as a medium to short duration of stays at the sites due to the scarcity of water.

The circumstances discussed above, added to the large size of the distribution area of the Great Mural substyle present in the Sierra de San Francisco and its relative homogeneity, especially in its nuclear area, may indicate that its primary function was not to demarcate territories in the places and canyons where it was created; that is, its production was not aimed at visually highlighting drastic interethnic differences, even if they existed, between clans or lineages. It is interesting that in certain canyons of the Sierra de San Francisco some representations of deer, bighorn sheep and even hares, birds, and marine fauna exhibit the same color patterns that anthropomorphs show (longitudinal or transverse bi-coloring). These patterns may be suggesting membership in a lineage and a common origin, with these animals recognized as lineage heads (Gutiérrez 2013). In summary, it is possible that in this region the affiliation processes among the communities were more flexible (Layton 1992:235).

Unlike its northern portion, the central and southern part of the Sierra de Guadalupe is located outside the Central Desert, within the La Giganta-Magdalena climatic region. The mountains in this sector are very spread out, and the rainfall rate is slightly higher in a gradient that rises from north to south. It has important hydrographic basins, most of which feed into the Pacific Ocean. Although many of these systems are intermittent, they offer reliable springs throughout the year. Among these basins, those of Guadalupe-San Raymundo and La Purísima stand out. In its plateaus, there abound wide ravines and extensive valleys with systems of tinajas and springs, and the gentle slopes provide an abundant vegetation cover that is dense, concentrated, and predictable. This setting did not demand a mobility as intense as in the southern sector of the Central Desert, but allowed stays of medium to long duration in strategic locations.13

A more intense territorial and emotional attachment to certain places with abundant water and resources might result from this situation, generating through rock art a strong sense of belonging, defense, and differentiation. However, it is not yet possible to affirm absolutely that one or another substyle or trend owed its origin to a distinct group. Several modes of visual representation may coexist within a single tradition, and these contrasts may be due to the fact that the places and the cave paintings’ motifs performed different functions, among other variables.

A preliminary classification of types of Great Mural sites made from the pictorial variables that their panels contain has been presented. The variation depended on several factors: for example, if the imagery was produced by one or several groups and/or fulfilled different functions, or if it was carried out by a single divided group, which would explain the similarities
and differences within stylistic subgroups such as those that compose the Great Mural tradition (María Isabel Hernández Llosas, personal communication 2002). Likewise, different groups may have each produced their own rock art, without conflicts, alternatively using the same space, among other variables (Gutiérrez 2013).

Subtle differences in the figures that make up a panel where one substyle predominates may mean the reuse of the site by a single group over a considerable period of time, during which other ways of representing what they wanted to express were innovated. Alternatively, the changes may have occurred due to external influences, incorporating different attributes into the figures but without changing the original function of the site (Gutiérrez 2013).

An unusual case is represented by meeting sites (Gutiérrez 2013), huge rocky enclosures where diverse lineages met. Through creating images that incorporated the “markers of distinction” of each of the lineages, they left significant indications of their human interaction, their communication, and their intervention and transformation of their world, that is, their reality (Heidegger 1953; Husserl 1959; Shutz and Luckmann 2003; Habermas 2008; Iwaniszewski 2012).

In contrast, there are cases in which the motifs are unusual and highly localized. Some sites present figures that make them unique. One example is the anthropomorphs with exceptional head forms, each of which has only been recorded in one case so far (Cuesta de San Pablo, Cueva San Borjitas, Los Monos de San Juan). Another case is the human figures with head forms or chromatic patterns that manifest themselves at sites recorded within well-circumscribed areas (Cuesta Palmarito, Arroyo San Gregorio, and sites with the typical early-phase San Borjitas human figures) (Gutierrez 2013). Under these circumstances, it is possible to argue that the images were created by a single group to demarcate their space territorially. However, this is complicated due to the high degree of superposition that characterizes some Great Mural panels. Recent elements may be covering the oldest, mimicking them; if such elements are “discovered,” they may reveal that a later group re-signified the panel and the place, appropriating the imagery, adding their own rock art and canceling the previous one.

