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Chumash Ritual and Sacred Geography on Santa Cruz Island, California

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In contrast to the archaeological visibility of Chumash rock art on the mainland, its virtual absence on the northern Channel Islands is reflective of what little is understood about ritual behavior in island prehistory. By relying on relevant ethnohistoric and ethnographic references from the mainland, it is possible to evaluate how related activities may be manifested archaeologically on the islands. On Santa Cruz Island, portable ritual items and rock features have been identified on El Montañon and the North Ridge, the most prominent ridgelines on the northern islands. Citing material correlates of ritual behavior, intentionally-made rock features are interpreted as possible shrines, which were an important aspect of winter solstice ceremonies among the mainland Chumash. Portable ritual items and possible shrines are considered in the context of sacred geography, revealing aspects of how the Chumash may have interacted with the supernatural landscape of Santa Cruz Island.

Landscapes are imbued with different attributes and values; whether economic, aesthetic, recreational, spiritual, or otherwise, these values intersect, conflict, and change through time. The natural and supernatural properties of landscapes, and the meanings and significance attributed to them, are continually reinterpreted through the perceptions and actions of those in the present (see Bradley 2000; Tilley 1994, 1996). "The meaningful spaces of landscapes are constructed through the temporalities of historical acts, forming both the medium for, and outcome of, movement and memory. Past actions, events, myths and stories 'colour' landscapes" (Tilley 1996:162). In turn, "while people create their landscapes these landscapes recursively act back so as to create the people who belong to them" (Tilley 1996:162).

Although distinctions "between monuments and 'natural' places" constitute "artificial constructions" (Bradley 2000:103), they are relevant to studies of sacred geography with respect to the degree to which the spiritual significance of locales may be manifested in the archaeological record (see Tilley 1994, 1996). The sacred properties of places such as mountaintops and springs may or may not be accentuated through cultural modification. Among the Chumash of the Santa Barbara Channel of California, the spectrum of natural and culturally-modified sacred places ranged from Point

Conception and Mount Pinos (as examples of the former) to sweatlodges and rock sites (as examples of the latter) (Grant 1965; Haley and Wilcoxon 1997, 1999). Haley and Wilcoxon (1999:215) note that "it seems likely that every Chumash-speaking village or cluster of villages had its own shrine with a meaning and function similar to that often ascribed today exclusively to Point Conception." Shrines, rock art, and other ceremonial features that "invest significant natural places with additional layers of symbolism" (Bradley 2000:107) were constructed and used throughout Chumash territory.

To what degree did the Chumash residents of the islands and mainland utilize and share similar cosmologies, symbols, metaphors, and rituals to express and negotiate their relationships with the supernatural? What is the archaeological evidence for sacred locales and associated practices on the northern Channel Islands? Santa Cruz Island is especially well-suited among these islands to addressing these questions, for several reasons; they include its pronounced topographic variability, the existence of ethnohistoric and ethnographic data pertaining to former island inhabitants, and the good preservation of cultural landscapes (Fig. 1). Co-owned and managed by Channel Islands National Park and the Nature Conservancy, archaeological sites on the island are relatively well-protected and are generally in fair to good condition. Despite the virtual absence of rock art,

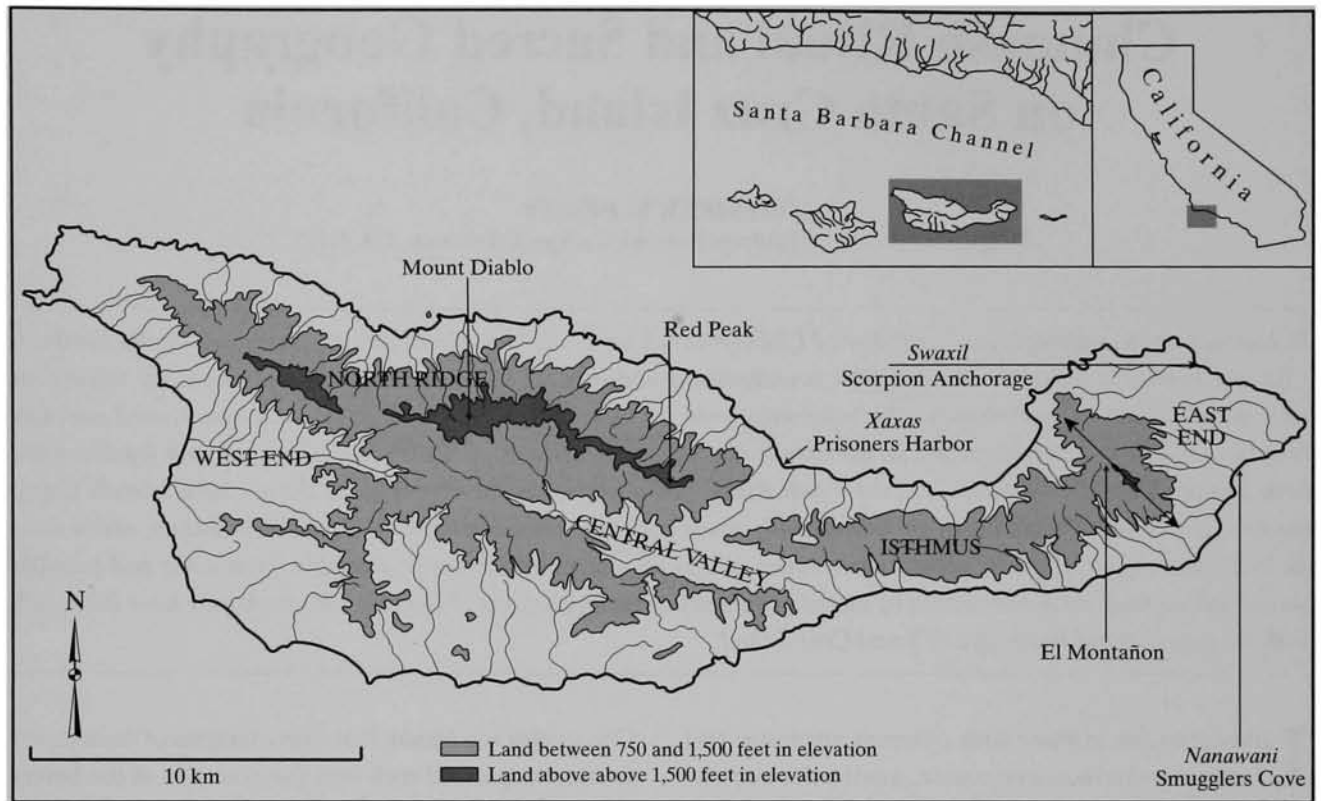


Figure 1. Santa Cruz Island.

the material correlates of ceremonial activities identified on Santa Cruz Island include both permanent features, such as possible shrines or offertory locales, and portable ritual items (Corbett 2004; Hollimon 1990; Hoover 1971; Hudson and Underhay 1978; King 1990; Lee 1981, 1997; Olson 1930; Perry 2003; Rogers 1929).

Contributing to our knowledge of ritual behavior on Santa Cruz Island, survey and site documentation on El Montañon and the North Ridge of Santa Cruz Island from 2001–2005 resulted in the identification of both portable ritual items and possible ritual features (Perry 2003; S. Spaulding, personal communication 2001–2006). Significantly, approximately 20 rock features—similar to one recorded in 1976, CA-SCRI-385 (Hudson 1976), and described by Hudson and Underhay (1978:70)—have been identified. Though their conditions vary, they share several significant characteristics, including their relatively consistent positioning on ridgetop saddles. Based on a variety of ethnographic and ethnohistoric data, these features are interpreted as possible shrines, analogous to those that were used throughout the Chumash mainland in historic times (and presumably earlier).

El Montañon is of particular interest among these ridgetlines because of the material evidence found there and because of ethnographic information relevant to eastern Santa Cruz Island. El Montañon is the northwest-southeast trending ridgetline that bounds and dominates the landscape of the east end, where the most important chert sources on the northern islands are located (Arnold 1987; Perry 2003, 2004). Two historic villages, *Swaxil* and *Nanawani*, were located on the east end, and their residents likely attributed supernatural properties to El Montañon. When coupled with information on portable items and other ritual data, these rock features and their relationship to El Montañon highlight the possible sacred geography and ceremonialism of Santa Cruz Island residents, as well as their commonalities (despite the absence of rock art) with the mainland.

ETHNOHISTORIC AND ETHNOGRAPHIC EVIDENCE FOR RITUAL BEHAVIOR

Elements of islander beliefs and rituals, including information on shrines, can be derived from diverse

ethnographic, ethnohistoric, and archaeological data from the mainland and from Santa Cruz Island. Relevant sources include historic accounts written by Spanish explorers, such as Longinos Martínéz in 1792 (Simpson 1961), and by Franciscan priests, as recorded in their responses to a questionnaire, *Preguntas y Respuestas*, that was administered from Spain and sent between 1813 and 1815 throughout Alta California (Geiger and Meighan 1976). The primary ethnographic documentation compiled by John P. Harrington is particularly useful; it includes information derived from his principal Chumash consultant, Fernando Librado, as well as from Candalaria Valenzuela and María Solares (Blackburn 1975; Hudson 1979; Hudson et al. 1977; Hudson and Blackburn 1986; Hudson and Underhay 1978; Johnson 1982a, 1993, 2001).

