

Updated and Revised

# Culture Crisis and Rock Art Intensification: Numic Ghost Dance Paintings and Coso Representational Petroglyphs

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**Photo 1. Coso Painted Style pictograph of historic longhorn cattle.**

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## Introduction

There exists in the far southern Sierra Nevada and eastern California desert remarkable aboriginal paintings exhibiting similarities with petroglyphs manufactured almost a thousand years earlier (Garfinkel 2007a, 2007b; Gold 2005). Many times the images are so vibrant and fresh they appear to have been made just a short time ago. If one studies closely the probable dating, element forms, subject matter, and locations of these paintings, it is possible that they were made as part of one of the Ghost Dance revitalistic movements, as was originally suggested by Schiffman and Andrews over three decades ago (Schiffman and Andrews 1982).

Such paintings appear to have been made by Numic groups (Northern Paiute, Panamint Shoshone, and Kawaiisu) during the historic era (cf. Stoffle et al. 2000). The production of multicolored rock paintings in secluded locations on a non-basalt canvas indicates a radical discontinuity with petroglyphs found in this same general area (Grant et al. 1968). The petroglyphs have been recognized as a distinctive expression termed the Coso Representational Rock Art Style (Schaafsma 1986).

These earlier petroglyphs are often drawn on exposed lava canyon walls and boulders located within and in the near vicinity of the Coso Range mostly within the boundaries of the China Lake Naval Ordinance Testing Station. Such a distinction in environmental setting, method of execution, and dating may be seen as rather persuasive evidence supporting, what some researchers believe is, a population replacement by Numic groups of earlier non-Numic (pre-Numic) peoples (Garfinkel 2006; Gilreath 1999; Gold 2005). Pre-Numic groups probably made the distinctive Coso Representational Style petroglyphs located in the Coso Range (Garfinkel 2007a; Gold 2005).

Grant et al. (1968) have published the most thorough discussion on the extraordinary array of Coso petroglyphs and the Coso locality figures prominently in discussions of Great Basin rock art function, dating, and significance (Bettinger and Baumhoff 1982; Heizer and Baumhoff 1962; Quinlan and Woody 2003; D. Whitley 1982, 1998). Conservative estimates indicate an excess of 100,000 individual petroglyph elements in an area of less than 90-square-miles (Gilreath 1999; Hildebrandt and McGuire 2002). Therefore the Cosos contain one of the greatest rock concentrations in the Western Hemisphere (Grant et al. 1968).

Over half of these rock art elements are realistic portrayals of bighorn sheep or the weaponry and ritual paraphernalia associated with hunting desert bighorn. Bighorn depictions are common throughout the Desert West, yet the quantity found in the Coso Range surpasses the total number of sheep drawings for all other regions combined (Grant et al. 1968:34).

***“What is so astonishing about the Coso Range rock art complex is that it apparently developed in almost complete isolation, an island of specialized art tradition.” Grant et al. (1968:115)***

Based on changes in subject matter (atlatl and dart versus bow and arrow) and the seriation of rock art styles, many scholars suggest that Coso petroglyphs were made from at least 8000 B.C. to about A.D. 1000/1300 (Garfinkel 2007a; Gilreath 1999; Gold 2005). During the total span of production, rock drawings changed from simple abstract forms to more naturalistic figures eventually culminating in elaborate, boat-shaped bodied bighorns with full, front-facing, bifurcating horns that are a hallmark of this locality. As knowledge has increased, prehistorians largely agree

that the majority of Coso glyphs were manufactured during a much more limited interval perhaps from ca. A.D. 600 to 1000/1300 (Garfinkel 2003, 2007a; Gold 2005; Garfinkel and Pringle 2004; Gilreath 1999). Given that brief period of intensification it is possible to posit similarities in the cultural contexts for both Coso Style paintings and Coso Representational Style petroglyphs.



**Photo 2. Coso Representational Style petroglyph bighorn.**

Perhaps both of these elaborate artistic traditions owe their most intense expressions to catastrophic cultural conditions endured by Native Americans. Such conditions of cultural crisis have been shown to correlate with revitalistic movements and an upsurge in



ceremonialism (Quinlan and Woody 2003: 384; Monteleone and Woody 1999).

During the closing period of Coso Representational Style petroglyph production such circumstances may have ensued. An intruding and competitive population influx (Numic in-migration) and the depletion of the local bighorn population could have factored into the demise of both the Coso petroglyph artisans and their artistic tradition (Garfinkel 2003, 2007a; Gilreath 1999; Gilreath and Hildebrandt 2001; Gold 2005; Grant et al. 1968; Quinlan and Woody 2003:384).

**Similarly, Coso Style** paintings appear to have been made during a very brief time span in the last half of the 19th century (A.D. 1850-1900) (cf. Brook et al. 1977; Gold 2005; Garfinkel 1978, 1982, 2007a; Ritter et al. 1982; Schiffman and Andrews 1982; Schiffman et al. 1982; Whitley 1982). During this time Numic groups in the southwestern Great Basin were subjected to the most significant Euroamerican depredations including forced relocation, genocide, and the destruction of their traditional subsistence resources (Table 2).

Although rock art production has not been ethnographically documented as an expression of eastern California Native American rituals, it is plausible that such activities occurred and were aimed at supernaturally returning to a more traditional and viable lifeway. Similar types of revitalistic activities were part of Ghost Dance movements that took place in eastern California during the periods from 1869-1875 and again in 1889-1895 (Kroeber 1925:872, Figure 71; Mooney 1973: 804; Thornton 1986: Appendix C and E).