What motivated the renewal, revival, or destruction of the images? A proposed hypothesis is that some places, their settings, and certain emblematic figures painted on the panels had an enormous emblematic charge. Painting, repainting, observing, and making sense of the imagery caused varied thoughts and emotions in the individuals, because among other things, these panels have been considered to have concentrated peoples’ collective memory, which could be usurped by groups different from those who initially had given the place meaning and signified it, thereby making it their own or eliminating it by imposing a new order (Gutiérrez 2013).

In these terms, some human or animal images may represent mythological beings or legendary founding ancestors. Through ritual repainting, the merging of new personages with older ones, or even the latter’s elimination, the original personages were preserved, recovered, and empowered. Powerful new personages were generated, while others were erased from the scene, concealing them (Heidegger 1953:45). Certain emblematic rock paintings served as a means through which both ancestors and mythical figures were personified, while their veneration, reactivation, or elimination allowed the reaffirmation and negotiation of individual and social identities over time (Gutiérrez 2013).

However, in terms of territorial demarcation, what happens with the imagery in the area where the Guajademi and Bahía Concepción substyles are manifested is very interesting. Changes at the level of language (Northern/Southern Cochimi) and
of dialect (Cadegomeño/Javiereño) occurred in a relatively small territory compared to the rest of the region where Cochimí was spoken. In this southern region of the Sierra de Guadalupe, one sees in the assemblages of pictographic or petroglyphic images a need to express the differences and make them visible. However, this does not necessarily mean that the relationship between the groups that shared this border were warlike.

It is possible to argue that this is an area of dialect transition documented through ethnohistoric sources, an area of symbolic and possibly identity transition, reflected by the adopted rock art conventions, and an area of geological, geomorphological, and environmental transition (Shreve 1951, 1964; Aschmann 1959; Hastings and Turner 1965; Crosby 1975, 1997; Ritter 1979, 1991, 1994, 2010; Wiggins 1980; Laylander 1987, 2016; Salinas-Zavala et al. 1991; Brown 1994; Turner and Brown 1994; Gutiérrez 2013).15

**Conclusions**

Throughout this article, the possible pan-regional nature of what has been defined as the Peninsular Ceremonial Complex has been proposed as a hypothesis (Hyland 1997; Gutiérrez and Hyland 2002). The use of some elements of this set of accessories that are presumed to have been used as ritual paraphernalia by both the northern Yuman groups and the Cochimí groups in the peninsula’s center makes it possible to postulate that both groups shared certain elements related to their community organization.

Through a review of the ethnohistoric sources from the time of contact, crucial aspects of the myth and ritual in the central peninsula have been detected, involving the veneration and the personification of the ancestors. The Kiliwa data (Meigs 1939) show that the proxy images for death (human hair cape, *tabla*, feathered baton), so important in the execution of the rituals, constituted the means to communicate and interact with the lineage ancestors and the dead through trance. In light of this strong association between a consistent set of ritual paraphernalia and the veneration of ancestral lineage heads, it is difficult to think that in the central peninsula there was a form of community organization radically different from that observed among the Yumans of the peninsula’s north. However, this cannot be confirmed until medium- and long-term contextual archaeological research is carried out throughout the region.

In trying to situate the production of material culture within the context of the peninsular ideology’s extensive structures, it is important not to treat culture as an amalgam of undifferentiated traits of equal susceptibility to change, but rather to examine critically how European contact may have affected different cultural spheres in different ways, to different degrees, and at different times. The fact that steel replaced stone in the production of arrowheads or that members of a tribe in New Guinea’s mountains wear T-shirts may be completely irrelevant to answering questions about myth, religion, and symbolism, among other things (von Gernet 1991).

As a contribution that supports this premise, it is appropriate to mention that belief systems are very resistant to change and that they operate largely independently of the transformations that the economic infrastructure undergoes (e.g. von Gernet 1992, 1993). In other words, in opposition to the concept that there is a close connection between the domain of ideas and the economic base, driven by certain materialist approaches, the ideological sphere is considered here as something relatively autonomous (von Gernet 1993). For this reason, it is argued that ethnographic information about religious beliefs, myth, and ritual can be considered reliable, despite the fact that other aspects of the groups in question may have undergone significant and undeniable transformations.
The following comments are not conclusive; they are hypothetical proposals that have arisen from the archaeological research conducted in the Sierras de San Francisco and Guadalupe, the chronology that is currently known for the region, a meticulous reading of the ethnohistoric sources, an analysis of the existing ethnography for the northern Yuman area, and a knowledge of the Great Mural art of this region.

