Lagomarsíno Canyon



10,000 Years of Art

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Lagomarsino Canyon: 10,000 Years of Art

The Nevada Rock Art Foundation

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Working for the Conservation of Nevada's Rock Art Heritage

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This book is dedicated to Alanah Woody who tirelessly championed archaeological research and historic preservation of Nevada rock art. Alanah co-founded the Nevada Rock Art Foundation to improve archaeological knowledge of rock art and raise public awareness of its heritage importance. Lagomarsino Canyon fascinated Alanah and she began the daunting task of recording the site so that its potential for new understandings of Nevada rock art could be realized. Alanah died unexpectedly in 2007 at age 51 before the completion of the project made possible by her vision and commitment. Her spirit endures through the research she made possible.

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Chapter One: Introduction

The state of Nevada is home to approximately 1,200 rock art sites, ranging from small, isolated boulders to large, complex sites with hundreds of images. Lagomarsino Canyon (northwestern Nevada) is home to the largest known petroglyph site in the state, with slightly more than 2,000 petroglyph panels. Situated on a talus and cliff on the northern end of the eastern slope of the Virginia Range, the gallery of petroglyphs at Lagomarsino Canyon spans a quarter of a mile in length and rises 80 feet in height. A steeply pitched talus climbs to a fine-grained basalt cliff where some of the most compelling images are found.

Before the Nevada Rock Art Foundation (NRAF) conducted a fiveyear recordation of Lagomarsino Canyon, from 2003 to 2008, the only intensive archaeological investigation of the area was conducted in 1958 when Martin Baumhoff, Robert Heizer, and Albert Elsasser of the University of California, Berkeley, estimated 600 petroglyph panels at the site. The description was published in Heizer and Baumhoff's 1962 landmark synthesis *Prehistoric Rock Art of Nevada and Eastern California*. This recordation and subsequent publication dominated archaeological thought about the site until the 1990s, when the late



Lagomarsino Canyon is located at the northern end of the Virginia Range, Storey County, Nevada.



Petroglyph at Lagomarsino Canyon

Dr. Alanah Woody, founding Executive Director of NRAF, began a thorough study of Nevada rock art that included a complete survey of Lagomarsino Canyon.

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What is rock art?

The term *petroglyph* refers to designs deliberately pecked, scratched, or scraped onto a rock. The surface of rock tends to darken with age (patination), and once that surface is scratched or pecked away, a lighter surface underneath is revealed. Over time, the pecked image will darken as the process of repatination takes place. Some of the oldest petroglyphs are almost invisible to the eye. Archaeologists who study rock art refer to a grouping of images on a single surface as a panel, much like a canvas; thus, a panel might have several motifs (images) or only one motif, but a large boulder could have multiple panels.

Pictographs are images painted onto rock surfaces using naturally occurring pigments. The color most commonly used in Nevada pictographs is red, from hematite, also known as ochre. Other pigments are black, white, and less frequently, green and yellow. Because of the inherently more fragile nature of pictographs, they are most often found in locations that have been protected from weathering, such as rock shelters or caves.

Geoglyphs are also considered to be rock art. Rocks and earth are manipulated to create images, often difficult to see because of the bird's-eye perspective required to fully appreciate the construction.

Geoglyphs are much less common and their origin is often enigmatic.

How old is rock art?

Scientific dating of petroglyphs is very difficult. When rock art occurs in association with other archaeological features, dates can be assigned *relatively* to the images. If there is a "hard date" (carbon-14-derived) of an archaeological feature and the rock art is in clear association with that feature, then it is reasonable to infer the rock art is within the same time range. Pictographs, because the pigments and binders contain organic substances, can yield carbon-14 dates, yet the process is intrusive, destructive, and very costly, sometimes producing ambiguous results. Very rarely have Nevada pictographs been the subject of radiocarbon assays.

In general, it can be said that rock art has spanned the human settlement of the Great Basin, from nearly 12,000 years ago to the time when traditional lifeways were disrupted by Euro-American colonization.

Who made rock art?

The makers of rock art were the inhabitants of the Great Basin prior to the arrival of Euro-Americans. Information about the origins of rock art by Great Basin Indian people is generally sparse, leading some researchers to conclude that the Indian peoples of the late nineteenth and early twentieth centuries knew little or nothing about rock art. Nonetheless, some information is found in myths detailing





the behaviors of spirit beings at the beginning of the world. These ancestral spirit-beings later became the spirit helpers, or familiars, to the Indian doctors, also known as shamans. Great Basin Indian names for petroglyphs sometimes refer to these ancestral beings as the artists. The Chemehuevi word for rock art is *tutuguuvo?opi*, meaning markings or scratchings made by the shaman's helper.

Are the marks random?

Lagomarsino Canyon's rock art is classed within the Basin and Range tradition, comprising both abstract and naturalistic expressions. Within the abstract expression are rectilinear and curvilinear designs that were made as both petroglyphs and pictographs (though the latter are absent from Lagomarsino Canyon). The Basin and Range tradition is pervasive throughout the history of human presence in the Great Basin and is strongly associated with Archaic hunter-forager cultures in the Desert West, but also present in styles associated with Fremont and Puebloan cultures.

In contrast with these abstract forms are naturalistic portrayals. Most common are humans depicted as stick-figures and bighorn sheep shown with curved horns. Bighorn sheep are by far the most common animal species portrayed in Nevada rock art. The distribution of bighorn sheep images is more pronounced in eastern and southern Nevada and, although present throughout the state, these images seem less common at sites in the north and the west.

Other animals portrayed in rock art include deer, elk, lizards,

coyotes, and mountain lions. The prominence of bighorn sheep in rock art perhaps attests to this animal's symbolic importance in prehistoric cultural thought, as it was not a staple of the prehistoric diet. Small mammals (rabbits, marmots, ground squirrels, etc.) were probably more important sources of meat, and deer and antelope were also hunted. Plants, which at all times made up the bulk of prehistoric diets, are very rarely identified in Nevada rock art, although some plant-like images are known.

Who "discovered" Lagomarsino Canyon?

Nevadans have long known of Lagomarsino Canyon and published references to it appeared as early as September 13, 1901, in the Silver State Newspaper (Winnemucca), which described the petroglyphs as "hieroglyphics" and attributed them to "cliff dwellers" driven out of the southwest during the sixth century. Undoubtedly, Indian peoples and Euro-Americans knew of the site long before this, but no published references are known.

The area was surveyed in the 1860s and 1870s by geography teams producing the earliest scientific maps of the Virginia City vicinity for the General Land Office. These early maps show Lagomarsino Canyon as an unnamed canyon, and the course of Long Valley Creek as the route of a proposed railroad. This route was used as a road between Virginia City, Nevada, and Truckee, California, during the Comstock mining boom. Also, the general area was reportedly deforested to feed Virginia City with timber. So it is likely that other Euro-Americans





encountered the petroglyphs at Lagomarsino Canyon, but they left no surviving record of their encounters, with one exception, John Reid.

