

Jay von Werlhof and Owens Valley Rock Art

Mark A. Giambastiani and Mark E. Basgall

Abstract

In 1965 Jay von Werlhof published an overview of Owens Valley rock art for the University of California Archaeological Survey based on fieldwork he conducted in the summer of 1959. Although this work has been largely overlooked by subsequent rock art research in eastern California, which has centered primarily on the Coso region, a careful read of the volume reveals the genesis of the many unique insights Jay developed in his lifelong study of prehistoric art. In retrospect, Jay's work in Owens Valley has had important implications for both archaeological and rock art research in eastern California and provides a different perspective from which to view contemporary opinions about the function and meaning of prehistoric imagery on stone.

Owens Valley Rock Art in Historical Context

The documentation of rock art in Owens Valley began in the late nineteenth century with observations by Garrick Mallery (1893), who believed the petroglyphs represented a system of prehistoric writing. In the early twentieth century Julian Steward (1929, 1933) took a more conventional approach, recognizing petroglyphs and pictographs as symbols used to convey some type of representative meaning. Within California Steward (1929) defined an "Owens Valley Region" that extended from Benton to Little Lake. He provided notes from his own site visits as well as secondhand accounts of the imagery present at a group of 15 sites across the region, some of which occurred at remote locations in Deep Springs Valley, in Saline Valley, and near the towns of Darwin and Millspaugh in the Argus Range. He also provided definitions for various petroglyph and pictograph elements, produced distributional maps for key elements, and described relationships

between Owens Valley and other California culture areas based on perceived similarities in rock art styles and motifs. Steward also gave terms for two major design forms of the basic abstract petroglyph style, formally identified by Heizer and Baumhoff (1962) as "Great Basin Curvilinear" and "Great Basin Rectilinear," which were used by von Werlhof (1965) and Grant et al. (1968) and are still in regular use today.

Following Steward's effort, rock art studies in Owens Valley slowed for a time. In the early 1950s Clement Meighan (1955) visited and recorded archaeological sites in southern Mono County, including a few sites with rock art at Chidago Canyon on the Volcanic Tableland, but he made little mention of any petroglyphs in his published notes. Even Heizer and Baumhoff's (1962) extensive treatise, *Rock Art of California and Nevada*, provided no specific discussions of the Owens Valley record. Instead, it drew up general lists of elements by site for known petroglyph localities across Mono and Inyo counties. In this work, however, Heizer and Baumhoff made two main contributions that would play important roles in the development of rock art study in Owens Valley and eastern California. The first was an expansion of Steward's stylistic classification scheme, adding "Great Basin Representational," "Great Basin Scratched," and "Pit-and-Groove" (recalling its introduction in Baumhoff et al. [1958]) to the overall repertoire. Heizer and Baumhoff also assigned a preliminary chronology to stylistic differences in Great Basin petroglyphs, with Pit-and-Groove the oldest (ca. 7000–5000 BP) followed by

Curvilinear Abstract (roughly 3000–500 BP), Rectilinear Abstract and Representational (each ca. 2000–500 BP), and Scratched (about 1000 BP to historic times).

The second main contribution of Heizer and Baumhoff's work, embracing an idea first introduced by Steward in 1929, was the enduring "hunting magic" hypothesis (Heizer and Baumhoff 1959, 1962). This idea held that the spatial distribution of rock art was correlated with the alignments of migratory deer or antelope trails and with the locations of natural water tanks and springs used regularly by these animals. Heizer and Baumhoff (1959:904–905) acknowledged that petroglyph sites were positioned on the landscape in locations where animals could be ambushed, but they believed that shamans, not hunters, were responsible for the production of petroglyphs, which were rendered in association with "shamanistic rituals connected with the deer, antelope, or mountain sheep hunt" as a means to insure success. The connections between shamanism, sympathetic magic, game hunting, and petroglyph production remain popular among contemporary rock art researchers.

Jay's Contributions

Building on the work of Steward (1929) and Heizer and Baumhoff (1962), Jay's efforts to compile existing data and document rock art sites represent the true beginnings of systematic rock art study in Owens Valley. Jay ultimately recorded 44 sites in the Owens Valley region, from Truman Meadows to Little Lake (Figure 1), and prepared a brief description of each site, a list of elements per site, and a series of sketches with representations ranging from single petroglyph or pictograph elements to extensive panels (von Werlhof 1960, 1965). On the Volcanic Tableland, Jay recorded rock art at 19 locations, including major complexes at Chidago Canyon (CA-MNO-5), Fish Slough (CA-MNO-6), Chalfant Canyon (CA-MNO-7), Red Canyon (CA-MNO-8), and other sites that were later studied in more detail by Mundy (1981), Nissen (1982), Raven

(1986), the authors of this paper (Giambastiani and Basgall 1990), and most recently by David Lee and Courtney Smith (Smith and Lee 2001; Lee and Smith 2003). He also inventoried at least nine locations in the Poverty Hills/Prospect Hills area west of Big Pine and another group of five sites northeast of Little Lake, none of which to this day have witnessed any further systematic examination. Heizer and Clewlow's (1973) *Prehistoric Rock Art of California* made mention of some of the sites Jay had recorded, and it briefly discussed his conclusions but provided no additional information on any specific locations other than expanded element lists (Heizer and Clewlow 1973:Appendix I). As such, Jay's work still represents the most inclusive study of Owens Valley rock art yet published.