The proposed connection between the Great Mural imagery and the Peninsular Ceremonial Complex has involved the reconstruction of the characteristics that define this complex by reviewing as already mentioned the extensive linguistic, ethnohistoric, and ethnographic data. Particular attention has been paid to the recurrent set of artifacts required for its operation: hair cape, \textit{tabla}, effigy, \textit{chacuaco}, and ceremonial baton.

From the analysis of the archaeolinguistic patterns to the wide peninsular distribution of the ritual paraphernalia and to the consistent ethnohistoric and ethnographic data related to their use and their relation to the belief systems and peninsular myths, it is proposed that the Peninsular Ceremonial Complex represents a consistent and stable set of religious concepts and ceremonial practices, probably long term, for the peninsula of Baja California.

The evaluation of the Great Mural imagery was made in terms of a set of expectations derived from the Peninsular Ceremonial Complex that includes: (1) trance related to the possession by spirits, (2) communication with lineage ancestors and mythical figures, (3) metaphors of death and agony, (4) personification of lineage ancestors and mythical figures, and (5) making of proxy images.

The discussion of the economic and social conditions and constraints in the creation of the Great Murals and peninsular ceremonialism constitutes a point of additional interrelation (Hyland 1997, Gutiérrez and Hyland 2002). It was found that the specific expectations derived from the Peninsular Ceremonial Complex may have a recognizable positive expression in the Great Mural cave paintings and petroglyphs. Based on this, it is suggested that this monumental pictorial tradition can be considered a localized manifestation of the said complex.

Up to now, the archaeology and rock art of the central and southern portions of the Great Mural area had been much investigated in a detailed and systematic way. Unfortunately, very little is known about the archaeology and imagery located (1) in the important northern transitional belt of the Sierra de la Giganta, which broadly coincides with the boundary where the Cochimi dialects of Cadegomeño and Javiereño were spoken, and (2) at the northern limit of the Great Mural tradition, which roughly coincides with the border between the Kiliwa and Cochimi, and between the Yuman and Peninsular Yuman language families, respectively (Ewing 1986, 2002; Ritter 1991, 1994).

Of great interest is the possibility of determining whether these linguistic borders coincide with specific climatic regions and if there is a correspondence with the symbolism expressed in the rock art. This opens a range of possibilities that in the best of scenarios would allow us to find out how these groups adapted culturally to their natural environment, what the resulting social relationships were, and how they interacted in terms of identity.

The systematic deconstruction of the imagery embodied in certain emblematic places is a procedure that allows reconstructing the “rhythms of creation” of each rock art panel. Separating pictorial layers and isolating each figure may provide key information for trying to unravel who occupied the site and therefore an area or a region, either in a single period or over centuries, and perhaps finding out in what manner they did so (peacefully or through war). Likewise, distinctive
markers that make it possible to identify specific
groups or lineages may be found (Gutiérrez 2013).

Future archaeological research in unexplored regions
of the peninsula may produce surprises if they focus
on the very abundant painted or engraved rock art
imagery that are surely present. The study of rock art
at the regional level is an enormous opportunity for
understanding the processes through which the ancient
inhabitants of these lands began their adventure of
living in the world, and how, through rock art imag-
ery, they impregnated the landscape with fragments
of their worldview, generating the unique peninsular
symbolic landscape.

Endnotes

1. Much of the following discussion is based the
results of investigations initially carried out in the
Sierra de San Francisco for the Instituto Nacional de
Antropolagia e Historia (INAH) (Gutiérrez and García
1983a, 1983b, 1990; García and Gutiérrez 1984),
which culminated in the project developed in 1991 and
1994 under the author’s direction (Gutiérrez 1991b).
The results of those investigations were presented to
the INAH’s Consejo de Arqueología as unpublished
reports (Gutiérrez and Hyland 1995, 1998). Justin R.
Hyland collaborated in the most recent project and
discussed many of its results in his unpublished 1997
doctoral dissertation. Hyland’s discussion is closely
followed here. These results were also subsequently
elaborated in a Spanish-language monograph co-au-
thored by the present author and Hyland (2002) and in
the present author’s doctoral thesis (Gutiérrez 2013).

