

The Landscape of Klamath Basin Rock Art

By

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A dissertation submitted in partial satisfaction of the
requirements for the degree of

Doctor of Philosophy

in

Anthropology

in the

Graduate Division

Of the

University of California, Berkeley

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Spring 2012

Abstract

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For the past three decades, efforts to interpret Klamath Basin rock art symbols using ethnographic literature and concepts of sacred landscapes have advanced our understanding of the art. This approach, however, is limited by the assumption that the rock art symbols meant the same thing in every social and land use context. From my research of the past decade I have inferred that rock art designs are not distributed randomly across the landscape. Instead, rock art displays appear to vary predicatively across three archaeologically-defined contexts that I have identified as settlement sites, frequently used areas and special use areas. In the research presented here, I use this apparent pattern to propose a context model for the rock art of the Klamath Basin and suggest that Klamath Basin shamans situated their varied repertoire of sacred symbols within these distinctive contexts in order to structure the way people encountered and experienced them. Understanding how rock art is patterned on the landscape has led to refined interpretations in an area where relatively little rock art research has been done.

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Acknowledgements

I gratefully acknowledge the excellent mentorship and help of my dissertation committee, whose insights and advice have provided me with a tremendous graduate education. They have taught me how to think about my research in terms of the discipline, as well as those of stakeholders. They have provided me with abundant opportunities for academic and professional growth as well as economic and moral support. Margaret Conkey, Kent Lightfoot, Steve Shackley, and Tom Biolsi have dedicated countless hours of guidance, training, and invaluable critique. To them, for them, I will always be grateful.

Without the encouragement and cooperation of the Klamath Tribes Culture and Heritage Committee, there would have been no dissertation. Special thanks are offered to my friend and colleague, Perry Chocktoot, director of the Klamath Tribes Culture and Heritage Committee, who has continued to offer his support and guidance throughout this project.

Modoc Tribal Elder Ruben Sanders, shared his vast store of cultural knowledge and led me to several rock art sites. His input will provide excellent materials for research far into the future. For his time, patience, expertise, and friendship, I will always be grateful. Moreover, I will always be grateful to Dr. Sonya Atalay, who was instrumental in my becoming a graduate student by connecting me with Meg Conkey and the Department of Anthropology at UC Berkeley.

There are a few people whose support went beyond the field and laboratory work, and to whom I am especially grateful. Melissa Morgan, who in addition to discovering the rock art on the cave ceiling at 30-10-23-8P (Thank you for looking up!), proof read my report drafts, provided logistical support, great food, and excellent first aid for the crew. Moreover, in addition to her participation in the field work, MaKai Magie made a video-documentary of our work for the Klamath Tribes. David Cohen diligently prepared my charcoal samples for radiocarbon dating. Jennifer Kimsey, in addition to offering enduring emotional support, loaned me the use of her truck for several field trips and generous use of her garage to serve as a field laboratory and storage facility.

Additionally, Dr. James Keyser cultivated my interest in rock art studies and has continued to provide excellent mentorship, encouragement, and support. David Whitley provided excellent and insightful comments about my use of myths as interpretive criteria for rock art images. Dr. Benjamin Swartz Jr. provided me with copies of his Klamath Basin research papers and shared insights into my own research as well as future prospects. Modoc National Forest Archaeologist Gerry Gates provided me with rock art maps and site reports and made me aware of the opportunities in his forest for future research. Fremont National Forest, John Kaiser provided me with maps and took me on a tour of rock art and archaeological sites. Refuge Manager Mike Johnson provided me with documents and gave me access to sites within his jurisdiction. Richard Cummins of the Lava Beds National Monument gave me access to sensitive rock art documents and made me aware of other research done within the Monument. Chiloquin Ranger District archaeologist, William Ray allowed me access to his rock art site reports and maps. Fremont National Forest Eastside Archaeologist Michelle Durant and Bureau of Land

Management Archaeologist Brooke Browne led me to a number of Klamath Basin rock art sites, provided me with maps and site reports, and helped me document some of the sites.

Elsewhere, Scott Thomas, from the Bureau of Land Management assisted me in identifying Klamath and Great Basin projectile point types. Craig Skinner graciously assigned my X-Ray Fluorescence data to Oregon obsidian sources free of charge. Nicholas Tripevich patiently coached me in the use of basic computer functions throughout my whole graduate student experience. Tomeko Wyrick of the Archaeological Research Facility provided excellent and timely organizational support. Wally Watkins hosted my crew and me at his Klamath Basin ranch and loaned us his truck for our fieldwork. I am indebted to Jerry Barrett, Glen and Bonnie Kircher for allowing us to their properties.

I am very grateful to the following people and organizations from which I have received generous funding. Without them, this research could not have been completed.

- The Stahl Endowment from the Archaeological Research Facility, UC Berkeley;
- The Lowie-Olsen Fund from the UC Berkeley Anthropology Department;
- The Olsen Fund from the Archaeological Research Facility;
- A travel grant for conferences from the UC Berkeley Graduate Division.
- The Native American Scholarship- National Science Foundation Training Award from the Society for American Archaeology;
- David Easley- Indigenous Culture Preservation Society;
- Roy F. Jones Scholarship from the Oregon Archaeological Society;
- The Class of 1960 Endowed Chair Funds;
- The Bank of Gordon David (dad).

Finally, there have been a number of people who have devoted their time and energy to record the rock art sites visited in Klamath County. Many participated on numerous projects in spite of their own responsibilities at work, home, and school. They have endured long hikes in the desert sun, cold mountain mornings, rattlesnakes, bad jokes, mosquitoes, and shifting research plans while providing excellence skills and great company in the process of producing the field reports and photographs that have become the data for this study. I sincerely thank them all, and hope that I have managed to list them all below.

Melissa Morgan
Chelsea Browne
Terry Dolan
Maria Cruz-Berracol

Cathie Blosser
Dan Braden
Dianne Ness
Monica Corpuz

Aaron David
Amy Faucon
MaKai Magie
Michelle Durant

Chapter 1: Introduction

In recent years, anthropology has engaged in an increasing attention to the wider landscapes of cultural practices. This has been especially fruitful in archaeology, where we have expanded our inferences from traces embedded in the wider and integrated worlds of experience, symbol, settlement, mythology, and society. The research presented in this dissertation contributes to studies in landscape archaeology by focusing on how indigenous cultural practices were carried out in particular places and exploring how ancient artists utilized these practice spaces to generate and reinforce group ideologies. Because the locality types in this study identify three archaeological contexts in which people practiced daily and seasonal routines, while at the same time encountering visual representations of group ideologies (e.g. rock art), multiple levels of culture converged on a single point in space and time. Thus, following after Hyder (2004), my study makes it possible to examine the multi-layered context of place that is present in the archaeological materials, visual culture, and the mental landscape that validated the location as a place.

Some of the earliest Klamath Basin rock art researchers stressed a Great Basin influence in the art (Cressman 1937; Steward 1929; Grant 1967; Heizer and Clewlow 1973). Heizer and Clewlow (1973:34-37) in particular, argued for a Northeastern California Painted Style with Great Basin affinities characterized by striking circle and dot figures, abstract curvilinear lines, angular elements, and generally lacking in human and animal figures. Later writers, however, came to identify Klamath Basin rock art as a distinctive style. Crotty (1979, 1981), Hyder and Lee (1990), and Lee et al. (1988) argued for a Modoc rock art style that was comprised of parallel lines, wavy or zigzag lines, dot patterns, and circular designs that range from simple to elaborate with internal and external ornamentations. The absence of Bighorn Sheep motifs is what distinguished it from Great Basin rock art. Fitzgerald (1992) and Hyder and Lee (1990) acknowledged this style and suggested that it date back at least 4500 years. More recently, Swartz (1998) proposed a Klamath Basin rock art style based on an abundance of circular designs, often concentric and nucleated, associated with triangular forms, abstract designs, zigzags, and dot fields. Hann et al. (2010:2) recognized this style and designated it as the Klamath Basin Style of the Columbia Plateau rock art tradition. To summarize, consensus holds that a Klamath Basin rock art style is characterized by a preponderance of circular designs, often concentric and nucleated, associated with zigzag, abstract, and triangular elements with circular themes dominating its expression.

Recent studies in the Klamath Basin, Oregon, have shown that the indigenous cultural landscape plays a significant role in the meaning and purpose of the rock art that is widely distributed across this area of some 8,093,712 hectares. In this dissertation I will draw upon a model of landscape use in order to better understand the rock art that we find there today. As I will discuss, while we do not have fixed dates for the making and “viewing” of the rock art, we do have insights from ethnohistory and ethnography as well as from our own research and observations to be able to approach a richer meaning for the rock art in its landscapes and therefore its possible cultural significances. This dissertation project is intended to identify the archaeological context of rock art sites across the Klamath Basin and compare the rock art between them. While my interpretations of the art will be based, in part, on the sacred geography identified in the Basin’s myths, I also hope by categorizing the general indigenous

cultural landscape into distinctive settings, and combining this information with the mythically-identified sacred landscape, that any patterns I discover will assist researchers in their efforts to understand the rock art as the indigenous peoples of the Klamath Basin perceived it.

Studies like these in the Klamath Basin have been largely sporadic and address a variety of research concerns. What remains to be considered in this growing body of literature is how the rock art in this region functioned within *particular social contexts*. In the landscape model I propose, rock art sites are distributed across three archaeological contexts: *settlement sites*, *frequently used areas* and *special use areas*. In this model, I propose that rock art served different purposes in different social situations, and that these differences help to explain the reason for the different ways they are displayed. The foundations of this model derive from a close reading of a number of ethnographic sources as well as from my own observations and research in the area (David 2005, 2010) including multiple reports I have prepared for some rock art sites for various agencies and projects. Taken together, I hypothesize that, at least for many rock art sites, there is an association of varied rock art images and locations with differing social contexts. In order to test the model, I recorded a sample of eleven rock art sites and their associated archaeological contexts. I anticipate that this model will help us to better understand how shamans used natural space to structure how people encountered sacred images whose meanings and sacred warrant derived from the mythic narratives that shaped their worldview.

