A PROPOSED EXAMPLE OF SACRED GEOGRAPHY AND SOCIOSPATIAL OCCUPATION IN PREHISTORIC CENTRAL BAJA CALIFORNIA

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Archaeological research at Cerro El Almacén in Bahía de los Ángeles in Baja California has revealed a diverse suite of likely late prehistoric (Comondú period) remains. These sites and features appear to reflect a landscape-based fusion of activities and their resultant cultural vestiges derived from both day-to-day and side-by-side domestic actions and apparent sacred/spiritual pursuits.

Recent landscape-level archaeological work on the central Gulf coast of Baja California in the vicinity of Bahía de los Ángeles provides data for an informed discussion of the apparent interplay of various prehistoric remains in one location. These findings include what can be interpreted as ritual or sacred prehistoric features and sites and those adjoining domestic locations. The 1990s research under the author’s guidance at the Bahía de los Ángeles locality was supported by the Instituto Nacional de Antropología e Historia and the University of California.

This paper is focused on the apparent conjunction of the various archaeological phenomena on Cerro El Almacén, an inselberg or erosional outlier of some 45 hectares within the bajada bordering the southwest side of Bahía de los Ángeles (Figures 1 and 2). The hill is about 900 m from the coastline.

Particularly relevant to the presentation are those specialized and concentrated locations of cultural remains, including places labeled as burial rockshelters, residential and special-use rockshelters, aligned cairns, a pictograph cave, a double trail and ending rock enclosures, and additional rock enclosures of various sizes, all within relatively close proximity (hundreds of meters or less apart) on this small hill.

CUEVAS ALMACÉN (UC-BC-9)

A staircase of three small tuff breccia or volcanic agglomerate rockshelters with prehistoric habitation debris occurs on the northwest side of Cerro El Almacén. All shelters have prehistoric refuse including shellfish remains (Cardita sp., Protothaca sp., and Glycymeris sp. dominate), basalt and quartz flakes, cores, and presumed core tools. Manos and metates of volcanic rock, charcoal, and animal bone fragments were also observed. Of particular relevance at the base of the hill is a large, low oval rock enclosure measuring 6 x 3 m.

CUEVAS QUEBRADIZAS (UC-BC-10)

Further up the slope of Cerro El Almacén occur two low escarpments of tuff-breccia containing 11 closely grouped small caves or rockshelters. This shelter complex is an apparent ossuary not unlike others known in the locality. At least three of the shelters contain human bone (disturbed primary and/or secondary inhumations). A loose wall of small boulders originally blocked the entrance to one of these shelters, and two rock cairns of basalt boulders about 30 cm in height occur within another. Likely associations with one burial include a possible carnivore scapula, small and large pieces of coral, a cryptocrystalline silicate flake, and two Laevicardium elatum valves.
Figure 1. Map of the study locality.
Figure 2. View southwest of the main hill.

DOS CORRALITOS (UC-BC-11)

Two low, conjoined rock rings or enclosures were found near the top of the main hill on a flat ridge with a broad view. These features are each 1.8 m in diameter. No artifacts or ecofacts were found in association.

PIEDRAS ALINEADAS (UC-BC-12)

At the Piedras Alineadas site, there are eight low, elongated cairns with well-developed rock coatings on the stones (Figure 3). These cairns are irregularly spaced between 3 and 23 m apart for about 100 m along the seaward or northeast base of Cerro El Almacén, on the alluvial fan adjoining the rocky hill. The individual cairns range in length from 1.6 to 2.5 m and in width from 0.8 to 1.6 m.

A single cairn was test excavated to aid in determining its possible function. No cultural remains were encountered.

CUEVAS ABRAHAM (UC-BC-13)

Four closely adjoining granitic boulder rockshelters/caves with fundamentally differing cultural remains compose Cuevas Abraham (see main boulder concentration on Figure 2). One cave contains red geometric pictographs on its ceiling and no cultural debris lying about the floor. The several adjoining rockshelters have an overlapping midden.