Hence the Coso Painted sites may be a record or an outcome of such ceremonies (cf. Schiffman and Andrews 1982; *sensu* Stoffle et al. 2000). This paper reviews the basis for the identification,

distribution, age, cultural affiliation, and function of Coso Style Paintings. Additionally it will briefly outline a parallel cultural context for Coso Representational Style petroglyphs, positing a similar explanation for their intensification.

**Table 2. Chronological Outline of Important Benchmarks  
in Eastern California Native American History**

**Longhorn Cattle Introduced and  
Used for Hides, Tallow, and Beef  
1850 - 1890**

**Harsh Winter, Drought, and  
Mass Starvation  
1861- 1862**

**Ghost-dance like Activities Reported  
in Owens Valley – Possibly led by  
Wodziwob  
1862**

**Forced March of Native Americans  
to Fort Sebastian  
1863**

**First Ghost Dance Movement  
By Wodziwob  
1869 - 1875**

**Blue Faceted Glass Trade Beads  
Used by Native Groups and Found  
In the Vicinity of Coso Paintings  
1859 - 1864**

**Panamint City Mining Boomtown  
Inaugurated and then Abandoned  
1873 - 1876**

**Second Ghost Dance Movement  
by Wovoka  
1889-1895**

**Indian Wars and the March to Sebastian Indian Reservation**

An exceptionally harsh winter of 1861-1862 led to potential starvation by the Native peoples of eastern California (Chalfant 1933; McCarthy and Johnson 2002). Much of the area had

already been deforested to supply timber and charcoal for the mines. The timber was harvested from the substantial stands of pinyon trees that would have normally provided significant fall nut crops. With their traditional subsistence practices in disarray, Native peoples began raiding Euroamerican cattle and horses.

Throughout the early and mid-1860's conflicts escalated. On July 4, 1862 Camp Independence was established on Oak Creek in the Owens Valley and a treaty was signed with the Native peoples. In the spring of 1863 White/Indian hostilities took on more formidable proportions when over 100 Paiute men were killed. By summer, nearly 1000 Natives surrendered and were being held at the fort.

In July 1863, over 998 captive Indians were forcibly marched to Sebastian Indian Reservation near Fort Tejon in the Tehachapi Mountains. Their number included men, women, and children of Kawaiisu, Panamint Shoshone, and Northern Paiute heritage. Some escaped in route, but many, too hungry, thirsty, or tired, were sabered by the soldiers and their corpses left by the side of the road (McCarthy and Johnson 2002).

Contemporary natives still tell stories of this removal episode and it is yet uppermost in the consciousness of the community. That event lives on in the local memory of Native peoples still residing in eastern California (particularly Owens, Death, and Panamint Valleys). Such shattering experiences of colonialism may have fueled a revival in a tradition of Native American rock art as exhibited in Coso Style Paintings (Quinlan and Woody 2003). After the forced relocation of eastern California Indians by American troops; there was a cautious and gradual return of Natives to their former homelands between 1864 and 1865 (McCarthy and Johnson 2002). When they returned they found their Native villages destroyed and their former homelands occupied by ranchers. Hence, instead of their usual lowland

occupation sites, they moved and occupied more secluded areas, rocky “refuge” camps, at the fringes of and high above the alluvial fans of White settlements (Walton 1992). Such encampments may have been the locations for the production of Coso Style paintings and such secluded sites were requisite for the proper conduct of Ghost Dance ceremonies (Carroll et al. 2002).

## **The Ghost Dance and Numic Groups of Eastern California**

**In 1869 Wodziwob dreamed** that a train was coming from the east and if Native peoples performed the Ghost Dance they could bring back the Indian dead and restore balance to the world (DuBois 1939; Gayton 1930; Hittman 1973, 1997; Kehoe 1989; Spier 1935). Wodziwob, a tribal prophet of the Mono Paiute, began to preach his messianic vision at pinenut festivals and rabbit hunts.

Later in the year 1889, the Northern Paiute prophet, Wovoka, re-ignited the movement after receiving a vision during a full eclipse of the sun on New Year’s day. He led renewed efforts focused on ameliorating the problems brought about by dominant Euroamerican society. The great hardships of aboriginal peoples were perhaps made a bit more bearable with the development of the Ghost Dance (Jorgensen 1986; La Barre 1970). Groups that had recently suffered the greatest population declines appear to have most thoroughly and quickly embraced it (cf. Thornton 1986).





**Photo 3. Ten figures, painted in white and embellished in red, are holding hands, six have a feather (eagle?) adorning their heads. This may indicate they are participating in a Round Dance. The figures are also depicted in an arc as if to imply circular movement. D. Austin photo**

**The Ghost Dance** had great similarities with the traditional Round Dance that made it relatively easy to graft the religious movement onto the Native indigenous cultures of eastern California (Hittman 1973; Kroeber 1925). Several researchers have argued that the Panamint Shoshone (aka Coso/Koso or Timbasha), Owens Valley Paiute, and perhaps the Kawaiisu were willing participants in the Ghost Dance movements (Gayton 1930:62, Figure 1; Kroeber 1925:872; McGrath 1984:21-22, 53-54; Mooney 1973:800-804; Schiffman and Andrews 1982; Steward 1938; Thornton 1986: Appendix C and E; Vander 1997).