In retrospect, Jay's work in Owens Valley has implications for the study of prehistoric rock art at both local and regional levels. On the Volcanic Tableland, one of the sites Jay recorded was CA-INY-399, a site excavated in 1988 by Far Western Anthropological Research Group and UC Davis and eventually reported on by the present authors (Basgall and Giambastiani 1995). Part of Jay's brief description of this site was particularly telling and helped to explain the tremendous amount of subsurface disturbance observed during Far Western's excavations (Basgall and Giambastiani 1995:189):

A ceramic bowl and "wicker" basket are said to have been excavated from the deposits by Lucille Wilcox of Bishop, in 1934. Her son and a companion later discharged a quarter pound dynamite charge in the floor hoping to bring to light other artifacts, but none were uncovered [von Werlhof 1965:26–27].

Jay's rendering of a pictograph panel on the rear wall of the shelter at INY-399 was also useful (Figures 2 and 3). Although slightly off-scale, his drawing gave us some expectations of what to see in and reproduce from scaled photos taken of the shelter wall. Our resulting sketch (Figure 4), as traced from photographs,

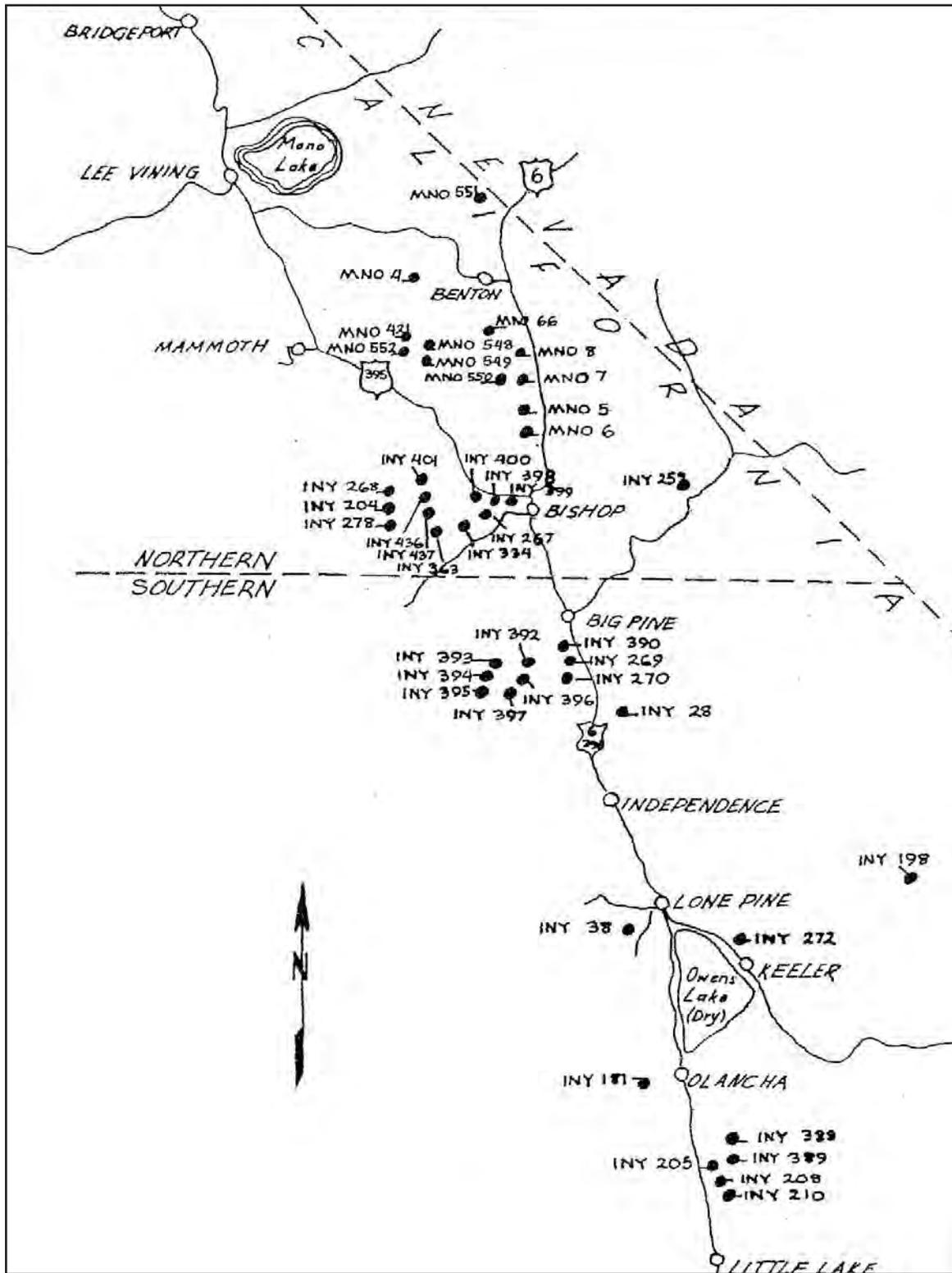


Figure 1. Jay's map of the Owens Valley petroglyph area (von Werlhof 1965:Map 1).