The pictographs at Cuevas Abraham include three small red (Munsell 10YR 4/6, 10R 5/6) panels (Figure 4). These hidden panels are situated on the upper walls and ceiling of the boulder shelter. The largest panel (48 x 27 cm) consists of vertical rows of dots or dashes interspersed with several vertical lines. One series of dots or dashes forms a circular cluster. The second panel (25 x 20 cm) embodies a vertical and horizontal row of dots or dashes that cross, along with some smearing and a curvilinear
Figure 3. Rock cairn.
element. The final panel (not illustrated) (30 x 15 cm) is painted within a natural bowl within the wall and consists of a dot and two nested curved lines integrated with a zigzag pattern.

CERRO DE LOS SENDEROS (UC-BC-58)

This site is approximately 100 m from Piedras Alineadas and is composed of two parallel hillside trails or pathways manufactured in the cobble/boulder field. These linear features are about 1.0 to 1.5 m in width and less than 30 m apart. These paths head in a linear direction from near the northeast base of Cerro El Almacén west-northwest up the hill for about 180 m until terminating in low rock rings, one 2.7 x 2.5 m across and the other 4.0 x 3.5 m across. Two additional small, low rock enclosures (ca. 2-4 m across) are within 50 m, and their proximity to the mortuary shelters is striking.
Figure 5. Cuevas Abraham units.

CUEVA CATA (UC-BC-59)

Approximately 50 m north of Cuevas Abraham can be found a hidden cave or small rockshelter. A natural cavity 1 m wide and 2.5 m deep is located directly behind the shelter entrance. Two wooden branches have been laid across this small recess from ledge to ledge (1 m) in such a fashion that they form a rack.

EXCAVATIONS AT CUEVAS ABRAHAM

Early in the regional fieldwork, Cerro El Almacén was considered to have potential data for understanding both Indian habitation behavior and ritual/spiritual-related activities. At the main midden shelter, two spaced 1-x-1-m test units were excavated, with recovery using arbitrary 10 cm levels and 3 mm mesh screens (Figure 5). The gray-brown to dark grayish brown (Munsell 10YR 5/2-10YR 4/2), loamy sand contained charcoal and 15-45 percent shellfish remains. Both units were 40 cm in depth. The presumed representative sample includes about 2 or 3 percent of the deposit.

Dating

A single radiocarbon date from the deposit is 450 ±40, with δ C-13 percent of –22.9 (UCR-2845). Two pieces of Ángel de la Guarda obsidian yielded obsidian hydration bands of 2.3 and 4.6 microns.

Overall, the meager evidence suggests a single late prehistoric Comondú deposit, probably dating in the range of 400 to 1,000 years ago or so.
Edge-modified Flakes and Cores/Core Tools

The artifacts recovered in this category are four presumed hand-held cutting/scraping tools (cryptocrystalline silicate and schist) with edge modifications and three cores/core tools of basalt and quartz (Figure 6).

Biface

A single quartz biface (Figure 6) is a middle-stage specimen that is likely a rejected blank or preform. Importantly, no projectile points were found. Overall, projectile points are not common in this coastal locality, perhaps a reflection on the past heavy use of marine food.

Debitage

There were 107 flakes and flake fragments found in the two units. The most abundant materials are basalt and rhyolite. These relatively large (0.7-7.1 cm long) flakes are derived from small to medium-sized cores. The absence of small flakes suggests that initial core/biface reduction occurred elsewhere. Quartz and quartz crystal flakes are second in frequency, and they are also relatively large (0.8-6.0 cm in length), derived from core reduction. Only about 10 percent of the recovered flakes are cryptocrystalline silicate. These flakes are smaller than the above flakes (0.4-3.2 cm long). One flake may represent heat treatment. These recovered flakes appear to have been derived from small core and/or middle- to late-stage biface thinning processes. Three small obsidian flakes were also found, one from a pebble that had been reduced using the bipolar technique and the other two from further reduction of larger flakes.

The flaked stone industry is neither complicated nor extensive. It certainly was expedient and functional in concert with the flaked shell artifacts, in terms of various presumed cutting/scraping activities.

