# ROCK ART OF THE WESTERN MOJAVE DESERT-A VIEW FROM THE FIRST DECADE OF THE 21<sup>st</sup> CENTURY

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## INTRODUCTION

This paper provides an overview of the Native Californian rock art found in the western Mojave Desert. Rock art may be defined as "landscape art" that is comprised of painted, engraved, pecked, ground, or incised images on natural rock surfaces (see Whitley 1998:11). The rock art of the region is best known from Mark Q. Sutton's (1982) *Rock Art of the Western Mojave Desert* and Albert Knight's (1993) *Rock Art of the Western Mojave Desert: A Reevaluation* (see also Knight 1997; Sutton 1988:67-70). These now somewhat dated publications describe the rock art of the western Mojave Desert as comprised of monochrome and polychrome painted images (pictographs), ground pit petroglyphs (cupules), and a few pecked petroglyph panels. This paper is intended to expand, clarify, and, in some cases, correct information found in those reports and, also, to share results of subsequent rock art research.

## **BACKGROUND**

### The Western Mojave Desert

The western Mojave Desert is encompassed within an internally draining hydrologic basin formed by the Fremont and Antelope Valleys (Sutton 1988:3). This desert basin is bounded on the north by the Tehachapi and Sierra Nevada Mountains, to the south by the Transverse Mountain Ranges, and to the east by an indistinct topographical divide punctuated by several granitic buttes. Broad environmental zones in the western Mojave Desert are described as valley floors, playas, interior mountains, and foothills/upper slopes of flanking mountain ranges (Sutton 1988:9).

The boundaries of Sutton's (1982) western Mojave Desert study area, which were also adopted by Knight (1993), circumscribe a great triangle with one point situated on Interstate 5 near Gorman, another on Highway 395 near the southeastern El Paso Mountains, and a third along Highway 395 at the north end of Cajon Pass. It is noted that Knight (1993), following Sutton (1982), discusses rock art sites found in desert-facing foothills of the Tehachapi, San Gabriel, and Castaic Mountains but omits a few rock art sites found near Goler Canyon in the southern El Paso Mountains. To facilitate comparison with Knight (1993) and Sutton (1982), this paper will also include rock art sites located at desert flanking slopes of the Tehachapi and Transverse Mountain Ranges but will not discuss the rock art from the El Paso Mountains (see Figure 1).

#### **Native Californians**

At the time of the European intrusion, the western Mojave Desert was inhabited by at least four distinct Uto-Aztecan linguistic-culture groups, the Kitanemuk, Tataviam, Serrano/Vanyume, and Kawaiisu. These groups probably entered the region at least 1500 - 2000 years ago and their historically known territories are suggested as applicable during much of the protohistoric period

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(Earle 1990:100). Given relatively rapid rates of weathering in the western Mojave Desert, painted rock art most likely date to no more than the last 800-1000 years and most panels are probably less than half of that age (Earle 2004; Sutton 1988:67; see also Whitley 1996). The relatively recent ages of pictographic rock art permits tentative connections to be made with historically known Native Californian groups

(Earle 2004). By contrast, the antiquity of petroglyphic rock art, which is more resistant to weathering, remains highly uncertain and any connections with later period Uto-Aztecan culture groups are problematic.

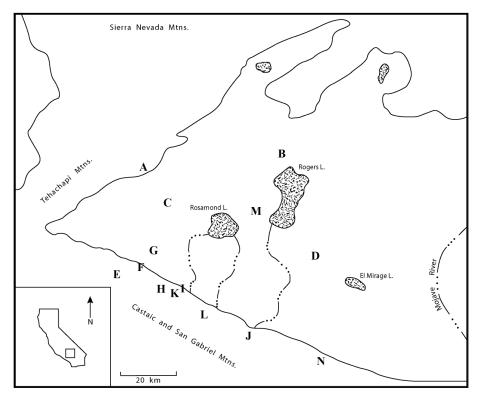


Figure 1. Rock art locations in the western Mojave Desert: (A) KER-273 and -1193; (B) KER-137; (C) KER-302; (D) LAN-192, -1731, -2368 and Hamil Ranch; (E) LAN-484; (F) LAN-721; (G) LAN-298; (H) LAN-947; (I) LAN-305; (J) LAN-447/723; (K) LAN-1767, -1768, and -3343; (L) LAN-1977; (M) LAN-2200; and (N) FS Nos. 05-01-54-236 and -237.

The Kitanemuk (also referred to as Kitanemuk Serranos) held territory in Tehachapi Mountains and the western Antelope Valley (Sutton 1988:19). The Kitanemuk spoke a Serran dialect of Takic that was related the dialects spoken by Serrano-Vanyume groups in the eastern Antelope Valley and, more distantly, to the language of Tataviam groups in the upper Santa Clara River watershed (Earle 1990; Earle et al. 1995; Johnson and Earle 1990:197). The Kitanemuk were greatly influenced by neighboring Interior Chumash and Yokuts groups and practiced a culture that contained many non-Serrano elements (Earle 2004), probably including painted rock art traditions.

The Tataviam (a Kitanemuk-derived name), also referred to as the *Alliklik* by the Ventureño Chumash, are a little known Takic language/culture group who occupied the entire upper Santa Clara River drainage from Piru on the west, San Fernando Pass on the south, and Soledad Pass on the east (Johnson and Earle 1990:199). Tataviam territory appears to have extended northward to encompass the middle segments of Piru Creek, Sierra Pelona Mountains, and southwestern fringe of the Antelope Valley (Earle 1990:94; Johnson and Earle 1990:192-197). Tataviam culture appears to have been influenced by neighboring Chumash groups and pictographs found within their postulated territory contain a few motifs that are stylistically similar to Chumash painted rock art (see Whitley 1996, 2003). Pitted cupule boulders are also seemingly ubiquitous throughout much of Tataviam territory; however, ages and cultural associations of this particular rock art tradition remains unclear.

Closely related clans of the Serrano and Vanyume (*Beñeme*), the latter sometimes referred to as Desert Serranos, inhabited the southeastern Antelope Valley, Cajon Pass, upper Mojave River drainages, and San Bernardino Mountains (Earle 1990; Earle et al. 1995). The Serrano-Vanyume also controlled territory in desert foothills of the eastern San Gabriel Mountains, including Sheep, Deadman (Graveyard), Big Rock, and Littlerock Canyons (Earle 1990; Earle, et al. 1995; Kroeber 1925:602, 616). A localized Serranspeaking clan group known as the *Mamaviatam* is thought to have inhabited the Little Rock Creek area east of Soledad Pass while the another clan, the *Amútskajam*, controlled territory in the eastern San Gabriel Mountains and Cajon Pass corridor (Earle 1990; Earle et al. 1995:2.8-11). Serrano—Vanyume painted rock art traditions were shared with most other Takic groups in southwestern California (Whitley e.g., 1996, 2000).

The Numic-speaking Kawaiisu (or *Nuooah*) occupied the southern Sierra Nevada Mountains, northern Tehachapi Mountains, northerly portions of the Antelope Valley, southern half of the Panamint Valley, Death Valley, and the Searles Lake area (Underwood 2006; Zigmond 1986). Kroeber (1925:602, 616) reported that some Kawaiisu informants claimed to have been born at Sheep Creek and Deadman Creeks in the San Gabriel Mountains and speculated that much of the western Mojave Desert might have been within Kawaiisu territory. Kawaiisu painted rock art in the Sierras and Tehachapi's are stylistically related to rock art traditions of the Yokuts and Chumash.