Figure 2. Central section of pictograph on rear wall of rockshelter at CA-INY-399; note chalk outline added by recording crew.

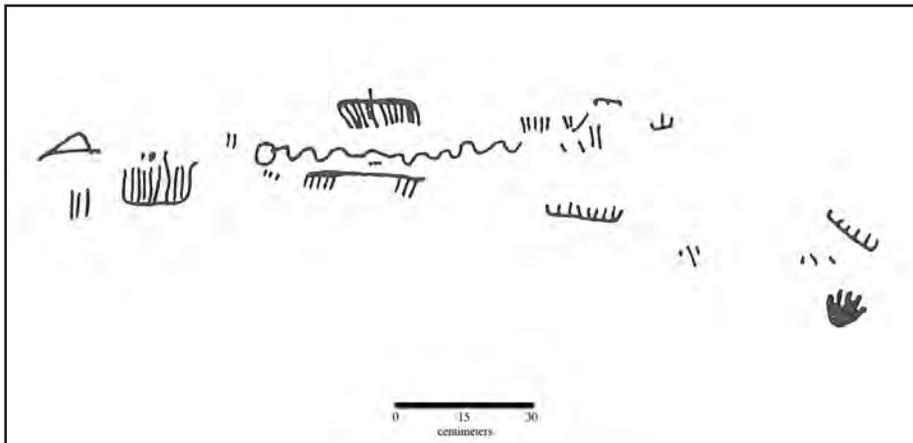


Figure 3. Jay's illustration of CA-INY-399 pictograph (von Werlhof 1965:Figure 30a).

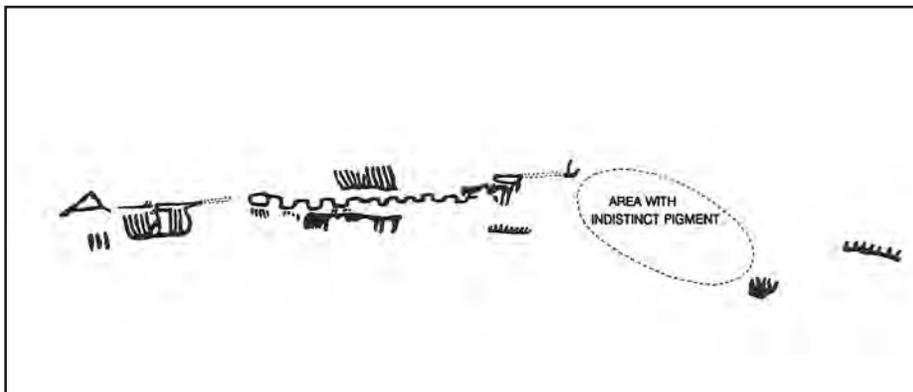


Figure 4. Illustration of CA-INY-399 pictograph, as traced from photo montage (Basgall and Giambastiani 1995:Figure 9.2).

compares well with Jay's depiction even though one major element is reversed and the spatial relationships between certain others diverge.

More importantly, Jay attempted to improve our understanding of rock art throughout Owens Valley by expanding conventional perceptions of petroglyph function and meaning. First, borrowing the element classification devised by Heizer and Baumhoff (1962), he tried to identify correlations between elements and sites across space. Jay separated his study sites into two groups, a northern sector (25 sites) and a southern sector (19 sites), the geographic dividing line being placed arbitrarily about halfway between Bishop and Big Pine through a gap in site distributions. Using some basic statistics and a set of key petroglyph elements, Jay demonstrated that Curvilinear designs were much more common than Rectilinear or Representational forms throughout Owens Valley and that Curvilinear elements were slightly more common in relation to Rectilinear forms in the southern sector than the northern sector. He also argued that certain paired Curvilinear and Rectilinear elements, such as the "circle" and "cross," respectively, had strong positive relationships (i.e., frequently occurring together at individual sites) that testified to a direct relationship between the two styles. Jay believed this relationship was indicative of a long-term shift from Curvilinear to Rectilinear style, favoring the idea that the two styles overlapped at some point in time, a position held by Heizer and Baumhoff (1962:233) and supported by most contemporary rock art researchers in the western Great Basin.