Pumice

Four small pieces of locally available (float along the beach) pumice were found, several exhibiting possible ground facets. An artifact of pumice occurs in the Palmer Collection derived from a nearby burial assemblage (see Massey and Osborne 1961:342). Likely pieces of pumice were brought to the site to serve as abraders. Among one group of coastal Australian aboriginal people (Gidjingali), pumice was used to sharpen bone for use in prying meat from shellfish (Meehan 1982:102).

Milling Tools

A single flat-surftaced granitic metate was found on the surface near the shelter entrance. A possible basalt mano was recovered during the excavation. Overall in the region, milling tools are relatively abundant.

Shell Tools

Shell tools for apparent cutting and scraping activities and flaked shell debris were relatively common in the excavated and surface materials. Dosinia sp. accounts for most of the artifacts (cf. Tyree 1997 for a more thorough discussion of such artifacts).

Shell Ornaments

Six ornamental pieces of a nacreous, iridescent shellfish such as Pinctada mazatlanica were found in the units (Figure 6). The use of mother-of-pearl ornaments by historic-era southern and central peninsula Indians is well documented (cf. Aschmann 1959:111; Mathes 1994; Wagner 1929:31).
Figure 6. Miscellaneous artifacts.
Shellfish Remains

The maritime focus of the occupants of Cuevas Abraham is most evident in the abundant shellfish remains. There were 35 separate families or genera of shoreline seashells present. Only one possible Haliotis sp. shell appears to be from the Pacific side of the peninsula. The two most abundant genera are the bivalves Cardita sp. and Protothaca sp. (Figure 7). The former is most abundant in terms of shellfish weight and probably meat mass as well.

Projections from sample counts suggest nearly one-quarter million marine mollusks were consumed here. Meehan (1982) found that one northern Australia maritime-situated aboriginal group ate shellfish during seasonal gathering, at “dinnertime camps” of a very temporary nature near the gathering beds, and back at the home base. Sometimes only the meats were returned to the home base. It seems reasonable to conclude that shellfish provided partial dietary support for a small number of people (band size—10-25 individuals) for a few centuries on a seasonal basis (see Ritter 1997 for further discussion in this regard). Aschmann’s (1959:103) estimate that 11 percent of the typical annual food intake for Central Desert Indians was shellfish may be a close approximation to the contribution that shellfish made to the dietary intake of this site’s occupiers.

Osteological Remains

Shark and ray-finned fish bone were found in all unit levels in the highest frequency, and crab remnants occurred in three-fourths of the levels excavated. Bat ray remains (Myliobatidae) occurred in
one-half of the levels. Reef and sandy shore fish bone was located in a number of levels. All fish remains appear to be from relatively small animals that can be found near the shore.

Other bones found in the excavated sample include those from a wood rat, hare, and possibly a mountain sheep, and remains from one unidentified bird and a sea turtle. There is a distinct emphasis in the osteological record on marine foods.

**Pollen Analysis**

Susan Smith of Northern Arizona University conducted pollen analysis of a background sample and a sample of an ash lens from Unit 2. The highest percentage of pollen from both off-site and unit samples are the grains from the Chenopodiaceae family and *Amaranthus* genus. Twenty-eight per cent of the off-site sample pollen fell within this category, compared to 43 percent of the unit sample. There was a slightly elevated count of Asteraceae pollen in the ash lens sample. Five percent of the Unit 2 pollen was from the Poaceae family, compared to none from the off-site sample. Not unexpectedly, these Cuevas Abraham pollen results weakly imply that various seed plants were being processed or somehow utilized in the shelter area.

**INTERPRETATIONS AND CONCLUSIONS**

The data recovered from the excavated sample point toward late prehistoric (Comondú) use of the one excavated shelter and adjoining deposit as a bayside residential base for a handful of marine-oriented families. A nearby shelter (Cueva Cata) with a possible rack for drying or hanging items could be a special-use location related to the main occupation shelters here. Residency/occupation was probably seasonal, possibly in the late summer through winter window when local tinajas would have provided fresh water and various cacti fruits and legumes would supplement marine foods. Use of Cuevas Abraham over a few centuries, perhaps a millennium, seems probable.