By the early 1800s, after removal of most Takic populations into the Spanish mission system, Numic-speaking Southern Piaute/Chemehuevi groups from interior desert areas began to move southward along the Mojave River and into the Antelope Valley. By the 1840s, Numic raiders had forced the abandonment of remnant Takic settlements at Cajon Pass and other desert corridors that led towards coastal California (Earle et al.1995:2.33-34). Historic period Numic populations may also have left rock art markings in the western Mojave Desert; however, these remain so far undefined.

## THE ROCK ART

#### **Rock Art Classifications**

**Painted Rock Art.** Pictographic rock art in the western Mojave Desert is recorded (sometimes incorrectly) at CA-KER-129, -130, 137, -273, and -1193; CA-LAN-192, -305, -447/723, -484, -721, -947, -1731, -1789/H, -2200, and -2368. Sutton (1982:35, 1988:67, 70) suggests that all monochromatic (mostly red) paintings in the western Mojave Desert are indicative of the *Southern California Rectilinear Style* (see Hedges 1973) while all polychrome painted images, which are primarily located in the Tehachapi foothills, relate to the *Southern Sierra Curvilinear Painted Style* (see Heizer and Clewlow 1973). In 1993, Knight proposed an extension of the *Southern Sierra Painted Style* to a rocky butte area of northeastern Los Angeles County and also suggested that the *Southern California Rectilinear Style* did not reach north of the San Andreas Fault Zone (these are both views Knight no longer holds).

The Southern California Rectilinear Abstract Painted Style is described as predominantly comprised of rectilinear designs, including chevrons, zigzags, straight lines, diamond chains, crosshatching, diamond "nets," crosses, as well as circle/dot designs and occasional handprints (Hedges 1973). The Southern California Rectilinear Style is characteristic of some, but not all, Takic groups in southwestern California and is also found, in diminished form, among the Yuman-speaking Tipai-Ipai and Kumeyaay (Whitley 2000). Geographically, the Southern California Rectilinear Style stretches from the southeastern Antelope Valley southward through portions of San Bernardino, Riverside, Los Angeles, Orange, and San Diego Counties; however, it is noted that Knight (1993:55-57) disagrees with Hedges' (1973) incorporation of the style into western and southern portions of Los Angeles County. The Southern California Rectilinear Style is typically found on large open boulders at or near later period villages and there is considerable ethnographic evidence to indicate that this rock art tradition was associated with

boys' and girls' puberty initiation ceremonies (see Clewlow 1978:624; Earle 2004; Hedges 1973; cf. Whitley 1996:9-10, 2003).

By contrast, the Southern Sierra Curvilinear Painted Style found at northern margins of the western Mojave Desert is characterized by large complex polychrome paintings and smaller monochromatic (mostly red) panels dominated by circular and linear motifs and stylized anthropomorphic and zoomorphic forms. This rock art style is concentrated in the foothills of Kern, Fresno, and Tulare Counties and is generally thought to be connected to shamanistic practices of the Penution-speaking Yokuts and a number of neighboring Uto-Aztecan groups, including the Kawaiisu, Kitanemuk, and Tubatulabal (Clewlow 1978:625; Earle 2004; Heizer and Clewlow 1973; Whitley 1992). It has been long been recognized that the Southern Sierra Painted Style is stylistically quite similar to the painted rock art of Chumashan groups at coastal and interior areas (see, as examples, Clewlow 1978; Grant 1965:110-11, 1971; Whitley e.g., 1992, 1996, 1997, 2000, 2003). Many researchers now accept the notion that the rock art paintings of the Chumash, Yokuts, and a series of smaller groups in between, including probably the Tataviam, comprise variants of a stylistically-connected tradition that stretches from the Santa Barbara Channel to the southern Sierra Nevada Mountains (see Grant 1971; Whitley 1992, 1996, 2003, and elsewhere). While this painted rock art tradition includes some of the most spectacular polychrome pictograph panels found in North America, it is important to recognize that the majority of the painted panels are quite small and comprised of simple monochromatic motifs (see Whitley 1996, 2003).

Pitted Rock Petroglyphs (Cupules). Cupule rock art found in the western Mojave Desert is connected to the Far Western Pit and Groove Tradition that is widespread throughout California, the Great Basin, and the Columbia Plateau (see True and Baumhoff 1981:226; Whitley e.g., 1996:10-11). Cupules are circular depressions that are carved, pecked, or ground into horizontal, vertical, or angled rock surfaces to create a pattern of pits. Cupules found in southern California are relatively shallow in relation to diameters, vary in size from a few centimeters to over 15 cm, range in number on any given boulder from few to dozens, and are sometimes associated with linear groves and, more rarely, petroglyph images (Earle 2004; cf. Payen 1968). Cupules may sometimes be confused with incipient or small-sized mortar holes, but can often be distinguished by locations on vertical or inclined surfaces, occurrence in multiple patterns, or association with distinct archaeological contexts (Earle 2004). As with other kinds of petroglyphs, it is generally difficult to ascertain ages of cupules because of significant resistance to weathering.

Sutton (1988:67) describes cupule boulders in the western Mojave Desert as "fairly common;" however, the majority of these sites are actually situated along southern foothill areas. Knight (1993, 1997) reports several cupule rock art concentrations that are found in association with other kinds of rock art. Pitted cupule (or cupule-like) images are specifically recorded at CA-KER-273 and 302, CA-LAN-447/723, 947, 1767, 1768, 1789/H, 1977, 2368, 3343, and 3486, and FS No. 05-01-54-236 and 237. Another cupule boulder, referred to as CT-10, is also known for the westernmost Antelope Valley; however, information regarding this rock art site is not readily available.

With varying degrees of plausibility, a number of different origins and uses of cupule rock art have been reported for California, including foot trail markers, astronomical observations, weather control magic, indicators of territorial boundaries, and female fertility ceremonies (Earle 2004). In far northwestern California, pit-and-groove petroglyphs are associated with weather magic rituals of shamans while further south, in Pomo territory, cupules appear to be associated with female fertility rituals (see Payen 1968; Whitley 1996:10-11; 1997, 2000). In the west-central Sierra Nevada Mountains, cupules are sometimes found directly associated with vulva-form petroglyphs and these were made almost certainly to enhance female fertility (Payen 1968).

From the Yokuts region southwards, cupule rock art is generally reported as having been produced in an "abstract generalized girls' puberty ceremony undertaken at first menses and signaling the arrival of

womanhood" (Whitley 1996:11). However, True and Baumhoff (1981) state that there is no ethnographic evidence from southern California to suggest that cupules are associated with coming-of-age initiation ceremonies, or with any other rituals for that matter. Due to scant ethnographic data, it should not be assumed that cupules found in southern California represent the products of historically known culture groups (Earle 2004:24-27).