**Ghost Dance-like activities** are documented for eastern California as early as February of 1862 (McGrath 1984:21-22, 53-54). In southern Owens Valley, near Independence Creek, a party of Northern Paiute Indians approached a group of Euroamericans at San Francis Ranch. They were waving burning pine-pitch torches set atop long poles and surrounded the ranch buildings. Natives were reported to have danced around the

buildings and proclaimed invulnerability from harm since they could spit out any bullets that might strike them or possibly enter their bodies. McGrath posits that the leader of this group of Natives was Wodziwob, the Northern Paiute prophet that initiated the first formal Ghost Dance ritual - later in 1869 (McGrath 1984:22, 54).

Mooney mentions that the Californian Shoshone bands adjacent to the Paiute were among the first to receive the new Ghost Dance Doctrine of Wovoka (Mooney 1973:804-806). The dance was supposedly introduced and accepted in the early months of 1889 (cf. Gayton 1930:62). Mooney (1973:804-806) states that among the Western Shoshone they recognized the prophet, Wovoka, and were looking forward to conducting dances, fully expecting the resurrection of the Indian dead and their ultimate supremacy over the Euroamerican intruders.



**Photo 4. *Wovoka in later years.***

## Previous Research

**Garfinkel (1978) first described** Coso Style pictographs (the Coso Painted Style) when he identified this peculiar, regional rock art expression. Two sites were first identified and similarities noted in style and subject matter with Coso Representational Style petroglyphs (Grant et al. 1968). Further work expanded the array of sites conforming to this style (Andrews 1977; Brook et al. 1977; Marcom 2002). Independent evaluation also supported the style's validity through statistical correlation of element types (D. Whitley 1982:108-109).

Whitley (1982) supported their historic age based on his mathematical analysis and concluded that there was a strong correlation of horse and rider images with bighorn sheep elements. An anthology was published that presented the current status of scholarship on the subject of Coso paintings (Schiffman et al. 1982). Little recent study has been completed until the present authors revisited the subject here and in the senior author's Ph.D. dissertation (Garfinkel 2007a; Gold 2005).

Schiffman and Andrews (1982) were the first scholars to suggest that Coso Style paintings in eastern California might be associated with Numic Ghost Dance rituals. Recent in-depth treatment of a well substantiated and richly documented pictograph site, on the Kaibab Plateau of the Grand Canyon, provides a compelling and rather well-supported Ghost Dance association for a rock painting made by historic local Numic inhabitants (Stoffle et al. 2000).

Ethnohistoric, ethnographic, and archival research support that location as a place where a Ghost Dance ceremony was performed by the Southern Paiute in the late 1800s and that the painting was either part of the ceremony or served as a record of it.

More recently, a number of other rock art sites throughout Nevada and eastern California have also been identified as other locations where Numic Ghost Dance ceremonies were apparently held (Carroll et al. 2002). Detailed discussions with contemporary Native Americans and novel interpretation of older ethnohistoric and ethnographic data have served to identify the configuration of Numic ritual places. Scholars have identified how the topography, natural resources, and cultural features preconditioned a specific location for this use.

## **Style and Subject Matter**

**Coso paintings are now recognized** at 20 sites. Most of these paintings (n = 16, 80%) are multicolored panels that always contain images of bighorn sheep and sometimes (n = 8, 40%) depict historic Euroamerican subject matter. Typical elements are: concentric circles, hand prints, shield-like patterns, sunburst symbols, stylized anthropomorphs, bighorn sheep, deer, men astride horses wearing Stetson type “cowboy” hats, and hunters with bow and arrows (Figures 1-6).

**The paintings contain some elements** reminiscent of, but not identical to, Coso Representational petroglyphs (*sensu* Garfinkel 1978; Schaafsma 1986; Schiffman et al. 1982). The sheep in the Coso paintings often (but not always) have full, front-facing, bifurcated horns (Figures 1 and 2) - a hallmark of the Late and Transitional Period, Coso Representational Style petroglyphs (cf., Grant et al. 1968; Schaafsma 1986). Most Coso Style Painted sites (n = 13; 65%) have white pigment that is otherwise rare in characteristically, monochromatic, red, abstract, Numic pictographs (Bettinger and Baumhoff 1982; Nissen 1982). For the



Numic, white pigment, was associated with the sacred realm and has links with spiritual matters (cf. Miller 1983:68). More specifically, the use of white pigment appears to have been especially prevalent in association with rituals and ceremonies relating to the Numic Ghost Dance (cf., Carroll et al. 2002; Stoffle et al. 1995, 2000).



**Figure 1. *Death Valley. Multiple anthropomorphic figures engaged in a ritual (holding hands or ascending). Single bighorn with bifurcating horns is depicted in Coso Style.***





*Figure 2. Death Valley. Images Painted in white, black, red and yellow. Coso style bighorn with front-facing bifurcating horns. Another zoomorph rendered on the extreme left.*

**Schiffman and Andrews** (1982:87) point out that most of the horse and rider elements in Coso Paintings are rendered in white (n = 12, 70%). They identify that the prophet of the 1890 Ghost Dance, Wovoka, wore a broad-brimmed white felt hat - a Stetson (Mooney 1973:769) and that Ghost Dance messengers may have been similarly adorned. Wodziwob, the prophet of the 1870 Ghost Dance Movement, was aided by an assistant a Native American rain doctor named Tavibo - meaning "white man" in Northern Paiute. Mooney (1965:4) reports that "two mysterious beings with white skins had appeared among the Paiute far to the west and announced a speedy resurrection of all dead Indians,

the restoration of game, and a return of the time of primitive life.” Mooney adds that both Indians and Euroamericans were to be white in the revitalized world to come.