Ethnographic implications suggest that rock art at *settlement sites* was produced as part of ceremonies that probably included isolated cases of ritual curing (Spier 1930:142; Gatschet 1890b:149). For example, images at Chq-23 AS KCM were said to have been made by *G'mokam'c*, who is the Klamath-Modoc culture hero and creator (Spier 1930:142). *G'mokam'c* was also the founder of shamanism in Klamath-Modoc cosmology (Ray 1963:19) and is said to have availed himself to shamans from time to time by visiting certain nearby rocks (Gatschet 1890a:149; Spier 1930:143). Conceivably, these images played a role in ritual curing. The fact that the images faced to the west at *settlement sites* lends support to this (see David 2005:60-63), since the “twilight land” is located in this direction and has further important supernatural implications for the art. Hypothesizing that rock art images within this setting derived from isolated rituals, they probably will invariably depict identifiable mythical characters imbued with the very powers needed for these ceremonies. In fact, Gatschet (1890a:c) reported that the shaman’s “power” animals and anthropomorphic characters are the same characters whose exploits are described in myth. Thus we should expect to see these beings, or even their body parts (see Spier 1930:132-133), represented in the art created by shamans. And because each instance of ritual curing varied according to the needs of the patient, two key assumptions are tested: first, the symbols will vary widely; second, the site image array would have been built up over time. Different shamans probably made these images at different times throughout the site’s history, meaning that they were not intended to be viewed as a single composition. The associated archaeological components may, of course, include pit house impressions, middens, cremation mounds, and household artifacts. While rock art at these locations may not have been intended for public display, it still may not have been hidden from public view.

By contrast, rock art located at *frequently used areas* may have been produced for public display, concentrating and advertising the power of the surrounding landscape as well as that of shamans. This notion has some ethnographic support. One Klamath informant told Klamath Agency

Doctor Dennison (1879) that the rock art of one site near the Klamath Agency meant nothing except to inspire fear of the shaman's supernatural power. The rock art site Dennison's informant referred to (now destroyed) was one composed entirely of concentric circles clustered together on a single panel. Given this statement, Dennison's informant seems to suggest that this rock art was meant to advertise the shaman's powers rather than to play a role in various curing rituals through time. This is an entirely different type of rock art than that of *settlement sites*. Accordingly, this kind of rock art should be displayed at highly visible places where people frequented, such as along well-used paths and near springs. The associated archaeological context will likely vary. For rock art sites located on hunting trails, for instance, one might expect archaeological finds to include projectile points, edge-worked flakes, and debitage—items reflective of resource procurement and processing. Because the art at such sites was produced for public display, images will likely be clustered together and relatively simple to access, if not impossible to avoid.

Finally, rock art located at *special use areas* may have been produced and used for situations like meditation and shamans' private rituals. Work by Hann and Bettles and by Whitley et al. have identified a few such sites that appear to have been used exclusively by shamans to interact with the supernatural world (Hann and Bettles 2006:189; Whitley et al. 2004:229, 231). These images will probably depict the same mythical characters as those at other context types, but with some important differences. Another difference is that these images were generated by induced trance and, as such, they should be comparable to the trance-induced iconography identified in Lewis-Williams and Dowson's (1988) neuropsychological model. The places at which they were clustered provided them a retreat for which they could continually review and renew their understanding of the mythical characters and their specific behaviors, and possibly even a private place to practice their ritual performances.¹ Given such a private function, the archaeological context of this rock art will likely be incidental, and in most cases even non-existent.

Identifying rock art display patterns within specific social contexts can lead us to a more thorough understanding of rock art symbolism and may even enable rock art researchers to reconcile seemingly insufficient or "irrelevant" statements about the art made by indigenous people in local ethnographies.

In chapter 1, I lay out the core research problems to be addressed in the dissertation and how I am testing the model that I am proposing for the landscapes of rock art in the Klamath Basin. In brief, I will also consider how this kind of a model fits in the wider research on rock art in North America. I outline the basic tenets of my landscape model for Klamath Basin rock art. Utilizing a base of three or four documented sites, I introduce each element and describe the expectations I have for how rock art is displayed within particular archaeological contexts.

¹ Incidentally, this corresponds with ethnographic and mythical accounts that tell about shamans visiting special places on a seasonal round in order to renew their potency. Petroglyph Point, one of the most densely concentrated rock art sites, is among them. Though not explicitly stated in the literature, rock art sites are probably located at all or most of these retreats. Locating them has been one of the ongoing goals of this project.

In chapter 2, I outline the boundaries of the project area in the Klamath Basin, discussing some of the properties that made it ecologically suitable for prehistoric settlement, and how this ecology influenced the development of the indigenous groups who settled there. I review the prehistory and history of the Klamath and Modoc peoples, their notions of sacred space, shamanism, and how these notions transformed certain locations within the Basin into places. I will conclude this chapter by discussing how Klamath-Modoc spirituality and shamanism inspired the production of rock art.

In Chapter 3, I discuss various aspects of Klamath-Modoc spirituality. I define what it meant to be a shaman in this culture and give a detailed description of various rituals and ceremonies. More importantly, I connect these behaviors to the production and use of rock art. A key discussion in this chapter focuses on the ethnographic understandings of the role of shamans or visionaries in the making and placing of rock art. As is shown later in the dissertation, this is one important aspect of ethnographic information in the Klamath case.

In chapter 4, I review a sample of selected studies that deal with how ethnography has been used to interpret rock art as well as a number of studies in landscape archaeology that likewise focus on rock art. More specifically, I focus on some of the key ethnographic studies that have considered rock art and how an ethnographic context has informed on the interpretation of rock art. This is a topic that is fraught with challenges because there is often not a direct link between the ethnographic information and the rock art, in space or in time. I then turn to studies that have specifically focused on rock art in the Klamath Basin and discuss the ways I will integrate them into my own study. I conclude with a review of each of the key ethnographies I used for this dissertation.

In chapter 5, I define all of my research criteria and discuss how and why each criterion will be analyzed in terms of the landscape model. I will describe the field methods used to collect the data and provide a justification for the data I chose.

In chapters 6-8, I analyze all aspects of the rock art and archaeological sites in terms of the model. Aspects of the rock art include the types of imagery, image sizes, density, and frequency, whether it is clustered onto a single panel or spread out across a large site, and the orientation of the panels, how the images were rendered. Aspects of the archaeological sites include their distances from the rock art, debitage analysis including geo-chemical analysis and projectile point analysis, and finally, assessing the assemblage types. I discuss the findings of the aforementioned analyses in terms of the landscape model. I compare the rock art site types with their associated archaeological site types. I incorporate results from the XRF and projectile point analysis in order to establish group affiliation and a range of dates for the archaeological assemblage. These I compare with established rock art dates in the region in order to establish both cultural and temporal continuity between the archaeological and rock art materials.

In chapter 9, I discuss the viability of the research and relate my proposed model for Klamath Basin rock art. I describe my biases and assumptions and use them to suggest ways to improve similar future research efforts. Finally, I compare this landscape model with similar models in the wider discipline, describing how it may be used to illuminate aspects of rock art in regions where little or no ethnographic materials exist.

Chapter Two: Setting

Introduction

The Klamath Basin of southern Oregon and northern California is bounded on the west by the southern end of the Cascade Range, and on the east by the northwest rim of the Great Basin. To the north lie the headwaters, which include the Wood, Williamson, Sycan, and Sprague Rivers, all of which are significant Upper Klamath Lake tributaries. To the south, the Klamath River drains Upper Klamath Lake Basin, flowing 423 kilometers from the southern end of Lake Ewuana into the Pacific Ocean, bisecting the Cascade and Coastal Ranges (National Marine Fisheries Service 2007:2 - 4). Within the southern portion of the Basin, the Lost River/Tule Lake/Clear Lake Basin water complex is now cut off from the Klamath River, although it was once connected through Lower Klamath Lake during periods of high water (Dicken and Dicken 1985:1 - 4). The Basin's elaborate system of lakes, marshes, and rivers provided a homeland for the Klamath and Modoc Indians for the past 6,500 years (Cressman 1956:463; Sampson 1985:507). Figure 1 shows the Klamath Basin and respective tribal territories. In this chapter, I provide a description of the physical and environmental conditions of the Klamath Basin and describe both its aboriginal inhabitants and the subsistence schedule they followed as a background to the rock art and the various contexts of its production.