**Pecked Petroglyphs.** Pecked petroglyph patterns appear to be quite scarce in the western Mojave Desert. Petroglyphs found at CA-KER-302 and the Hamil Ranch (no trinomial) are representative of the *Great Basin Abstract Pecked Style*. This style of rock art, which includes curvilinear and rectilinear subcategories, is comprised of spirals, concentric circles, meandering lines, rayed circles and similar images, with occasional zoomorphic or anthropomorphic figures (Heizer and Baumhoff 1962; see Grant 1971:232,237; Clewlow 1978:620-621). In contrast to previous reports, the faintly visible petroglyphs reported at LAN-947 have not yet been definitely related to the *Great Basin Pecked Style* or any other style (Beth Padon, personal communication 2008; cf. Knight 1993:46).

Perhaps relevant to western Mojave Desert rock art, some petroglyph images found at the Soledad Canyon corridor may have been manufactured coeval with spatially associated cupules. These rock art sites suggest that distinctions between cupules and petroglyphs in southern California may not be as great as once thought. As example, cupule rock art at CA-LAN-540 near southern foothills of the Sierra Pelona Ridge, which reportedly contains the largest concentration of cupule pits in south-central California, encompasses a few pecked petroglyphs, including a hollow circle; a zigzag; a "rake" terminating in cupules, an inverted "U" with a central bisecting line, and a set of parallel lines (Whitley 1996:30-31; 2003). Similarly, elaborate pecked curvilinear petroglyphs are directly associated with a significant number of cupules in the Shannon Valley near Acton/Escondido Canyon (Robinson 1987). Whitley (1996:10; 2003) associates these petroglyph patterns to the *California Engraved Variant* of the *California Tradition*, which includes pecked, incised, or scratched simple geometric petroglyph forms. The *California Engraved Variant* is most common in northern California but also occurs in small quantities to at least the Mexican border (Whitley 1996:10).

#### The Rock Art Sites

Subsequent to Knight's (1993) report, a number of additional rock art sites have been discovered in the western Mojave Desert and, conversely, some previously reported sites have been determined as non-existent or incorrectly described. This section provides updated descriptions of most known rock art sites found in the western Mojave Desert (see Table 1).

*CA-KER-129* (*Willow Springs Village Site*). KER-129 was once the location of the largest native (i.e. Kitanemuk) community in the northwest Mojave Desert and is also considered an important place to early local history. Sutton (1982, 1988:67) states that there are elaborate polychrome pictographs present at KER-129; however, Knight (1993:41) reports that there is no rock art at Willow Springs, perhaps due to a lack of suitable rocks. Knight (1993:41) concludes that the rock art described for Willow Springs is actually found several miles away in Burnham Canyon at KER-273 and -1193.

*CA-KER-130*. KER-130 is described as containing pictographs in a rock shelter; however, no rock shelter exists at the recorded location and, in fact, there are no rock outcrops at all at the recorded location of this site (note that a lithic scatter IS present). Haensel (1964) refers to the site as "Desert Butte;" however, Desert Butte is actually located several miles to the west. Knight (1993:42) concludes that KER-130 represents a mis-mapped site (at least in terms of the "rock art" component) and the recorded rock art is actually located at KER-137.

CA-KER-137 (Desert Butte). KER-137 contains the shallow rock shelter originally described for KER-

130. Monochromatic black pictographs were apparently once visible in the rock shelter; however, the paintings appear to be almost (or perhaps completely) weathered away (Knight 1993:43). The specific style of the black pigment pictographs remains uncertain. Unlike many rock art sites in the western Mojave Desert, KER-137 is considered quite accessible to visitors (Knight 1993:43).

*CA-KER-273 and -KER-1193 (Burham Canyon Sites)*. The highly important pictograph panels KER-273 and KER-1193 are situated on granite bedrock outcrops in Burham Canyon a few miles northwest of Willow Springs. These pictograph loci are described as representing the "real" Willow Springs rock art (Knight 1993:43-44).

The still-impressive polychrome pictograph panel at KER-273, which is located in a rock shelter that overlooks KER-1193, is reported to be "one of the most elaborate and well-preserved pictograph panels in southern California" (Knight 1993:44). The main panel is comprised of a large fantastic polychrome abstract image in red, white, black, orange, and a small amount of blue. Smaller associated pictographs include a red so-called "teddy bear" motif (similar to those found in northeastern Tehachapi Valley at CA-KER-508). The polychromatic paintings at KER- 273 are assigned to the *Southern Sierra Style* and are most likely associated with Kitanemuk habitation (cf. Knight 1993:44). Mortar-like depressions and cupule rock art are also reported at this site (Knight 1993:44; Sutton 1988:67). A less complex panel at nearby KER-1193 is comprised of a red sun-like symbol and about 30 short dashes (see Sutton 1982:30, Fig. 2). Speculatively, this panel may be associated with a possible winter solstice observation station (Knight 1993).

In 1990, Andy Greene, a Kawaiisu elder, reported that KER-273 was used as a "birthing cave" by Kitanemuk, Kawaiisu, and Tataviam women (Knight 1993:43-44). This significant ethnographic information may or may not be associated with the original origins and functions of the rock art. Charlie Cooke, a Chumash chief, has stated that the Burnham Canyon rock art sites, which are situated on public lands administered by the Bureau of Land Management, are sacred to local Native American people and should not be casually visited (Knight 1993:44, 57).

CA-KER-302 (Sweetser Site). KER-302, which is located in the Rosamond Hills, comprises the type-site for Glennan's hypothesized Pinto-age "Rhyolite Tradition" in the western Mojave Desert. KER-302 contains petroglyphs that are clearly classifiable within the Great Basin Pecked Abstract Style (Knight 1993). Glennan (1971:6) initially described the petroglyph rock art as "...a large, roughly spherical boulder which is covered on two sides with pecked geometric design elements...the surface of the boulder is quite weathered....it is quite difficult to determine...the design elements originally present." In addition to the primary petroglyph panel, three small adjacent boulders also each exhibit one or two simple petroglyph images. Knight's (1993:44) statement about the absence of cupules at this site is revised in this paper due subsequent discovery of four or five cupule pits adjacent to one of the petroglyph patterns.

Table 1. Rock	Art Sites in t	the Western	Mojave Desert

Site	Pictographs	Petroglyphs	Cupules	Classification/Comments
Designation				
CA-KER-129	0	0	0	Mis-mapped: no rock art
CA-KER-130	0	0	0	Mis-mapped: no rock art
CA-KER-137	Black pigment	0	0	Classification not currently
	(weathered			possible
	away)			
CA-KER-273	Polychrome and	0	Cupules are	SSP / Probable Kawaiisu origins.
	Monochrome		present	Spatially associated with CA-
			(number	KER-1193