The pictograph shelter immediately adjoining the residential locus lacks a cultural deposit and offers evidence of possible ritual activities beginning with the painting episode itself and later viewing by native peoples. The painted images could be enoptc depictions from a trance-state experience by a shaman or other individual under a shaman’s tutelage (see Ritter 2007). Malotki (2007:32-33) notes the universal need for art production “to make certain locales in their environment special or extra-ordinary and thereby render them ritually effective.” Hence one is left with a rock art “shrine” allowing humans to feel an ability to maintain a level of control over an unpredictable and dangerous world.

That so little rock art is present here suggests that there were only a few painting episodes, especially when compared to the amount of art at interior sites (Ritter 2007).

The relatively hidden nature of the art further suggests it was specialized viewing, and its presence on Cerro El Almacén and absence in somewhat limited surveys so far conducted elsewhere in the bay locality add another line of evidence pointing toward the ritual and domestic importance of this hill.

Presumed residential debris is most definitive at certain rockshelter locations such as at Cuevas Abraham and Cuevas Almacén. What is unique at this location other than the rock art shelter are the relatively closely spaced features of an apparent nondomestic function.

It is apparent in this region that burial occurred away from the residential bases during late prehistoric times, both at Cerro El Almacén and at other places. However, such locations were only minutes away, if they were contemporaneous. Known interment places as discussed herein include small rockshelters but also (within a few kilometers) boulder-strewn hills and talus slopes where chambers were constructed for single and multiple interments.

There are prehistoric features in Arizona, comparable to the hillside paths and the cleared areas at their upper ends at Cerro El Almacén, which are discussed by Masse and Rankin (2008:573). These authors believe these Arizona “summit paths” and associated rock circles on hills may have served as
processional paths much like Mesoamerican temple stairways. Seemingly relevant, the feature on Cerro El Almacén heads approximately toward the mortuary complex.

Rock cairns are common in the Desert West. Among many comparative studies in the California desert, Western Papaguería, Baja California, and the Gulf of California islands, see Ritter (1981), Bowen (2000), and Vanderpot and Altschul (2008).

There is an early, well-known, and often-cited missionary description (Clavijero 1937:115) of cairn construction in the central peninsula. Clavijero noted that at Indian public gatherings the shaman or guama imposed penalties or misfortunes on those who did not bring him “the best fruit” as payment for his services. “Not only private individuals but even entire tribes were often subjected to these penalties. Likewise in the punishment of similar sins they were obliged frequently to open some new road in the mountains so that the spiritual visitor could descend with more ease and to erect on it at certain distances some heaps of stones on which he might rest.” The roads discussed could be pathways like those found at Cerro El Almacén and in Arizona.

A number of alternative subsistence-related functions for the cairn construction and alignment can also be explored. Vanderpot and Altschul (2008: 356-359) discuss possible cairn use to support nets, trip wires, or other entanglement devices or as part of drive lines for animals like rabbits, bighorn sheep, or deer. The Cerro El Almacén cairns do not appear to be so arranged. That the cairns could have supported a rabbit net or the like at the base of the hill cannot in totality be ruled out. However, why are the cairns irregularly spaced, and why does this one feature complex seem unique in the greater locality where most cairns are singular features?

Could these cairns be symbolic markers placed by individuals walking along the base of the hill, much like trail shrines (see Vanderpot and Altschul 2008:359-361 for a more detailed discussion of these western desert features) to commemorate special events or places? Some of these features in Alta California would have artifacts in association, as discussed in Rogers (1966), but this is not the case here, based on the testing conducted. Vanderpot and Altschul (2008:361) note that “in the historical period, it was a Yuman and Tohono O’odham custom to toss a stone on a growing pile at significant points along a trail, such as passes or forks, for luck.” Bowen (2000:336) found evidence among the Seri that a stone or stick was placed by a prominent rock alongside a trail in order that the spirit of the rock would make some person give the traveler a gift. Bowen (2000:337) similarly relates that rock clusters and cairns have been used by Seri shamans as a means of exercising power over others. According to Moser (1963), among the Seri, rock pile cairns represented the chief spirit of an area, and a shaman who built one might pronounce a curse on anybody who would tear it down.