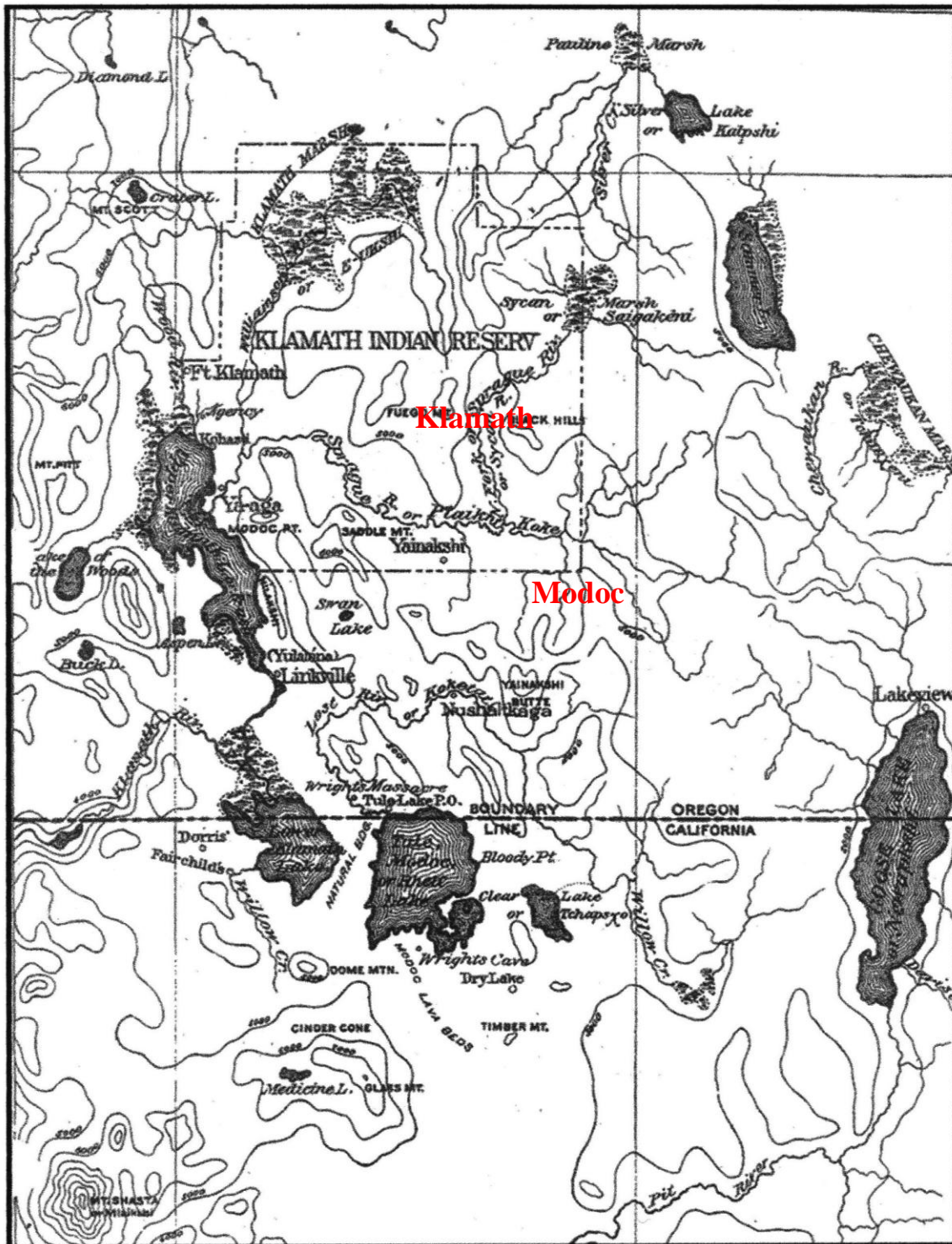


Figure 1: Ethnographic map of the Klamath Basin.

Adapted from a map prepared by Samuel A. Gatschet (From Gatschet 1890).

Climate

The Basin's climate is characterized by hot, dry summers and wet winters with moderate to low temperatures. Annual basin precipitation ranges from 38 centimeters at valley floors to more than 70 inches in the Cascade Mountains. Sixty to seventy percent of the precipitation occurs from October through March, usually in the form of snow (Illian 1970:110). Visiting the region in the 1870s, Gatschet described the climate as one of abrupt changes. According to him, the dry atmosphere made summer days intensively hot, and nights bitterly cold. Severe winter snows covered the ground, starting around November, and reached depths of up to 1.2 meters as the winter progressed. He reported that the lakes froze over to great thickness, but never entirely, for most of the winter (Gatschet 1890a:xxvi- xxvii). Although rain and hailstorms were rare, the Basin's precipitation, coupled with mountain runoff, was sufficient to keep the water levels of the lake consistent throughout the year. Cressman attributed the long-term human occupation in the Klamath Basin to these consistent (and hence predictable) water levels (Cressman 1956:379).

Geological History

The geography of the Klamath Basin has been shaped by its long, geological history. Between 40 and 30 million years ago, in the Late Eocene and early Oligocene, the continental shoreline ran through what is today Central Oregon. But sometime during the later Eocene, volcanic eruptions began forming the mountains that would later become the Cascade Range. Mountain building and uplift moved the shoreline further west toward its present location. Later, during the Miocene, between 24 and 5.3 million years BP, the Klamath Basin experienced complex sequences of volcanism and sediment deposition. The later Miocene and Early Pliocene saw the formation of a series of freshwater lakes and deltas in the Klamath Basin, along with increased sediment deposition. Continued volcanic activity resulted in basalt intrusions into earlier sandstone and diatomite deposits, while at the same time continuing to build the High Cascades. It was during this process that the Basin and Range topography we are familiar with today was formed. Crustal folding along a general northwest or northeast axis in the late Pliocene, coupled with normal faulting along a northwestward trend in the early Pleistocene, created a system of ridges and valleys that include the Klamath Basin (Clark 1999:4-6). During this same time also, glacial and interglacial periods led to the formation of ancient Lake Modoc. According to Dicken,

The Klamath Lakes, Upper and Lower, together with Tule Lake are the shrunken remnants of pluvial Lake Modoc. The old pluvial lake, which existed in Pleistocene time, consisted of several connected arms with an overall length of nearly 75 mi [120 km]. The southern end was in California, south of Tule Lake; the northern end was near Fort Klamath in west-central Klamath County. At maximum extent, the 400 mi [643.7] of shoreline was at the nearly uniform elevation of 4240 ft above sea level (Dicken 1980:179).

Volcanism continued to build the Cascade Range, and around 400,000 years BP, in the middle of the Pleistocene, a series of eruptions began to form Mt. Mazama. These eruptive frequencies slowed by around 50,000 years BP. Mt. Mazama's final eruptive event took place approximately 6,900 years ago (Orr et al. 1992:254). The explosion emptied all of the lava from the magma chamber below, causing the mountain to collapse in on itself and to form the caldera that would later fill with water and become Crater Lake (Clark 1999:6-7). Its violent eruption ejected

tremendous volumes of pumice, ash, and volcanic dust that reached as far north as Alberta, Canada and as far south and east as Nevada and Wyoming, respectively. The distinctive ash layer from this event became a significant time marker for Pacific Northwest archaeologists today. Today, volcanic rocks dominate the Klamath Basin's geology in the form of basalts and tuffs, both of which have been used as rock art media (Cressman 1956:379; Cole 2006:10).

Habitat

Much of the Klamath Basin lies within the Semiarid and Arid Transition Zones (Bailey 1936:22-24). Habitats within these transition zones depend greatly on elevation. The Klamath Basin is thus characterized by upland forests and the marshes and lakes of the lowlands, each of which are described below.

Forested Uplands

The Upper Klamath Basin has several distinctive vegetation zones based on elevation and exposure. Although true alpine habitats are rare in the Basin, subalpine slopes and meadows are found near the higher peaks. Mountain hemlock, Shasta red fir, whitebark pine, and lodgepole dominate the subalpine forest, while Manzanita, huckleberry, lupine, and long-stolon sedge comprise the understory. Dwarf hulsea, western pasque flower, Davidson's penstemon, and partridge foot are common talus species. Within the mixed conifer forest at lower elevations, Ponderosa pine, sugar pine, western white pine, incense cedar, and Douglas fir occur along with Shasta red fir and white fir beneath the canopy. Bitter brush, goldenbush, western needlegrass, and a variety of windflowers make up the understory. Chinquapin, boxwood, prince's pine, and twinflower grow in the understory in drier areas. The lower elevation woodlands and shrublands are dominated by rabbitbrush, big sagebrush, and bunchgrasses, with various concentrations of juniper occurring throughout. Klamath plumb and mountain mahogany grows along the rocky ridges and slopes. Scattered scablands host low sagebrush, biscuitroot, daggerpod fraseria, and Sandberg bluegrass communities (Juillerat et al. 2007:4-5).

Marsh and Lowlands

While the Klamath and Modoc exploited resources at all elevations throughout the Basin, it was along the lakes, streams and marshes to which they adapted. Vegetation around the Klamath marsh includes both north native wetlands and forest plant communities. The wetland habitats are highly diverse and include emergent aquatics, submergent and floating leaf aquatics, and sedge meadows. Emergent aquatics include broad-leafed cattail, tule, and hardskin bulrush, while submergent and floating leaf aquatics are dominated by the yellow-leaf water lily. Coontail, marestail, and pondweeds are also included. Sedge Meadows include Nebraska sedge, Baltic rush, and beaked sedge. Field mint and narrow-spiked reedgrass are also common. The forest plant communities are dominated by Ponderosa pine, but often have patches of lodgepole and aspen, depending on site conditions. Primary understory includes antelope bitterbrush, currant, green Manzanita, green rabbitbrush, wild strawberry, Western rye grasses, Western needle grass, and squirrel tail (US Fish and Wildlife Service 2010:56-58). Larger mammals include deer, antelope, elk, bobcat, and mountain lion, while smaller mammals include beaver, otter, muskrats, porcupines, and groundhogs. Fish species include rainbow trout, eastern brook trout, speckled dace, brown bullhead, tui chub, blue chub, Pacific lamprey, and Klamath large scale sucker. The Marsh is also particularly rich in waterfowl, raptors, shore birds, cranes, and many other types of birds (Sobel 1992:7). In fact, the Upper Klamath Basin is along the Pacific

Flyway, and it supports the largest concentration of migratory waterfowl in North America, with up to 2 million migratory birds during fall migration and about half that number in spring (Jarvis 2002:313).

Klamath and Modoc Cultural Subdivisions

The people who were to later be called the Klamath and Modoc entered the Klamath Basin approximately 10,000 years ago from the Great Basin, and by the time of the Mt. Mazama eruption, these hunting and fishing peoples began taking on the life ways described in the ethnographies (Cressman 1956:402; Stern 1966:3-4; Sampson 1985:507). Although once a unified people, the Klamath and Modoc underwent a series of political separations beginning around 1780, and considered themselves distinct but related peoples by the time the earliest whites made contact with them (Gatschet 1890a:13). Stern attributed their separation to cultural influences from the Columbia Plateau and Californian groups. While both groups originated fundamentally from the Great Basin, their relative geological positions and ecological resources lead the Klamath to diverge toward the Plateau and the Modoc toward California (Stern 1966:4). Yet in spite of their political separation, the two peoples remained culturally similar in almost all significant ways (Loubser and Whitley 1999:48), including their use of language and sharing the same corpus of myths, including their creation narrative (Stern 1966:4).