Substantial information has been obtained from the records of priests working at missions where islanders were present, especially missions San Buenaventura and Santa Barbara (Geiger and Meighan 1976; Johnson 1982b, 1993, 2001). Individuals from the western end of Santa Cruz Island, from Santa Rosa, and from San Miguel Island moved primarily to Mission Santa Barbara. Those living on eastern and southern Santa Cruz Island tended to go to Mission San Buenaventura, where they represented about 35% of the baptized Chumash (Johnson 1982b, 1993:20, 23; McLendon and Johnson 1999:94). In fact, of the 240 baptized Chumash from *Swaxil* and *Nanawani* on the east end, only 26 did not go to Mission San Buenaventura (McLendon and Johnson 1999:53), underscoring the historic connections between Ventura and eastern Santa Cruz Island.

Following mission secularization, the Chumash continued to maintain shrines as centers of traditional ceremonial practices through the 1870s (Haley and Wilcoxon 1999:229; Hudson et al. 1977; Hudson and Blackburn 1986:96–97; Hudson and Underhay 1978:71). Significantly, two communities of Cruzeño families existed on the mainland in post-mission times: *Qwa'* in the Goleta Slough area near Mission Santa Barbara, and *Kamexmey* along the Ventura River near Mission San Buenaventura. *Qwa'* and *Kamexmey* were founded by prominent men from Santa Cruz Island: José Crespin Kamuliyatset, the former chief of *Liyam*, and Evaristo from *Swaxil*, respectively (McLendon and Johnson 1999:137). The residents of both villages were known to have continued to build and use traditional houses,

sweatlodges, shrines, and other ceremonial features, as well as to have engaged in fishing and shellfish gathering (Hudson et al. 1977; Hudson and Blackburn 1986:84–90; Johnson 2001:63).

Fernando Librado's family history and life experiences, which resulted in him having a wide range of cultural, and specifically ritual, knowledge about both Santa Cruz Island and the mainland, are especially relevant (Blackburn 1975; Hudson 1979; Hudson et al. 1977; Hudson and Underhay 1978; Johnson 1982a; McLendon and Johnson 1999). Several of Librado's family members came from Santa Cruz Island, particularly the village of *Swaxil* at Scorpion Anchorage (Johnson 1982a, 1982b). "Fernando's father, paternal grandfather, and great-grandfather were all born at *Swaxil*," and were prominent men who were members of both the Brotherhood of the Tomol and the *'antap* society (Blackburn 1975:18; Hudson et al. 1977:3). Born at Mission San Buenaventura in 1839, Librado lived and worked in various places throughout Chumash territory, including as a ranch hand at Scorpion Anchorage (Hudson 1979; Johnson 1982a; McLendon and Johnson 1999). He had knowledge about *Swaxil* and the geography of the east end, as well as about the use of shrines by former islanders and their descendants on the mainland (Hudson et al. 1977; Hudson and Blackburn 1986). Notably, Librado said that "the heads of all the families at *Kamexmey* would participate in erecting the shrine poles during the annual Winter Solstice Ceremony" (McLendon and Johnson 1999:144), having accompanied Evaristo's family and others from *Kamexmey* to conduct winter solstice rituals in the hills near Ventura (Hudson and Blackburn 1986:96).

All of this evidence indicates that the ritual activities, such as shrine construction and use, that were documented among the mainland Chumash may be directly related to those conducted on the islands, and specifically to *Swaxil* residents and the cultural landscape of the east end. Shrines are expected to have been maintained on El Montañón, not only because of the geography and composition of the ridgeline, but also because individuals from eastern Santa Cruz Island and their descendants continued to construct and use mountain shrines through the 1870s on the mainland, shrines that persisted as sacred places despite Catholic influence and suppression (Hudson and Blackburn 1986:84–90, 93–96; Hudson and Underhay 1978:69). Based on this information,

I argue that these shrines represent a suite of fairly recent activities for which there should be archaeological correlates on the prominent ridgelines of Santa Cruz Island (Hudson et al. 1977; Hudson and Blackburn 1986; Hudson and Underhay 1978).

Mountains and Shrines as Ritual Locales

Sacred places at which the Chumash conducted rituals included a combination of natural features, such as mountains, and cultural features, such as shrines, ceremonial enclosures, open fields or dancing grounds, and cemeteries. Blackburn (1974:104) emphasizes two types of structures among the cultural features: a small ceremonial enclosure, the *siliyiq*, and “the *sawil* or shrine (often places on hill-tops and promontories, or in other remote spots) in which sacrifices of money, seeds, or down were made or ceremonies were held.” Although there were definite exceptions, this quote highlights the common practice of shrines being located in elevated areas because of their significance to Chumash sacred geography.

Like many other native Californians, the Chumash conceptualized the universe as consisting of three superimposed worlds, where supernaturals, mortals, and malevolent underworld entities resided (Bean 1976; Blackburn 1975:91; Flynn 1991; Hudson et al. 1977; Hudson and Underhay 1978:39–41). Mountains were sacred and powerful places because of their proximity to and connection with the upper world, and they were regarded as gateways of power. As quoted in Hudson and Underhay (1978:42):

Bean (1976:415) has noted the importance of balancing the powers of the universe among various California Indian peoples, for whom these ritual centers [i.e., mountains] ‘...were considered sacred places where cosmic or sacred time and space and spiritual beings met with secular time and space and human beings.’

The tallest and most sacred mountain in the Chumash landscape was Mount Pinos, *Itihinmu*, where

...man stood at the very center of the cosmos, and was capable of using this ideal geographic location to bring power into the Middle World from both the Upper and Lower Worlds, transcending time and space [Hudson and Underhay 1978:42].

Mountain shrines were used for various purposes; they were places where public and private rituals were conducted, and both community and individual needs were addressed at different times (Applegate 1975;

Hudson and Blackburn 1986; Hudson and Underhay 1978). Shrines were locales where offerings were given for different reasons:

They would come together there in their necessities and pilgrimages. Then one, in the name of the rest... petitioned for rain, an abundance of acorns, seeds, and wild fruits...and that they might catch many fish and kill many deer [Geiger and Meighan 1976:58].

Shrines were also used to commemorate the dead, such as at Point Conception and at the “Depository of the Things of the Dead” that Fernando Librado visited at Ventura and described to Harrington (Haley and Wilcoxon 1997, 1999; Hudson et al. 1977:61–63; Hudson and Blackburn 1986:84–90).

Shrines are also known to have been used for winter solstice ceremonies, which were vital to the Chumash in perpetuating their relationship with the universe and especially Sun, *Kakunupmawa* (Hudson et al. 1977; Hudson and Blackburn 1986; Hudson and Underhay 1978). Rituals revolved around supplicating Sun, “a powerful supernatural being capable of giving life, warmth, and light, or bringing death” (Hudson and Underhay 1978:61). At the winter solstice, the sun was at its maximum southerly direction; this was viewed as a critical time of ritual and renewal for the universe, but also one of fear for punishment and death by Sun. According to Chumash oral tradition, Sun played a *peon* game every night with Sky Coyote, *Šnilemun*, during which they battled for the welfare or death of humans (Blackburn 1975:91–92; Hudson et al. 1977; Hudson and Underhay 1978:52). Befitting the climate of southern California, if Sun won the most games by the end of the year, humans would perish through drought, but if Sky Coyote won, humans would experience bountiful conditions (see Johnson 2000).

The Chumash conducted winter solstice ceremonies at mountain shrines, either to predict whether drought or other bad conditions would ensue the following year, or to prevent them from occurring (Hudson and Underhay 1978; see Johnson 2000). One of the most important components of these rituals was the erection of feathered poles to symbolize the *axis mundalis*, the connection between earth and sun, “the center of the earth...this is our kingdom” (Hudson et al. 1977:55–63; Hudson and Blackburn 1986:93–98; Hudson and Underhay 1978:69). For the Chumash, these ceremonies and associated items

“...were supposed to make the sun return for another year which would cause much gladness,” and were critical in “pulling” the sun back to its northward course (Hudson et al. 1977:56, 105). Johnson (2000:306) has observed that “ceremonial commemorative events function to preserve significant social memories, in this case that climate is unpredictable and unforeseen impacts to food resources may arise.” Winter solstice ceremonies conducted at these shrines underscored how the Chumash connected themselves to the intrinsic power of mountains and how these locales functioned as focal points of supernatural action (see Bean 1976; Hudson and Blackburn 1986:90). Tilley’s (1996:173–174) interpretations of prehistoric monuments on Bodmin Moor in southwest England capture the dynamic relationship between ceremonial features and sacred places such as these:

One of the purposes of using and visiting these monuments was to inform and sediment in the mind a sense of awe and wonder, of the significance of the place, and its ancestral connotations, the events which had taken place there...creating, maintaining, working, and re-working an intimate network of relationships between monuments and topography.

Material Correlates of Mountain Shrines

Several material correlates of mountain shrines, including those constructed specifically for winter solstice ceremonies, can be derived from ethnohistoric and ethnographic sources. The most detailed of the mission era accounts with respect to Chumash shrines was written by Father José Señán at Mission San Buenaventura, in response to an official question about evidence for idolatry (Geiger and Meighan 1976:58):

In the vicinity of their rancherias and in some spots in the mountains they had certain places which were kept well cleared, swept and adorned with beautiful plumages fastened to poles...They would come together there in their necessities and for pilgrimages... At the end of their supplication they would employ the simple and plain mark of respect of offering beads, acorns, and various other seeds in order that the Invisible One [the Sun] might look upon them and be propitious to them [Geiger and Meighan 1976:58].

Based on accounts such as this, the major shrine elements present would be the feathered poles, the rock piles that secured them, and the offerings surrounding

them (Geiger and Meighan 1976; Hudson et al. 1977; Hudson and Blackburn 1986:84–90, 93–98; Hudson and Underhay 1978).