In 1904, John Reid of Reno, Nevada, took photographs of the site and sent them to Dr. John C. Merriman, a professor of paleontology, at the University of California, Berkeley. Merriman informed Dr. Julian Steward, a major figure in Americanist anthropology and arguably the most influential early Great Basin ethnographer. In 1929, Steward included Lagomarsino Canyon in *Petroglyphs of California and Adjoining States,* his landmark synthesis of the Desert West's rock art. He recorded the site as "208 Pt Virginia City, Nevada." He did not visit the site, but relied on John Reid's 1904 description and photographs. Steward's brief account drew attention to perceived stylistic similarities in Lagomarsino Canyon's rock art to other Great Basin sites, and his report reproduced a small number of photographs from the site as well as line drawings of select motifs.

In 1954, Howard Squires, of the US Geological Survey, visited Lagomarsino Canyon and briefly described the locality's rock art without mentioning any associated archaeology. It was not until the late 1950s that Lagomarsino Canyon attracted more formal archaeological attention when Martin Baumhoff, Robert Heizer, and Albert Elsasser from the University of California, Berkeley, recorded the site.

What does rock art mean?

Baumhoff, Heizer, and Elsasser reported a summary description of the site's associated archaeological features, noting that "[s]cattered on the surface of a small occupation or camp site centered about [a] spring are obsidian chips and an occasional projectile point" (Heizer and Baumhoff 1962:291). Based on the volume of rock art, they inferred that a "fairly long span" of time elapsed between the making of the first petrogylphs and the most recent.

The archaeological significance of Lagomarsino Canyon was the evidence they believed it provided for their hunting-magic theory of prehistoric rock art's cultural functions. This theory was the first general explanatory approach to be applied to rock art of the Desert West and had its roots in studies of Ice Age cave art in Europe. "It is not difficult to relate certain of the petroglyph elements to natural objects, the increase of which would be advantageous to the Indians' economy. The most obvious examples are the mountain sheep...and what may be possibly interpreted as the cones of the piñon" (Heizer and Baumhoff 1962:291).

This explanation of the prehistoric sociocultural function of Lagomarsino Canyon's petroglyphs drew on the site's associated archaeological features, environmental context, and the content of the rock art to infer a connection with prehistoric ceremonialism. The archaeology of a seasonal campsite and a substantial rock wall that may have served to divert game to waiting hunters suggested that people visited Lagomarsino Canyon to hunt and forage plant resources.

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Rock wall at Lagomarsino



This inference was borne out for Heizer and Baumhoff by what they saw as Lagomarsino Canyon's favorable environment. Important economic resources were present at the site, particularly the perennial spring (which would have attracted animals), piñon, and game animals (bighorn sheep and mule deer).

Inspired by their experience and analysis of Lagomarsino Canyon, Heizer and Baumhoff went on to suggest that much rock art in Nevada was embedded in hunting-magic rituals. They argued that rock art sites were often located on game trails or with hunting features such as blinds or the debris from hunting episodes, e.g., broken projectile points. How well this hunting-magic explanation holds up against current knowledge of Lagomarsino Canyon (based on total inventory of the site's archaeology) and its environs is explored in Chapter Three, Site Description.







Chapter Two: Nevada Prehistory

The history of human settlement in the Great Basin is the story of how people adapted their economic and social lives to changing environmental and climatic conditions. Over time, the flora and fauna of the region has changed in response to a general drying and warming trend in climate, resulting in the Great Basin's modern arid climate where water is scarce, and plants and animals patchily distributed. Piñon pine, because of its dominance and cultural importance to Indian peoples, can seem as an eternal part of the Great Basin landscape. Yet, piñon first entered the Great Basin from the Mojave Desert to the south around 10,000 years ago and has been slowly spreading north and east since then, reaching central Nevada some 6,000 years ago and northern Nevada only in the last 1,000 years.

Before humans first entered the Great Basin some 12,000 years ago, massive Ice Age lakes covered much of the region; their retreat made human settlement possible. The archaeology of the region illustrates how peoples took advantage of the varying opportunities provided by a changing environment and climate.

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Climatic pattern: Late Pleistocene (24,000 to 12,000 years ago)

During the Late Pleistocene, the climate was much cooler and wetter than today's, with winter precipitation dominant and valley bottoms (4,000 to 5,000 feet) covered by sagebrush steppe intermixed with wetlands. Intermediate mountain slopes (5,000 to 8,000 feet) were dominated by juniper woodlands, while high mountain areas (8,000 to 10,000 feet) were covered by montane conifer forest stands made up of Jeffery pine, Ponderosa pine, Douglas fir, or white fir.

Pleistocene Lake Lahontan (shoreline 10 miles northeast of Lagomarsino Canyon) was at its highest stand (elevation of 4,391 feet) around 13,000 years ago, after which it began receding in response to the trend toward hotter and drier conditions with greatly decreased winter precipitation. Wetlands also fluctuated and began to retreat, though were still more extensive than they were to become during the succeeding Holocene.

Climatic pattern: Early Holocene (12,000 to 8,000 years ago)

As the terminal Pleistocene drying trend continued, lakes contracted to form marshes and valley bottoms or completely dried to form barren saline playas surrounded by shadscale, which grows in relatively low-elevation dry areas (less than 7 inches precipitation a year) that have saline soils. Depending on soil salinity and composition, shadscale may be accompanied by greasewood, bud sage, winterfat or Indian ricegrass. During the Early Holocene, conditions were wetter and cooler than today's, with precipitation mostly coming



in the form of summer rains. Although smaller than during the Late Pleistocene, wetlands and marsh areas in the Truckee Meadows and along the lower Truckee River were at their Holocene maximum.

Archaeological tradition: Pre-Archaic (12,000 to 7,000 years ago)

People first entered the western Great Basin region by at least 12,000 to 10,000 years ago. Human colonization of the Great Basin coincided with the last glacial recession and the final high stand of Lake Lahontan. The Pre-Archaic toolkit included large bifacial knives, stemmed and concave-base projectile points with edge grinding, crescents, graving tools, punches, choppers, and steep-edge scrapers. There are no known Pre-Archaic habitation sites in the western Great Basin, only surface sites where big game animals were hunted and killed, and their carcasses processed. The region was seemingly used by small hunting parties making occasional forays into the western Great Basin.

Archaeologists debate whether these early Great Basin hunterforagers were specialized big-game hunters, marsh dwellers, or if they followed a more generalized subsistence economy. While all artifacts associated with the Pre-Archaic come from hunting or scavenging sites, big game (such as mammoth, bison, elk, pronghorn, and bighorn sheep) was almost certainly supplemented by small mammals and wetland plants, especially tubers and roots. Harvesting and processing these wetland plants, along with fish and birds, does not leave a strong archaeological signature, as they use tools made mostly of perishable



materials, and can be undetectable in surface archaeological remains, in contrast to later evidence of processing of seeds and nuts that used large, robust stone tools (manos and metates) that survive well on the surface. By 8,000 to 7,000 years ago, the transition to the warmer, drier Middle Holocene climate was marked by the disappearance of the region's large remnant Pleistocene lakes, the extinction of mammoths and bison, and by a corresponding shift in toolkit and subsistence strategies.