			uncertain).	
CA-KER-302	0	4 Petroglyph boulders	6-7 cupules are present	GBP; FWPG
CA-KER-1193	Red Monochrome	0	0	SSP / Probable Kawaiisu origins. Spatially associated with CA- KER-273
CA-LAN-192	Reportedly visible in 1920s –no longer extant	0	Nearby cupules recorded as CA-LAN- 3486	Pictograph classification not possible/Should not now be considered as a pictograph site
CA-LAN-305	0	Petroglyphs reported	0	The reported petroglyphs do not appear to exist.
CA-LAN-447/723	Red Monochrome	0	7-8 ground depressions	SCRA - associated with Mamaviatam Serrano clan
CA-LAN-484	Red and black Monochrome	0	0	In mountains south of the desert
CA-LAN-721	Polychrome and Monochrome	0	0	Primarily SSP (probably associated with Kitanemuk and/or Tataviam groups)
CA-LAN-947	Red Monochrome	1 Petroglyph boulder	Present (number not reported)	SCRA -very weathered; Possible GBP
CA-LAN-1731	Polychrome and Monochrome	Vulva-like forms reported in vicinity	0	Associated with Kawaiisu - affiliated groups
CA-LAN-1767, 1768, 3343	0	0	Many cupule pits at each site	FWPG
CA-LAN-1789/H (encompasses CA- LAN-298	Red and black (at LAN-298) Monochrome	-	Many cupules at several loci	Pictographs possibly represent SCRA; FWPG
CA-LAN-1977	0	0	Cupules on at least five boulders	Associated with a habitation site in desert foothills
CA-LAN-2096	0	1 vulva-like form	0	Form is similar to other features at Piute Buttes and at CA-LAN-2368
CA-LAN-2200	Red Monochrome	0	0	SCRA associated with Serrano habitation
CA-LAN-2368	Red, black, white Monochrome	1 vulva-like form	7-8 small crude cupule pits.	SCRA pictographs associated with Serrano habitation
CA-LAN-3486	0	0	Many cupules	FWPG /probable Serrano territory
05-01-54-0236	0	1 pecked serpentine motif	26 cupule pits on single boulder	FWPG/ in Serrano territory
05-01-54-0237	0	0	20+ cupules on a single boulder	FWPG / in Serrano territory
Hamil Ranch	0	1	0	GBP curvilinear
CT-10 (western Antelope Valley)	0	0	Cupule panel in cleft of boulder	FWPG

SSP = Southern Sierra Painted Style; SCRA = Southern California Rectilinear Abstract Style; GBP = Great Basin Pecked Style = GBP; FWPG = Far Western Pit and Groove Style.

KER-302 is situated on private property and the occupants of an adjacent house are currently not happy with intrusive rock art "students" who keep invading their property, almost always quite uninvited. An elderly male occupant of the property, in fact, suggested to a writer of this paper (Knight) that his future research should be conducted in a very hot place – and he did not mean another place in the Mojave Desert! Rock art researchers are well advised to not trespass on the private property at KER-302.

*CA-LAN-192* (*Lovejoy Springs*). According to the results of a recent archaeological study, this major desert spring site has supported human habitation for at least three thousand years (Price et al. 2004). Pictograph panels were reported in the 1920s; however, these apparently are no longer in existence (Earle 2004). Multiple cupule loci have recently been recorded in the general vicinity (see LAN-3486 below).

*CA-LAN-298*. LAN-298 is a habitation site at Fairmont Buttes that contains a red pigment pictograph. LAN-298 is now consolidated within the larger Fairmont/Antelope Buttes village complex (see CA-LAN-1789/H below).

*CA-LAN-305.* Based on available information, Knight (1993:46-47) reported the presence of petroglyph images and included an illustration of Becker's (1990) sketch. However, in March 2004, Knight conducted a field check and, even with a site record form in hand, was unable to relocate any petroglyphs. At this time, LAN-305 is not considered by the writers to represent a rock art site.

*CA-LAN-447/723 (Big Rock Creek)*. This monochromatic pictograph site, which has been assigned two trinomials, is found on private property situated along Big Rock Creek in the San Gabriel Mountain foothills of the eastern Antelope Valley. The site consists of a single panel of pictographs located on an open exposure of a large east-facing sandstone bedrock outcrop, about four meters above the stream bed. The red pictograph elements, which generally correspond to the *Southern California Rectilinear Abstract Style*, are illustrated in Knight (1993:48, Figure 4) and Sutton (1988:69, Figure 26b); however, in the interest of accuracy, it is noted that Knight omits a "lizard" motif in his illustration and Sutton's sketch is depicted upside down. The site also contains several small shallow grinding depressions (cupule-like and mortar-like) that may be ritualistic rather than functional in origin.

In 1996, one of the writers of this report (Milburn) and Dr. David S. Whitley led a crew of Forest Service Passport-in-Time (PIT) volunteers to document the pictographs at LAN-447/723. This project resulted in the following description:

The single panel at the site is painted in red, and portrays ten motifs; however, two different colors are identifiable. The majority (horizontal rake, upper diamond chain, 4 circles and a zigzag) are all Dusky Red (Munsell 10R3/4); the remainder (vertical rake, lower diamond chain and "lizard") are Dark Red (Munsell 10R3/6). Most likely, these two colors reflect two episodes of painting at this site as the color distinction is very subtle, itself reflecting what is most likely two elements of pigment rather than any effort at polychromatic painting.

With the exception of the lizard, the motifs are all "geometric." The zigzag and diamond chains, however, are entopic designs which may be interpreted as rattlesnake motifs, inasmuch as these motifs were universally identified ethnographically....Its age is unknown although it seems unlikely that the paintings would be preserved on this open, southeast-facing panel, for any great length of time. Based on preservation factors alone, it seems unlikely that it could be more than 1000 years old, and an age of less than half that

time is probably most likely, especially given the relative lack of fading evident in most of these motifs [Whitley 1996:17-18].



Figure 2. Pictograph at LAN-447/723.

LAN-447/723 is reported to be located within the territory of the *Mamaviatam* clan, a sub-group of the Serrano-Vanyume (Earle 1990; Earle et al. 1995). Due to the brightness of the rock art pigment, the site is assessed as "relatively recent in age, probably on the order of only a few hundred years" (Whitley 1996:29). The possibility that rock art relates to girls' puberty ceremonies is conceded; however, the presence of the lizard-like motif, among other lines of reasoning, suggests the "...work of one or more shamans, responsible for two separate incidents of rock painting....A significant number of rattlesnake motifs at this site suggest that it was a vision quest location of one or more rattlesnake shamans" (Whitley (1996:16-17).

During a 2007 site visit, one of the authors (Tejada) observed that a water pipeline had recently been installed immediately adjacent to the bedrock outcrop containing the rock art panel. While the pipeline does not appear to have damaged the rock art, it has affected other aspects of the site's overall integrity.

**CA-LAN-484** (**Burnt Peak Pictograph Site**). This site is situated on private property in the mountains somewhat south of the western end of the desert but is included in this paper because it has been previously discussed by Sutton (1982) and Knight (1993). This site consists of two red pigment pictographs, one or both of which may be sun-symbols; however, it is noted that a site record also refers to the presence of black pigment designs. The pictographs have not been assigned to a specific rock art style; however, the images are similar to those found at LAN-365 near Agua Dulce (Tataviam territory).