## **Longhorn Cattle**

**In the Owens Valley** and other areas of eastern California, Euroamerican colonization occurred rather late. Cattle began to reach the study area, associated with immigrant trains from the East, in about 1849. Beginning in 1861 ranchers began to graze cattle throughout the area and dozens of cattle drives ensued. Some, with as many as 1500 head, passed through the area of eastern California on the way to the mining towns in Inyo and Mono counties. In doing so, the cattle soon consumed or trampled native plants that formed a substantial portion of the aboriginal diet and destroyed many of the key economic plants that were staples for the Natives. By 1873 over 200,000 head of livestock were wintering in the Owens Valley and other valley systems of eastern California (Chalfant 1933).

***"Lying on my back in semidarkness, staring up at this vibrant interplay of man and beast, was otherworldly."  
Geron Marcom***

**A few of the largest** Coso pictograph sites (n = 4) contain elements perhaps resembling cattle. At the largest sites images of quadrupeds with long horns and in some cases a long tail are displayed (Garfinkel 1978, Figures 4 and 6; Grant et al. 1968:107; Marcom 2002:2; T. Whitley 1982a: Figure III-1, III-8A). Recent reanalysis of one painting revealed another possible longhorn image (Backes 2005). Review of the bovine images from one site

by several of our colleagues provided a consistent interpretation that certain images may represent a longhorn steer.



**Figure 3** *Two zoomorphs on lower right side exhibit atlatl like elements impaling animals. Many sheep are done with Coso Style, front facing horns, Armed bowman are depicted on lower right and upper left areas of panel. Some upside down. Horse and rider images are depicted several times (n=3) in this panel. Illustration rendered by artist based on an original drawing by Suzanne Crowley as it appears in Brooks et al. 1978:11, Figure 1; and Ritter et al 1982:18, Figure 11-1.*

**Longhorns were the first cattle** brought into California by Spanish missionaries and explorers in the 18th century. These were the ancestors of the California and Texas longhorns and trace their ancestry to Andalusia and Extremadura Spain. Most of these cattle remained in the coastal counties of California from San Diego to Monterey, areas frequented by Franciscan missionaries.



It was not until the 1850s that California began to see the importation of many longhorns to supply the beef requirements of the Northern California gold rush. Supplies of domestic cattle were inadequate to meet the vast demand of the 49er immigrations. With the price of beef escalating, it became profitable for Texas and New Mexico ranchers to drive cattle westwards to feed this large new market (Gordon 1880).



**Figure 4. Death Valley. Central zoomorphic figure may be a longhorn steer. Other representations include a number of bighorn sheep and a central human form with a wand or sheep crook. Painting rendered in black, red, and white.**



***Photo 5: Woodcut of longhorn cattle.***

**Therefore, the early 1850s saw** the first large cattle drive to cross the desert lands of eastern California. At least 100,000 head of longhorn cattle were driven into California during this period (Dobie 1941:363). But the era of the longhorn in early California was short-lived as one calamity followed another. Droughts in 1856 caused the loss of 100,000 head of cattle. Another drought followed in 1861-1862. Then a great and disastrous drought in 1864 led 50-75% of Los Angeles County cattle to die of thirst or starvation. After 1864 most California ranches were divided and sold into smaller holdings. During the late 1800s longhorns diminished in number in California, Texas, and the South due to changing demands of the marketplace toward fatter British breeds of Durham or Hereford bulls.

**Hence, if some of the Coso paintings do depict longhorns,** they probably date to a period when cattle drives crossed the southwestern corner of the Great Basin and there were mining boomtown markets demanding this beef. That period dates from



about 1850 to the late 1880s or early 1890s. After that time, the longhorn steers slowly vanished from the landscape contemporaneous with changing market conditions and the demands for a beefier steer.

## **Horses and Riders**

**The depiction of mounted** and unmounted horses, with and without saddles, occurs in a third (n = 6) of Coso Style pictographs (Tables 1 and 2; Figures 5 and 6). It is not clear when the Kawaiisu, Panamint Shoshone, and Northern Paiute began using horses. During the period from 1830-1860 it appears that any horses that were obtained were probably eaten and recognized only as food (Euler 1966). By the 1870's it seems that related groups such as the Southern Paiute were trading for horses and men and women used them for transportation (Fowler and Matley 1979:79).







**Figure 5. Death Valley. Multiple zoomorphic images perhaps depicting horses with and without saddles.**

**Figure 6. Death Valley. Horse and rider image at far left. Second image may be another horse and rider that has faded or eroded. First image appears to have a bridle and rider may be carrying a weapon (gun) or flag. Painting completed in red and black pigments.**

**Gayton (1930:71) mentions that the Ghost Dance**, performed by the Western Mono in 1872, ended with a horse and rider dance. The horse dance was performed with persons riding horses around in a circle inside a ring of dancers. Gayton (1930:71) tells us that, according to her consultants, old horses were miraculously rejuvenated and special horse dance songs were even sung. Perhaps the images of horses and riders expressed in the Coso Style paintings were meant to depict this part of the ceremony.