The acts of preparing, transporting, erecting, and replacing the feathered poles are emphasized in various accounts, with their number representing villages and prominent men (Hudson et al. 1977:55–63; see Hudson and Blackburn 1986:95). In preparation for winter solstice ceremonies, “they had to determine how many feather poles were necessary by visiting the localities where the poles had been erected previously....They carried these poles, which they planned to erect on the hills, with one in each hand” (Hudson et al. 1977:59; Hudson and Blackburn 1986:95). The poles were made from toyon, redwood, or red pine; attached to them were some combination of eagle, condor, buzzard, crow, and other raptor feathers (Hudson et al. 1977:63; Hudson and Blackburn 1986:86–87, 93–98; Hudson and Underhay 1978:66–70). Most poles were about 4–5½ feet above the ground, about 1–3 inches in diameter, and were set in holes (lined with stones) that were about 1/2 to 1 foot in depth, according to some estimates (Hudson et al. 1977:62–63, 105, 106; Hudson and Blackburn 1986; Hudson and Underhay 1978:67).

Unfortunately, the feathered poles—which would provide the strongest evidence for ritual activities—have little chance of being recovered archaeologically. Most of the ethnohistoric and ethnographic accounts explicitly mention that the feathered poles were not left in place, but removed and/or destroyed and replaced as part of the winter solstice ceremonies (Hudson et al. 1977; Hudson and Blackburn 1986:84–90, 93–98; Hudson and Underhay 1978:67–69). In Candalaria Valenzuela’s description of a shrine on San Cayetano Peak, she mentions that the “pole would be burned at the end of the winter solstice and the new one erected” (Outland 1956:5–6, in Hudson and Blackburn 1986:94); according to María Solares, “the old one was destroyed by fire” (Hudson and Underhay 1978:68). With regard to potential archaeological correlates, then, among the most important shrine features would be the rocks that were used to secure the poles and the charred wood from the burned poles.

The rocks are referred to as being stacked in piles or as lining the holes that were excavated in order to anchor the poles throughout the year (Hudson et al.

1977:61–63; Hudson and Blackburn 1986:84–90, 93–98, Figure 308.2-1; Hudson and Underhay 1978:69). At the shrine on San Cayetano Peak, “...the pole was sunken into the ground a short distance and small rocks piled around the base to keep it in an erect position during the year” (Hudson and Blackburn 1986:94). Referring to a shrine he visited in the hills west of Ventura for a winter solstice ceremony, Librado observed that “the pole was about four feet or so above the ground, set in a hole lined with stones” (Hudson et al. 1977:63). Librado also mentioned the participants traveling to another shrine where “...three poles, arranged north to south, were positioned in the ground about 1½ feet from each other and supported by rocks” (Hudson and Underhay 1978:69). Several accounts refer to multiple poles placed together at shrines, indicating areas in which multiple holes or rock piles were made and poles put in place as people moved upward along hills and ridgelines (Hudson et al. 1977:62–63; Hudson and Blackburn 1986:95–96).

In addition to pole installation, maintenance, and destruction, several ethnohistoric and ethnographic accounts mention various types of offerings left at these hilltop shrines, with seeds and beads being the most often cited (Blackburn 1974:104, 1975:14–15; Geiger and Meighan 1976:48–49, 58; Hudson et al. 1977:58–59, 63; Hudson and Blackburn 1986:84–89; Hudson and Underhay 1978:69). Offerings of food such as acorns, islay, and chia; feathers or feather down; and items of wealth such as beads were given to promote resource abundance and health, as described in the following quote: “...On the day of the [feathered pole] erection...offerings of beads, food, trinkets, etc., were made. They sang about the pole, men and women, asking for a bountiful year...” (Hudson and Blackburn 1986:94). Some of the questions that Father Señan included in his Chumash confessional are particularly insightful: “Have you ever believed in dances, and do you scatter seeds and beads? Did you believe that by scattering seeds, etc., you would kill fish? That there would be plenty of seeds, and deer, and rabbits and jackrabbits?” (Beeler 1967:25).

The construction of these shrines in elevated locales, including on mountains, hills, and ridgelines, was common throughout Chumash territory (Blackburn 1974, 1975; Hudson et al. 1977:55–63; Hudson and Blackburn 1986:84–90; Hudson and Underhay 1978). Different accounts describe ceremonial processions to

these shrines (Applegate 1975; Hudson et al. 1977:55–63; Hudson and Blackburn 1986:84–90; see Tilley 1996 for a discussion of ceremonial processions). In referring to the area of the “Depository of the Dead,” Librado observed that there were “...thirty stations up there, distributed all the way up the slope of the hill” (Hudson et al. 1977:62). In *The Eye of the Flute*, Librado also described a winter solstice procession in which the residents of *Kamexmey* erected the first pole of the series on a mesa in Ventura; the fifth and final pole was placed on “a high hill there, precipitous towards the Ventura River” (Hudson et al. 1977:61–63; Hudson and Blackburn 1986:95). The shrines were often placed in the “clearest and most elevated spot” (Geiger and Meighan 1976:58; Hudson and Blackburn 1986:84–90; Simpson 1961:53). Saddles were selected in some cases, possibly to afford sufficiently level ground for associated activities (see Hudson and Blackburn 1986:86). Regardless of the particular reasons for site placement, location is an important criterion when evaluating possible shrines.

In considering the commonalities in these different accounts, especially in Librado’s references to shrines maintained by the families at *Kamexmey* and other Chumash in Ventura, potential archaeological correlates for shrines would seem to include the following: rock features; small post-holes underneath the rock features; beads and other offertory items; organically-rich soil with possible plant remains; fire-affected rock and/or charcoal (from burning poles and/or offerings); locations on hilltops, ridgelines, and prominent headlands; and site orientations relative to cardinal directions and/or other sacred reference points (see Kirkish 1992). Hudson and Underhay (1978:70), citing several of these criteria, were the first to propose the presence of comparable shrine sites on the Channel Islands on the basis of their assessment of CA-SCRI-385 on Santa Cruz Island.

ARCHAEOLOGICAL EVIDENCE FOR RITUAL BEHAVIOR

Shared beliefs about sacred geography and ceremonial integration among the Chumash throughout the Santa Barbara Channel are reflected in rock art (Bury et al. 2004; Grant 1965), shrines (Hudson and Underhay 1978), and ceremonial objects (Hudson and Blackburn 1986; Lee 1981, 1997), as well as in the symbolism employed in

such items, such as the swordfish and other entities (see Bernard 2004; Blackburn 1975; Davenport et al. 1993; Noah 2005). Despite the prevalence of, and considerable focus on, rock art on the mainland, comparatively few examples have been identified on the Channel Islands. This disparity may be related in part to the limited availability of suitable surfaces, such as sandstone or steatite, on which to paint and etch (Meighan 2000:15). In particular, the geology of Santa Cruz Island offers primarily irregular and unstable volcanic surfaces on which to work, which means that either much of the rock art has eroded and/or the islanders did not produce it in the same manner as mainlanders.

This hypothesis is supported by the fact that petroglyphs and pictographs have been identified in sandstone contexts on San Nicolas, San Clemente, and Santa Rosa islands, and cupules have been found on steatite outcrops on Santa Catalina Island (Meighan 2000; Orr 1968). Marine animals (i.e., sea mammals) were incised into sandstone at the Cave of the Whales (CA-SNI-53) on San Nicolas Island, and painted in red ochre at CA-SCLI-1724 and another recently identified rockshelter on San Clemente Island (M. Larson, personal communication 2007; Meighan 2000; Reinman and Townsend 1960; Rozaire and Kritzman 1960). The only well-documented rock art on the northern Channel Islands is located at the trans-Holocene site complex of CA-SRI-147 on Santa Rosa Island, where two small petroglyph panels were first noticed by Jones in 1901 (Jones 1956; Orr 1968:103–104). Incised into a sandstone rockshelter, Panel A “consists of a series of primarily vertical lines.... Overall, the effect resembles a downward-pointing fork,” whereas Panel B is comprised of “...a series of 32 circular dots, or cupules, incised into the sandstone, all within an area measuring 19 x 31 cm.” (York 1996; York et al. 1995).

Despite the little that is known about rock art on the Channel Islands, interpretations of ritual behavior can be derived from other features, as well as from the comparatively abundant evidence of portable ceremonial items (Cameron 2000; Hale 1995; Hale and Salls 2000; Koerper 2001, 2006; Koerper and Whitney-Desautels 1999; Lee 1981, 1997; Meighan 2000). Meighan (2000:23–24) asserts that “esoteric and ritual activities for islanders were expressed in ways other than rock art production and there is no island rock art closely

comparable to the more elaborate mainland sites. For the islands, it is possible that what is called ‘portable rock art,’ consisting of incised and decorated stones small enough to be carried (Lee 1981), were the ritual items of choice” (see Hardy 2000). For example, incised steatite plaques and other steatite objects; turtle shell rattles; quartz crystals; polished pebbles; rhizoconcretions; shell beads and ornaments; shell containers (i.e., abalone bowls); basketry trays and water bottles; caches of seeds, asphaltum, and red ochre; intentionally destroyed ‘personal property;’ and fox, dog, raptor, and human burials are among the features and artifacts at the Lemon Tank site (CA-SCLI-1524), a Late Period Gabrielino ceremonial locale on San Clemente Island (Hale 1995; Hale and Salls 2000).