Climatic pattern: Middle Holocene (8,000 to 5,000 years ago)

During the Middle Holocene, aridity and temperature reached a maximum about 6,000 years ago. Wetlands contracted as precipitation diminished and playas with associated shadscale expanded. Intermediate elevations continued to be dominated by sagebrush steppe. Piñon appeared in central Nevada and began intermixing with juniper to form the earliest piñon-juniper woodlands. Piñon only reached the Reno Floristic Region in the Late Holocene (around 3,000 years ago). Wetlands and marsh areas in the Truckee Meadows and along the lower Truckee River contracted to their minimum.

The higher temperatures and much drier conditions of the Middle Holocene resulted in the loss of many of the wetlands people had heretofore relied upon, prompting changes in economic strategies and practices. Desiccation of the residual lakes within the Lahontan Basin continued and many of the heavily used lakeside marshes began to dry up. Desert shrubs (such as shadscale) expanded into lower-elevation





areas as the climate became more arid and wetland areas became drier; more wet-adapted trees and shrubs retreated upslope. These climatic and ecotone (plant community boundaries) shifts occurred throughout the Great Basin and were accompanied by corresponding shifts in hunter-forager settlement systems and economic strategies.

Archaeological tradition: Early Archaic (7,000 to 4,000 years ago)

The archaeology of the Early Archaic displays evidence of a series of regional adaptations to these changing desert, wetland, and highland/mountain environments. Larger habitation sites during this period were usually located near permanent springs and streams. Population density appears to be lower compared to nineteenthcentury Native American populations, especially in highland or mountainous areas. Winter camps were usually located on valley bottoms, along stream terraces or in the vicinity of a permanent water source. Projectile points, though large, are smaller and less regular than Pre-Archaic point types and functioned as dart points. These are indicative of a change from use of spears to use of dart throwing technology (atlatl), suggesting different ways of hunting and organization of hunting parties. Atlatls allowed longer-range hunting than was possible from using spears. Gypsum-, Pinto-, and Humboldtstyle points are among the diagnostic projectile point styles of this period. Seed-processing tools (manos and metates, specifically) became common during the Early Archaic.

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Climatic pattern: Late Holocene (5,000 years ago to present)

After about 5,000 years ago, the extreme aridity of the Middle Holocene gave way to more moderate conditions dominated again by winter precipitation. Relatively wet and dry environmental episodes alternated about every 1,500 years. Vegetation patterns were essentially the same as that of today, as piñon appeared in the Reno Floristic Region around 3,000 years ago. Wetlands and marsh areas in the Truckee Meadows and along the lower Truckee River assumed their modern configuration.

Archaeological tradition: Middle Archaic (4,000 to 1,500 years ago)

Environmental and cultural adaptations that began at the beginning of the Middle Holocene by Early Archaic groups continued during Middle Archaic times, with gradual adaptations to changing conditions that are marked without major technological innovations. In the Truckee Meadows, and along the Truckee and Carson rivers, people began to aggregate at and seasonally reuse village sites to harvest wetland resources. Winter camps and larger base camps typically have several house pits, sometimes with interior hearths, and associated caches and earth ovens within exterior activity areas. Exchange in marine shell and obsidian, and craft specialization, especially in textiles and other perishables, is evident during this period. Elko-series points appear to be the predominant dart type used during this period, along with a variety of flaked stone tools and ground stone seed-processing tools.





Archaeological tradition: Late Archaic (1,500 years ago to contact)

About 2,000 years ago, the climate began to change from relatively cooler and moister conditions toward the modern warmer and drier regime that typifies the Great Basin today. The Late Archaic period began around 1,500 years ago, and is generally characterized as a period of social reorientation and diversification of resources exploited, with a greater reliance on smaller mammals and plant resources. Plantand seed-processing tools became more elaborate and appear more commonly at Late Archaic campsites. Some of the more significant indicators of this shift in economic strategy are the appearance of bow and arrow technology around 1,500 years ago and snares at about the same time. Bow and arrow use allows solitary hunting and more effective ambush strategies (because, unlike the atlatl, the bow and arrow can be used while crouching). Rosegate projectile points are diagnostic of Late Archaic and ethnohistoric chipped stone tool technology (e.g., Cottonwood Triangular points), along with hullers and various mortar types to supplement existing ground stone technology. Pottery was first introduced 900 years ago. People continued to live at campsites near permanent wetlands until contact with emigrant Euro-Americans.



Looking across the creek bottom to rock wall from the talus

Chapter Three: Lagomarsino Canyon Site Description

Archaeological background

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Lagomarsino Canyon is one of several petroglyph localities known in the Virginia Range area but is, by far, the largest of these. Strikingly, the impressive volume and concentration of petroglyphs at Lagomarsino Canyon are out of proportion to the archaeological evidence for human utilization of the site and its vicinity. There is a midden, sparse lithics scatter, and several ground stone tools that are indicative of a small, seasonal campsite rather than a substantial one or seasonal aggregation site (where larger groups of people came together for social or economic reasons). This suggests that peoples visited Lagomarsino Canyon for the *place itself* and not for gathering plants or hunting or other economic activities, except to sustain them while there.

The archaeology in the area surrounding the Lagomarsino Canyon petroglyph site includes other small petroglyph sites, short-term camp sites, hunting locales, and historic woodcutting. It appears that the region of Lagomarsino Canyon was used largely for seasonal hunting

expeditions and travel, from the Virginia Highlands to the Truckee River, mainly during the Middle and Late Archaic.

The restricted economic usage of Lagomarsino Canyon is in keeping with the limited economic resources available for much of the region in prehistory. Important resources, such as piñon and hard-seed grasses, were not favored by the area's environment. Piñon arrived only in the last 1,200 to 600 years and was never dense across the region. Soils tend to be silt and clay, which are not conducive to hard-seed grasses that prefer sandy soils. Hard-seed processing requires ground stone tools, which are not common at Lagomarsino Canyon.

Favored resources in the area include early spring roots and tubers, game, and water. Roots and tubers like silt and clay soils, unlike hardseed grasses, but processing them leaves only a weak archaeological signature (a wooden digging stick is sufficient and these do not survive well in the record, unlike ground stone tools). The midden and lithics scatter indicate some limited use of the site for seasonal hunting expeditions, which in turn indicates that bighorn sheep, antelope, and deer were present in the prehistoric environment. The region is not well watered and Lagomarsino Canyon contains the only perennial spring in the area, another factor that made the site potentially attractive to game animals and people.