## **Native Copying of Ancient Petroglyph Art**

**Slater (2000) documents the heyday** of Panamint Shoshone figurative baskets that contained realistic portrayals of various animals and humans. Renderings of bighorn sheep on such baskets appear to have been inspired by Coso Representational Style petroglyphs (cf., Slater 2000 and Figure 7 this paper).

A number of basketry designs are obvious replicas of the Coso bighorn petroglyphs replete with full, front-facing, bifurcated horns, with ears added, and specialized hoof adornments (Slater 2000:51-52, Plate 11 and 12, Figure 17). No other ethnolinguistic group (including the neighboring Yokuts, Tubatulabal, and Kawaiisu) are known to have practiced such an extensive tradition of realistic, zoomorphic, and anthropomorphic representations on their basketry (Sennett-Graham 1989; Slater 2000). Even the anthropomorphic renderings found on the Panamint Shoshone figurative baskets, in some cases, bear a striking resemblance to some of the images identified within Coso style pictographs and petroglyphs (cf., Slater 2000, Figures 42 and 43).

**Discussions with Eva Slater** (personal communication 2004) and others familiar with Panamint figurative baskets (Sue Ann Monteleone and Beth Porter personal communications 2004) indicate that such styles for realistic basketry imagery largely date to a period after 1893, subsequent to their display at the Columbian Exposition. The majority of these baskets therefore appear to have been manufactured in the earliest decades of the 1900's, although some baskets of this style may date as early as ca.1880 (see Slater 2000:84, Figure 19). Hence a pattern of copying earlier Native graphics and producing realistic renderings was definitely a part of the cultural traditions of the historic Panamint Shoshone.



**Figure 7. Panamint Figurative Basket. Basket designs contain images of chuckwalla, birds, and bighorn sheep. Enlarged image of sheep is compared with bighorn sheep petroglyph image found in the Coso Range (lower right) Image after Slater 2000.**



**The largest and most elaborate** Coso Style painting is one located in eastern California. The panel has over 150 elements including many bighorn sheep and other animals impaled by, what can best be described as, atlatl darts (Figure 3; also Ritter et al. 1982: Figures II-1, II-4 A and B). The images are, in two instances, quite deliberate and bear close similarity to renderings identified in the Coso Range petroglyphs confidently attributed as atlatl representations (Grant et al. 1968).

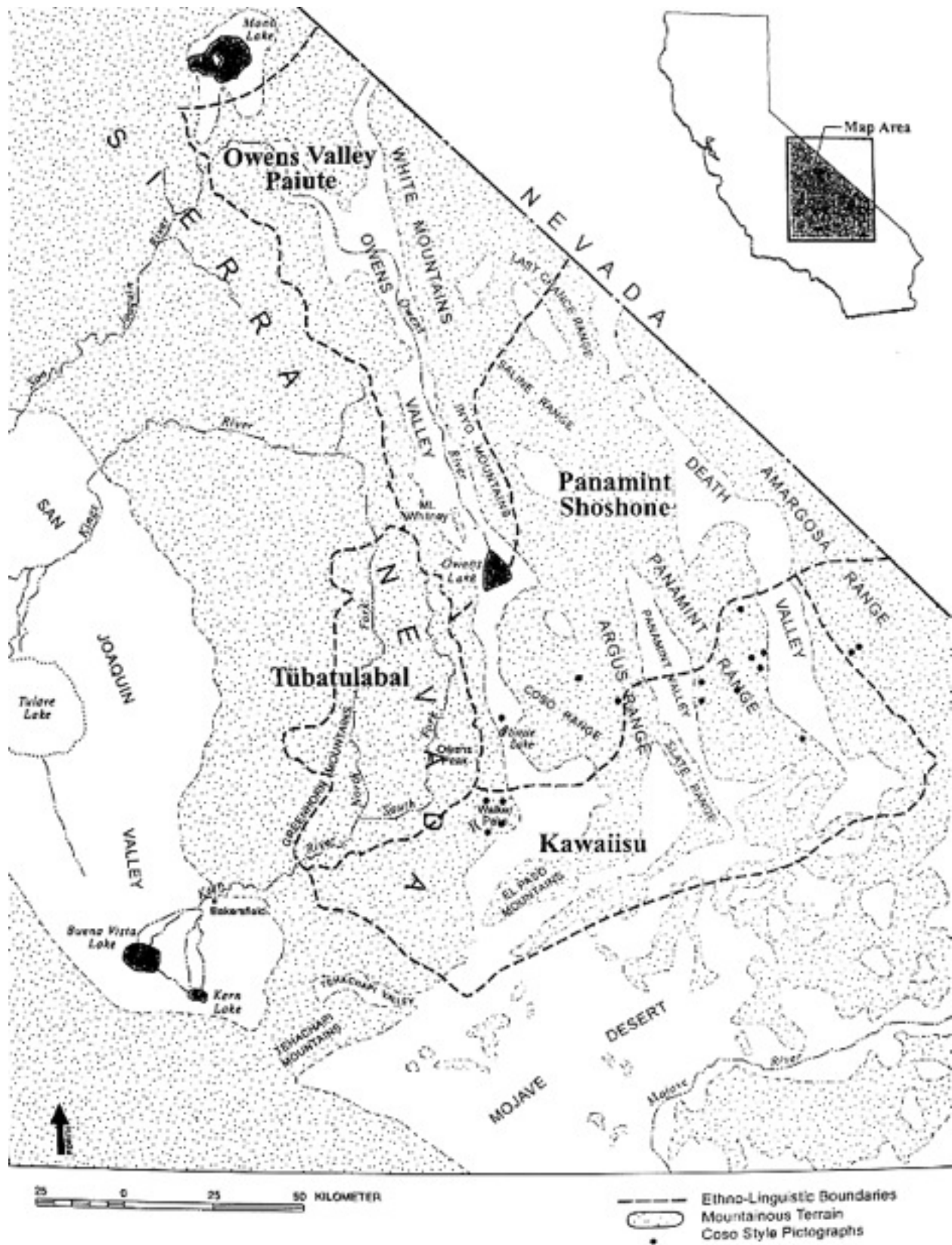
These painted elements contain the conventionalized images of atlatls with finger grips - rendered in a fashion quite similar to those represented in the Coso petroglyph tradition (Brook et al. 1977:19, Figure 18). Yet this same painting also contains a number of horse and riders and individuals wearing Western-style, wide-brimmed (Stetson) hats (Brook et al 1977; Ritter et al. 1982). A revitalization and re-emphasis on traditional imagery would be inferred since atlatls were not a part of the Native cultural repertoire at this historic date. *Therefore, evidence seems to point to a historic attempt at copying the earlier iconography found in the nearby Coso Range petroglyphs* (emphasis added; cf. Sutton 1981)1.