On Santa Cruz Island, relevant data include portable ritual items recovered during the excavation of cemeteries and habitation sites, as well as from possible ceremonial features found during surveys (Corbett 2004; Hollimon 1990; Hoover 1971; King 1990; Lee 1981, 1997; Olson 1930; Perry 2003; Rogers 1929). Common ceremonial objects include incised stones, charmstones (or plummet stones), bone whistles, quartz crystals, talismans such as raptor claws, and other shamanic regalia. On the east end of the island, Olson conducted excavations of cemeteries at Smugglers Cove (CA-SCRI-504, or B-138, and CA-SCRI-506, or B-135), the location of the historic village of *Nanawani* (Hoover 1971; Olson 1930). Quartz crystals and steatite pipes were among the evidence for ritual specialists being interred there (Hollimon 1990; Olson 1930:14–15). Surveys on Santa Cruz Island have also resulted in the identification of several culturally-modified rock features suggestive of shrines (Hudson 1976; Hudson and Underhay 1978; Perry 2003). Evidence of these features has been found along the west-east trending North Ridge, including west of Mount Diablo, and from Red Peak to just west of Prisoners Harbor, as well as on El Montañón, the ridgeline separating the east end from the rest of the island (see Fig. 1).

Portable ritual items and possible shrines are among the archaeological criteria that can shed light on ceremonialism and the sacred geography of Santa Cruz Island (see Lee 1981, 1997). The North Ridge data include Hudson and Underhay’s (1978) exploration of CA-SCRI-385 in 1976 (Hudson 1976) and S. Spaulding’s (personal communication, 2003–2005) subsequent

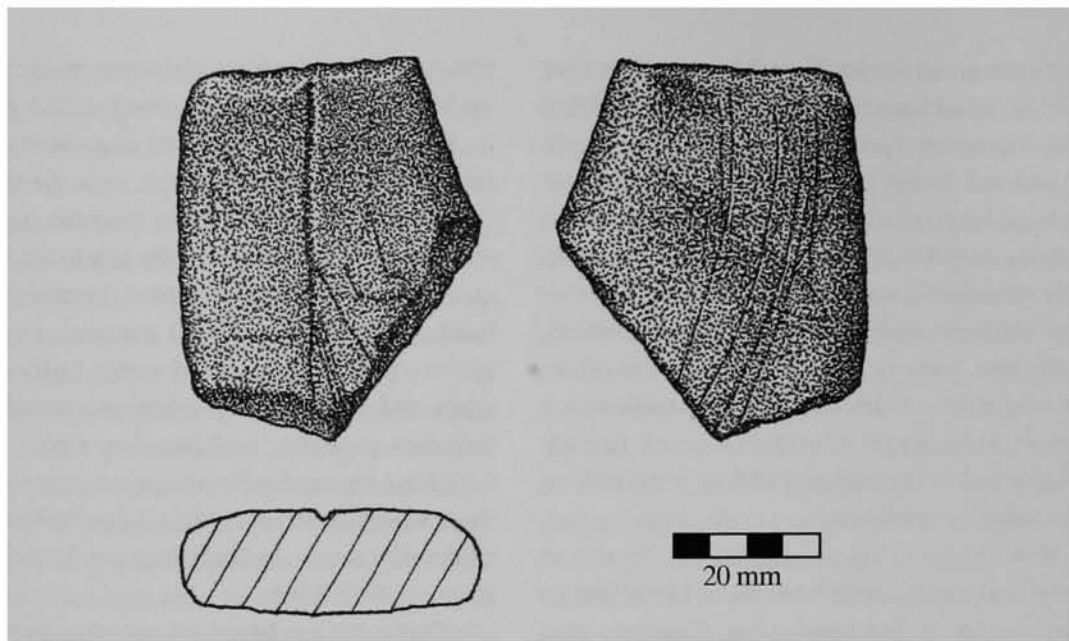


Figure 2. Incised stone, CA-SCRI-393.

photographic documentation and exploration in the early 2000s. The evidence described here for El Montañon is based on surveys and site documentation by Arnold in the early 1980s, followed by comparable fieldwork I conducted in 2001–2002 and 2005. The significance of this ridgeline in the broader sacred landscape of the island is evaluated based primarily on rock features and ceremonial objects found on and near El Montañon which are discussed in the context of ethnohistorically and ethnographically-documented ritual activities among former islanders on the mainland.

Portable Ritual Items on Santa Cruz Island

During survey and site documentation on the east end between 2001 and 2002, one charmstone and two incised stones were found on the surface of sites in the vicinity of El Montañon (Perry 2003). The charmstone, or plummet stone, is a smooth, torpedo-shaped piece of siltstone incised with identical deep grooves that encircle both ends. The artifact is 62.94 mm. in length, 32.47 mm. in width, and 31.49 mm. in thickness; it weighs 47.29 gm. (Perry 2003:266). Its identification as a plummet stone, or charmstone, is based on the distinguishing features (as described in Hudson and Blackburn 1986:157–163) of its shape, the presence of incising, and its material type. The stones were used as personal amulets or talismans by shamans ‘in making rain, curing the sick, and in various ceremonies’ and by warriors and travelers for protection;

the grooves were ‘for the purpose of fastening feathers to the implement’ (Hudson and Blackburn 1986:158–159; Hudson and Underhay 1978; Walker and Hudson 1990).

The two incised stones were found on the surface at CA-SCRI-393, a site with three shell midden loci with Middle Holocene deposits on a flat just west of El Montañon (Perry 2003:265–269). As defined by Lee (1997:59), these stones “were not used as, nor created for, sharpening instruments, as has been suggested elsewhere...Made of mudstone, siltstone, or diatomaceous earth, they may be flat or rounded, and are further embellished with incising.” Incised stones have been recovered from a variety of mainland and island contexts, including habitation sites, cemeteries, and ritual centers (e.g., in and near intentional animal burials on San Clemente Island) (Bury et al. 2004; Hale 1995; Lee 1981, 1997). Produced and used throughout the Santa Barbara Channel starting around 4,000 B.P., they have been interpreted as ritual items that likely varied in their specific purposes and meanings (Bury et al. 2004; Lee 1981, 1997).

Both of the incised siltstone objects recovered from CA-SCRI-393 are shaped and have intentional etchings or incisions (Perry 2003:265–269). The design on one is sparse and geometric (Fig. 2) compared to other incised stones. The other, which is complex in its composition, is stained with red ochre along the intact end of its white, intentionally-shaped trapezoidal form (Fig. 3). Incising is

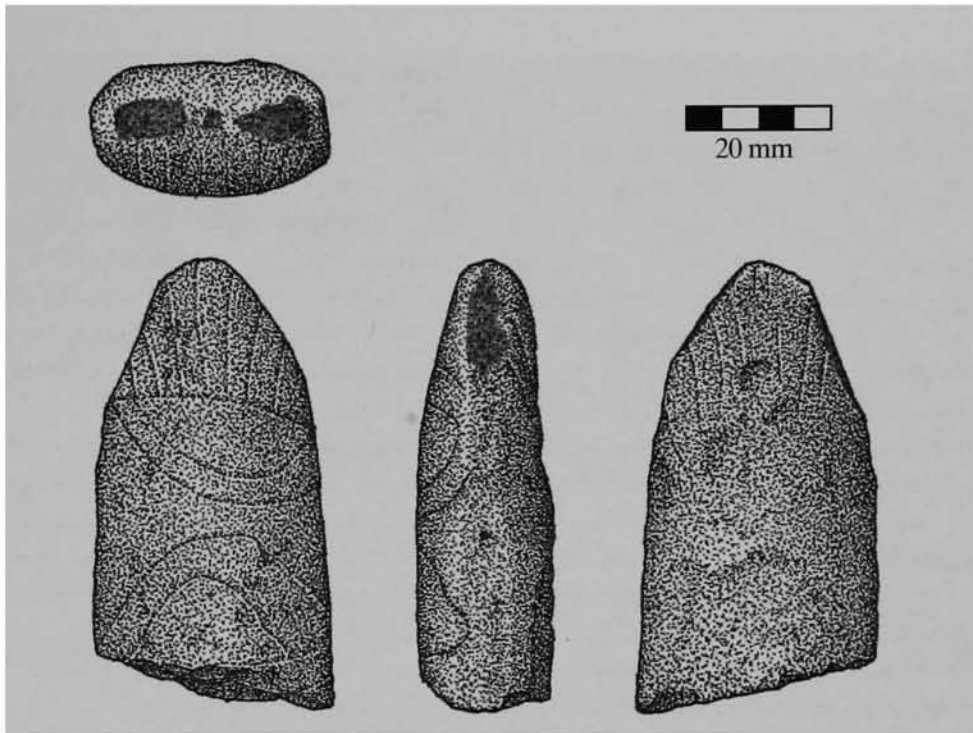


Figure 3. Incised stone, CA-SCRI-393.

visible on both sides of the object; on one side there are parallel semi-circles or crescents and eight lines arranged in what is subjectively described as a sunburst pattern.

Possible interpretations of this particular incised stone involve recognition of the importance of the sun and the sunstick or staff used during the winter solstice ceremonies (Hudson et al. 1977; Hudson and Blackburn 1986:235–239; Hudson and Underhay 1978; Lee 1981, 1997). The sunstick is described as a painted stone disc on a wooden shaft with associated symbolism pertaining to the sanddollar (Hudson et al. 1977:57). “Also painted on the stone was a red or black crescent which represented the moon. The entire sunstick was regarded as a metaphor for the central axis (*axis mundalis*) of the world” (Hudson and Underhay 1978:63).