Overall, the archaeology of Lagomarsino Canyon's setting indicates that the general area was used sporadically during the Pre-Archaic and Early Archaic, followed by increasing use during the Middle Archaic and declining use in the Late Archaic. A stemmed point (11,000 to



Stemmed point found at Lagomarsino Canyon



8,000 years ago) was found at Lagomarsino Canyon, indicating at least a short Pre-Archaic foray into the area, but the most common projectile points reported in the vicinity are Middle and Late Archaic types. One petroglyph panel at Lagomarsino Canyon seems to portray a type of dart point (Elko series) that was used 4,000 to 1,500 years ago.

Recording Lagomarsino Canyon

Fieldwork investigations carried out from 2003 to 2008 by NRAF dramatically changed archaeological perceptions about Lagomarsino Canyon, revealing the true scale and character of the site's prehistoric rock art and associated archaeological features. Working in partnership with Storey County (the land owner), NRAF conducted an exhaustive archaeological survey and documentation of Lagomarsino Canyon. The project was intended to enhance management of the site and produce a better understanding and appreciation of the importance of its cultural heritage.

Each petroglyph and archaeological feature was painstakingly recorded through detailed observations, photography, line drawings, and geospatial data collection. The 2,229 petroglyph panels at the site were identified by surveying a total area of 21 acres, ensuring that all prehistoric archaeological features present at the site were located and recorded. Future archaeological surveys may, of course, identify additional petroglyph panels not identified by NRAF's fieldwork. However, given the intensive nature and duration of the survey, it is





likely that future discoveries at the site would be minimal. Vandalism and natural erosion were also thoroughly documented to ensure an accurate record of Lagomarsino Canyon's condition.

Spatial organization

Lagomarsino Canyon's rock art is distributed along the south face of a 1,706-foot stretch of a basalt cliff and associated talus. The southwestern corner of the site is where a small perennial spring and prehistoric campsite, reported in the 1958 recordation by Baumhoff *et al.*, are located. Rock art panels are distributed on boulders throughout the talus and on vertical faces of the cliff above. Spatial patterning is discernible, with prominent high-density areas of rock art showing that distribution of petroglyphs is not random.

More than 80 percent of the rock art is concentrated in a 197- by 246-foot area of the central portion of the site. The eastern half of the site contains only a sparse distribution of rock art. The densest concentrations of rock art are found on the cliff and at the foot of the talus, i.e., the highest and lowest elevation points on the slope. Midslope areas of the central portion of the site have somewhat less dense concentrations of rock art, but still a large quantity of petroglyphs. Across the site there is a general trend that areas high on the talus leading to the foot of the cliff have much fewer rock art panels that are not densely clustered.

Visual prominence in art can be achieved by size, repetition, or landscape position. The cliff face at Lagomarsino Canyon presents rock

art images that are particularly notable for their arresting landscape position, with commanding views of the canyon and site, and for the size and quality of their execution. The designs in these sections are highly visible from the canyon bottom and appear to have been made in such a way as to enhance their visibility from a distance. They are deeply pecked with wide lines and dominate (in terms of surface area they cover) at the site. The relationship between height and size of motifs was an artistic choice that took advantage of the physical structure of the landscape. The cliff face is several yards tall and the largest talus boulders are located high up the slope and near the cliff. Another consequence of this placement is that when viewed from the bottom of the canyon, the large designs on the cliff face and the smaller designs at the middle of the talus slope appear to be the same size, a wonderful display of manipulation of perspective, as observed by a visiting rock art researcher in 2004.

In contrast, boulders in the talus have much smaller surface areas, providing lesser-sized canvases on which to make rock art. Their visual prominence, particularly in the lower areas of the central portion of the site, is achieved by densely clustering concentrations of motifs. Accordingly, rock art in the central portion of the site, whether on the cliff or the talus, is readily apparent to a casual passerby standing at the foot of the talus.

Other archaeological features and artifacts are rare at the site. The area where Baumhoff *et al.* reported a seasonal campsite is largely denuded of artifacts or their remains, other than the occasional waste





flake. This is probably the result of surface artifact survey presumably done when Baumhoff *et al.* test excavated the area. During NRAF's fieldwork, only insubstantial settlement debris was noted: 2 isolated projectile point fragments, unidentified to type; a biface; 12 slab millingstones; and 6 handstones. These were found in the lower central portion of the site. The ground stone tools were all found in the vicinity of petroglyph panels, indicating that some plant resource processing activities took place with rock art as a backdrop.

Style, motif types, and themes

Petroglyphs comprise all the rock art at Lagomarsino Canyon, with more than half containing design elements made by solid pecking as the primary technique; stipple pecking is the second most common technique. Motifs made by abrasion and scratching are significantly less common but do occur.

Abstract imagery

Lagomarsino Canyon's rock art is visually dominated by abstract motifs (a single or repeated design, such as a circle or a row of circles), which comprise 85 percent of the 4,600 motifs found. The quantity of abstract motifs means that the observer is everywhere surrounded by enigmatic designs. More figurative or naturalistic forms are overshadowed by the size and number of abstract motifs. Only one anthropomorph on the cliff face is comparable in size to the largest abstract motifs at the site. Therefore, abstract designs predominate

because of their quantity and striking placement, in contrast to most naturalistic motifs, which can be easily overlooked. This is contrary to the modern observer's experience at most rock art sites where the observer's eye focuses on designs that have cognitive resonance, usually naturalistic imagery that the observer can identify.

A total of 81 different motif types is found. The most common (100 or more examples) are:

Circular forms—dots (rows, columns, and fields), circles, connected circles, and tailed circles;

Simple lines—arcs, horizontal lines, and vertical lines;

Complex lines—wavy lines, parallel wavy lines;

Perpendicular line designs—rakes;

Triangular forms—triangles;

Rectangular forms—grids.

Execution. Many linear forms, particularly simple vertical and horizontal lines that occur singly, appear to be more expedient or the remnant of performance; i.e., the act of making the design was the primary motivation for doing so. In contrast, the site's well-made, deeply pecked, large, imposing abstract designs concentrated on the cliff face and high up the talus suggest the work of master artists. These large, visually impressive panels comprise large rakes, schematic representations of textiles, fields of dots, circles with long trailing lines, and one anthropomorph with outstretched arms.

Meaning. The meanings or references of abstract motif types are particularly enigmatic to contemporary observers, as the form of the



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design does not bear any natural resemblance to some real-world object that one can identify. More naturalistic forms, such as bighorn sheep motifs, may have represented cultural concepts unrelated to the natural animal, but identifying the animal species as the subject of that motif becomes one level of "meaning" to an external observer. In their original cultural and social contexts of use, abstract designs, if they represented specific cultural concepts, would have required commentary from people with special knowledge of their cultural references. It is also possible that abstract designs had many meanings and ways of being understood within their original context of use. Abstract imagery derives its power from its capacity to represent many things and concepts simultaneously, creating a hierarchy of meanings and commentaries.