2. “Cochimi is a Monqui word designating the tribes
living immediately to the north of Loreto, and was first
recorded by Padre Salvatierra in 1698 .... The original
tribal name of the Cochimi has, since Venegas wrote,
become a linguistic term; although Venegas himself is
quite clear that by ‘Cochimi’ he means in one case a
language, and in another, a tribe” (Massey 1949:288).

3. The great quantity of archaeological evidence on
the western slope of the Sierra de Guadalupe and the
Pacific coastal plains requires intensive, systematic
archaeological investigation. Information in addition
to that addressed here will be available when the final
report is finished for the “Identidad social, comuni-
cación ritual y arte rupestre: el Gran Mural de la Sierra
de Guadalupe B.C.S.” project (Gutiérrez 2001).

4. The habitation shelters cited most frequently in the
ethnographic record are stone or scrub enclosures,
circular, semicircular, or square. The Natives slept at
night in such shelters, which were designed to house
only a single family (Aschmann 1959:108–109; Picco-
lo 1962:64).

5. “A little over 80 cm in length, they are rod-like with
an integral projecting hook carved at the distal end.
There is one bark finger-loop at the proximal end ....
These specimens conform to what will be referred to
here as the Type I configuration in which the dart shaft
does not rest in a groove as in the case of Type II spear
throwers.” (Kowta 1984:6).

6. Reflecting on the world and externalizing and mate-
rializing the resulting thoughts through the creation of
a symbolic system required the participation of suitable
and qualified characters, agents, or social actors who
were able to create a symbolic language. To generate
a change, the agent or social actor must be able to
distance himself from himself and carry out a deep
reflection about their own existence that the agent or social actor “manages to be aware of
himself”, and his future actions will be governed by
knowing “what he does and the reasons for his doing”
(Giddens 1995:24); then he will be able to devise strate-
gies to communicate to society the result of his intro-
spection; and thus his observation, his performance, and
his practice will become discursive (Gutiérrez 2013).
7. See Gutiérrez 2013 for a synthesis of the philosophical concepts discussed here.

8. In the excavation of Guano Cave in the Sierra de Guadalupe, a concentration of coprolites containing pitahaya seeds was found. Samples of these materials are being analyzed to test the possibility that they are of human origin.

9. “According to Leroi-Gourhan, there are numerous schematic phallic forms that include simple lines, dots composing lines, lines with lateral ramifications as teeth, barbs, or fans. According to this scheme, the references to the masculine would be innumerable in paleolithic art, but it is not known if this assessment can be sustained in general” (Angulo and García 2005). On the other hand, it has been proposed that this sign could represent a “phallic symbol” (Gutiérrez 2007, 2013); however, at the moment, this interpretation cannot be fully demonstrated. It is a fact that the ambiguity of certain rock figures poses real challenges for elucidating their meaning, so it seems necessary to explore other possibilities of explanation, at least as an investigative exercise. It is necessary not to isolate the perceived form which does not seem to “make sense” because the code is not known, but instead to consider other variables that are associated with it and that can help to identify patterns. The graphic representation of an idea emanating from indigenous thought does not necessarily have to meet current expectations, nor to equate with a preconceived way of seeing and representing the world through Western thinking.

10. In the case addressed, mention is made of some pan-peninsular features related to the extensive structures of peninsular ceremonialism, which is why the Great Mural rock art (Hyland 1997; Gutiérrez and Hyland 2002) has been included, which is well documented in the central mountain ranges of the Baja California peninsula. As with other features of the ceremonial complex, this pictorial tradition presents slight or profound differences but without losing the essential attributes that characterize it, such as the presence at some sites of large figures; different head forms (plumes or headdresses); monochrome, bichrome, and polychrome images; superimposition; representations of male and female human figures; and a wide repertoire of terrestrial and marine fauna. For the moment, the absence of systematic records to the north and south of the area where this pictorial style has been identified prevents knowing precisely how far its limits reach.

11. See Crosby (1997) for a revised, detailed description of the characteristics of each of the mentioned Great Murals substyles.