The whitish siltstone of this artifact resembles the color and texture of a sanddollar; that, combined with the incised crescents and rays, makes it seem reasonable to propose that it could signify a sanddollar and/or other type of sun symbolism. In a quote from Harrington (who was paraphrasing Librado), the sanddollar is referred to as “a shell that resembles the shape of the sun and has a heart and from there the rays ran” (Hudson and Underhay 1978:51). The Chumash name for sanddollar means “the shadow of the child of the winter solstice,”

while the sacred name of the sun metaphorically means “the radiance of the child born on the winter solstice.” Other interpretations of this artifact pertain to frogs, lizards, and other water symbolism, with connections to winter solstice ceremonies (see Hudson and Underhay 1978:60).

Although limited, these artifacts provide evidence for ritual activity on eastern Santa Cruz Island, including the production and use of incised stones, as initially discussed by Lee (1981, 1997:67). These incised stones are comparable to the 37 found in the region around Vandenberg Air Force Base that have been analyzed recently by Bury and others (Bury et al. 2004), as well as to the 127 from Malaga Cove, Topanga Canyon, and Jalama that were studied earlier by Lee (1997:62). In general, they suggest that commonalities in ritual practices existed throughout the Santa Barbara Channel, some of which may have had considerable time depth (Bury et al. 2004; Hollimon 1990; Lee 1981, 1997). Specifically, the presence of such artifacts around El Montañon suggests another aspect of the ridgeline’s usage that was beyond or perhaps complimentary to its roles as the major chert source on the northern Channel Islands and as an important travel route—that of being a sacred place.

Rock Features on Santa Cruz Island

Approximately 20 rock features on Santa Cruz Island meet several of the archaeological criteria for shrines (Perry 2003:265–274; S. Spaulding, personal communication 2003–2005) (Table 1). Most are located on El Montañon and the North Ridge, the highest and most prominent ridgelines on the northern Channel Islands. The North Ridge, which is composed of Santa Cruz Island Volcanics, forms the northern half of the island west of the Isthmus; its highest peak is Mount Diablo, 2,470 feet above sea level. El Montañon is oriented northwest-southeast, and with its highest unnamed peak at 1,808 ft., it dramatically separates the east end from the rest of the island. From different points on the North Ridge, one can see El Montañon, the central valley, and the west end of the island, as well as the mainland, Santa Rosa, and San Miguel islands. From El Montañon the predominant views are of the east end, the isthmus, North Ridge, and the mainland. Given that a large portion of Chumash territory can be seen from these vantage points, it seems reasonable to hypothesize that the islanders may have attributed supernatural properties or significance to these ridgelines.

The rock features present range from being intentionally modified and well-defined to those appearing to be highly disturbed; they include natural

features that meet the criterion of location, which renders their specific number impossible to determine (S. Spaulding, personal communication 2003–2005; see Tilley 1996 and Bradley 2000). When in good condition, these sites most commonly consist of oval to rectangular features made of intentionally-placed volcanic rocks that form a platform about 2 x 3 m. in diameter and 10 to 20 cm. in height (Perry 2003:265–274; S. Spaulding, personal communication 2003–2005). The rocks are sometimes fire-affected, but not in every context. Black silty loam soil is often found at these features, interspersed between the rocks. The dark soil and rocks are sitting atop and embedded into the ground surface, but none appear to have much depth. In most cases, no shellfish or fish remains have been found in association. However, in some areas the situation is more complicated due to the fact that the features are located directly on shell middens (e.g., features A–E at CA-SCRI-406).

As important as their physical attributes might be, the location of the rock features on ridgetop saddles and at higher elevations is also suggestive of ritual behavior, notably shrine use. Their presence in saddles can be attributed to the need for flat, cleared areas on which to conduct ceremonies and others activities (Hudson and Underhay 1978:70). In addition, they are generally not associated directly with habitation sites, but are more

Table 1

ETHNOGRAPHIC REFERENCES TO AND ARCHAEOLOGICAL CORRELATES OF CHUMASH SHRINES

	Ethnographic references to mainland shrines	Archaeological correlates	Rock features on Santa Cruz Island
Location	Elevated locales (e.g. ridgelines)	Elevated locales (e.g. ridgelines)	Elevated locales (i.e. ridgeline saddles)
Cleared area around shrine	Ground surface kept clean for use during ceremonies	Not associated directly with habitation locales/ limited associated artifacts	Not associated directly with habitation locales/ limited associated artifacts
Feathered poles	Pole size: 4–5 feet in height, 1–3 inches in diameter Toyon, redwood, or red pine Burned after use	Postholes ½ to 1 ft. in depth, 1–3 inches in diameter Macrobotanical remains Fire-affected rocks	Posthole with comparable dimensions at CA-SCRI-385 Carbonaceous soil Fire-affected rocks
Rock piles or rock-lined holes	Rock piles or rock-lined holes to keep the poles erect	Rock piles or rock-lined holes	Intentionally formed rock features Average dimensions: 2 x 3 m Oval to rectangular in shape
Offerings	Seeds, acorns, and other food offerings Beads and other wealth items	Macrobotanical remains Beads and other wealth items	Carbonaceous soil with no shellfish or fish remains No beads, but chert



Figure 4. CA-SCRI-385 (facing east-northeast).

remote. Evidence from nearby shell middens indicates that people were not living on El Montañon after the Middle Holocene; in more recent times, it is possible that coastal inhabitants made ceremonial visits to ridgetops.

Ten relatively well-defined rock features have been identified on El Montañon within 2,000 m. of one another and at elevations ranging from 1,275 to 1,750 ft. (Perry 2003:265–274). The remainder are located on the North Ridge, primarily above 1,000 ft., although one is also found in the saddle of a ridgeline that extends southward above substantial midden deposits at Pelican Bay (S. Spaulding, personal communication 2001–2005). Five of the ten features on El Montañon are clustered together on top of the shell midden at CA-SCRI-406, one is nearby, three are distributed along the main ridgeline, and one disturbed feature is situated in a deep saddle on a ridgeline that connects the east end to the Isthmus. CA-SCRI-385, three rock features on El Montañon, CA-SCRI-399, one of six in the vicinity of CA-SCRI-406, and CA-SCRI-413 are discussed to highlight both commonalities and differences in these features.

CA-SCRI-385. The first of these rock features that was documented on the island, CA-SCRI-385, was visited in 1976 by an expedition from the Santa Barbara Museum of Natural History; it is well known because of its description in *Crystals in the Sky: An Intellectual Odyssey Involving Chumash Astronomy, Cosmology, and Rock Art* (Hudson 1976; Hudson and Underhay 1978). Hudson and Underhay described the rock feature (Fig. 4), which is located in a saddle at an elevation of 1,300 ft. along the western part of the North Ridge, in the following manner:

The site included an oval double platform of unshaped stones whose color, shape, and ‘packing’ earth were completely different from those on or near the high mountain saddle. Fine-textured black soil filled the tiny cracks between the stones, in contrast to the pale orange soil which was natural to the area. The lower platform measured about 6 feet east to west and 4½ feet north to south. The upper platform, recessed about 18 inches from the edge of the lower platform, was also an oval, and about 10 inches in height [1978:70, Figure 9].



Figure 5a. Feature F, CA-SCRI-406 (facing southwest).

They also probed the feature and noted the presence of a posthole 2 inches in diameter that extended more than 6 inches in depth. Hudson and Underhay (1978:70) concluded their description by saying that “there seem to be good reasons for believing that both sites formed a shrine. Their location on a high mountain saddle supports this contention, as does the placement of rocks and stones which may have supported feathered poles.”

Further interpretations of this rock feature are limited due to the significant amount of erosion and disturbance that has occurred between 1976 and 2002, when the site was revisited (S. Spaulding, personal communication 2002). Outlines of two, and possibly three, rings of stone were still visible in 2002, but there had been noticeable changes in the distribution of the rocks and a substantial destabilization of the original form. Nevertheless, the field notes and published descriptions allow for comparisons to be made between CA-SCRI-385 and rock features on El Montañón.

CA-SCRI-406. Feature F, included within multi-loci CA-SCRI-406 and known to island visitors as the ‘sun shrine’ for the past 20 years, is the northernmost of the rock features on El Montañón (Arnold 1982; J. Johnson, personal communication 2007; S. Spaulding, personal communication 1998; see Figs. 5a and b). At 1,400 ft. in elevation, this rock feature is located in a saddle—between High Mount at 1,581 ft. to the southeast and an unnamed peak at 1,532 ft. to the west—that is highly visible from the northern portion of the east end, including the area around *Swaxil*. This feature, which is constructed of red volcanic rocks, stands in sharp contrast to the whitish hue of the exposed bedrock of the Monterey Formation on which it is situated.