At the time, Jay basically agreed with the rock art chronology laid out by Heizer and Baumhoff (1962) which held the Pit-and-Groove petroglyph style as oldest, followed by Great Basin Curvilinear, Great Basin Rectilinear, Great Basin Representational, and Great Basin Scratched, the last essentially coeval with pictographs (painted designs). However, he felt that the Pit-and-Groove style was much older than

recognized by Heizer and Baumhoff, suggesting it dated as early as 9,000 years ago. He believed, as did his predecessors, that petroglyph production died out in late prehistoric times, and he considered this outcome to have been a response to population growth in Owens Valley. Citing the presence of hundreds of occupation sites along the Owens River, Jay argued that most sites along natural draws and trails indicated "nearly every available opportunity for ambushing migratory animals with the aid of petroglyphs had been utilized," and he also stated that the practice of petroglyph manufacture "probably halted as the population of Paiute Indians filled the valley grazing lands" (von Werlhof 1965:116).

Although Jay believed that petroglyph sites in Owens Valley were positioned according to the geography of deer migrations, he did not feel they were related to any kind of hunting ritual. He argued that sites in the northern sector were aligned with migratory trails while those in the southern sector were associated with winter grazing areas. For the Volcanic Tableland, Jay noted correlations between rock art sites and deer trails extending between the Sierra Nevada and winter feeding grounds in Queen, Hammil, and Chalfant valleys (all on the east side of the Tableland), and he described similar coincidences for rock art sites and deer trails west of Bishop (in Round Valley and along Bishop Creek) and also farther south at Wyman Canyon and at Big Pine, Lone Pine, and Olancho. Jay believed that petroglyphs acted as a visual deterrent or attractant to deer herds and that petroglyph makers "intended that the animals see the designs" (von Werlhof 1965:123), thus allowing hunters lying in wait behind blinds or walls to catch the animals off guard. Jay clearly believed that rock art served to assist hunters in ambushing their prey, not in conjuring them out of thin air or in providing magical aid to insure success.

The "deer association" posited by Jay, an idea developed without benefit of excavation data or faunal

assemblages, is lent some support by more recent zooarchaeological studies. A general dearth of deer remains in archaeological samples has led some researchers to suggest that their modern abundance is a historic phenomenon, one with serious repercussions for the survival of other indigenous artiodactyls (Berger and Wehausen 1991). Recent data, however, suggest that the prehistoric distribution and abundance of deer were more complex. Excavations at CA-INY-1384/H, just northwest of Bishop, and other sites in the immediate vicinity have contributed nearly 70 percent of all prehistoric deer remains from the Inyo-Mono region (Basgall et al. 2003). This implies that deer were prehistorically common in the area surrounding their modern wintering grounds near the Tungsten Hills (i.e., Round Valley, Buttermilk Country), but exceedingly rare in other areas. That this pattern extends back two or three millennia is indicated by the fact that many deposits containing deer bone date to Newberry and even pre-Newberry times. It is also of interest that many of the archaeological assemblages with deer contain few antelope or mountain sheep elements, which may reflect minimal overlap in the former distribution of large vertebrates.

Contemporary Research from Jay's Perspective

Having examined the local impact of Jay's work, we can now look to some of the broader implications of Jay's ideas with respect to two major issues in the contemporary study of eastern California rock art.

Petroglyphs and Residential Occupations

Implicit in Jay's ideas about the geographic positioning of rock art is the notion that lowland rock art sites were originally used as hunting sites but were later occupied for residential purposes. This reflects a now long-standing argument as to whether or not petroglyphs and seemingly associated residential deposits are contemporaneous. Heizer and Baumhoff (1959) believed that occupational debris at petroglyph sites

postdated the art, perhaps representing winter village habitations. They believed that Scratched glyphs and pictographs could be associated with village occupancy but that other petroglyph styles were older than such habitations (Heizer and Baumhoff 1962:232). Recently, Whitley (2010; Whitley and Dorn 2010) has suggested that petroglyphs and archaeological deposits at Coso rock art sites are not necessarily related and that recent direct-dating efforts (cation-ratio and varnish micro-laminate) show many of the glyphs to be considerably older than occupational debris found in apparent association. In fact, Whitley believes that petroglyph localities served as vision quest sites, many of which were also (later and/or in different seasons) used as residential camps (Whitley 1998b; Whitley et al. 1999).

There is, however, considerable evidence to the contrary. At Coso, Gilreath's (1999a) obsidian hydration study involving sites with petroglyphs and residential debris implies that rock art production in the Coso area peaked during late Newberry and Haiwee times (ca. 2300–650 BP) in accordance with the height of trans-Sierran Coso obsidian trade and levels of prehistoric artiodactyl consumption. Hildebrandt and McGuire (2002) and McGuire and Hildebrandt (2005) have followed suit, suggesting that the use of obsidian at Coso sites was highest between 2500 and 1000 BP, corresponding with the emphasis of petroglyph production in the area. Gilreath and Hildebrandt (2008) have added support to these ideas through the comparison of petroglyph design, superposition, and degree of revarnishing with associated projectile point types and hydration data. In addition, the recent examination of more than 100 sites containing petroglyphs, artifact deposits, and milling features in the Bircham Uplands, a few kilometers southeast of the Coso petroglyph center, also implies that rock art production was not temporally segregated from occupational uses (Giambastiani and Sibley 2010; Long and Sprengeler 2010).