As was common among tribal groups throughout this region, the Klamath and Modoc tribes did not have concrete territorial boundaries. Instead, they occupied a core homeland and utilized the peripheral territory in common with neighboring groups (Jensen and Farber 1982:21-22; Spier 1930:8-10). While the Klamath occupied settlements along the Klamath Marsh and Upper Klamath Lake north of today's Oregon-California border, the Modoc occupied areas along the Lost River and banks of Tule and Clear Lakes south of the border.

Neither the Klamath nor the Modoc peoples were unified political entities. Rather, they were made up of a series of tribal subdivisions, each occupying distinct, autonomous territories, and unified only through a common language, customs, and military necessity (Spier 1930:21-22). Spier identified five tribal subdivisions among the Klamath in his monograph. The *a'ukckni* people occupied the Klamath marsh and middle Williamson River, and possibly some settlements along the Sprague River as well. The *kowa'cdikni* settled around Agency Lake and may have been included in the *a'ukckni* groups in pre-reservation times. The *du'kwakni* people were centered on the Williamson River delta and were closely affiliated with the Pelican Bay people. The *gu'mbotkni* people were centered on the Pelican Bay and on the marsh to the north. Finally, the *iu'lalonkni* people occupied Link River and all along the eastern shore of the Klamath Lake (Spier 1930:23).

Ray similarly identified three geographically-defined subdivisions among the Modoc. The *Paskanwas*, or "river people," lived in the lower Lost River valley from the Lost River gap to Tule Lake. The *Gumbatwas* lived west of a line separating Lower Klamath Lake and the Lost River, through Tule Lake, southeastward to the Modoc territorial boundary. The *Kowiwas*, or the "people of the far out country" lived east of this line, except for the lower valley of the Lost River (Ray 1963:202-203).

These tribal subdivisions were based largely on group consciousness and were taken very seriously by their members, especially among the Modoc, who were fiercely territorial (Ray 1963:201), at least when observed and recorded by visitors. According to Spier, villages were as likely to go to war with one another as they were with outside groups (Spier 1930:24). Yet in spite of this, the Klamath and Modoc did maintain a more or less friendly relationship based more on economic convenience than a genuine sense of kinship. Even though they never openly went to war with one another, the Klamath and Modoc frequently allied themselves to make war on the Pit River peoples further south. The main reason for this was the taking of slaves for sale or trade with Columbia River tribes in the north. To this end, the Klamath served as middlemen for the movement of slaves to markets in the north (Ray 1963:134-135).

Subsistence

The Klamath-Modoc economic strategy was highly formalized, dictated by the availability of food. Winter lodges were dismantled and abandoned just as soon as the local snow had melted off, usually in March. For the Klamath, this could occur as late as April or May (Spier 1930:146). Prior to departing winter quarters, however, villagers erected small, mat-covered houses for the old and others who would remain behind. Runners, who would return from seasonal camps with stores and provisions all throughout the spring and summer months, would see to their needs. When these lodges were completed, the groups relocated to spring fishing camps to take advantage of the first runs of sucker fish. For the Modoc, this could last up to a month (Ray 1963:181), while for the Klamath, this could go for two months or longer (Spier 1930:146). Sometimes, the Klamath and Modoc met on Lost River to catch and dry fish in common. Sucker fish served the Klamath and Modoc as a primary food source. These fish typically live in deep lake waters until they reach sexual maturity, and then migrate upstream in the early spring, to lay their eggs on the rocky river bottoms. It was during these runs that the Klamath and Modoc exploited sucker fish in great quantities. Suckers were caught from canoes, weirs, and along river banks using a variety of nets. While some were taken home and roasted, most were dried in the sun and stored for winter use (Spier 1930:147-154). By June, the first of the salmon runs began. While both Gatschet and Spier reported that salmon was an important staple for the Klamath and Modoc, detailed information from ethnographic sources is scarce, probably because ethnographers collected information after the advent of the reservation in 1864, and the salmon harvest areas were located outside of reservation boundaries. Thus, fishing for salmon in the highlands probably had not occurred for a generation when the ethnographers collected their information. Nevertheless, Gatschet reported that salmon was an important staple for the Klamath, and that they ascended twice a year into the lakes and rivers in the Klamath uplands to harvest them, once in June and again in the autumn. As the sucker runs diminished toward the end of June, villagers moved toward the marshes and prairies for gathering root crops, and to take advantage of the beginning trout runs. Camps were selected that enabled the people to optimize these activities. Spring and summer months found women gathering camas and epos, while men continued to fish and hunt waterfowl and small game. Waterfowl eggs were also exploited at this time. They found camas growing mainly in Ponderosa pine forest meadows, blossoming in great abundance beginning in the spring. The Modoc began digging them in June or July and continued for about a month. Bulbs were dug and either stored or steamed overnight in a stone oven, then dried on tule mats and stored for the winter in pits (Coville 1897:93; Ray 1963:198). Camas bulbs could be stored for more than a year, according to Howe (1979:109). Another important staple was the epos root, which was exploited at about

the same time as camas. Also called *e-pa* by the Modoc, epos grew on rocky scab flats and were commonly dug in the spring, when the contents were soft and milky (Coville 1897:101). Because they had a short growing season, women worked continuously. But because of the time involved in cleaning and returning basketfuls back to the village, productive harvesting days were reduced to only ten or fifteen (Ray 1963:197-198).

All these activities went on until later in July when antelope and mountain sheep hunting began in the Lava Beds. Then, by around mid-August, the Klamath moved to the Marsh where the women harvested and processed *wocus* seed and the men hunted the lowland hills. *Wocus* grew in vast abundance on the marsh and was an important resource for both the Klamath and Modoc. Although many Modoc congregated along the Tule and Lower Klamath Lakes, many others joined the Klamath on the Klamath Marsh (Stern 1966:12). Warm Springs, Snake, and Paiute groups joined them as well (Gatschet 1890a:xxxv; Spier 1930:41; Ray Royce, pers. Comm., July 22, 2009). *Wocus* seeds were removed from pods and parched. While some were dried and eaten as is, most were ground into a meal and stored, later to be made into a porridge or bread (Coville 1987:96). A second run of suckers and salmon also occurred between August and September, and men concentrated again on fishing while those women not engaged in harvesting *wocus* gathered and dried lowland berry crops. Toward the end of September, fishing yields again diminished and camps were moved to higher, more remote locations where men intensified their hunting activities and women gathered huckleberries and other highland fruits and nuts. This continued until the threat of snow forced the people to return to winter villages to rebuild earth lodges in preparation for the coming winter (Spier 1930:145-146; Ray 1963:180-182).

Gambling and Trade Fair

Another important yet barely reported aspect of the Klamath-Modoc economic cycle were the annual gambling and trade fairs, which took place at the base of Yainax Butte and Gearhart Mountain in the Klamath Uplands. Although inter-tribal gambling occurred at any time throughout the year (Ray 1963:123), it was in the Klamath uplands, near the end of their food-gathering cycle, where the Klamath, Modoc, Snake, Warm Springs, Paiute, Shasta, and Pit River groups gathered to trade, gamble, and to compete in a variety of contests (Davis 1974:19). These large fairs were important components in the tribal economy, as they provided wealth to some and served as an economic leveling mechanism for others (Ray 1963:180-182; Spier 1930:145-146). The skilled gambler enjoyed high social and economic status. Although success in gambling was determined largely by chance, a large element of skill was also present. Accordingly, some men won more consistently than others. The contest was basically between two opponents. While one player arranged marked game pieces and kept them hidden under a special gambling mat or robe, the opposing player tried to guess their arrangement. However, as Ray described, “the guesser was permitted unlimited preliminary guesses, without being committed to such guesses until he accompanied one with a subtle formal signal. Likewise, until such a signal was given, the opponent was privileged to shift the position of the pieces at will,” (Ray 1963:123). As this went on, the two opponents studied one another’s eyes, facial expressions, and body movements. The one who interpreted his opponent’s actions more accurately was usually the winner in the long run (Ray 1963:123-124). Although the contest was between two players, any number of individuals could participate. Less skilled gamblers, or those less economically fortunate, could increase their wealth, by casting their bets with the more successful gamblers (Ray 1963:124). As the two primary opponents played, the participating

bystanders cast bets and supported their champion by singing power songs (Stern 1966:49; Ray 1963:124). Figure 2 shows Klamath and Paiute teams playing the stick game. Tremendous wealth traded hands at these fairs. The Klamath and Modoc, in particular, brought slaves to trade with Columbia River Indians for horses. Later, trappers from Fort Vancouver came to acquire furs from the Klamath-Modoc and bows and arrows from the Pit River in return for blankets, beads, and other European trade goods (Clarke 1873:549-550). This tradition continued well into recent historic times (Allison 1994:144, 229).



Figure 2: Klamath versus Paiute in the traditional “stick” game, in which players from one side arrange two sets of marked bones beneath the bandanas while their side sings a power song. Opposing players must then guess the arrangement.

From, Stern 1966:49.

Conclusions

Different ecological zones throughout the Klamath Basin, each featuring different peaks of production, meant that the Klamath and Modoc had to move between ecological niches at different times on their subsistence round in order to optimize their returns. Exploiting some of these resources required the groups to camp in one place for up to a month or more, while others required them to stay for only a few days. Movement between these zones, coupled with processing activities and the duration of occupancy in associated camps, determined the archaeological signature these groups left behind. Rock art is located in each of these resource

zones. Sometimes it is directly associated with villages and camps, but quite often it is located in the middle of resource procurement and processing areas, suggesting that its placement in these places was intentional. It is worthy to note that the rock art exhibits a stark contrast in size and complexity between these contexts. It is these differences between contexts that make the Klamath Basin a particularly suitable area for rock art research, especially research that is oriented to trying to understand the relationship between the placement of rock art and the varying cultural landscapes of the mobile Klamath peoples.