Naturalistic imagery

Naturalistic motifs or images that bear some resemblance to an identifiable subject (such as a person or animal) account for less than 5 percent of the total motifs at Lagomarsino Canyon. These represent a very restricted set of naturalistic motifs--only 10 different motif types compared with more than 81 abstract motif types. Zoomorphs are strikingly rare, with only 19 instances. Bighorn sheep, which are often regarded as one of the characteristic motif types of Great Basin rock art, are very rare, with only 5 instances. No other large or mediumsized mammals are represented in the site's art, other than 2 possible bear paw print designs. Lizards (7 examples) are the most frequently

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portrayed animal species at Lagomarsino Canyon. Other animals include a bird, 2 insects, and 2 indeterminate zoomorphs that cannot be identified to species.

Portrayals of the human form are largely variants of Basin and Range tradition stick-figures (98 instances), though naturalistic representations of feet (29 instances) are a significant component of the site's corpus of anthropomorphs. None of these anthropomorphs are shown in hunting scenes or depicted holding objects. One anthropomorph appears to be "falling," portrayed with legs arcing in opposite directions and upside down.

Possible schematic portrayals of objects of everyday life are present at the site. Most significant are geometric and linear designs identified by elders of the Washoe Tribe as traditional basket designs or textiles that include hunting nets (5 instances). One panel contains naturalistic treatments of possible Elko-series projectile points. There are 6 schematic designs conventionally identified by rock art researchers as depictions of atlatls, though skeptics could point out that these are simply circles bisected by a vertical line. The portrayal of material culture objects in Lagomarsino Canyon's rock art (with the exception of the possible atlatl motifs and bow and arrow elsewhere) is unusual in North American prehistoric rock art. Few rock art sites are known elsewhere in the Great Basin that contain representations of basketry equipment used for plant resource processing and storage.

The quality of much of the art, its design types, and style of execution make Lagomarsino Canyon a particularly good example of





Falling man

Atlatl

Basin and Range tradition. The site's dominant emphasis on abstract imagery is somewhat unusual for Great Basin rock art sites, and the sizes of many of the site's designs are among the largest in the Basin. The site's potential for stylistic analyses of Great Basin rock art was realized by Heizer and Baumhoff for whom the site was important in their refinement of Steward's (1929) seminal style classifications of western US rock art. The quantity of rock art panels at the site also makes it one of the largest sites of its type in Nevada and the Desert West.

The age of Lagomarsino petroglyphs

Although petroglyphs cannot be reliably dated using scientific chronometric methods, the age of some panels at Lagomarsino Canyon can be estimated from their themes and the site's archaeological context. The small number of circles bisected by a vertical line (possibly representing atlatls), as well as a panel with naturalistic portrayals of possible Elko-series points, indicates a Middle Archaic age (4,000 to 1,500 years ago) for some of the rock art at the site. The dart points depicted on this panel are consistent with the points found at adjacent archaeological sites. The Stemmed point found at Lagomarsino Canyon suggests a Pre-Archaic visit (10,000 to 8,000 years ago), though it is not clear whether people marked their visit during this time with rock art.

The naturalistic textile designs identified by Washoe tribal elders as traditional basket designs indicate that some of the site's rock art

may have been made in the last 1,500 years. Overall, the available dating evidence, along with the sheer quantity of the imagery and degree of patination among its panels, suggests that people repeatedly came to Lagomarsino Canyon, possibly in all periods – Pre-Archaic, Early Archaic, Middle Archaic, Late Archaic, and Ethnohistoric – to make rock art. The general archaeological context and themes in Lagomarsino Canyon's rock art suggests that the site's primary period of use was the Middle Archaic, with decreasing use during the Late Archaic.

The meaning of the site

For the archaeologists who summarily recorded Lagomarsino Canyon in the 1950s, the site was a compelling example of a place used for hunting-magic ceremonies or practices. The site's setting was seen as providing a favorable environment for hunting and plant gathering, and, accordingly, the natural inference was that the rock art was made to enlist magical assistance in daily economic routines and ensure that resources were abundant. It is now known that the general environmental setting was not as favorable as envisaged; the general area was used largely for seasonal hunting forays and travel, mainly during the Middle and Late Archaic. It seems that people were drawn to Lagomarsino Canyon *despite* its limited economic resources. This undermines Heizer and Baumhoff's (1962) hunting-magic explanation of Lagomarsino Canyon's rock art as they theorized it; for them, the themes of the site's rock art would have been related to the economic




activities that took place there, as reflected by the archaeology and their reconstruction of the prehistoric environment. If people were not, in fact, visiting Lagomarsino Canyon chiefly to hunt and forage, why would they make symbolic markings on its rocks to enlist magical aid for those activities? We could also ask why, if Lagomarsino Canyon's rock art was made to support economic activities, are there so few depictions in the art of critical animal and plant resources?

Critiques within the archaeological literature of hunting-magic theory have successfully eroded this approach's popularity among archaeologists, and today few archaeologists actively espouse it as an explanation of Great Basin rock art. But, it could be argued that people came to Lagomarsino Canyon to make rock art for hunting-magic purposes, enlisting magical aid to ensure that the critical resources they hunted and gathered *elsewhere* were abundant. Lagomarsino Canyon's abstract imagery may portray game animals and plants that were important to the prehistoric diet, but this cannot be known with certainty. Such a counter-argument highlights one of the problems of understanding prehistoric rock art; its ambiguous nature means that most theories about why it was made and what it means (other than the most outlandish) cannot be proved or refuted based on archaeological information alone.

What can be said is that people did not primarily visit Lagomarsino Canyon to harvest its natural resources. Hunter-foragers were repeatedly drawn to Lagomarsino Canyon for its cultural value, marked by the sheer quantity of the site's rock art, the scale of much

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of the petroglyph designs, and the time invested in making this vast assemblage of art. The art's ambiguity suggests that it was not intended to represent a simple narrative of everyday life. Instead, its understanding would have required commentary from knowledgeable individuals recognized as having access to a special knowledge and culturally authorized to interpret the rock art. The site's associated archaeology does not suggest economic activities restricted to either men or women; both sexes could have been the art's audiences. Lagomarsino Canyon's open setting and the rock art's prominence in the landscape both indicate that the rock art was not intended to be secluded or hidden, that its intended audience was not limited to those with special knowledge of the site's location. The rock art communicated information to a public audience, information that probably expressed broad social themes in the cultures that made and used it. What Lagomarsino Canyon's hunter-foragers represented through their rock art was an ideological presentation of their society and theories of being that served their social practices. These symbolic markings in the landscape are a physical embodiment of their social histories and enduring signs of past cultural actions.







Chapter Four: The People of Lagomarsino Canyon

Anthropologists describe the people who lived in the Great Basin as foragers, or hunter-gatherers. This way of life was characterized by small groups of people moving across the land following known and predictable seasonal harvests of non-domesticated animals and plants. A key component to this adaptive strategy was flexibility. Composition of Great Basin forager groups, although primarily organized around kinship, shifted in response to social and environmental conditions, as did seasonal rounds and ranges of territory. Artistic and social expression found outlet in daily activities, artifacts, verbal arts, and the most enduring form—rock art.