Vanderpot and Altschul (2008: 361, 374-375) note that in the Western Papaguería there were many places regarded as sacred because of associated myths or suitability for propitiatory offerings, locations where ideologically based cairns could be placed. Among the O’odham, ethnographic information indicates cairns were placed to help medicine people find specific areas of certain scheduled rituals generally within specific mountain ranges, rituals suspected to be associated with origin myths and how the people are to live in this world.

The pattern of small shelter burial at Cerro El Almacén is relatively widespread in the greater Bahía de los Ángeles / Bahía las Ánimas locality (Ritter 1994, 1995, 1997). It would appear that these burials are at least in part related to the Comondú complex, based on radiocarbon dates of 1,000 years or less obtained by King (1997) on Bahía las Ánimas burials and artifact associations noted by Massey and Osborne (1961) on burials near Bahía de los Ángeles. Still, Hyland (1997) dated human secondary burial remains from a small cave in the not-so-distant Sierra de San Francisco that are middle Archaic in age (just over 3,000 years old). The radiocarbon date and one obsidian hydration reading obtained from Cuevas Abraham do fall in the Comondú period.

The locality research by this author has led to the documentation of 231 rock enclosures or “rock rings,” apparently variable in function and age (see Figure 8). (Historic-period ceramics found in one such feature point toward some of these as being contact-era in age.) It can be predicted that there are
hundreds, even thousands in the region. Yet the examples on Cerro El Almacén appear to represent features lacking a direct domestic association.

The rock enclosures on the hillside and ridge lack residential debris and are either associated with other problematic features such as pathways or at locations offering panoramic vistas and solitude. Bowen (1976:40) has found among the Seri that such features in these situations may have been for religious activities such as vision questing, a prerequisite to becoming a shaman. It is also noteworthy that several rock enclosures lacking habitation debris occur by two adjoining mortuary hills at Bahía las Ánimas (Ritter 1995). As such, these clearings could also be related to mortuary ceremonialism. Aschmann (1959:109) notes shelters for ceremonial objects built just outside campsites. Finally, the large rock enclosure without habitation debris could have functioned as a religious or ceremonial structure as described by Aschmann (1959:109).

While the ages of the various features and sites cannot be established with certainty, there are some indications (late burials, dated occupation deposit) that these assorted locations in sum or in part are related. Certainly the landscape associations discussed here are small in scope. There is locally a minimum of dating results, data recovery, and inventory compared to other regions of the greater American Southwest and Alta California. But we have the beginnings in this localized place of an identified relationship between habitation and the cosmos as postulated at a much broader level in northern New Mexico by Fowles (2009). The spiritual/religious and domestic/economic conjunction is strongly suggested.

The occupation residue at Cuevas Abraham is rather commonplace in content. These occupants were relatively mobile people, it would seem, using Cuevas Abraham for day-to-day living centered on the bay’s bountiful resources. Trade/exchange or long-distance resource procurement is minimally evident in the obsidian and silicified tuff and one possible ornament.
The location of Cuevas Abraham provided a residential-based shelter and security with an expansive view of the bay. A number of similar-appearing sites occur on this hill and those relatively nearby, suggesting a much-dispersed pattern of family groups at least seasonally occupying this southern part of the bay. The ritual activities evident from the various nonresidential sites on this hill, contemporaneous in whole or part, likely resulted from sacred/spiritual actions of the nearby base camp inhabitants. This hill may have been the focus of one band, lineage, or local subgroup. Side by side we have residential use, burial and burial-related ceremonialism, and possibly shamanism and its fundamentals such as the production of art and the seeking of visions or dreams. All of these activities found a landscape focus on Cerro El Almacén, a likely prehistoric cosmological marker or power location (cf. Hector 2009:74) not despoiled by the contemporaneous day-to-day living activities of families.

NOTE

1 More detailed accounts are presented in Ritter (1994, 1995, 1997, 2008). This article is an abbreviated and updated presentation derived from these earlier documents and presentations.

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