In the next chapter I discuss selected aspects of Klamath-Modoc spirituality, focusing particularly on those aspects which led to the creation of rock art.

Chapter Three: Klamath and Modoc Spirituality

Introduction

In this chapter I discuss Klamath and Modoc spirituality, with special attention devoted to concepts of spirit power and its implications for both shamans and the non-shaman public. This is a key discussion in regard to our attempts to interpret the rock art of the Klamath-Modoc peoples and although I have already alluded to how aspects of spirits and associated rituals are implicated in the study of the rock art in a landscape context, a more complete discussion of spirituality is warranted in light of the rock art making practices and resultant imagery. I describe the general characteristics of spirits in Klamath-Modoc cosmology and how they affected the people's daily routines. Given their fundamental importance in ritual, I also describe a selection of the more prominent spirits that shamans called into their service, reasoning that these, of all spirits, were likely represented in the rock art. Next, I describe the nature of the power quest rituals for shamans and non-shamans alike, focusing on the differences in both the processes and ultimate outcomes. I follow this up with a description of the shaman's initiation ceremony, in which novice shamans announced their readiness to cure to the villagers while veteran shamans reinforced and expanded their prestige. I conclude by describing the shamans' curing ceremony and the role played by the ritual paraphernalia (*mu'lwas*) with which the shaman called into service the various relevant aspects of the supernatural world.

Shamanism

The term shaman has been the subject of intense debate in anthropology in recent years and shows no clear sign of being resolved in the near future. Dowson, in particular argues that the reason for that is because the concept of shamanism, especially in rock art studies, has been oversimplified (Dowson 2007:49). My purpose in this chapter is not to resolve the debate, but rather, to define shamans within the limit of Klamath-Modoc society and to describe certain aspects of their behaviors within the community.

In response to the ongoing debate, Lewis-Williams has recently offered a more generalized definition of shamanism that covers its original application in Siberia, as well as those shamanisms found in other parts of the world.

Limiting his definition of shamanism to hunter-gatherers, Lewis-Williams states that

shamanism is fundamentally posited on a range of institutionalized altered states of consciousness; the visual, aural, and somatic experiences of those states give rise to perceptions of what is taken to be an alternative reality; this reality is frequently tiered, having various spiritual realms above, and below, the world of daily life; these realms are believed to be inhabited by spirits of various sorts; and, the behavior of the human nervous system in certain altered states also creates an illusion of dissociation from one's body, "soul-loss" (Lewis-Williams n.d.:2).

Using both altered states of consciousness, as well as various medicines and rituals, shamans are commonly believed to "contact spirits and supernatural entities; heal the sick; control movements and lives of animals; foresee the future, control the weather, and harm enemies" (Lewis-Williams n.d.:3). These six functions are believed to be facilitated by supernatural entities that

include variously conceived supernatural potency, or power; and animal-helpers and other categories of spirits that assist shamans and are associated with potency (Lewis-Williams n.d.: 3).

Klamath-Modoc shamanism fits within this general model. But in order to elucidate the shaman's relationship to Klamath Basin rock art, I expound on Lewis-Williams' general definition by focusing more closely on the various roles shamans played within Klamath-Modoc culture, and by discussing various other aspects of their spirituality as it applied to both shamans and non-shamans alike.

Klamath and Modoc Shamanism

Perhaps the most prominent persons in the tribal community were shamans, or *kiuks* (Spier 1930:107). For the purposes of this discussion, and to remain consistent with the language utilized in supporting ethnographic literature (Gatschet 1890; Curtin 1912; Curtis 1924; Spier 1930; Ray 1963; Stern 1966), I use the term "shaman" here to describe Klamath and Modoc "doctors" who cured and practiced their craft with the assistance of spirits. The Klamath-Modoc term for these practitioners is "*kiuks*."

According to Spier, "The shaman (*kiuks*) is one who has acquired more than usual spirit power" (Spier 1930:107). Similarly, referring to them as Indian conjurers, shamans, or sorcerers, Gatschet described them thus:

These "medicine-men" do not only treat the sick, but they arrange and preside over the "doctor-dances" in the communal dance-house, are consulted for dreams, predict the weather, during the pond-lily harvest give advice on the more important incidents of tribal pursuits, and are much dreaded on account of their alleged power of sorcery (Gatschet 1890b:135).

Shamans could be both men and women, although female shamans were less numerous (Spier 1930:107; Ray 1963:42). Although shamans enjoyed a good economic position, Ray explains that they were seldom rich. "Unavailable to him, or at least little used, were the profitable pursuits of commercialism, gambling, and intensive hunting" (Ray 1963:9). However, Spier pointed out that shamans were clearly the most important and outstanding figures in Klamath society, even among the chiefs due largely to their popularity (Spier 1930:107).

The Klamath and Modoc recognized no specialized types of shamans. The extent of their power was determined solely by the number and characteristics of the spirits they served (Spier 1930:108). Shamans' spirits were available to them at any time: they needed only to sing the proper song to invoke their aid (Ray 1963:45).

Spier reported that a trance state was not part of the shaman's behavior (Spier 1930:109). Nevertheless, during the Modoc War of 1870, the Modoc shaman Curly-Headed Doctor is said to have inhaled smoke from his pipe and gone into a fit in an effort to ensure that the Modoc remained impervious to federal bullets (Murray 1959:118). Loubser and Whitley (1999:62) argue that Murray's description of the shaman's "fit," characterized by twitching and jerking, makes it clear that Curly Headed doctor had fallen into a shamanic trance. This discrepancy may

stem from the fact that such “frenzied” behavior may typically have taken place outside of public view and was thus not reported to ethnographers. In this report, I propose that this is the case and that such trance states led to the production of rock art in the *special use* settings described in Chapter 8

Shamans sought spirit power from animals, birds, reptiles, fish, natural phenomena, and a handful of anthropomorphic and purely mythical beings (Spier 1930:103). Gatschet noted that the creatures and beings from which power is sought are the same as those told about in the myths. Not only did shamans appeal directly to these animals, but also to their limbs, organs, and other parts that were believed to hold supernatural potency (Spier 1930:133). As indicated, shamans accomplished their many feats through the use of supernatural power, which they invoked by singing their power songs or incantations (Spier 1930:108).

Overtly, shamans were expected to lie quietly in their home during the winter, maintaining a certain amount of reserve. But the reality, as reported by Spier, is that they transcended even the chiefs in popularity and went to a great deal of trouble to convince people that they could harness and control spirit power (Spier 1930:118, 123). A large part of their popularity came from the annual performance they held in mid-winter. Among the Klamath, this was typically a joint affair in which many shamans participated in a five-day ceremony where they displayed their power to the assembled villagers (Spier 1930:112). But as Ray pointed out, this was an entirely selfish endeavor. “The whole affair was essentially private and selfish in motivations. The shaman’s only object was to improve his personal future,” (Ray 1963:43). A shaman’s “job security” depended greatly on the people’s belief in their supernatural powers. For that reason they were also not above taking credit for things known to be beyond their control. Modoc informant, Peter Sconchin, recounted his father’s discontent with shamans to Ray:

A doctor claims he can make it rain. He can make the strongest wind, too. He can make heavy snow. He can stop wind, rain, or snow. My father once asked a doctor to stop a bad storm. The doctor agreed. But with all his singing and dancing for two nights the storm didn’t cease. Sometimes a doctor will sing and dance for five nights and still the bad weather continues. The people are disappointed that the doctor can’t change the weather. But they try to believe him, and they try again sometime. Even though they know the doctor can’t make it rain or snow they still believe in him. If the rain comes in two or three days, the doctor says the he brought it. If the storm stops the doctor says that he did it, and everyone believes him. As far as I can remember a doctor never stopped rain or wind (Ray 1963:67-68).

Neither was it above a shaman to claim credit for killing someone at great distances, even when the alleged victim was still alive (Ray 1963:68-70). By contrast, a Modoc shaman named *Jakalunas* was renowned for his ability to kill enemies from a distance using his supernatural powers (Dillon 1973:183; see also Ray 1963:68-70). Whether or not this was true, it was, perhaps, sufficient that shamans maintained the *reputation* for the ability. Even during the early reservation days, when agency authorities were attempting to eradicate shamanism altogether among the Klamath, belief in the shamans’ powers persisted. Agency Superintendent John Meacham wrote of the futility of these attempts:

To prevent a *practice* is one thing, to change the belief in the theory which actuated that *practice* is quite another thing. Thus while it is very true the practice of medicine by Indian doctors is abolished yet I am fully warranted in saying that there is not half a dozen Indians on the Reservation who are not as firm as ever in the belief of “spiritual medicine.” Even Head Chief Allan David grave, sedate, and logical as he is in most things, acknowledged to me the other day that he still believed and was afraid to punish the doctors (Stern 1966:111-112).

Another way that shamans reinforced the peoples’ belief in them was through the visual media. The shaman’s lodge was not only the largest in the village, but was the only one decorated inside and out. These decorations consisted of items that symbolized the shaman’s spirits. Even the way shamans dressed bespoke their supernatural potency. Spier (1930:110-111) provides a detailed description of a shaman’s elaborate medicine outfit. Klamath shaman, Lee Snipes is shown on the left in figure 3 wearing his medicine regalia. The bones, probably human, were likely meant to impress his clientele (see Howe 1992:30).



Figure 3: Dr. Lee Snipes in full medicine regalia, posing with his wife and daughter.

Adapted from, Howe 1992:30

So, at every turn, shamans went to great effort to advertise their supernatural power. It should come as little surprise that they may have created some of the rock art also for this very purpose (Dennison 1879). I discuss this in greater detail in chapter 7.