Looking back to the Volcanic Tableland, we have examined several sites that demonstrate both direct and

indirect spatial associations between petroglyphs and residential deposits (Giambastiani and Basgall 1990; Basgall and Giambastiani 1995). At CA-MNO-2189 roughly 200 petroglyph panels and isolated elements occur in five main groups around a discontinuous outcrop of volcanic tuff. The majority of glyphs are found in association with several rock ring house foundations, and many others are situated near or adjacent to non-feature artifact deposits. The site boasts an impressive array of abstract Curvilinear and Rectilinear motifs, but most interesting are an ambitious panel containing 22 cupules interspersed between geometric elements, a natural alcove that has three perforations in one wall and notched pebbles on its corresponding interior face, and a small, protected recess that manifests several bas-relief “vulva-form” sculptures (Raven 1986:32). The cupule panel (Figure 5) occurs on a nearly vertical rock face that forms the rear wall of a stacked rock house ring (designated Structure 5), and many of the cupules appear to be more recent (less patinated) than surrounding designs. There are also many other cupules on rocks within house ring foundations and atop a stacked rock shelter wall; of these, all are found on horizontal rock surfaces and

appear to have been produced sometime after the associated structures were built.

Similar occurrences are evident at CA-MNO-2190, where cupules are common and present on rocks within one stacked rock house ring (Figure 6). Perhaps the best example we know of on the Tableland is CA-MNO-2465, where two rock ring houses together manifest at least 25 cupules and five pecked grooves (on 14 individual rocks) and several vulva forms as well (Structure 2 [see Figures 7 and 8]; Structure 3 [see Figures 9 and 10]). Cupules and grooves are again present on horizontal surfaces, but only two of the four vulva forms are so positioned, others being situated on vertical or less obtrusive rock faces.

While it remains possible that petroglyphs incorporated into house structures at MNO-2189, MNO-2190, and MNO-2465 predate the manufacture of these features and the residential occupation of the sites in question, the associations just described seem fairly unequivocal. While occupational debris from house interiors at all three locations dates strictly to Marana times (post-650 BP), all sites also manifest evidence



Figure 5. Cupule/ petroglyph wall at CA-MNO-2189, Structure 5.