The site consists of an oval-shaped feature composed of primarily basaltic rocks that were intentionally placed in a tight cluster measuring 236 by 140 cm. on axes of 290°–110° and 200°–20°, respectively. Recent erosion around its perimeter has exposed brown soil and small

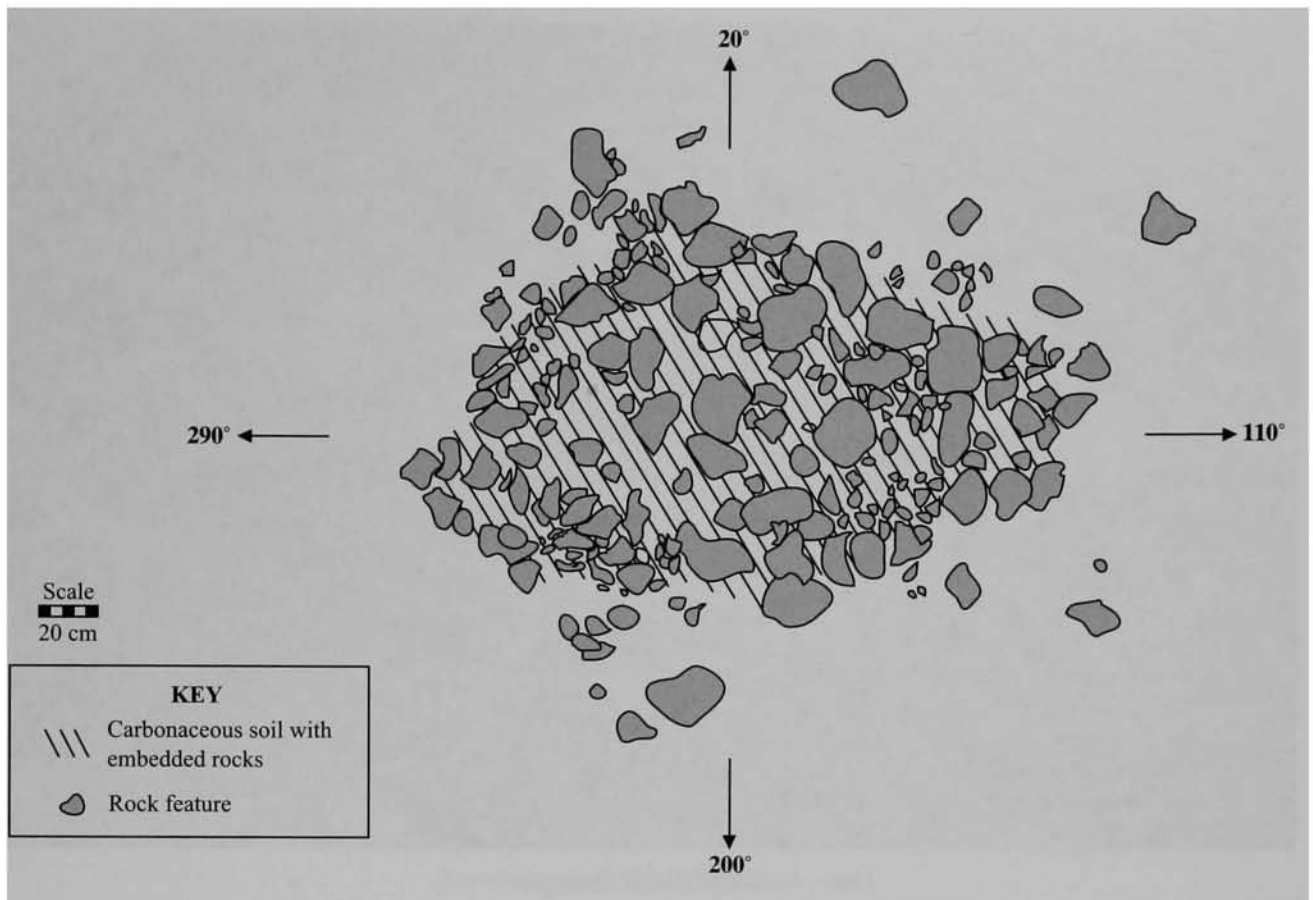


Figure 5b. Feature F, CA-SCRI-406.

flecks of charcoal interspersed between and underneath the rocks, some of which, but not all, are fire-affected. A few basalt flakes and some debitage were found in the vicinity, but no other cultural materials have been observed. This rock feature is in good condition and is one of the most obvious, despite erosion and rock displacement around its perimeter in recent years (note the differences in stone distribution between Figures 5a and b).

Southeast and uphill from the 'sun shrine' is the shell midden of CA-SCRI-406, and nearby is a low-density chert scatter associated with trapezoidal microblade production. CA-SCRI-406 represents the earliest occupation and use of the ridgeline, based on two radiocarbon dates: $5,040 \pm 80$ B.P. and $6,380 \pm 70$ B.P. (Perry 2003, 2005). Five tightly clustered rock features (features A through E), similar in characteristics to Feature F, are located on the surface of the shell midden. Despite their overlap, it is not clear whether the rock features are associated

with the shell midden or with microblade production; they lie parallel to one another on the surface of and/or are slightly embedded into the midden. It is virtually impossible to determine whether organic materials are directly associated with these features because of the underlying shell midden. However, further testing at this site may help to resolve some of these questions.

Each of the rock features at CA-SCRI-406 is consistent in dimensions and materials to the others described on El Montañón. The major distinction is that they are oriented in a different direction than the rest of the rock features on the main ridgeline; their axis lengthwise is northeast-southwest, in contrast to the west-northwest orientation of the others. Features A–F run parallel to each other and the landform, indicating that landform orientation, along with cardinal directions, may have influenced their placement. Interestingly, these features are located on one of the widest expanses of flat ground on the top of El Montañón.



Figure 6a. CA-SCRI-399 (facing northwest).

CA-SCRI-399. Three rock features are situated in gentle saddles between High Mount and the highest point of the ridgeline, an unnamed peak with an elevation of 1,808 ft. Located at 1,675 ft. in elevation, the rock feature at CA-SCRI-399 is similar to the others, measuring 320 by 225 cm. on axes of 295°–115° and 205°–25°, respectively (Figs. 6a and b). In the original site record from 1982, Arnold describes it as a “well-imbedded, well-formed rectangular formation of volcanic rocks.” Surrounding the rock feature is a small chert scatter measuring 8 x 8 m. in diameter, which consists of flakes and debitage associated with trapezoidal microblade production.

Evidence of a footpath is apparent immediately next to the feature; it intersects the densest portion of the lithic scatter, which is oriented to the northeast. Despite the proximity of the trail, the overall character of the rock feature does not appear to have been impacted significantly, with fewer obviously dislodged rocks than at other sites. Unlike the other rock features discussed, none of the volcanic rocks at this site appear to be fire-affected, and no organic soil or charcoal is obvious within the rocks.

CA-SCRI-413. CA-SCRI-413, which is situated 100 m. southeast of CA-SCRI-399 at 1,650 ft., consists of a small, low-density chert scatter with evidence of trapezoidal microblade production, at least one rock feature, and an abundance of fire-affected rocks. First recorded by Arnold in 1982 and updated by Perry in 2005, this site has evidence of at least one rock feature, possibly two (if not more). Large, dislodged volcanic rocks are scattered through an area 10 x 8 m. in diameter. Because of these characteristics, this site is the most reminiscent of the ‘double oval platform’ Hudson and Underhay (1978:70) described at CA-SCRI-385.

Feature A at CA-SCRI-413 is similar to other well-defined rock features on El Montañon and the North Ridge (Figs. 7a and b). Fire-affected volcanic rocks were intentionally placed to form what appears to be an oval or rectangle that measures 210 by 155 cm. on axes of 310°–130° and 220°–40°, respectively. Arnold (original site record) describes it as ‘an oval circle of hand-laid imbedded rocks’ that is 2.5 x 2 m. in diameter, suggesting that some erosion has occurred in

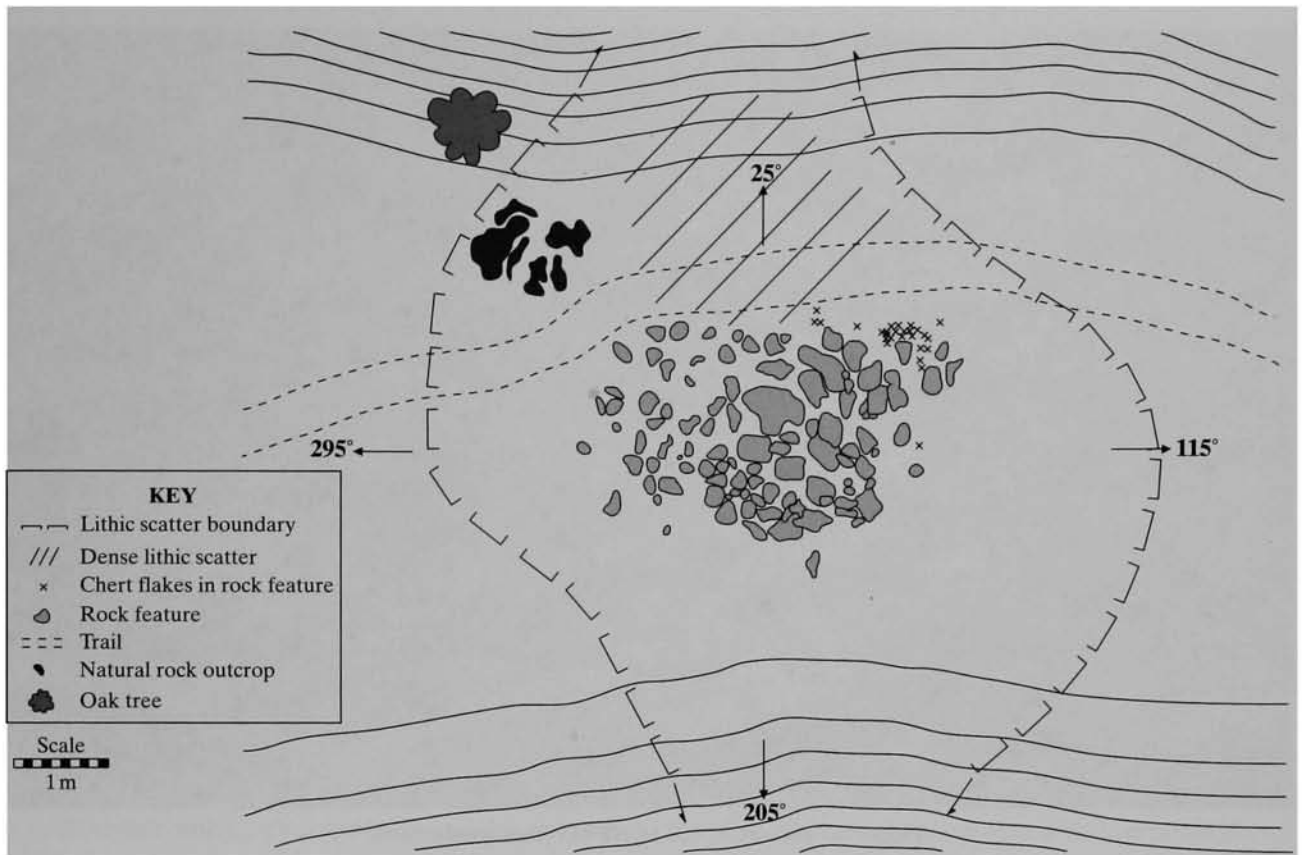


Figure 6b. CA-SCRI-399.

the past 23 years, likely related to human and animal activities.