The ancestors of the modern day Northern and Southern Paiute, Washoe, and Shoshone people inhabited the Great Basin at the time Euro-Americans first began recording their travels. Both the Washoe and Northern Paiute people traversed Lagomarsino Canyon. Ethnographic pattern, place names, resource use, and trade routes indicate that Lagomarsino Canyon, although often designated as falling within Washoe territory, was important in the lives of *many* peoples, across both time and space.



Generalized ethnographic boundaries in the Great Basin



Washoe and Northern Paiute lands

The Washoe and Northern Paiute peoples are separate by virtue of language, territory, history, and some resource and ritual specialization, but prior to Euro-American influence, both groups lived the typical Great Basin forager lifeway. The Washoe people had more of a mountain environment than the Northern Paiute and, thus, a significantly higher population density. Their territory comprised the region of the Sierra Nevada, north and south of Lake Tahoe, from the southern shore of Honey Lake south through Antelope Valley and the West Fork of the Walker River. The Washoe settled along the crest of the Sierra Nevada Mountains with seasonal movements down into the western and eastern Sierra fronts. They moved along the western fronts, where they followed tributaries of the Sacramento and San Joaquin rivers in search of acorns. On the eastern front, they followed major rivers such as the Truckee and Walker rivers in pursuit of fish and other resources. Seasonal resource-gathering forays frequently took the Washoe beyond their core range, putting them in contact with the Northern Paiute and other groups. The Washoe people who moved east into the Northern Paiute territory of Pyramid Lake were called "cousins" by the Northern Paiutes: "In the old days some of the Washoes would come to Pyramid Lake. They called the Washoes who visited them cousins. They were not related to the Paiute, they just called them cousins" (Park in Fowler 1989:5).

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The Northern Paiute people practiced a foraging lifeway, like the Washoe, but with more emphasis on marsh and valley bottom resources. People speaking Northern Paiute occupied a large region in Oregon, Idaho, and Nevada. It stretched from the John Day River in Oregon in the north, east to the edge of the Snake River Plain in Idaho, south to the Mono Lake Basin in California, and west to the California/ Nevada border above Honey Lake. The boundaries of this area blended into the boundaries of adjacent groups, including the Shoshone to the east, the Owens Valley Paiute to the south, the Bannock to the north, the Klamath to the northwest, and the Washoe to the west.

Boundaries between the lands of Great Basin Indian people have come to be viewed as fixed, hard lines, possibly as a result of the Indian Claims Suits. In 1946, the Indian Claims Commission Act created pathways for Native American Tribes to petition the federal government to settle land claims. For Great Basin Indian groups, the Commission relied heavily on maps prepared for the treaty negotiations in 1863, which were "treaties of peace, not land cessation" (Clemmer and Stewart 1986:553). Anthropologists were key players in the suits, bringing evidence against the government position that "territorial boundaries were so vague that accurate bases for compensation could not be determined" (Clemmer and Stewart 1986:553).

While acknowledging the critical reasons for defined boundaries, it is nonetheless useful to point out that ethnographic evidence suggests that boundaries were fluid zones that shifted according to resource use





and social need. Among the Northern Paiute people, hunting, fishing and pine nut harvesting influenced boundaries to shift: "the invasion of the Paviotso country by Washo and Shoshoni...suggests that a strip of territory on each side of the ridges, customarily constituting the formal boundaries, was exploited by whichever group arrived on the scene first" (Park in Fowler 1989:3). "Moreover, much of the Washoe range, including the core area, was jointly used by adjacent non-Washoe peoples or provided a corridor of trade and travel" (d'Azevedo 1986:467).

Interaction between the two languages supports the view of a permeable boundary between the Washoe and Northern Paiute people. The Washoe language has several loanwords from Numic, the term for the language family that includes Northern Paiute. The Washoe language has loanwords from other surrounding groups as well, but Jacobsen (1986:109) notes "On balance, it seems that the borrowings from Numic imply a more intimate cultural contact than those from the west. Numic has exchanged more loanwords with Washoe than with any other contiguous group." Similarly, the Numic language has a closer relationship with the Washoe language than with any surrounding language (Miller 1986:104).

Subsistence

The physical needs of Great Basin foragers were met through use of local resources, although trade and travel also contributed resources not locally available. Nonperishable ocean shells from the Pacific

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and obsidian from distant quarries show up archaeologically (dating as far back as 6,500 years ago in the Great Basin and continuing until approximately 1,500 years ago). The exchange of perishable materials such as salt, acorns, basketry, animal hides, etc., is described ethnographically. Whereas the presence of exotic materials in a local site cannot be directly labeled as trade (distance does not equate trade), their presence does serve to indicate *social relationships*: people exchanged goods, whether locally or distantly, suggesting a pattern of overlapping circles of trade and travel.

In general, regionally available plants and animals provided food and material needs. Plants (sagebrush, tule, cattail, willow, grasses, trees, etc.) and animal products (bone, sinew, antler, fur, and hide) were used to build shelters, weave textiles, make clothing and footwear, and to create decoration. Tools and containers were woven or shaped from bone, stone, and wood, or, less frequently, made from pottery. Grinding of seeds, nuts, minerals, and dried food products was accomplished with manos and metates. The most valuable tool of foragers, however, was their extensive knowledge of their environment, which was held within their vast memories, aided by song, story, and myth.

Importance of fishing

The term hunter-gatherer does not explicitly recognize the importance of fishing for many foragers. The Washoe and Northern Paiute people had access to a major aboriginal fishery: a complex





that included Pyramid Lake, the Truckee River, and Lake Tahoe, as well as the Carson and Walker rivers, and Walker Lake. For people in this region, fish provided an abundant and concentrated resource during winter and spring fish runs. Stream and pond fishing also offered subsistence. It is interesting to note that Lagomarsino Canyon, although not identified archaeologically as a major resource site, is situated almost directly in the middle of this aboriginal fishery. Both the Pyramid Lake and Walker Lake areas bear linguistic markings of shared use and significance. The Pine Nut Range, to the south of Lagomarsino Canyon, is another major resource for both groups. These resource zones drew people from the east and west, offering opportunities for interaction.

Localized Washoe subgroups, particularly the 2á?waku wáťa detdé?yi? (cui-ui river dwellers, i.e., the Truckee River, Washoe language), traveled east to Pyramid Lake for fishing. The significance of the resource is reflected in the name of the group. The same marking is found among the Pyramid Lake Northern Paiute group, who were the *kuyuidikadi* (cui-ui eaters, Paiute language). Place names, as well as local group names, referenced the important cui-ui fish (*Chasmistes cujus*), a native, large sucker fish. Among the Washoe people, the Truckee River, Pyramid Lake, and possibly Tule Peak to the west of Pyramid Lake in the Virginia Mountains were associated with the cui-ui resource: 2á?waku wáťa, "cui-ui water"; 2á?waku da?aw, "cui-ui lake"; and 2á?waku dala?ak, "cui-ui mountain". For the Northern Paiute people, *kuyuipaninnadi*, "cui-ui lake", is the name of

Pyramid Lake, and *kuyuinahukwa* is the name of the Truckee River. The Truckee River is known in both languages by other names as well, perhaps referring to different segments of the river.