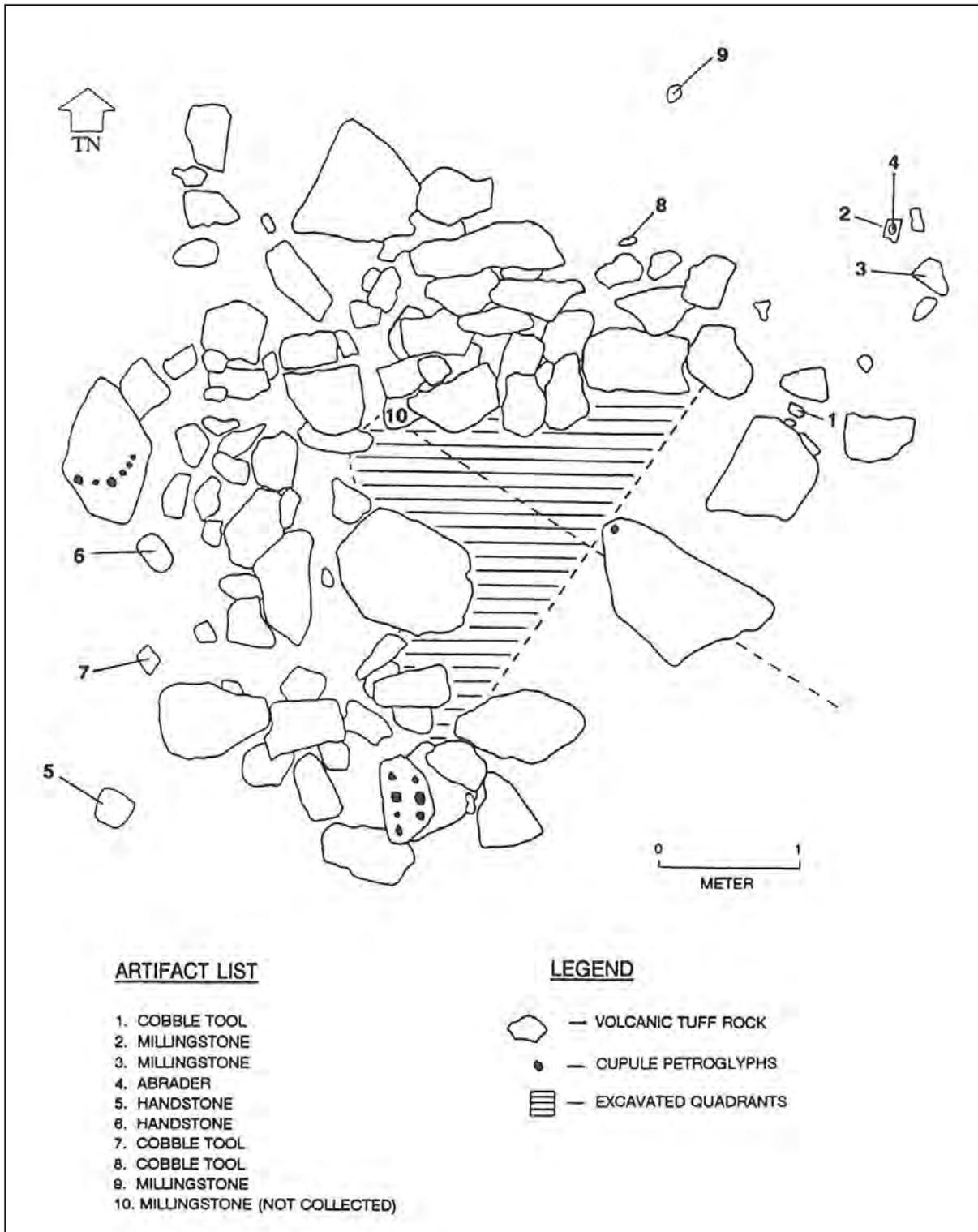


Figure 6. Cupules on foundation rocks at CA-MNO-2190, Structure 4 (Basgall and Giambastiani 1995:Figure 6.3).

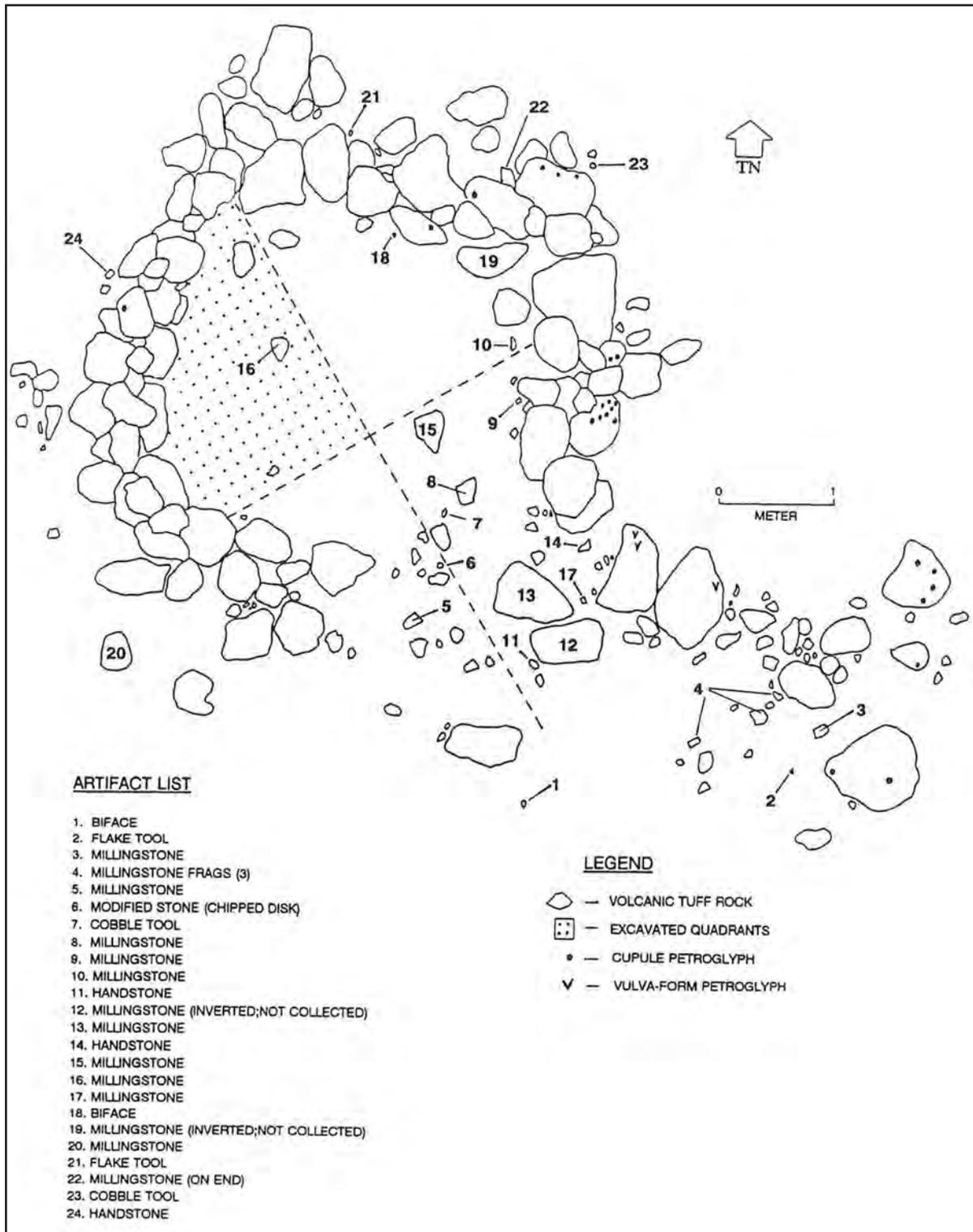


Figure 7. Cupules and vulva forms on foundation rocks at CA-MNO-2465, Structure 2 (Basgall and Giambastiani 1995:Figure 10.5).