Less than six meters northwest of the primary feature (Feature A) are embedded volcanic rocks and dark carbonaceous soil intermixed with abundant charcoal in an area about 180 by 150 cm. in diameter (Feature B). In 2005, one charcoal sample yielding a radiocarbon date of 920 ± 40 B.P. (Beta-195426) was extracted from intact deposits at Feature B. They were initially exposed through pig rooting and subsequently probed for undisturbed materials. Supplementing the evidence for trapezoidal microblade production, this date indicates activity at this site during the Medieval Climatic Anomaly, sometime between the late Middle and early Late Period.

Only one of the eight dated sites on El Montañón has yielded radiocarbon dates falling within the past 1,500 years. CA-SCRI-753 is a small rockshelter located downhill from a large chert quarry and microblade production center, CA-SCRI-394 (Perry 2003). Near an intermittent spring, the rockshelter is 400 ft. downhill on a westerly ridgeline whose junction with the main ridgeline

of El Montañón is just north of where CA-SCRI-413 sits in a low saddle. Two shellfish samples from 10–15 cm. in depth were obtained from intact deposits just inside the rockshelter's dripline, yielding calibrated radiocarbon dates of $1,180 \pm 50$ B.P. (Beta-168347) and $1,250 \pm 60$ B.P. (Beta-222706) (Perry 2003). These data are tenuous, yet tantalizing, in terms of what they suggest about possible connections between site activities during the Medieval Climatic Anomaly, a nearby freshwater source, and the association of shrines with concerns about drought and resource abundance (see Johnson 2000).

Chronology of the Rock Features

The chronology of these rock features, as well as the question of the antiquity of shrine construction and use among the Chumash, may never be adequately defined or understood. Due to the absence of commonly dated materials such as marine shell, and the limited presence of charcoal, it is difficult to obtain radiocarbon samples from these sites. Nevertheless, the meager data available hint that these rock features date to the



Figure 7a. Feature A, CA-SCRI-413 (facing northeast).

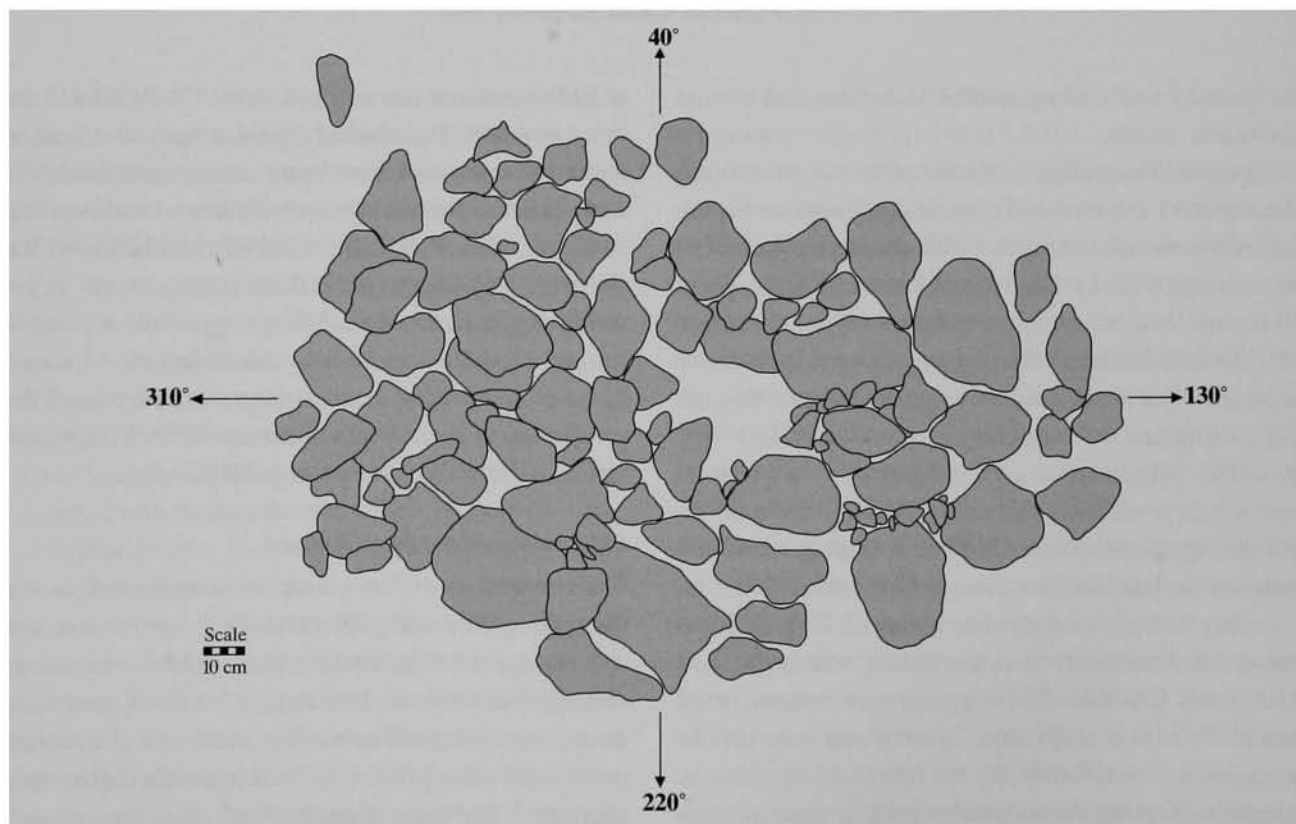


Figure 7b. Feature A, CA-SCRI-413.

past 1,500 years; their fragility alone suggests they may be younger. Although some of them, such as the one at CA-SCRI-406, are found on or near shell middens dating to the Middle Holocene, this does not indicate that they are contemporaneous. Indeed, a strong pattern of reoccupation of and/or reuse of materials at Middle Holocene sites during the late Middle Period has been documented throughout the east end of the island (Perry 2003, 2004; Perry and Jazwa, n.d.). Local residents appear to have opportunistically capitalized on chert flakes and debitage discarded during the Middle Holocene to manufacture trapezoidal microblades several thousand years later, a practice that is evident at CA-SCRI-406 (Perry and Jazwa, n.d.).

Furthermore, the lack of substantial occupation on El Montañón during the Late Holocene is consistent with ethnohistoric and ethnographic accounts of shrines being situated away from habitations, which were positioned primarily along the coast at this time. The spatial separation of these activities may also be represented at Pelican Bay, immediately north of the North Ridge. A rock feature with characteristics comparable to those on El Montañón sits in a pronounced ridgeline saddle at 500 ft. in elevation. Located downslope (600 m. to the northeast) are the dense and extensive shell middens of CA-SCRI-446 and CA-SCRI-516. Although these sites have never been tested, the microblade cores, microblades, and *Olivella* beads evident on the ground surface, along with other temporally diagnostic artifacts, indicate that these sites date to sometime during and/or after the late Middle Period (M. Glassow, personal communication 2006). In sum, the current evidence suggests that these rock features were constructed sometime during the Late Holocene, possibly as early as the latter part of the Middle Period.

DISCUSSION AND INTERPRETATIONS

Common interpretations of these rock features on Santa Cruz Island involve either the Chumash (i.e., roasting pits, signal fires, or shrines) or historic ranching operations (i.e., water troughs and barn floors) (Hudson and Underhay 1978; S. Spaulding, personal communication 2001–2005). For some obvious reasons, these features have been connected most often to cooking-related activities. It is possible that they represent roasting pits, which are

known to have been utilized by island inhabitants to prepare blue dick bulbs (referred to as *cacomites* by Librado), and other corms and tubers:

Fernando saw a cacomite-roasting oven at *Xaxas* (Prisoners Harbor) on Santa Cruz Island, above the creek to the east. It was three feet wide, four feet long, and he could not tell how deep it was because it was partly filled in....A cacomite oven is a pit in the ground; some he saw were six feet long and not as broad [quoted in Timbrook 1993:56].