**Photo 6. Panorama of the elaborate pictograph found in an eastern California rock shelter.**

**Ethnographic evidence indicates** that Native Americans did indeed copy ancient designs and incorporate them into their artistic traditions with little knowledge of the meaning of such designs (Gifford 1936; Haury 1945:70). Such an interpretation also is supported by the fact that the Ghost Dance ideology was emphatically “nativistic” or focused on the past (Carroll et al. 2002).

***For the Numic, white pigment, was associated with the sacred realm and has links with spiritual matters (cf. Miller 1983:68).***



**Figure 8. Ethnolinguistic Groups and Coso Paintings in Eastern California.**



## Distribution

**Coso Style pictographs** are usually found in isolated settings, on non-basalt canvases – rocks located in protected environs - adorning caves, rock shelters, or slightly concealed rock faces. They are most often located from 3500 to 7000 feet above sea level – with many sites situated above 5000 feet. Coso Painted sites are concentrated in two areas: along the crest of the Sierra Nevada and in Panamint /Death Valley (Figure 8; also Marcom 2002:21). Coso Style pictographs are found just west of the crest of the far southern high Sierra along the easternmost boundary of Kern County. They are also noted immediately east of the crest of the Sierra - at the head of Indian Wells Canyon. They are also situated in the Coso Range and in and near Death Valley. Significantly, in the nearby Owens Valley these rock paintings contain no painted bighorn or horses and only a few anthropomorphs, and they are in the main colored only in red (Smith and Lee 2001).

## Dating

**To understand just when** these hypothesized revitalization efforts were manifest, one needs to ask several contextual questions. When would such ritual activity have historically occurred? When were the individual leaders and proper influences present to activate such religious zeal? In other words, when were the conditions particularly “ripe” to necessitate such intensification in native graphics?

It was during the latter half of the 1800s that Euro-American depredations against the Owens Valley Paiute, Panamint Shoshone, and Kawaiisu took their most dramatic turn and

cultural destruction of their traditional lifeways reached its zenith. If there is a correlation between these two phenomena then rock art sites containing historic elements and painted sheep might then date from no earlier than 1850 to perhaps no later than the turn of the century. We base this determination on the following.



***Photo 7. Polychrome section of an eastern California pictograph panel.***

***"Many times the images are so vibrant and fresh they appear to have been made just a short time ago."***

The Coso Style pictographs found at the most colorful site likely postdate the European occupation there. The developments there of a populous mining town dates to the short period from 1873-1876. Some fanciful accounts indicate that a catastrophic flash flood on July 24, 1876 destroyed most of the town and a few

stragglers were said to linger there. Yet newspaper accounts of the day indicate that this tale was fully concocted and the reality was far less impressive; that the rich ore veins were gradually depleted and the boomtown came to a slow end (Ritter et al. 1982).

**Faunal remains analyzed** by Peter Schultz from the largest Coso Style pictograph site attest to the use of that rock shelter by miners of European ancestry. That interpretation is based on the animal bones represented (species identified), their butchering methods, and the cuts and types of meat discovered (Schulz 1979). The Euroamerican use of the shelter, Schulz posits, must have post-dated the manufacture of the pictographs.

Yet, we find this assertion rather difficult to accept for the following reasons. The pictographs are painted on a blackened, soot-laced surface that probably derives from use of the shelter by miners. All other Coso Style painted sites have no such blackening of their rock canvases and are rendered on smoke-free and non-blackened granite rock faces. Additionally if the paintings had preceded the Euroamerican occupation by miners then we most likely would see some graffiti or damage on them.