Walker Lake and Walker River are also known by their main resource, the cutthroat trout, in both languages : *?ímgi?* in Washoe and *agai* in Paiute. Carson River, however, did not share a resource-based name between the two groups.

Lagomarsino Canyon would have been a short distance (around 5 miles) to the south of the Pyramid Lake/Truckee River area, in the Virginia Range, and to the north of the Carson and Walker rivers by a considerably greater distance. No direct evidence ties the fishery complex around Pyramid Lake to Lagomarsino Canyon, yet ethnographic and linguistic features shared between the Northern Paiute and Washoe groups in the general area suggest at least the opportunity for *shared access* to Lagomarsino Canyon.

Social organization

The Great Basin people were most mobile in small, fluid groups who stayed in "camps" while harvesting resources. Camps contrasted with more permanent home sites that housed larger, more fixed groups of people. The more permanent home sites were associated with designated regions, and those who occupied those regions were known as *tibiwaga?yu* "possessor of a home district", Paiute, or *detdé?yi*? "dwellers", Washoe.

Group membership was organized through bilateral kinship





connections and consensus. In bilateral kinship systems, a person is eligible for membership by demonstrating connection through either the maternal or paternal line. Such a connection is necessary but not sufficient: kinship must be reinforced by actively participating in the group's political, social, and economic activities to such an extent that there is mutual agreement that a person is a member.

In this system, membership was not necessarily congruent with language. Traditional Washoe groups included Northern Paiute speakers and traditional Northern Paiute groups included Washoe speakers. A person could abandon membership in a group and takeup membership in another. Groups could expel or recruit members. However, while this flexibility was available, most people lived in one or two groups throughout their lives, usually the group into which they were born and then the group into which they married. Serial marriages could lead to a series of group memberships. Intragroup conflict, commonly resolved through mobility, could also lead to changes in group membership. Over time, groups were created, prospered, declined, and disappeared as people made pragmatic decisions about which kinship connections to cultivate and which to let wither.

Foragers are often described as living in an egalitarian social structure. Even among a group of equals, however, the division of labor followed gender lines: men hunted and women gathered, although even those distinctions waned when a particularly large harvest required the labor of all (e.g., pine nut harvests, fish runs, rabbit and





antelope drives) or wavered when expedient (opportunistic encounter of a resource). The egalitarian social structure of foragers also hosted a group of semi-specialists: the so-named shaman or Indian doctor. This individual had access to spirit helpers who interceded on the behalf of people when they fell ill. The cause of illness was metaphysical in origin, and Indian doctors were distinct from other people in their ability to commune with the spirit world.

Who made the rock art?

The limited information about the origins of rock art among Great Basin Indian peoples is found in myths detailing the behaviors of spirit beings in the beginning of the world, some of whom later became spirit helpers for the shamans. Coyote and his brother Wolf are the lead actors in Great Basin mythology during the time known as "when the world was new", or "when animals were people" or even "away back on the first earth." Wolf is wise and responsible; Coyote is the trickster and greedy fellow, but one who made the world as we know it: "[coyote] secured the fire and the pine nuts, released the game impounded in a cave, caused death to occur, and imparted to man knowledge of arts and craft" (Hultkrantz 1986:638). The name given to Grimes Point Petroglyph Site (outside of Fallon, Nevada) by the Northern Paiute people is *Iza?a tibonnu*, "Coyote's Writings" (Fowler 1992:40). No Indian name for Lagomarsino Canyon has been found.





Chapter Five: Conclusion

The story of human settlement in the Great Basin is usually told by archaeologists as a tale of the different ways people adapted to a generally drying and warming environment over some 12,000 to 10,000 years. This economic focus tells part of the story, but the landscape itself was not experienced or conceptualized solely in those terms. Lagomarsino Canyon is the largest known rock art site in Nevada and is an enduring monument to the lives and behaviors of the Archaic hunter-foragers who made and used it. Rock art is one of the few types of archaeological features that can offer a glimpse into the social worlds of Archaic hunter-foragers.

Lagomarsino Canyon shows that Archaic hunter-foragers did not categorize their landscape and its usage solely on economic criteria. People appear to have visited Lagomarsino Canyon to make and use rock art, as the archaeological evidence for hunting and foraging activities is generally sparse compared to the huge volume of rock art at the site. The site was visited despite the rather limited resources present, suggesting that it was the cultural significance of Lagomarsino Canyon that drew people here. This cultural significance survives as the thousands of petroglyphs pecked into boulders and the cliff face.

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Contemporary observers have often thought that uncovering an original meaning for rock art would constitute its archaeological explanation. But, what single meaning or purpose can be suggested for a place that was apparently used and re-used for several millennia? And where is the meaning of the site; is it the meaning of specific petroglyph motifs, the meaning of the behaviors performed at the site, or the meaning of the place itself as a monument? Without indigenous commentary, the individual meanings of Lagomarsino Canyon's rock art are unknowable to archaeologists. And if, as suggested previously, Lagomarsino Canyon's rock art functioned as cultural symbolism, then it never had a single meaning—in the sense of functioning as a system of visual communication intended to express single ideas.

The general social context of Lagomarsino Canyon's rock art can be explained by considering its abstract form and the site's setting (both environmental and archaeological). The archaeological context suggests the canyon was occasionally visited during the Pre-Archaic and Early Archaic, but most intensively used during the Middle Archaic followed by declining use in the Late Archaic. The general area was used for seasonal hunting expeditions and foraging forays, with sufficient resources to support people staying in the canyon while they made and used petroglyphs. The volume of the site's rock art indicates repeated visits to make rock art. The rock art is not randomly distributed in the canyon, as select areas of the talus and cliff face were preferred canvases for petroglyphs, indicated by spatial patterning in high-density clusters of rock art.





The physical structure of the landscape shaped the observer's visual experience of the site with its dominant ambiguous abstract motifs. On the cliff face, the designs are imposingly large, and in the smaller boulders of the talus, the smaller designs maintain their prominence because of their dense concentration. Whatever route the observer takes to move around the site, the experience is shaped by these abstract design forms. By the time the site's rock art was complete, an Archaic observer's visual experience of the site would have been similar, but the abstract imagery may not have been unknowable; instead, the art's cultural references may have been transparent to them through their knowledge of their cultural systems.

The limited archaeological features and artifacts other than rock art at Lagomarsino Canyon suggest that people visited the site for its cultural significance, ultimately, physically manifested by the rock art. The source of the cultural significance for Lagomarsino remains obscure; ethnographies do not reveal Native American names or myths associated with the canyon. But, at some point during the Middle Archaic, the cultural power of this place in the landscape drew and continued to draw people to the canyon for social and cultural reasons rather than economic ones, resulting by the end of the Archaic in a vast assemblage of cultural symbolism.