CA-LAN-721 (Temet Osraniek / Shea's Castle Site). LAN-721 is the best known and most significant concentrations of pictographs along southern margins of the western Mojave Desert. Smithsonian linguist and ethnologist John P. Harrington recorded the native name of this place as Temet Osraniek, which translates to piedra pintada in Spanish and "painted rock" in English (Earle 2004:22). The pictographs are situated on a large granitic outcrop above a spring. Bedrock mortars and a village site are found a short distance down canyon. A photograph and sketch of the site indicate that a spring house structure also once existed at the site (Pickus 1988). William Blake, who had observed the pictographs in

1853, mentioned them in his 1858 *Report of a Geological Reconnaissance in California:* "Near a spring is a broad cliff of granite covered with Indian hieroglyphics.... This was near Elizabeth Lake towards Tejon..." (Benson 1997:147). In the late 1800s, Reverend Stephen Bowers, who was a notorious grave robber paid by the Smithsonian Institution to collect Indian artifacts and skulls, reportedly read Blake's report and attempted to find the pictographs but could not do so (Benson 1997).

The pictographs at LAN-721 are found in two primary groupings and a smaller secondary group. The paintings are highly exposed to weathering and most are now in poor condition. Many have clearly faded even since they were sketched by Bleitz and Sanberg (1976) (see Figure 3). In addition to mostly red pigment, faint traces of black and white paint are also present, and it is possible that the main panel was partially polychrome one time. Early photographs are reported to show remnants of polychrome painting at a protected area of the panel (Earle 2004:22). Motifs include simple and elongated stylized anthropomorphs, a large multi-circle sunburst with several rays, a set of four or five hand prints, a long chain of connected circles (now partially faded), individual circles, and abstract elements. Several paintings are grouped together and are vertically elongated above where the spring emerges from the base of the rock formation.

Based on the large size of some of the paintings and location in Kitanemuk territory, Knight (1993) reported that the rock art might be classifiable as *Southern Sierra Painted Style*. While Earle (2004:22, 24) indicates that some elements of the *Southern California Abstract Rectilinear Style* are present, he agrees with Knight (1993) that most of the pictographs appear similar to Chumash and Yokuts painted rock art. As result, Earle (2004) suggests that site inhabitants were probably from the Kitanemuk or Tataviam (or perhaps both) culture groups.

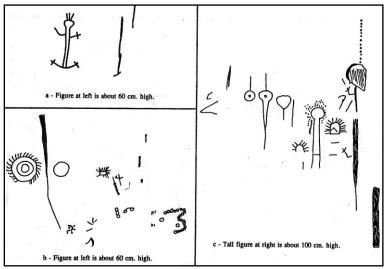


Figure 3. Pictographs at LAN-721 reproduced from Knight (1993:50, Fig. 6)

CA-LAN-947 (Ritter Ranch Pictograph Site). LAN-947 is situated to the west of Palmdale along the San Andreas Fault Rift Zone in the Anaverde Valley. Springs are present at the site and elsewhere in the immediate area. The site contains a few very faded red pictographs situated on a vertical face of a large basalt outcrop. These include "a diamond net, several zigzag lines, a large dot surrounded by nine additional dots and three lines, and several areas of smeared red pigment," one of which is greater than one meter in size (Sutton 1982:31; 1988:68-69). The paintings appear to be representative of the Southern California Rectilinear Abstract Painted Style. Recent archaeological work related to the Ritter Ranch housing development has verified that a boulder with one weathered abstract curvilinear

petroglyph with at least a couple of cupules is situated a few meters down slope from the pictograph panel (Beth Padon, personal communication, 2008).

CA-LAN-1731 (Piute Butte). This site is situated on a tall rock face within a natural granitic "amphitheatre" on the north slope of Piute Butte, which is administered by the Antelope Valley Indian Museum. The earliest sketches of the rock art at the amphitheatre were made by Gordon Redtfeldt, who worked from the mid-1950s to the 1960s with Charles La Monk and the Archaeological Survey Association of Southern California. Copies of Redtfeldt's (n.d.) sketches, which are curated at the UCLA Rock Art Archives, show relatively elaborate motifs, including a stylized anthropomorph with circular hands, feet and "antenna," a chain of diamonds, several circles with various appendages, an anthropomorph with a "eye of the needle" head, a cross within a circle, vertical lines with cross-bars, and a few other motifs that are difficult to describe. Redfeldt's (n.d.) sketches are reproduced by Knight (1993:51-55, Figs. 7-8, 10-11).

It is now known that Redtfeldt's sketches contain a number of painted elements that were not created by Native Californians (Edra Moore, personal communication 2008). The Antelope Valley Indian Museum has a 1932 photograph that shows a woman, identified as Laura Loomis, seated in front of a rather rich display of colorful pictographs on the amphitheatre wall (Moore 2004). These painted elements, most of which are not even faintly visible today, include rayed lines, a simple line-drawn anthropomorph, at least four "rattlesnake" elements, and an oval "mitochondrion" element. It has been suggested that the property's owner, H. Arden Edwards, who was an artist and avid collector of Native American artifacts, may have drawn these "pictographs" as a stage setting for a series of Indian plays he organized at the amphitheatre. Redtfeldt may have not known about the dubious origins of this rock art; however, in fairness, we point out that Redfeldts's (n.d) field notes were not relocated for this study. Since Redtfeldt had plenty of experience dealing with rock art, he may actually have distinguished between authentic pictographs and the more recent paintings.

LAN-1731 was rerecorded in 1987 but only a red rayed "sun" image and a possible anthropomorph figure were still visible. The rayed disk sketched by Sampson (1987) represents a fragment of a larger element that was recorded 25 years earlier by Redtfeldt (n.d). Sampson's sketches, which are reproduced by Knight (1993:51-55, Figs. 9-10), indicate that much pigment has weathered away in a relatively short period of time.

Given the uncertainty surrounding the origins of some of the pictographs, the previous assignment of LAN-1731 to the *Southern Sierra Style* no longer seems sustainable. While the rock art remains stylistically unclassified, it is noted that *Southern California Abstract Rectilinear Style* paintings are found elsewhere in the general vicinity.

Interestingly, another type of rock art may also be present at the Piute Butte vicinity. A "vulva"- form petroglyph is recorded as LAN-2096 (see below). Edra Moore, a former curator of the Antelope Valley Indian Museum, reports that other vulva-like petroglyph images exist in the general area (personal communication 2008). At the present time, the rock art at Piute Butte is closed to public access until an assessment of significance can be completed by the California Department of Parks and Recreation.

*CA-LAN-1767*, *-LAN-1768*, *and -LAN-3343* (*Anaverde Hills Sites*). CA-LAN-1767, 1768, and 3343 are pitted cupule sites located in the San Andreas Fault Rift Zone along the northern base of the Sierra Pelona Mountains. The bedrock of the Sierra Pelonas is comprised of hard and soft schist's, which provide good surfaces for cupule manufacture but make poor surfaces for pictographs and most petroglyphs. It is therefore perhaps not surprising that at least 30 cupule sites have been recorded in the Sierra Pelona Mountains to the west.

LAN-1767, 1768, and 3343 each contain one or more small schist boulders or rock outcrops with roughly 20 to 50 cupules. LAN-3343 contains hard Pelona Schist outcrops and the cupules are about dime-sized and are very shallow. By contrast, small isolated cupule boulders at LAN-1767 and 1768 are comprised of soft talc schist and the cupule pits are correspondingly much larger (between 4 – 8 cm diameter and 1-2 cm deep).