Figure 8. Vulva forms at CA-MNO-2465, Structure 2.

of Haiwee-age occupation (1350–650 BP), and both MNO-2189 and MNO-2190 contain artifact deposits of Newberry age (3150–1350 BP). If the petroglyphs at all three sites predate obvious residential habitations (e.g., house structures), they should be older than 650 BP; however, if they pre-date any occupational usage at all, they must be of Newberry age (in the case of MNO-2465) or even pre-Newberry age (at MNO-2189 and MNO-2190).

The Hunting Magic Hypothesis Is Not Dead

Jay did not subscribe wholesale to Heizer and Baumhoff's (1959, 1962) hunting magic hypothesis as an explanation for the seeming relationship between petroglyphs and deer exploitation. Considering the variability evident in petroglyph motifs and in their inferred meanings, Jay stated that "the continuum of petroglyph-making denies that the designs were induced to mystically ensure the presence of game" and that "it also denies that petroglyphs were a form of sympathetic magic" (von Werlhof 1965:123). While Jay evidently felt that most hunting-related rock art was placed at specific locations where it would be seen by herds of game during winter migrations down

into lowland areas, he believed their specific (utilitarian) function was to "attract, or distract, the attention of the game and hence give the hunter an advantage in the chase" (von Werlhof 1965:4).

In general, this view goes against current opinions that still hold to certain variations of the hunting magic hypothesis. With particular respect to the bighorn sheep imagery so prevalent among petroglyphs of the Coso Range, there has been much debate as to whether Coso rock art served in increase rites (Garfinkel 2006; Garfinkel et al. 2010), was associated with rituals involved in prestige hunting (Hildebrandt and McGuire 2002, 2003; McGuire and Hildebrandt 2005; Gilreath and Hildebrandt 2008), or represents vision quest or shamanic trance imagery associated with rain-making (Whitley 1992, 1998a, 1998b, 2000; Whitley et al. 1999; Keyser and Whitley 2006). Following Grant et al. (1968), arguments by Garfinkel (2006) and Hildebrandt and McGuire (2002, 2003; McGuire and Hildebrandt 2005) suggest that the importance of bighorn sheep in the Coso region grew dramatically during late Newberry-Haiwee times and became a focus of cult-like ritualistic activities and of prestige-oriented hunting practices. As populations of bighorn