Spirits, Souls, Ghosts

Spirits are a class of beings that are predominantly manifested as birds and animals, winds, lighting, and a handful of anthropomorphic beings. These beings are thought to dwell in the mountains, mountain pools, and river eddies (Spier 1930:93, 95). Certain rocks were also believed to be petrified remains of mythical beings. Many of these have been associated with the culture hero *Gmokam'c* (Spier 1930:143). The spirits of these stones were believed to return to inhabit their bodies from time to time for a variety of reasons. One stone in particular was *K'tai Tupakshi* (Standing Rock), which was destroyed by railroad construction in 1911. According to Gatschet, *K'tai Tupakshi* was the

. . . name of a rock about ten feet high and fourteen feet in width, situated fifty yards north of the Sprague River and about one hundred and fifty yards from the junction of Sprague and Williamson Rivers. Indian pictures are visible on its surface, and the rock is called "*K'mukamtch's chair*", because this deity had, according to the myth, constructed a fish-trap of willow branches there, and was watching on this rock for the preservation of this structure (Gatschet 1890b:149).

Although initiates sought power from a host of spirits, these spirits were not specialized. According to Spier, "the Klamath lack all architectural feeling in conceiving their religious beings (Spier 1930:100). Seekers could gain power for hunting, gambling, fishing, lovemaking, and warfare with equal expectations from any of the spirit-helpers at their disposal (Spier 1930:93). The exception to this was the few specialized spirits available only to shamans. According to Gatschet,

Another class of spirits embodies the spirits of those animals, which have to be consulted by the *kiuks*² or conjurer when he is called to treat a case of disease. Such persons only who have been trained during five years for the profession of conjurers can see these spirits, but by them they are seen as clearly as we see the objects around us. To see them they have to go to the home of a deceased conjurer, and at night only. He is then led by a spirit called *Yayaya-ash* appearing in the form of a one-legged man towards the spot where the animal-spirits live; this specter presides over them; there the conjurer notices that each appears different from the other, and is at liberty to consult them about the patient's case. *Yayaya-ash* means "the frightener," and by the myth-tellers is regarded as the Thunder or its spirit [Gatschet 1890a:xcviii].

Gatschet provides a list of the more common spirits used by shamans (Gatschet 1890a:lxxix-xciv) and, contrary to Spier, he states that "The animals which form the subject of mythic stories and beast tales are pretty much the same as those mentioned in the magic songs of the medical practitioners, of which I have brought together a considerable collection in Texts, pp. 153-181"

² *Kiuks*, also spelled *qyoqs*, is the Klamath term for shaman, or doctor.

(Gatschet 1890a:c-ci). For a more comprehensive list of specialized spirits used by shamans, the reader is referred to Gatschet (1890a: xlxxix-xciv), Spier (1930:119) and Ray (1963:46).

Belief in spirits influenced people's everyday behaviors. For example, before eating, bits of food were cast toward the earth, mountains, old house pits, and cremation places so as to feed the spirits first (Spier 1930:141). Another example concerns an old woman spirit who lived on the slopes of Mt. Pitt (McGloughlin) named *Wile-ekak*. This spirit controls the west wind. People shouted at her to make the wind stop when it blew too hard, or to give them a harder wind to drive away the mosquitoes and such (Spier 1930:104-105). Finally, *Goga'ne* are dwarf men who lived in the Cascades but were seen all over Klamath country. Possessing enormous strength, they sat ready to capitalize on people's breeches of conduct. Encounters with them were almost always fatal (Spier 1930:105-106).

Souls differed from spirits in that spirits were a class of beings while souls were the life essence of the deceased. To the Klamath and Modoc, all creatures had souls. Seated in the heart, the soul was conceptualized as the quickening of life as made evident by breath (*hok'i*) (Spier 1930:101). At death, the soul left the body through the top of the dead and journeyed to the land of the dead while the ashes and smoke from the cremated body rose into the air and returned on the wind to rest at the birthplace of the deceased (Spier 1930:101).

Ghosts (*skoks*) are souls that have returned from the land of the dead. Considered dangerous and deadly, they constantly go about seeking to catch someone's soul to take to the land of the dead (Spier 1930:101). Ghosts that return from the land of the dead resemble neither humans exactly nor skeletons, but are perceived as a vague combination of the two (Spier 1930:101). Spier's description of ghosts places them more into the category of spirits rather than departed souls, since they are transformed beings. Upon returning from the land of the dead, they ceased to be manifestations of a former personality; instead, they were dangerous beings that were believed to possess lethal supernatural power. According to Ray, ghosts traveled only at night. Seeing a ghost, or hearing its rattling bones, posed the greatest danger. "Fear of it was so great, especially among children, but including many adults, that to leave the house after dark was a traumatic experience," (Ray 1963:49-50). Although not always seen, everyone who encountered it heard the sound of rattling bones and the distinctive cry, "*sqo—qs*" (Ray 1963:50).

Spirits, souls, and ghosts all play different roles in Klamath-Modoc cosmology, but they seldom overlap. The exception to this, of course, is the use of ghosts (*skoks*) by some shamans as medicines. Although considered dangerous and potentially fatal, *skoks* was also capable of curing an apparently fatally ill patient (Ray 1963:47). These instances are, however, typically extreme cases, when no other spirit-helper will suffice or when the spirit assembly at a curing ceremony failed to reach consensus. In such instances, the ghost spirit is called upon to trump the stalemate (Ray 1963:57).

In some of the myths, Curtin describes *skoks* to be more like medicines rather than merely dangerous apparitions. In one particular tale, an old woman sends her *skoks* into a nearby man to make him scream in order to save the life of Bear-Woman, whose soul had left her body. The *skoks* was the old woman's medicine (Curtin 1912:226).

Souls and ghosts are sharply distinct from spirits. According to Spier, spirits are beings that live in the mountains, in river eddies, and in lakes where they are sought out by those in search of power (Spier 1930:100-101). A list of Klamath spirit places where people traditionally went in search of power may be found in Spier (1930:98-100).

Acquisition of Supernatural Power

Klamath and Modoc religion revolved around the acquisition of supernatural power. While Spier reported that the quest was open to everyone (1930:94), Ray stated that this practice was restricted to shamans (1963:31). The discrepancy may be one of terminology. Ray's description of the Modoc crisis quest for ordinary individuals is nearly identical to the power quest ritual described by Spier (Ray 1963:77-81). Thus, I find it likely that the Klamath power quest and Modoc crisis quest were one and the same, and that Ray's distinction may have arisen from the differences in the kinds of power sought by shamans versus non-shamans.

Power Quest

Among both the Klamath and Modoc, there was considerable emphasis on "making artificial rock piles for religious or commemorative purposes and for attributing mythological significance to rock piles of unknown origin" (Ray 1963:xiii). For the Klamath and Modoc, spirit power was necessary for all aspects of life, and was sought by nearly every member of the community (Spier 1930:93). The quest is called *spu'tu*. The power is made manifest in a song heard in a dream (Spier 1930:94). Spier describes the initial ritual thus:

A boy is sent into the mountains on a vigil of several days, perhaps five, at puberty, that is, when his voice changes. He seeks power that he may acquire property, be a good hunter, become rich, a chief, and be able to do all the things that are difficult. (One does not need power to become a fisherman, for instance). He must fast and must not touch his hands to his face, but must use a scratcher instead. He must sleep without covering and warm himself only occasionally by a little fire. He runs constantly throughout the night, piling rocks into high piles (called *sewa'l*) and swimming in the mountain pools. He prays, calling loudly to the spirits, and finally gets an answer. At night he may see a spirit with blood flowing from his mouth; then he faints and when he wakes he too will have a hemorrhage (*djakglekge'ka*). He "nearly dies" before he secures the song (Spier 1930:95).

The same method for gaining spirit power is observed by a mourner, gambler, or shaman, although swimming in deep river eddies was more frequently mentioned in this connection. Nevertheless, these seekers will still go to the mountains to fast and pile rocks (Spier 1930:97). No mention is made of rock art being a part of the power quest ritual.

Shaman's Power Quest

The shaman's quest for supernatural power is much different than that of other individuals, in that, the power he seeks comes from a spiritual beckoning, prompting him to learn the ways of "doctoring." Spirit power for the ordinary individual, by contrast, is vague and meant only to aid them in succeeding in their various pursuits. The spirits gained by the shaman became the primary source of his professional livelihood. It should be noted, however, that shamans

considered themselves to be the servants of their spirit-helpers. That is, they were the vehicles for all spirit activity. I discuss this further below.

According to Gatschet (1890a:xcviii), the training period for shamans lasted up to five years. Ray, in contrast, described a detailed process that could have been completed in just a few weeks. Each phase of the shaman's spirit quest was characterized by a specific function that included the spiritual call, the acquaintance with the spiritual universe, and finally, the shaman's acquisition of particular spirit-helpers, or familiars (Ray 1963:35). The spiritual call came in the form of a dream at anytime during a man's life, and after menopause in a woman's life. During the dream, spirits appear, but they are vague and the dreamer does not remember them upon waking. These dreams continued for about five days. At their conclusion, the dreamer would decide whether or not to pursue training as a shaman. In order to become a true shaman, further steps were necessary on the part of the dreamer (Ray 1963:31-32).

Following the spiritual calling, the supplicant devoted five days to a quest in which he sought personal contact with the spirits. The supplicant visited places where spirits were known to dwell, usually in the early morning and late evening. The most common of these places included the deserted house pits of deceased shamans, as well as the places where they had performed their rituals. The seeker visited these places one after another. According to Ray, "Other spirit sites were the former gathering places of mythological beings, and certain pits and depressions other than those of deserted houses." Sometimes, pits and depressions other than shamans' former dwellings were also used (Ray 1963:33). At each of these locations, seekers would simply lie down and sleep. During these dreams, all the spirits of the universe appeared, but did not speak. Most were animals, according to Ray, but some were humans in miniature form, each having a distinctive sex. "Different songs were associated with each sex of the paired spirits." Once again, the dreamer did not remember the appearance of these spirits with sufficient accuracy. By the end of the fifth day, all spirits had passed in review. At this point came the most dramatic event of the quest: "As he stepped into the pit, the seeker fell 'dead,' that is, unconscious" (Ray 1963:33-34).