**Photo 8. The chemical composition of glass, shape of the vessel and bottle neck characteristics help determine a range of time during which the glass was manufactured. Glass fragments shown are typical of the late 1880's to early 1900's. D. Austin photo**

The two westernmost expressions of the Coso Painted Style (Garfinkel 1978; Garfinkel et al. 1980: 335-338) are found on the crest of the Sierra Nevada. These two pictograph panels contain a total of 14 individual elements. Thirteen of these elements are painted in a striking variety of colors including red, white, black, pink, and orange. One painting is located on a large granite boulder overlooking an ephemeral drainage between two prehistoric campsites. Depicted on that panel are two bighorn

sheep with boat-shaped bodies with full, front-facing, bifurcating horns. Also rendered is a horse and rider element.

A cache of three complete manos, one manufactured of vesicular basalt, was found nearby. The exotic basalt mano lends further credence to the supposition that the authors of these paintings were typically desert dwellers and had last occupied this area. The other pictograph site contains a single bighorn painted in orange and was rendered on the ceiling of a small rock shelter.

**Significantly, only two of the 19 sites** investigated for the Pacific Crest Trail, in the vicinity of these two paintings, contained glass trade beads (Garfinkel et al. 1980). Those two sites were the locales that bracketed the two Coso Painted sites. A total of 11 glass trade beads were identified at these sites and this collection (all translucent, cobalt blue, faceted and non-faceted, hexagonal forms) are types particularly diagnostic of the period from 1859 to 1864 (Titchenal 1994). Both aboriginal camps have their principal occupations during the Chimney Period (AD 1300-1895) and contained characteristic Desert Series (Desert Side-notched and Cottonwood) projectile points. As such, much of our chronological information seems to point to the period from AD 1850-1895 as the most likely time when some of these pictograph sites were made. Of course most of this information is purely speculative and largely circumstantial but growing evidence seems to support the notion that these paintings were made sometime during the latter half of the 19th century.





**Photo 9. Top row: Cottonwood leaf and triangle points. Bottom row: Desert Side Notch points**

## **Ethnic Affiliation**

**Coso paintings are exclusively found** in the vicinity of Kawaiisu, Panamint Shoshone, and Owens Valley Paiute territory (Figure 7). Most of these paintings lie at the boundaries of these groups. Multi-ethnic or multi-linguistic settlements were located along these borderlands. Several anthropologists describe such settlements (Driver 1937; Garfinkel 2005; Steward 1938; Voegelin 1938). The physical location, historic dating, subject



matter (horses, mounted riders, hatted anthropomorphs, and longhorn cattle) and associated archaeological materials indicate that these paintings were probably rendered by the historic Native inhabitants of the areas where they are found (Figure 7). It would seem reasonable to posit that the manufacturers of the Coso Style paintings were people who spoke a Numic language (Thomas et al. 1986:280).

The Round Dance was part of the traditional social interaction sphere of the Panamint Shoshone, Kawaiisu, and Northern Paiute (Miller 1983:77; Steward 1938; Zigmond 1987). These ritual activities normally occurred during the fall fiestas and were correlated with times of resource abundance (e.g., pinyon harvests, fish runs, rabbit and antelope drives). It is interesting to note that several (n = 6) of the Coso Painted sites occur at high elevations and are found in and near the pinyon zone. Therefore the paintings could have been made in association with such a key time for ritual activities and in association with the harvest of pinyon nuts.

## Function

**It is plausible that some of the larger**, more elaborate Coso Style pictographs might have been locations where Native Americans gathered for the Ghost Dance ceremony. Certainly alternative functions for the paintings can be suggested as it is possible that the paintings were simply documentary, depicting strange or dangerous events or having some other meaning entirely (cf. Whitley et al. 2005). Nonetheless, one can recognize a functional context where traditional graphical elements would have a symbolic and cathartic purpose. Such an expression would most likely have developed and spread when Native cultural practices were in disarray. That time period would have been when the traditional Native resource base and culture were in imminent destruction. Such a time occurred after the eastern

California Indian Wars and followed the forced relocation of the Native peoples of the Inyo-Mono and eastern Kern region.

## **Coso Representational Petroglyphs**

**Coso Representational petroglyphs** may have enjoyed a maximum expression and period of greatest intensification from ca. A.D. 600 to 1000/1300 (cf. Garfinkel 2005, 2007a, 2007b; Gilreath 1999; Gold 2005; Grant et al. 1968; contra Keyser and Whitley 2006; Whitley et al. 2005). Such a production spike and elaboration appears to have endured over only a few hundred years.

The Coso petroglyph makers may have overhunted the local bighorn sheep population shortly before this period of intensive petroglyph production. Evidence exists indicating that desert bighorn sheep were so depleted that the regional archaeofaunal record shows a dramatic change from a predominant focus on large artiodactyl (primarily bighorn sheep) exploitation to the hunting of small game (cf., Garfinkel 2007a; Hildebrandt and McGuire 2002; Holanda and Delacorte 1999). This shift may have been an unintentional consequence of the use of the more flexible bow and arrow technology that replaced the former atlatl and dart.

The final death knell for the Coso petroglyph artisans may have come when local climatic conditions deteriorated during the late Haiwee era ca. A.D. 970-1350. Paleoclimatic data provides ample evidence for two periods of “epic drought” that could have profoundly effected the lifeways of the Coso populace (Stine 1990, 1994).