The Anaverde Hills cupule sites are all located on small knolls at the mouths of fairly small canyons that contain much greater native plant density and diversity than found at nearby areas. The plant species, which include elderberry, desert plum, and mariposa lily, are more robust than plants growing even short distances away. Many bird species are also present, which suggests that other kinds of animals would likely be attracted to the thickets of plants. Since the sites are found at areas of relative resource abundance, one of the writers of this paper (Knight) speculates that the cupule boulders may mark spatial patterns of land-ownership or other systems of land-use, quite possibility the particular drainage each cupule rock is found in.

*CA-LAN-1789/H* (*Fairmont/Antelope Buttes Complex*). LAN-1789/H represents a large site complex located at the Fairmont/Antelope Buttes vicinity in the Antelope Valley. The site designation encompasses a number of previously recorded sites with extensive rhyolite quarry and workshop materials, habitation deposits, bedrock mortar facilities, and a small amount of rock art. Cupule petroglyphs are present at eight or nine different boulders located throughout the site area.

As mentioned earlier, LAN-298 is now considered to comprise a locus of LAN-1789/H. LAN-298 encompasses a dispersed concentration of approximately 400 bedrock mortars and contains a very faint red pigment pictograph panel. The painted elements are a rayed disk (illustrated by Sutton 1982:30, Fig. 3) and a set of three or four interconnected red circles. The pictograph panel is very exposed to the weather and it seems probable that additional painted elements were present in the past. Although difficult to categorize from limited data, Knight (1993:42, Fig. 1) suggests the pictograph panel represents the *Southern California Rectilinear Abstract Style*. The site is in private ownership but remains generally accessible.

*CA-LAN-1977* (*Santiago No. 4*). LAN-1977 is a large multi-component prehistoric encampment site situated on a terrace along Santiago Creek. Santiago Creek is a primary contributor to Little Rock Creek, which is the largest drainage flowing into the western Mojave Desert. LAN-1977 contains at least five small schist boulders containing cupule rock art. Milburn (1998) conducted test-level excavations at LAN-1977 that yielded, among other data, 21 obsidian debitage pieces with rim hydration measurements ranging from 1.0 and 12.1 microns and charcoal from two rock-lined earth ovens that yielded near identical <sup>14</sup>C ages of 840 +/-60 RCYBP and 850 +/- 50 RCYBP. Upstream from LAN-1977 is a smaller encampment site (FS No 05-01-54-109) that contains an alignment of three cupule depressions situated on a narrow low-lying granitic boulder. LAN-1977 and FS No 05-01-54-109 are administered by the Angeles National Forest.

*CA-LAN-2096 (Piute Butte "Yoni")*. LAN-2096 consists of a large granitic boulder with naturally eroded fissures that may have been enhanced by pecking or grinding to create a vulva-form feature. The degree of purposeful human enhancement at LAN-2096 is unclear, however, this feature is similar in appearance to a smaller boulder located on the eastern flank of Piute Butte (a site record is reportedly in preparation by Tejada) and a boulder near a private residence at LAN-2368 (see below). All of these vulva-like images are situated in highly erodible quartz monzonite bedrock.

CA-LAN-2200 (Edward's Air Force Base). The pictograph rock art at LAN-2200 is comprised of a small panel on the ceiling of a rock shelter on Edwards Air Force Base. The red pigment elements include a fragment of a vertical diamond chain, irregular rectangular-rectilinear elements, an oblong

circle, and several large red dots. These elements are clearly characteristic of the *Southern California Abstract Rectilinear Style* and suggest association with Takic groups from the southern side of the desert. This site does not seem associated with a habitation site, perhaps suggesting shamanistic activities rather than coming-of-age rituals.

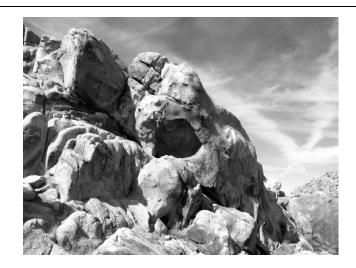
CA-LAN-2368 ("Wolf's Rock Pile"). In 1982, Sutton suggested that Southern California Rectilinear Style pictographs would likely be found in the desert north of the San Andreas Fault; however, Knight (1993::41) stated that a northward extension of the style area was unsupported. Subsequently, during 1994, a local archaeological informant told Knight about an unrecorded rock art site situated in the vicinity of Folgate Butte near Lake Los Angeles. With permission of the landowner, Knight visited the site and determined that the pictographs clearly represent the Southern California Rectilinear Style. Knight recorded the site as LAN-2368 and then, as mea culpa, immediately called Sutton to inform him about the new site.

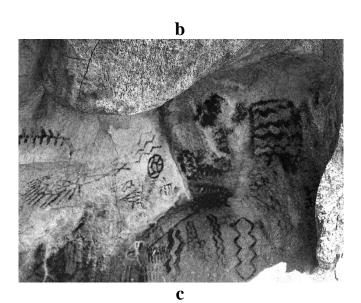
LAN-2368 contains a small east-facing rock shelter situated high on a rocky butte with a primary panel of 30 to 40 somewhat weathered red pictographs that also exhibit some traces of black and white pigment (Figure 4a). The uppermost portions of the panel are slightly faded but in mostly good condition. Most of the lower panel are subject to substantial weathering. The motifs include chains of diamonds, individual zigzags, sets of two or more zigzag lines (some parallel and others randomly grouped), short lines, a possible avian image, segmented circles, and abstract images (Figure 4b). A small number of crudely executed cupules are located below the pictographs. The pictographs at this locus were almost certainly created by Serrano-affiliated groups.

Another small rock shelter at LAN-2368 is comprised of a set of about 15 red vertical lines, obviously made with the fingers, situated on the north side of the butte. A third very weathered red pictograph panel can be (barely) seen in a small rock shelter on an easterly flank of the butte. During a recent site visit, "Charlie," the matriarch of the family that has owned the property for four generations, recalled to Knight and Milburn that she remembers numerous paintings in this shelter when she was a young girl; however, someone subsequently built a "bonfire" in front of the shelter that blackened most of the paintings.

During that site visit, a possible vulva-form petroglyph was observed on a large boulder directly behind a residence on the property (Figure 4c). As is the case with similar features at nearby Piute Butte, the degree of natural erosion versus purposeful modification remains unclear; however, the form seems unmistakable. Numerous groundstone artifacts (mainly metates and manos) were also observed and it now appears that a significant prehistoric occupation component exists in conjunction with the rock art at LAN-2368.

*CA-LAN-3486.* Jay Lloyd of Applied Earthworks recently recorded the cupule rock art at LAN-3486 in conjunction with a large data recovery and monitoring project at Lovejoy Springs (CA-LAN-192). The site is situated within an alcove amongst a cluster of granitic boulders near the summit of a small unnamed butte. An obsidian flake was noted on the terrace just outside the alcove. Feature A contains at least 24 small circular cupules concentrated within an area measuring 110 cm by 90 cm. Feature B contains a series of at least 18 cupules on a weathered





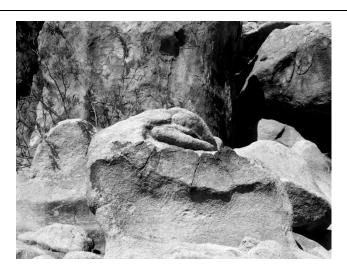


Figure 4. LAN-2368 showing: (a) pictograph rock shelter situated high in the rocky butte; (b) enhanced rectilinear pictographs at the primary panel; and (c) vulva-form petroglyph image (center of photo).

granite boulder (2.0 m long, 1.4m wide, and 0.9m high) that is located just outside of the alcove. The site itself is reportedly undisturbed, but the immediate area contains much trash and graffiti on near-by rocks.