At this point, the seeker caught a glimpse that vaguely resembled a partial human skeleton figure. When it disappeared, the voice of the Ghost Spirit announced to the seeker that he or she would now be a doctor (shaman) and proceeded to give further instructions for the third and final phase of the spirit quest. During this period the seeker stayed at home, observed various taboos, and awaited the appearance of specific spirits (Ray 1963:34). Spirits once again visited the seekers in their dreams as they slept in their beds. The spirits that came were much fewer in number than before. They appeared individually and spoke directly to the dreamer, each giving the supplicant specific instructions and a song, which the seeker sang immediately upon waking. Family members observing the ritual joined in the singing. This went on for five days. These spirits became the new shaman's familiars, which he or she would use ritually for the rest of their careers (Ray 1963:35). Although shamans never sought additional spirits, they might nevertheless return to the house pits or any other spirit haunt to renew their power (Ray 1963:36).

Given the private and secluded nature of their settings, special use areas were probably places where shamans underwent various ritual self-deprivations in order to induce dreams, or trance.

Ray's description of these rituals, which I described in chapter 8, though detailed, lays out a process that could have been completed in just a matter of weeks (Ray 1963:31-36). While this seems feasible, Gatschet reported that the shaman's apprenticeship took a period of up to five years to complete (Gatschet 1890a:xcviii). This discrepancy is likely due to the varying degrees of knowledge held by Ray's informants. By definition, power quests were private affairs, especially for shamans. Accordingly, there is every chance Ray's informants simply did not know the whole procedure. One source that could account for the discrepancy may be found in the mythic tale, *Latkakaws* (Curtin 1912:7-10). In this story, *Kumush* (*Gmokam'c*) sends his son *Isis* to a number of sacred places throughout the Klamath Basin to swim, fast, pile rocks, and pray to the mountains for wisdom and strength. In a later text, *Kumush* specified that only certain men would undertake such quests: "Those who go to the mountains must ask to be made wise, or brave, or a doctor [emphasis mine]. They must swim in the *gauwams* [springs or ponds] and dream," (Curtin 1912:45). Curtin's description of the quest is much more extensive than Ray's; the places *Isis* went for spirit power are located as far as 196 kilometers from the heart of Modoc territory. This is, perhaps, the reason why Ray's description falls short of the five year-period proposed by Gatschet.

Shaman's Initiation

Following the final presentation of spirits, in which they taught their songs to the shaman, the only element of protocol remaining before practice could be assumed was the initiation ceremony. This came in late fall. The ceremony was essentially an elaborated announcement that novice shamans were ready to offer their services (Ray 1963:37).

Prior to the ceremony, invitations were sent throughout the territory, and people often traveled great distances to attend (Ray 1963:38). Ideally, the ceremony lasted for five nights, but this depended upon whether novices were able to amass sufficient quantities of food for the guests and, of course, the extent of their power songs. Five days and nights were ideal, but shorter ceremonies were common (see Spier 1930:113; Ray 1963:38).

The ceremony took place in the shaman's own lodge. Not only was this lodge spacious enough to accommodate large public gatherings, but it differed significantly from other lodges in that it was decorated inside and out. According to Spier,

The posts are painted with horizontal stripes, alternately red and white. They are not carved. According to one informant, men's faces, snakes, lizards, animals of all sorts, but not spirits, are painted on the posts; but I doubt this. The grass-stuffed skins of various animals and birds, probably all of them representing the shaman's spirits, are hung under the slanting roof beams; mink, skunk, crane, *tcauwilo'ks* (a duck-like bird), butterball duck, white shitepoke, rattlesnake, a big speckled snake, and the dried skin of the lizard were mentioned. The birds have outstretched wings. Standing on the roof of the lodge on the northern side of the hatchway, is a wooden image of *tcakia'k*, the little boy spirit, made by the shamans. Head, trunk, and arms are rudely carved and painted. Red-shafted flicker (yellowhammer) feathers are fastened around its neck (only shamans wear feathers of this bird) (Spier 1930:109).

On the first day of the ceremony, a ritual pole was also erected near the entrance that had been cleared of branches and painted red. Attached to it were various pendants that symbolized the shaman's spirits (Ray 1963:37).

Although Ray (1963) and Spier (1930) each differ slightly in the details, each of the days and nights followed a similar pattern: on the first day, the shaman and accompanying helpers began with an early morning fire dance. This lasted all day and was not repeated for the remainder of the ceremony. Its purpose was to call upon the spirits to give the shaman strength to perform the feats that follow. The morning following this dance, everyone except for the shaman went to bathe, in spite of the freezing water temperature (Spier 1930:113-115). The nights were given over to sleight of hand tricks. This is the only part of the ceremony where children were invited to attend. Most important are the fire-swallowing and arrowhead swallowing tricks. The latter, in particular, required little light and thus the firelight was allowed to die down considerably. After swallowing as many as twenty arrowheads, the shaman and interpreters sing to the bear spirit and soon the arrowheads reappeared (Spier 1930:114). Other tricks included making the stuffed birds and animals hanging about the lodge appear to come to life, flying and dancing about as the shaman sang their power songs. The stuffed animals were believed to be spirits (Spier 1930:117).

Following the first night, the ensuing four days and nights were filled with singing and dancing. During this time the novice shaman repeated songs that had been sung by previous shamans in order to demonstrate that he or she was now the new medium for their power, and they also introduce their own songs, which the observers would repeat in chorus (Ray 1963:40). At the end of the ceremony, the ritual pole and pendants were taken down and hidden away to protect laymen from touching them and becoming ill (Ray 1963:41).

Ideally, a shaman would repeat this performance for five consecutive years. However, at the conclusion of the first ceremony, the novice was officially ready to cure. For a more complete description of the shaman's initiation ceremony, the reader is directed to Spier (1930:112-118) and Ray (1963:37-41).

Sickness and Curing

Sickness, among the Klamath and Modoc, was believed to be caused by spirit activity, from which an intrusive object was introduced into the patient's body. The only way to cure the patient was to remove and destroy the object (Spier 1930:122). Shamans were tasked to affect such cures.

To understand the logic behind the shamans' choice of medicine spirits, it is important to understand the procedure they used to cure a patient. These steps included the shaman's "preparatory acts, the diagnostic procedure, and then the curing procedure" (Ray 1963:55). I have summarized Ray's description below.

Preparatory acts involved contemplation and smoking. This went on for a time until the shaman felt ready to assist the spirits in attacking the disease. Then, during the diagnostic procedure, shamans called upon the spirits by singing their songs in turn. Among the first summoned was Lightning, because this spirit's light gave the shamans sufficient sight to identify disease-causing

spirits that were invisible to everyone else. When all spirits had been summoned, they proceeded to debate among themselves through the voice of the shaman, trying to identify the disease-causing culprit. This could go on for some time, and if a stalemate resulted, the ghost spirit was called upon to break it (Ray 1963:55-57). No matter what the cause of the disease, the cure was always the same: removing it by sucking it out of the patient. According to Ray, “The only theory was that of an intruded object or matter. All intrusions were caused directly or indirectly by spirits,” (Ray 1963:59).

As I indicated in chapter 6, selection of particular spirits was not a haphazard affair. Some property or characteristic of the spirit figured into their role in the curing ritual (see Spier 1930:133; Ray 1963:46-47). Describing a healing ritual, Ray (1963:56) states that at one point during the performance, a spirit will enter the shaman and the shaman becomes the voice of the newly arrived spirit. Spier furthermore reports,

The shaman is *possessed* [my italics] during his performances. He is the vehicle of the spirit; the spirit sings with his voice, sucks with his lips, and sees with his eyes. It is not in him at other times, but in its home in the mountains or under the water and must be called on to enter his body (Spier 1930:109).

Mu'lwas

The importance of songs or incantations in shamanic rituals cannot be overstated. Singing was critical to the ritual process. According to Spier, “One word, *swi'is* means song and spirit being.

. . . [W]hen it is said that a man has a Coyote *swi'is*, for example, it means that he has the appropriate song or songs and that this animal is his supernatural helper. The spirit never manifests itself but in a song; the singer is the vehicle, the voice of the spirit. Song and spirit are one and the same thing (Spier 1930:95).

Gatschet's data supports Spier's observation:

Kiuksam shui'sh is not merely a conjurer's song, but a mysterious agency connected with a spell of preternatural power. This spell is not exclusively attached to a drug, or by that kind of witchcraft which is called elsewhere the evil eye. *Kiuksam shui'sh* is therefore a beneficial or destructive *tamanuash* [spirit power] agency, which when applied to a patient can cure him or make him worse; when appearing under the shape of a dream, it is a dream of good or one of bad augury (Gatschet 1890a:159).

Aside from mythical animals and beings, shamans had access to an immeasurable toolkit; pretty much anything they found to be useful could be called into ritual service (Spier 1930:132). The Klamath and Modoc call such items “*mu'lwas*,” which are shamans' tools or ritual paraphernalia. Gatschet identified *mu'lwas* as a

curing implement [or] magic help of the conjurer in his treatment of the diseased. Articles serving for this purpose are bird feathers, scoops, otter-skin scalps, rattles, rabbit- or fox-skins, etc (Gatschet 1890b:221).

All items decorating shamans' lodges and making up their medicine outfits were considered to be *mu'lwas* because of their symbolic association with spirit power (Spier 1930:110). The subjects of incantations are, by nature, charged with supernatural potency and, accordingly, serve as shamans' *curing implements*. *Mu'lwas*, then, symbolized spiritual medicine which shamans invoked through singing.