12. Reference is made to borders that to a certain extent are “neutral” because the Great Mural substyles transcend and “move” arbitrarily in relation to one another across large territories. Their preliminary identification has been achieved thanks to the recording of sites that contain panels in which, to a greater or lesser degree, there “coexist” painted figures that show the typical conventions that define various substyles. In some panels, more than two pictorial tendencies are mixed (Gutiérrez 2013).

13. It is not possible to quantify with certainty the length of these groups’ medium- to long-term stays in places where there was a greater possibility of accessing water. This would have depended on such factors as the sizes of the tinajas and pools and the volume of water they could contain. In intermittent streams, the amount of surface water will increase or decrease depending on the rainy season, but in general the water table is always very shallow, so that digging in the stream beds to get water is possible. This practice is still common in the region, where the excavation is called a bateque.

14. On the other hand (Gutiérrez 2013), it has been proposed that the iconography expressed in rock art
is a social construct that produced in its creators and observers acts of recognition and feelings of belonging, and, in this sense, can be considered as transcendental symbolic capital (Bourdieu 2007:109–110) that was relevant to the processes of visual construction of the social identities of the past. Even, in some cases, their production and exhibition were crucial for the conformation of intergroup identities (gender, age, etc.) and interethnic identities (Fiore 2005, 2006).

15. There are numerous works that propose specific functions for some Great Mural sites. Those of Jones (1990), Ewing (1986, 1990, 1992, 2002), Moore (1986, 1993, 2015), Smith (1983, 1985a, 1985b, 1986), Ritter (1986, 1992, 2007), Rubio (2013), and Viñas (2006, 2013) stand out, among others. Although these include very detailed investigations of Great Murals sites’ paintings and provide valuable information, an overview at a regional level may be required to try to identify the functional variables of both pictographs and petroglyphs. This is why it is necessary to continue with the detailed analysis of a representative sample of the different types of sites identified, their physiographic settings, the cave paintings they contain, and the results from the excavations at some of them. Only in this way will it be possible gradually to approach the identification of patterns and functional variables.

References Cited

Álvarez de Williams, Anita
1975  Primeros pobladores de la Baja California. Gobierno del Estado de Baja California, Mexicali, México.
Angulo Cuesta, Javier, and Marcos García Diez

Aschmann, Homer

Baegert, Johann Jakob

Barco, Miguel del
1988  Historia natural y crónica de la antigua California. 2nd ed. Edited by Miguel León-Portilla. Universidad Nacional Autónoma de México, Mexico City.

Bourdieu, Pierre

Brown, David E.

Burrus, Ernest J.
1966  Wenceslaus Link’s Diary of His 1766 Expedition to Northern Baja California. Baja California Travels Series 5. Dawson’s Book Shop, Los Angeles.

Campbell, Elizabeth W. C.
Clavijero, Francisco Javier

Crosby, Harry W.

Davis, Emma Lou

Davis, Loren G.

DuBois, Constance Goddard

Ducue, Benno
1765 *Descripción de la California (1765)*. Biblioteca Nacional, Mexico City.

Dunne, Peter Masten

Ewing, Eve

Fiore, Dánae

Fontaine, Joseph S., and Allen Prosser

García Uranga, Baudelina Lydia, and María de la Luz Gutiérrez
1984 *Informe de los trabajos realizados durante la segunda temporada de campo del subproyecto de localización y registro de sitios con pinturas rupestres y/o petroglifos en la península de Baja California, México*. Instituto Nacional de Antropología e Historia, Mexico City.

Giddens, Anthony
Gifford, E. W.

Grant, Campbell

Gutiérrez, María de la Luz
1991a Conservación y estudio de sitios con manifestaciones rupestres en el área norte de la Sierra de San Francisco, Baja California Sur. *Boletín del Consejo de Arqueología*, pp. 142–146.

1991b *Informe de los trabajos correspondientes a la segunda temporada de campo del proyecto Conservación y estudio de sitios arqueológicos con manifestaciones rupestres de la Sierra de San Francisco, B.C.S.* Instituto Nacional de Antropología e Historia, Mexico City.