Forest Service Nos. 05-01-54-0236 and -54-0237. Forest Service (FS) Site Nos. 05-01-54-0236 and -0237 each contain cupule/petroglyph boulders situated along Grandview Creek in the northern San Gabriel Mountains (Figure 5). Both of the sites are located within administrative boundaries of the Angeles National Forest (Milburn 2006).

FS No. 05-01-54-0236, or "Ron's Cupule Boulder," is comprised of approximately 26 ground cupule depressions and a curvilinear pecked chain-like petroglyph motif on a grayish-green metamorphic boulder. The cupules range from 3.4 cm to 8.0 cm in diameter. A pecked curvilinear motif runs horizontally around a portion of the boulder between several cupules and then forks into two branches. The rock art boulder is situated about 130 m southeast of a prehistoric encampment on a creek terrace that has yielded a Cottonwood-series projectile point, manos, metates, lithic debitage, burnt bone fragments, and darkened midden deposits.

FS No. 05-01-54-0237, or the "Pinnehah Site," is a seasonal food resource procurement and processing encampment site situated on a terrace at the junction of Grandview creek and an unnamed tributary. The site contains a single grayish-green boulder with a series of more than 20 ground cupule depressions. The site also contains rock ring features, midden deposits, lithic debitage/cores, bone fragments, and schist manos, metates, and a pestle.

Hamill Ranch Petroglyph (No trinomial). Moore (2004) has documented a petroglyph boulder on the privately-owned Hamill Ranch located approximately one mile directly east of Piute Butte. The boulder sits at the base of a granitic bedrock outcrop below a small east-facing rock shelter. The rockshelter was not investigated during Moore's (2004) field visit for further evidence of rock art panels. The petroglyph, which is rather faded, consists of several intersecting curvilinear loops, which is a signature of the *Great Basin Pecked Abstract Style*. The site has not been formally recorded and its current status is unknown.

CT-10 (Trinomial not known). This site, which is situated on private property in the westernmost end of the Antelope Valley, includes a patterned cupule rock art panel situated in the

cleft of a 15 foot high boulder. More specific site information, including current status, was not readily available at the time this paper was prepared.

#### **DISCUSSION**

There are over 20 known rock art sites in the western Mojave Desert (cf. Sutton 1982; Knight 1993). Twelve of the sites contain polychrome or monochromatic pictograph panels: KER-137, -272, -1193, LAN-447/723, -484, -721, -947, -1731, -1789/H, -2200, and -2368. Pictographs are also reported to have once been visible at LAN-192 (Earle 2004). Most pictograph elements at the westerly portions of the study area are characteristic of Southern Sierra and Chumash rock art styles, which frequently includes the lavish use of multiple colors of pigment. This rock art tradition, which comprises part of Whitley's (e.g., 1998; 1997, 2003) *South-Central Variant of the Californian Tradition*, is also connected to Kawaiisu, Kitanemuk, and perhaps Tataviam cultural-linguistic groups. In marked contrast, most rock paintings found at southeasterly and central portions of the western Mojave Desert are related to the *Southern California Abstract Rectilinear Style*, which is characteristic of Serrano-Vanyume groups in the region.

Cupule rock art in the western Mojave Desert is found at LAN-1767,-1768, -1789/H, -1977, -3343, -3486, FS Nos. 05-01-54-236, -237, and, also, CT-10. Other cupule-like depressions are

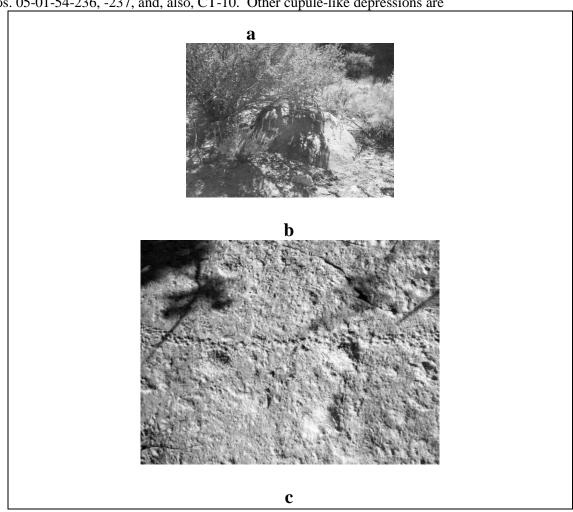




Figure 5. Grandview Canyon rock art: (a) cupule/petroglyph boulder at FS No. 05-01-54-0236; (b) portion of pecked linear motif with cupules at FS No. 05-01-54-0236; and (c) cupule pits at FS No. 05-01-54-0237.

found in association with pictographs at KER-273, LAN-447/723, 1789/H, and 2368. Cupule concentrations associated with pecked petroglyphs include CA-KER-302, LAN-947, and FS No. 05-01-54-236. Most cupule rock art is predominantly found on schist and other metamorphic boulders located along southern flanks of the Antelope Valley. As noted previously, cupule rock art in the western Mojave Desert spatially overlaps painted rock art and petroglyph traditions. However, it is not known whether the culture groups who made painted rock art also made petroglyphs and cupules. It may be hypothesized that that petroglyph and cupule making are older traditions that were partly or completely replaced with rock painting during later periods (cf. Whitley 1996:11-12).

Two pecked petroglyph sites, KER-302 and the Hamil Ranch Site, are representative of the *Great Basin Abstract Pecked Tradition*. While the ages of these ancient-looking petroglyphs have not yet been determined, it is thought they may have considerable time-depth. The styles of the petroglyph images at LAN-947 and FS No. 05-01-54-236 remain so far undetermined. A particularly distinct petroglyph type, comprised of vulva-like features ground or pecked in soft quartz monzonite rock, is situated within a highly localized geographical area near Piute and Folgate Buttes. These features probably represent examples of sexual symbolism in which the rocks are depicted as symbolic vaginas. Much more research is required to determine the origins, characteristics, cultural affiliations, and geographical extent of this particular rock art tradition.

## **CONCLUSION**

At least nine additional Native Californian rock art sites, including painted rock art, petroglyphs, and pitted cupule boulders, have been recorded in the western Mojave Desert since Knight (1993) last wrote about the subject. The northwestern and the southwestern flanks of the western desert region remain largely unexamined and it seems highly likely that additional rock art sites, particularly those containing cupule components, will be found in those areas. During the next few decades of the 21<sup>st</sup> century, it is expected that new rock art discoveries and continuing re-examinations of known rock art will contribute to better understanding of past culture concepts in the western Mojave Desert.

#### **CITATIONS**

Becker, Kenneth

1990

Site Record Supplement for CA-LAN-305. On file at South-Central Coastal Archaeological Information Center.

Benson, Arlene

1997

The Noontide Sun – The Field Journals of the Reverend Stephen Bowers, Pioneer California Archaeologist. *Ballena Press Anthropological Papers No. 44*, edited by Thomas C. Blackburn.