**Photo 10. Dr. Alan Garfinkel examines a Big Petroglyph Canyon boulder with four Large Late Period bighorn sheep pecked into it. The bighorns are superimposed over older petroglyphs of Patterned Body Anthropomorphs (PBAs). D. Austin photo**



**Grant et al.** (1968:41-42) argued that the early Coso artisans were armed only with relatively inefficient dart points propelled by atlatls (spear throwers). These researchers suggested that rock pictures were initially used as an important psychological aid or hunting magic (*sensu* Garfinkel 2007b; contra Keyser and Whitley 2006). After the introduction of the bow and arrow, large communal hunts appear to have proliferated and the kill rate for big game may have increased dramatically (Garfinkel 2007a, 2007b; Gold 2005). Coso hunters used dogs and dummy hunters to ambush bighorn along their trails and migration routes. This allowed larger harvests of sheep. The depletion of the sheep population could have brought on an intensification of sheep ritual to bring the sheep back. However the sheep were eventually depleted, the cult discontinued, and with this decline the tradition of rock drawings ceased.

**The period when Grant et al.** recognized this intense ritual activity may correlate with the greatest preponderance of rock images and their most elaborate execution (life-sized or even larger images of sheep). The greatest number of images and the largest renderings appear to have been manufactured during a time that coincides with an abrupt decline in artiodactyl remains in the archaeofaunal record. Hence it is posited that, as with the Numic paintings, the Coso artisans hoped to supernaturally influence the forces that would bring back the sheep and restore this traditional subsistence resource to its earlier state (cf. Ruby and Hildebrandt 2001).

## **Revitalization and Millennial Movements**

**Religious iconography is often replete** with symbols representing a culture's shared values and world view. An abundance of religious expressions often correlates with periods of great turmoil. Revitalization or nativistic movements are often identified as "cults of despair," given their rapid appearance

during periods of crisis. These new religious institutions regularly feature messianic leaders, prophecy, and the anticipation of a coming utopian state. Within this context, a culture may be aroused and energized by what it perceives as “prophetic destiny”.

Religious symbols may represent a future wondrous state based on a mythological past with the explicit suggestion that all disturbances associated with intruders will vanish with the renewal and revitalization of the oppressed people. Most researchers insist that such expressions are adaptive responses to externally induced acculturation pressures on indigenous peoples.



***Photo 11. This 1891 Smithsonian woodcut depicts Sioux men and woman participating in the Ghost Dance. Shortly after this event the Massacre at Wounded Knee brought about the end of Wovoka's Ghost Dance movement.***

**Nativistic movements are therefore often recognized** as expressions of cultural revivals and are associated with sets of symbols that reflect the values of the subordinate population. To understand such symbolism it is critical to appreciate the larger sphere of environmental factors that produces them. Such expressions often incorporate elements of older traditional cultural symbols and also integrate novel ones.

For the historic multicolored Numic paintings, such symbols may be a predictable reaction to the loss of aboriginal rituals and might logically incorporate the religious symbols closely associated with the arrival of Hispanic and Euroamerican populations (horses, western style head gear, etc.). In general the loss of traditional religious elements fostered the development of new religious movements including the Ghost Dance and the Native American Church.

## **Conclusion**

**For the Coso petroglyph artisans** an explosion of religious activity resulted in the production of great numbers of images incorporating larger than life-size sheep. A parallel course of intensification, and abrupt discontinuation appears characteristic of Coso pictographs. These Numic paintings seem to occur only during the last half of the 19th century (1850-1900). That period is a time when Native groups in the southwestern corner of the Great Basin endured their most significant and dramatic depredations fostered by the influx of Euroamericans.

Correlating with these circumstances was the practice of rituals and ceremonies aimed at bringing back the dead and restoring the subordinate population to their traditional lands and lifeways. These revitalistic activities appear to have led to the development of a peculiar style of rock painting known as the Coso Painted Style. Less than two dozen sites, corresponding to this style,



serve as silent testimony to Native ceremonies commemorating that sad chapter of history.

## Notes:

1. At the Stahl Site Cave (CA-Iny-205), Mark Raymond Harrington (1957) noted the presence of a crudely rendered petroglyph panel within a rockshelter adjacent to the Stahl site (CA-Iny-182) located near Little Lake, California. He suggested that these scratched and pecked drawings were the work of the historic Shoshone occupants of the Stahl site or even more recent use by Euroamericans (Harrington 1957:76).

Harrington includes a photo of the petroglyph panel in his early monograph on the sites (Harrington 1957:Figure 52). Almost half a century has passed since Harrington's initial study. Yet recent documentation and research on the panel shows very little change from the earlier image (Austin 2005). A clearer and more detailed photographic evaluation attempting to document the complete panel reveals that at least one and possibly two sheep are rendered in unique Coso style - with full front-facing horns and boat-shaped bodies. Yet these scratched and engraved drawings have been etched into and are superimposed over what is possibly a late dating (historic?) episode of smoke blackening on the roof of the cave.

The environmental context for this panel is more akin to and generally characteristic of Coso paintings (secluded) rather than Coso Representational petroglyphs (exposed). The Stahl rockshelter petroglyph elements have been scratched and abraded into the blackened canvas and as such are similar to the late prehistoric images identified with the Great Basin Scratched Style (Bettinger and Baumhoff 1982) and akin to the Coso paintings. Therefore, these Stahl cave drawings are perhaps an intermediate or transitional stage between the "Numic" scratching

(Gilreath 2003) and the more recent historic dating Coso Style paintings.

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