Although abstract motif types are usually the most common designs represented in rock art site assemblages throughout the Great Basin, Lagomarsino's very pronounced emphasis on abstract motifs is striking. Eighty-five percent of all motifs are abstract forms, with

identifiable motifs referring to animals and people relatively rare (five percent). The marked preference for abstract designs that require insider knowledge to be understood and whose form makes them capable of bearing many meanings at the same time, indicates that rock art could potentially have become a source of social power.

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Privileged access to cultural knowledge is used by individuals and groups to build prestige, status, and structures of power. Within traditional societies, individuals and groups may assert a special relationship to the past or to supernatural agents who guarantee the veracity and authenticity of this special knowledge, and by implication, those authorized to have access to that special knowledge. As noted earlier in this book, what Lagomarsino Canyon's hunter-foragers represented through their rock art was an ideological presentation of their society and theories of being that served their social practices. In particular, it served to legitimate the social positions and special knowledge of those recognized as authorized to explain the rock art.

These images at Lagomarsino Canyon are symbolic markings in the landscape, an enduring physical embodiment of past social histories and cultural actions. Although it may never be known what the "meaning" of Lagomarsino Canyon's petroglyphs is in terms of the themes and subjects they represented, or the content and mythology of the practices that used the rock art as a vital part of its setting, the "meaning" of the site's rock art can be explained by what it symbolizes about the societies that made and used it.

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"Snowmaker" glyph with graffiti damage; later mitigated by conservator. Damage could only be masked, not erased.





Satellite image of Lagomarsino Canyon. Center left is where the spring is found.



Lagomarsino Canyon's talus



Winter scenery at Lagomarsino Canyon

Glossary

£ 59

abstract expression

Motifs whose form or shape does not resemble the subject or theme represented. Abstract motifs are composed of combinations of straight (rectilinear) or curved (curvilinear) lines to form individual designs such as rakes, circles, zigzags, etc.

anthropomorph

Stylized depiction of the human form, most commonly as a stick-figure in the Basin and Range tradition, but also more elaborate portrayals among the Fremont, Pahranagat, and Puebloan traditions.

Archaic

A term used in North American archaeology to refer to periods characterized by mobile hunter-forager lifeways. In the Great Basin, the Archaic generally covers the period 7,000 to 150 years ago. Mobile hunter-forager lifeways move people around the landscape to harvest the animal, plant, and mineral resources they rely upon.

atlatl

A dart thrower, a tool used for increasing the thrust and distance of a dart when thrown. Atlatls take the form of a wooden stick with a handle at one end and a hook at the other to hold the end of the dart.

Basin and Range tradition

Characteristic rock art pattern in the Great Basin that comprises abstract curvilinear (multiple representations of circles and meandering lines) and rectilinear styles (rows of dots, grids, rectangles, squares, triangles, lines, and cross-hatching).

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bifacial knife

Knives are cutting tools shaped from stone with an exposed cutting edge; a bifacial knife has tool working along both faces (ventral and dorsal).

bilateral kinship

System of recognizing relatives, or kin, through both the maternal (mother) and paternal (father) lines.

campsites

A residential site used by a task-specific work party drawn from the wider group, such as camp where hunters dwelt during hunting expeditions.

carbon-14 derived

Carbon-14, ¹⁴C, or radiocarbon, is a radioactive isotope of carbon and its presence in organic materials is the basis of the radiocarbon dating method to estimate the age of carbon-bearing materials up to about 58,000 to 62,000 years ago. One of the most frequent uses of radiocarbon dating is to estimate the age of organic remains from archaeological sites.

Desert West

The lands west of the Rocky Mountains, generally characterized by low annual precipitation. The Great Basin, in particular, is defined by extreme aridity, and prehistoric cultures in this area were influenced heavily by the demands of life in a desert climate. Jesse Jennings, an early and influential archaeologist from the University of Utah, characterized this lifeway as Great Basin Desert culture, drawing on ethnographic and archaeological evidence.

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Elko-series projectile points

A type of triangular projectile point with corner notches that were hafted onto dart foreshafts. Elko series points are Middle Archaic in age and are found throughout the Great Basin.

Euro-American colonization

The "settling" of North America by European immigrants, which often had a deleterious impact on Indian cultures.

Fremont

The Fremont prehistoric culture was found in Utah and parts of Nevada, Idaho, and Colorado from 1,500 to 700 years ago. It revolved largely around corn horticulture supplemented by hunting and gathering plants. The distinctive Fremont rock art tradition is characterized by anthropomorphs with hourglass shapes, rectangular shapes, or triangular bodies lacking legs. Often, these forms show bodily adornment or internal decoration that might represent clothing.

Great Basin

Area of western North America between the Rocky Mountains and the Sierra Nevada, characterized by interior drainage.

habitation sites

Large camp sites where groups aggregated on a seasonal basis.

Ice Age cave art

Prehistoric paintings on cave walls and ceilings in Europe, particularly Spain and France. The earliest dates back to approximately 40,000 years ago.

mano and metates

Stone tools used to crush, grind, and mix solid substances (seeds, nuts, bones, minerals, etc.). The mano is a hand tool, used to grind (in a horizontal motion) against the metate, a shallow, bowl-shaped area on bedrock or small boulder.

naturalistic expression

Motifs that bear an apparent natural resemblance to the theme or subject represented, such as a bighorn sheep or person.

panel

A discrete rock surface that bears rock art, defined either naturally by different aspects of the faces of a boulder or arbitrarily on large rock surfaces (such as cave walls or ceilings) by natural breaks in areas where rock art motifs are distributed. Panel is used by rock art researchers as equivalent to the art historian's "canvas."

patination

Darkening of the surface of a boulder through a microbial process.

perennial spring

A spring that flows continuously.

petroglyph

An image made by removing part of a rock surface (usually its patina) by incising, scratching, pecking, carving, or abrading.

pictograph

An image made by adding pigment or charcoal to a rock face.

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Puebloan, Ancestral

Early Native American culture, beginning around 1,200 years ago, characterized by pit houses, cliff dwellings, and pueblos. Ancient Puebloans are ancestors of contemporary Pueblo peoples.

solid pecking

Petroglyph technique that reduces the surface of a rock by pecking; the percussive marks are made contiguously leaving little or no negative space in the final motif.

stipple pecking

Petroglyph technique that reduces the surface of a rock by pecking; the percussive marks are spaced to leave negative space, giving the final motif a stipple or speckled effect.

talus

Slope composed of cobbles, boulders, and other rocky detritus that often accumulates at the foot of a cliff.

'when the world was new'

Mythological time when the world was populated by supernatural ancestral spirits, beings who had both animal and human traits. These beings were the ones who made the world as it is today.

zoomorph

Stylized depiction of an animal.



The late Dr. Alanah Woody instructing a volunteer at Lagomarsino Canyon

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