Bleitz, Dana and Delmer Sandberg

1976

Site Record Form for CA-LAN-721. On file at South-Central Coastal Archaeological Information Center.

Clewlow, C. William Jr.

1978

Prehistoric Rock Art. In California, edited by Robert F. Heizer, pp. 619-625. *Handbook of North American Indians*, vol. 8, William C. Sturtevant, general editor, Smithsonian Institution, Washington, D.C.

Earle, David D.

1990

New Evidence on the Political Geography of the Antelope Valley and Western Mojave Desert at Spanish Contact. In *Archaeology and Ethnohistory of Antelope Valley and Vicinity*, edited by Bruce Love and William DeWitt, pp. 87-104. Antelope Valley Archaeological Society Occasional Papers No. 2, Lancaster, California.

2004

(Draft) *Native Californian Rock Art and the Rock Art of the Antelope Valley Region*. Unpublished manuscript in possession of the writers.

Earle, David D., Judy McKeehan, and Roger D. Mason 1995

Cultural Resources Overview of the Little Rock Watershed, Angeles National Forest, California. Chambers Group, Inc. Prepared For EA Engineering, Science and Technology, Inc. Submitted to USDA - Forest Service, Angeles National Forest, Heritage Resources Section, Arcadia, California.

Glennan, William S.

1971

A Glimpse at the Prehistory of the Antelope Valley: Archaeological Investigations at the Sweetser Site (Ker-302). The Kern-Antelope Valley Historical Society, Rosamond, California.

Grant, Campbell

1965

The Rock Paintings of the Chumash, A Study of California Indian Culture. University of California Press, Berkeley and Los Angeles.

1971

Rock Art in California. In *The California Indians A Source Book*, Robert F. Heizer and M.A. Whipple, editors, pp.231-243. University of California Press, Berkeley and Los Angeles.

Haenszel, Arda

1964

Site Record for CA-KER-130. On file at Southern San Joaquin Valley Archaeological Information Center, California State University, Bakersfield.

1965

Site Record for CA-KER-129. On file at Southern San Joaquin Valley Archaeological Information Center

Hedges, Kenneth E.

1973

Rock Art in Southern California. *Pacific Coast Archaeological Society Quarterly* 9 (4):1-28.

Heizer, Robert F. and Martin A. Baumhoff

1962.

Prehistoric Rock Art of Nevada and Eastern California. University of California Press, Berkeley.

Johnson, John R. and David D. Earle

1990 Tataviam Geography and Ethnohistory. *Journal of California and Great Basin Archaeology* 12(2): 191-214.

Knight, Albert

1993

Rock Art of the Western Mojave Desert: A Reevaluation. *Journal of the Kern County Archaeological Society*, Vol. 4: 41-60.

1997

Rock Art of Los Angeles County, California. Manuscript on file South Central Coastal Information Center.

Kroeber, Alfred L.

1925

Handbook of the Indians of California. *Smithsonian Institution Bureau of America Ethnology Bulletin 78*, Washington D.C.

Milburn, Douglas

2006

Site Records for FS No. 05-01-54-0236 and -237. On file USDA Forest Service-Angeles National Forest, Heritage Resources Section, Arcadia, California.

Milburn, Douglas H., Kelli Brasket, Amy Buckner, Joanna Huckabee, and David Peebles 2005

Site Record Update for CA-LAN-1977. On file USDA Forest Service-Angeles National Forest, Heritage Resources Section, Arcadia, California.

Moore, Edra

2004

Preservation Planning: Toward Cultural Preserve Status For Piute Butte. Report on file at Antelope Valley Indian Museum State Historic Park, Lancaster, California.

2008

Personal communication to Al Knight.

Padon, Beth

2008

Personal communication to Barbara Tejada and Douglas Milburn.

Payen, Louis A.

1968

A Note on Cupule Sculptures in Exogene Caves from the Sierra Nevada, California. Caves and Karst-Research in Speleology, Pp. 33-39, Vol. 10, No. 4. Castro Valley, California.

Picus, Grace Graham

1988

A Castle in the Valley – All You Ever Wanted to Know About Shea's Castle – And Mayhap A Modicum More. The Kern-Antelope Historical Society, Inc.

Price, Barry A., Jay B/ Lloyd, Sandra S. Flint, Mary Clark Baloian, Michael Mirro, Randy Baloian, David Earle, and Alan Garfinkel

2004

Final Eligibility and Effects Assessment at CA-LAN-192, Stephen Sorenson Park, Los Angeles County, California. Applied Earthworks, Inc. Submitted to Community Development Commission of the County of Los Angeles.

Redtfeldt, Gordon

n.d.

*Prehistoric Indian Rock Art of California*. Unpublished manuscript, on file at University of California, Los Angeles Rock Art Archive.

Robinson. Roger W.

1987

Cultural Resources Investigation Forty Acres Located in Shannon Valley, North Los Angeles County, California. In *Prehistory of the Antelope Valley: An Overview*, edited by Roger W. Robinson, pp. 35-47. Antelope Valley Archaeological Society Occasional Papers No. 1,

Lancaster, California.

Sutton, Mark Q.

1982

The Rock Art of the Western Mojave Desert. *Pacific Coast Archaeological Society Quarterly* 18 (4), pp. 27-38.

1988

An Introduction to the Archaeology of the Western Mojave Desert, California. Coyote Press, Salinas.

True, D.L., and Martin A. Baumhoff

1981

Pitted Rock Petroglyphs in Southern California. *Journal of California and Great Basin Anthropology* 3 (2), pp. 257-268.

Underwood, Jackson

2006

Discovering the Desert Kawaiisu. In *A Fetschrift Honoring the Contributions of California Archaeologist Jay von Werlhoff*, edited by Russell L. Kaldenberg, pp. 179-191. Maturango Museum Publication No. 20, Ridgecrest.

Whitley, David S.

1992

Shamanism and Rock Art in Far Western North America. *Cambridge Archaeological Journal* 2(1), 89-113.

1996

Final Report on Angeles National Forest Passport-in-Time (PIT) Rock Art Recording Project, Los Angeles County, California. Ms. on file USDA- Forest Service, Angeles National Forest, Heritage Resources Section, Arcadia, California.

1997

L'art du chamanes: Art rupestre en California. Paris: Edition du Seuil/The Art of the Shaman: The Rock Art of Native California. New York: Harry N. Abrams.

1998

Finding Rain in the Desert: Landscape, Gender, and Far Western North American Rock Art. In *The Archaeology of Rock Art*, Chippendale & P.S.C. Taçon, editors, pp. 11-29. Cambridge University Press, Cambridge.

2000

The Art of the Shaman: Rock Art of California. University of Utah Press, Salt Lake City.

2003

Rock Art Sites of the Angeles National Forest, Los Angeles County, California. National Register of Historic Places Multiple Property Documentation Form. On file at Heritage Resources Section, Angeles National Forest, Arcadia, California

Zigmond, Maurice L.

## 1986

Kawaiisu. In Great Basin, edited by Warren L. D'Azevedo, pp. 398-411. *Handbook of North American Indians*, vol. 11, William C. Sturtevant, general editor, Smithsonian Institution, Washing