2001 Identidad social, comunicación ritual y arte rupestre: el Gran Mural de la Sierra de Guadalupe, B.C.S. *Memorias: Balances y Perspectivas de la Antropología e Historia de Baja California* 2:64–72


Gutiérrez, María de la Luz, and Baudelina L. García Uranga
1983a *Programa de trabajo correspondiente a la segunda temporada de campo del subproyecto de “Localización y registro de sitios con pinturas rupestres y/o petroglifos en la península de Baja California,”* Instituto Nacional de Antropología e Historia, Mexico City.

1983b *Proyecto de localización, registro y estudios de sitios con pinturas rupestres y/o petroglifos en la península de Baja California.* Instituto Nacional de Antropología e Historia, Mexico City.


Habermas, Jürgen
2008 *Teoría de la acción comunicativa, II*. Taurus, Mexico City.

Hastings, James Rodney, and Raymond M. Turner

Hedges, Ken


Heidegger, Martin
Heizer, Robert F.

Husserl, Edmundo

Hyland, Justin R.

Iwaniszewski, Stanislaw

Jones, Bernard M., Jr.

Kelly, William H.

Kowta, M.

Kroeber, A. L.

Lamphere, Louise
Massey, William C., and Carolyn M. Osborne

Massey, William C., and Donald R. Tuohy

Mathes, W. Michael

Meighan, Clement W., and V. L. Pontoni

Meigs, Peveril, III

Mixco, Mauricio J.

Molto, J. Eldon, and Harumi Fujita

Moore, Elanie A.


Ochoa Zazueta, Jesús Ángel
1978 *Los kiliwa y el mundo se hizo así*. Instituto Nacional Indigenista, Mexico City.

1982a *Baja California: diferenciación lingüística*. Universidad de Occidente, Los Mochis, Mexico.

1982b *Sociolingüística de Baja California*. Universidad de Occidente, Los Mochis, Mexico.

Piccolo, Francisco María

Ritter, Eric W.


Prehistoric Cultural Adaptations in the Sierras de San Francisco and Guadalupe, Baja California Sur

American Rock Art Research Association, El Toro, California.


2007 An Archaeological Approach to the Rupetrian Images at La Angostura, Central Baja California. Memorias: Balances y Perspectivas de la Antropología e Historia de Baja California 8:26–56.

2010 Baja California Sur-Central. In La prehistoria de Baja California: avances en la arqueología de la península olvidada, edited by Don Laylander, Jerry D. Moore, and Julia Bendímez Patterson, pp. 123–144. Centro INAH Baja California, Mexicali.

Robles Uribe, Carlos

1965 Investigación lingüística sobre los grupos indígenas del estado de Baja California, México. Anales del Instituto Nacional de Antropología e Historia 17:275–301.

Rubio Mora, Albert

2013 El yacimiento arqueológico de la cueva de El Ratón: una cueva con pinturas en la Sierra de San Francisco (Baja California Sur, México). II. el mural pintado. Seminar d’Estudis i Recerques Prehistòriques, Monografies 10, Universitat de Barcelona.

Sales, Luis

1794 Noticias de la provincia de California, en tres cartas escritas a un amigo. 3 vols. Hermanos de Orga, Valencia, Spain.


Salinas-Zavala, César Augusto, Rocío Coria-Benet, and Eva Díaz-Rivera


Schutz, Alfred, and Thomas Luckmann


Shreve, Forrest


Smith, Ron


Spier, Leslie


Taraval, Sigismundo
1931 The Indian Uprising in Lower California, 1734–1737. Quivira Society, Los Angeles.

Treganza, Adan E.

Tuohy, Donald R.

Turner, Raymond M., and David E. Brown

Venegas, Miguel

1943 Noticia de la California. 3 vols. Luis Alvarez y Alvarez de la Cadena, Mexico City.

1979 Obras californianas del padre Miguel Venegas, S.J. 5 vols. Universidad Autónoma de Baja California Sur, La Paz, Mexico.

Viñas Vallverdú, Ramón

2013 La Cueva Pintada: proceso evolutivo de un centro ceremonial, Sierra de San Francisco, Baja California Sur, México. Seminari d’Estudis i Recerques Prehistòriques, Monografies No. 9, Universitat de Barcelona.

von Gernet, Alexander
1991 Exploring the Universal-Particular Continuum in the Construction of Prehistoric Ideology. Draft manuscript.


Waterman, T. T.

Whitley, David S.

Wiggins, I. L.

Wylie, Alison