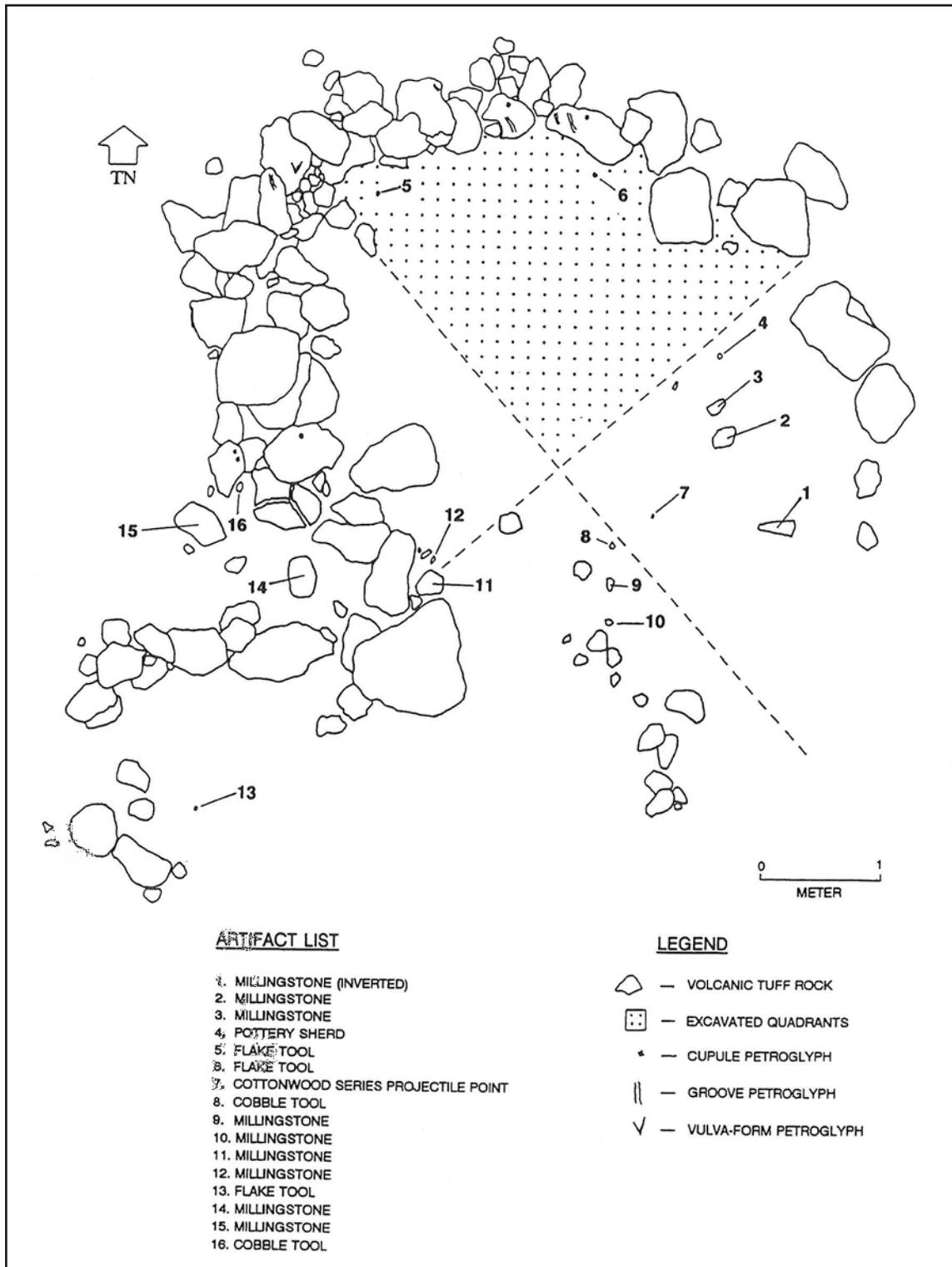


Figure 9. Cupules, grooves, and vulva forms on foundation rocks at CA-MNO-2465, Structure 3 (Basgall and Giambastiani 1995:Figure 10.6).



Figure 10. Vulva forms at CA-MNO-2465, Structure 3.

sheep were gradually depleted, the production of Coso petroglyphs intensified in an attempt to restore them; ultimately, however, the increase in petroglyph production may have fostered more intensified hunting and actually hastened the collapse of sheep populations (Gilreath and Hildebrandt 2008). While this is not the venue to debate the function of Coso rock art, these opinions (as well as those of Whitley) clearly see the purpose of petroglyphs as beyond that of aiding basic hunting strategies. This brings to mind, however, questions concerning the physical placement of petroglyph designs relative to occupational deposits. For example, Gilreath and Hildebrandt (Gilreath 1997, 1999a, 1999b, 2003; Gilreath and Hildebrandt 2008) have repeatedly argued that rock art and residential deposits occur in both spatial and temporal association at Coso sites. What, then, do the actual positions of petroglyph elements at these sites imply about their function? Were they placed in direct association with residential structures, as on the Volcanic Tableland (Giambastiani and Basgall 1990; Basgall and Giambastiani 1995), or were they inscribed at locations away from living areas but still at the same general location? Perhaps (as Whitley might agree) this says more about the placement of habitations than of petroglyphs, as the former could have been established

in a variety of different settings but the latter required suitable expanses of rock. Moreover, if Coso petroglyphs at residential sites functioned specifically in some type of hunting rituals, should we expect them to occur away from occupation areas or within them? Walker (1991) and Whitley et al. (1999) have suggested that Native Americans did not necessarily divide sacred and profane space as Euro-Americans do, thus allowing the presence of religious symbols in proximity to mundane residential facilities. Still, considering examples from the Volcanic Tableland, we might have a difficult time arguing that cupules and vulva forms on boulders within and around house structures had been produced in the context of hunting rites.

The Eyes of an Artist

As an artist, Jay viewed rock art, first and foremost, as an aesthetic form of religious expression. He saw the transition from abstract to representational designs in Owens Valley as attributed to “a more confident involvement with the realities of the natural world” (von Werlhof 1965:122). Even among abstract petroglyphs, Jay saw a consistency in basic design and in the use of a specific, limited set of elements that he believed was representative of an accepted and conventional

art form. Jay's work indicates he considered Owens Valley petrography to be a long-standing tradition from which a consistent set of designs, their meaning, and their function were passed down from generation to generation along with other cultural values. Jay also believed that Owens Valley rock art served as symbols of identity and that the transition from abstract to representational elements reflected the emergence of "a more stable and secure life" in lowland areas where game was plentiful; ultimately, rock art signified a "sense of growing power over the unknown" among Native peoples in the area (von Werlhof 1965:122).

Although we will never know for sure which side Jay would have taken in the debate over the meaning of Coso rock art, he would have probably done what he always did—give us more to think about with his own unique and eloquent opinion. His notion that Owens Valley rock art was intended to attract/distract animals at convenient hunting locations is perhaps anathema to much modern thinking about rock art function, but it does highlight how evident correlations in time, space, and behavioral phenomena can be assessed in numerous ways.

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