Despite the presence of fire-affected rock and charcoal, and the likelihood of roasting pits at other sites, the characteristics and locations of the particular features discussed here suggest they were not used for cooking-related purposes. Most of these rock features tend to be stones sitting on the surface or slightly embedded in it, none of which appear to match the description of pits excavated into the ground, as would be expected for cooking. Also, the rocks appear to have been carefully positioned relative to one another, or were at least intentionally placed in the center of the well-preserved features, which is not congruent with how a hearth or roasting pit would be in-filled. It is significant that they are generally located in windy, exposed areas on narrow ridgelines, and are not usually associated with middens or formal artifacts (with the exception of features A–F at CA-SCRI-406). If they were used for food preparation, then it is expected that there would be other evidence of food processing or consumption, and/or they would be situated in areas more conducive to daily food-related activities (e.g., not narrow ridgelines).

Some people have also suggested that these features may have been involved in the lighting of signal fires to help guide paddlers to the island, citing known references to night-time journeys such as those occasionally made to San Nicolas Island (see Hudson et al. 1978). A use for signal fires is not a reasonable explanation because there is limited visibility from the ocean to the specific locations of the rock features on El Montañón and the North Ridge. In some cases, their placement in saddles obscures them from view from major village sites and beaches; on the North Ridge, several of these features are simply not visible from the ocean or shoreline. Fires at lower elevations, such as along the sea cliffs near *Swaxil*, would have been much more useful to indicate landing areas. Instead, site placement seems to have been influenced by other factors,

such as landform orientation and inter-visibility between locales on El Montañon and the North Ridge.

Alternatively, some have asked whether these might be remnants of historic water troughs, barn floors, or other ranching features, as they were sometimes set on rock platforms (S. Spaulding, personal communication 2002). However, their elevated placement and distance from historic roads would have been inconvenient for grazing operations or storage; even today, no road crests El Montañon. Most pastures on eastern Santa Cruz Island were located at lower elevations, in flatter and more expansive terrain, and were nowhere near these rock features. In addition, the presence of charcoal and organic material within them, as well as chert flakes and debitage around the rocks, is not consistent with what would be expected of rock platforms constructed for water troughs or barn floors.

Although additional research needs to be conducted to sufficiently evaluate these hypotheses, I propose that at least some of the rock features on Santa Cruz Island are best interpreted as probable shrines. In addition to CA-SCRI-385, these include five sites on El Montañon, based on the identification of ten rock features, the presence of carbonaceous soil suggestive of offerings in at least three, and their elevated locations. The rock features may be the islanders' equivalent of the rock piles or rock-lined holes referred to in ethnographic accounts. Those on El Montañon and the North Ridge could have served purposes similar to those documented on the mainland, representing a way to support poles along windy, exposed ridgelines where there was little soil in which to excavate holes or anchor poles.

Finding postholes in these features is very difficult, if not impossible; however, the presence of fire-affected rocks and charcoal may reflect the regular destruction of feathered poles. A posthole was documented at CA-SCRI-385 (Hudson and Underhay 1978:70), but similar holes have not been demonstrated conclusively at similar rock features elsewhere on the island. They may indeed be present, but may not yet have been identified because of their small diameter and the level of disturbance at some features. Nevertheless, patchy evidence of burning, namely fire-affected rocks and charcoal, may indeed be related to the annual burning of poles and/or the destruction of offerings, among other possibilities. Such an activity better accounts for the

mixture of fire-affected and unmodified rocks at Feature F at CA-SCRI-406 than cooking activities.

Furthermore, despite the lack of beads in association with these features, the carbonaceous soil interspersed within the rocks at CA-SCRI-385, Feature F at CA-SCRI-406, and features A and B at CA-SCRI-413, among others, may be indicative of plant and/or feather offerings. Beads are one of the primary criteria Kirkish (1992:81) cites to interpret CA-SBA-2389 near Point Sal as a shrine. However, given that Santa Cruz Island residents were involved with bead production in one fashion or another, and that they used beads to procure plants and plant-related products from the mainland, it is possible that beads did not hold the same spiritual value in their eyes. Instead, these anthropogenic soils may be indicative of acorns, seeds, feathers, and/or other items symbolizing the particular needs and concerns of island living, including limited plant availability. Also, the lithic scatters at CA-SCRI-399 and CA-SCRI-413 hint at the possibility that chert may also have been offered, given the importance of El Montañon to chert exploitation on the northern Channel Islands.

Among the most compelling characteristics of these rock features are their placement on ridgetop saddles and other prominent locales, and their proximity to one another and to the major high points on El Montañon. In particular, features A through E at CA-SCRI-406 and Feature F in the saddle immediately to the northwest, as well as the proximity of CA-SCRI-399 and CA-SCRI-413 to one another, are evocative of descriptions of multiple shrines located along procession routes. El Montañon can be accessed from *Swaxil* (Scorpion Anchorage) or *Nanawani* (Smugglers Cove), or from the isthmus to the west. Of the two possible routes from *Swaxil*, one requires traversing the northernmost unnamed peak and descending into the saddle with Feature F; the other leads to the area of features A through E. If traveling from *Nanawani*, the most obvious route requires ascending an easterly ridgeline that adjoins the southernmost and highest unnamed peak; from there, CA-SCRI-399 and CA-SCRI-413 are a short walk downhill. Approaching El Montañon from the isthmus entails ascending a westerly ridgeline in which there is another heavily disturbed rock feature in a deep saddle just downhill from High Mount.

In addition to spatial relationships between the rock features and high points on El Montañon, it is

important to consider other potential aspects of sacred geography, including inter-visibility with the North Ridge and the mainland. Although Mount Diablo is the highest peak on the island, Red Peak at 1,822 ft. in elevation is highly visible from El Montañon, and is located west of Prisoners Harbor (and the historic village of *Xaxas*) along the eastern extent of the North Ridge. Six possible shrine sites are situated in saddles along the ridgeline between Red Peak and *Xaxas*, suggestive of another possible procession route. From these vantages on the North Ridge and El Montañon one can see the entire extent of the Chumash Middle World, including Point Conception and the general area of Mount Pinos, representing a kind of regional inter-visibility that could not have been ignored by island inhabitants. Instead, it is reasonable to assume that these ridgelines were part of a larger supernatural landscape that may have connected members of different island villages not only to El Montañon and the North Ridge, but also to the topography of the mainland and its sacred locales.

In addition to inter-visibility, it is interesting to note the possible color symbolism inherent in the geology of these ridgelines. Among the Chumash, the major elements of the Earth and rainbow were believed to have been composed of red (fire), white (wind), and blue (sky) (Blackburn 1974:104; Blackburn 1975:96; Hudson et al. 1977:35). El Montañon is comprised of two geologic formations—Santa Cruz Island Volcanics and the Monterey Formation—which are red and white, respectively. The color contrast between these formations is visually striking, particularly along the western flanks visible from the Isthmus and North Ridge. It also appears to have been reinforced through the choice of rocks used in the features, as best exemplified by the red rocks on white bedrock at Feature F at CA-SCRI-406. The colors of El Montañon are especially difficult to ignore with respect to the blue sky, red volcanics, and the white Monterey Formation etched and altered by the wind.

FUTURE RESEARCH

The way in which physical landscapes become imbued with supernatural properties is a topic addressed in *The Powers of Rocks: Topography and Monument Construction on Bodmin Moor in Southwest England*, in which Tilley (1996:163) describes how “visually

dominant summits with rock stacks or Tors are found throughout the Moor, and others form distinctive silhouettes” on the distant skyline. People interacted with the sacred geography of Bodmin Moor by constructing different kinds of cultural features through time. Tilley (1996:167) describes the transition from the Mesolithic to the Neolithic as the landscape became increasingly domesticated: “The construction of the long cairns served to formalize, objectify and make explicitly visible, for the first time, a relationship between social Being and the physical form of the landscape which had already existed in human thought for thousands of years.” If one extends these ideas to Santa Cruz Island, and if these rock features are the remnants of shrines, they represent an important material dimension to the sacred landscape, a landscape whose supernatural attributes were likely recognized by island inhabitants long ago (see Hudson and Blackburn 1986:90).

To further evaluate this hypothesis, greater attention should be given to the spatial and temporal distribution of rock features and ceremonial items on the northern Channel Islands. On Santa Cruz Island, the South Ridge needs to be surveyed to assess whether the prevalence of rock features on the North Ridge and El Montañon is an actual spatial pattern rather than an artifact of sampling bias. Also, rock art and incised stones should be systematically searched for, targeting areas that meet some of the ethnographic criteria for sacred places. Several individual rock features are still in sufficiently good condition to be subjected to limited testing for the presence of postholes and charcoal samples. In addition, there is the possibility of conducting flotation to identify potential macrobotanical remains in the carbonaceous soil embedded within some of these features. Through these methods, we may gain a better understanding of their regional distribution, as well as of when and how they were constructed and used, and then ideally derive more precise interpretations of their functions.

Regardless of the archaeological manifestations of such activities, it is nevertheless evident that the Chumash meditated their relationships with the supernatural through the use and modification of significant natural features, including some on the Channel Islands, and defined sacred landscapes that tangibly represented and reinforced their belief systems. That El Montañon in particular may have been spiritually significant is not

surprising given its dominance of the east end landscape and its inter-visibility with other sacred locales, its color symbolism, and the abundance of desirable resources in its vicinity (i.e., high-quality chert of varying colors). Significantly, the rock features and portable ritual items identified on El Montañón and the North Ridge may be associated with winter solstice ceremonies, rainmaking, and other concerns for health and welfare. Such ritual activities emphasize how residents mediated resource stress and other concerns through their relationship with the sacred geography of the island. Through multiple lines of evidence, including rock art, incised stones and other portable ritual items, and shrines, it is possible to understand how the Chumash may have negotiated the ever-changing circumstances of the Santa Barbara Channel through the supernatural values with which island and mainland landscapes were imbued.

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