The fact that rock art images were also called *mu'lwas* indicates that they, too, represented spiritual medicine. Because shamans were said to sing to them, it follows that they must have been considered curing implements. According to Spier,

The Klamath do not make pictographs. There are however a few in their country, said to have been made by Kemu'kumps, the culture hero. *They refer to them as shaman's mu'lwas, paraphernalia or, better, objects pertaining to a shaman* [emphasis mine]. They are repainted from time to time by old men, "who work for a shaman," by which my informant may have meant shaman's interpreters (Spier 1930:142).

Given the importance of myths and shamans' incantations, then, it is noteworthy that Gatschet stated that *shamans also sang to painted rocks* (see Gatschet 1890a:179; Gatschet 1890b:149). Lest we forget, singing was a wholly spiritual activity among Klamath and Modoc shamans. The very act of singing to them indicates that painted rocks are associated with spiritual power, implying by extension that the images must derive from myth, just as do the subjects of incantations recorded by Gatschet. In short, myth, incantations, and rock art are all one and the same.

Conclusion

In this chapter, I discussed aspects of Klamath-Modoc spirituality that I thought relevant to my study. Each aspect contributes added meaning to the rock art. In the section on shamanism, I reviewed the basic tenets of the role and described some of their self-promoting behaviors that ultimately led them to create a certain category of rock art (see chapter 7).

I furthermore distinguished between spirits, souls, and ghosts and provided a rudimentary description of the spirits that shamans used in various rituals. These spirits, in particular, are what we see represented in the rock art.

In a similar fashion, I distinguished between ordinary power/crisis quests conducted by most members of Klamath-Modoc society from those carried out by aspiring shamans. The stacked rock features left over from the ordinary power quest provide context for some rock art sites, while Ray's description of the shaman's spirits in the shaman's power quest will inform some of the interpretations I offer for rock art in *special use* contexts.

In my description of the Shamans' Initiation ceremony, I tried to show how every aspect of the program symbolized and reinforced the spiritual matrix within which shamans exercised their curative powers. Their behavior, songs, and dances invited spirits and recounted their special powers. Even their lodge décor (including paintings) was so completely representative of spirits that it defies logic to expect that they would *not* also paint these spirits on rock canvases, particularly those they believed had deep spiritual meaning.

In the Sickness and Curing discussion I showed the relationship between the shamans' curing ritual and the spirits involved in the procedure. Finally, in the *Mu'lwas* section I pointed out that many of these spirits are represented, in whole or in part, in the rock art.

Detailed application of these concepts is discussed in the following chapters, where I discuss rock art in various contexts. A more complete discussion on the topic may be found in Gatschet (1890a: lxxix-cvi), Spier (1930: 93-143), and Ray (1963: 18-81). In the next chapter I review the literature I consulted in preparation for this study.

Chapter Four: Literature Review and Previous Research

Introduction

In this chapter I review the research literature and approaches I consulted for this project. I divide the chapter into three main sections. In the first section I discuss various landscape archaeological approaches to rock art studies that have been employed within approximately the last twenty years, while in the second section, I review general ethnographic approaches to rock art studies. In the last section I review previous research in Klamath Basin rock art that include the ethnographic studies that have been done specifically with the Klamath-Modoc, and also a sample of the academic research that has been done.

Landscape Approaches to Rock Art Research

In this section I discuss examples of both formal and informed landscape methodologies that have been applied to the study of rock art. The interpretive framework that differentiates between “formal” and “informed” (for example, informed by ethnography or history) was developed explicitly for rock art research by Chppindale and Taçon (2004). According to them, informed methods are those that depend on some source of insight passed on directly or indirectly from those who made and used the rock art. By contrast, formal methods are those that depend on no inside knowledge, but instead provide information based on structured studies and scientific methodologies (Chppindale and Taçon 2004:14). Arsenault (2004) further notes that formal approaches tend to view landscape as a neutral backdrop against which social actions occurred, while informed approaches view it as a social phenomenon that is the object of symbolic practices and representations. Nevertheless, even though these approaches are philosophically different, they are not mutually exclusive. If used in tandem, researchers may define the archaeology of landscape as the “totality of the physical and symbolic resources formed within a specific region seemingly associated with sacred sites” (Arsenault 2004:73). In my study, I made it a point to use a combination of formal and informed approaches by first establishing a formal pattern based on three contexts, and then by offering informed interpretations for the art within the respective contexts.

Formal Methods

In the following section, I describe three aspects of formal approaches to landscape. These include the creation of analytical units on the landscape for comparative study; the application of formal theory to explain rock art and its patterning on the landscape; and those that approach the rock art panels themselves as landscapes at a microscale.

Researchers have found a number of ways to organize the landscape into plausible units of analysis. Bradley et al. (1994) accomplished this simply by comparing rock art complexes within two naturally-occurring settings. Focusing on the rock art of Galicia, in Northwestern Spain, Bradley et al.(1994) divided their study area into two groups of sites, one that focused on the river valleys drowned by rising sea levels, and the other group were those sites along the edges of the uplands. Studying rock art sites in their precise topographical settings enabled the authors to offer interpretations at different geographic scales. In a similar fashion for a study of rock art in Galloway, Scotland, Bradley et al. (1993) overlaid their sample area with an imaginary grid based on 100 meter intervals and then examined the closest rock exposure to each grid intersection for surfaces suitable for rock art. They mapped these suitable surfaces and

compared them with the locations of actual carved rock sites, hoping to draw comparisons that hinted at preference. Viewshed analysis based on compass bearings at various distances demonstrated there was a relationship between rock surfaces containing art and those with the greatest viewshed. Working in Norway, Fry et al. (2003) modeled the spatial distribution of archaeological sites based on simple landscape indicators from Reformation period (AD 1537) land use and settlement patterns, using combined perspectives from landscape archaeology and ecology. Hypothesizing that prehistoric agricultural settlements and their associated graves were situated on lighter, well-drained soils that were easy to work, they consulted the national database of cultural sites, focusing particularly on information from land use and elevation and management map layers. With the assistance of local land use potential maps, they created a digital elevation model (DEM) to identify optimal convex locations where archaeological sites should occur. Then they overlaid this map with known monument locations and found that it corresponded precisely with known sites. Oubina et al. (1998) made a similar dissection of the landscape in an area of Galicia in Northwest Spain, where they selected five relief units that each exhibited its own ideal environmental characteristic, then drew an imaginary north-south transect in this area. Each relief unit corresponded with specific landscape characteristics such as slopes, flatlands, and valleys. By dividing the landscape into specific environmental zones in this fashion, and incorporating local historical and archaeological analyses, the authors were able to correlate individual relief units with documented pre/historic land use practices, each of which corresponds to changing rock art styles and distribution patterns over time. Finally, Hyder (2004) calls for a formal methodology that links locational variables with expected human behaviors, but cautions that “such methodology should acknowledge the interpretative limitations set by any given scale” (Hyder 2004:87). The three environmental levels of analysis archaeologists usually recognize include the micro-, meso-, and macro-, each corresponding to the local site, topographic, and regional environments, respectively. Each scale presents its own inherent limitations. Researchers must be aware of the scale of the system under study and ensure that there is an appropriate fit between the questions asked and the data to be collected.

An important aspect of my dissertation focuses on where shamans placed their symbols on the landscape in relation to where others were going or what activities they were engaged in. The structuring of encounters with their art gave shamans a powerful mechanism for displaying and reinforcing the ideology that contributed to their prestige. Each of the following readings that I discuss here addresses how prehistoric peoples created or utilized natural patterning in the landscape in order to effectively display their art. Thomas (1993), for example, brings together time-geography and structuration theory in order to formulate interpretations for created space in Neolithic Britain. He explores *historical phenomenology*, the study of the structure of thought, to offer an interpretation of megalithic complexes of the British Isles (Thomas 1993:75). Drawing on Hagerstrand’s principle of time-geography, Thomas shows how the monuments and barrows of Neolithic Britain were used to *presence* (introduce) absent persons into social discourse by means of metaphors and mnemonics and thereby influence the nature of interaction. Integrating such spaces into everyday life was important to both the creation of routine and social reproduction (Thomas 1993:77). In North America, Swartz and Hurlbutt (1994) employ concepts drawn from art, architecture, social philosophy and animal behavioral studies in order to propose interpretations of both the rock art and the space in which it is exhibited. They note that these discipline-bound theoretical formulas overlap in many areas. But properly integrated, they form a “unified space model” that can serve as a device to help explain and better

understand archaeological phenomena in settlement patterns and petroglyph interpretation. Diaz-Andreu (2002) applies her concept of “ritual depth and identities” to post-Palaeolithic paintings of Villar del Humo, Spain, which previous researchers had established was made manifest on both sacred and secular landscapes. She observes that some rock art concentrations were situated in places of higher visibility than others, and that the rock art style differs drastically between them, suggesting that the ritual topography was structurally restricted. Furthermore, she suggests that the absence of children and females in the subject matter indicates that the motifs represented exclusively men’s ritual. And finally, since access to the more “sacred” of these sites was topographically restricted, she reasons that only some men may have been privy to the art. Many of the sites I investigated, particularly those in *frequently used areas*, show evidence for the kind of intentional “structuration” Thomas describes.

Finally, some authors have recognized the importance of the rock face itself in formal analysis and have approached the rock face as though it represented a “landscape in miniature” (Keyser and Poetschat 2004:118). I have noted instances in Klamath Basin rock art where prehistoric artists incorporated natural cracks, fissures, and even natural mineral stains from weathering into their designs, thereby creating a metaphor that includes both the painting and the rock surface itself. While I did not employ a structured approach to these instances during this project, I kept watch for instances of panel face interaction nonetheless. The authors I review in this section each discuss some of the reasoning behind this approach as well as propose a logical, methodology for employing it. Nash and Chippindale (2002), for instance, point out that prehistoric artists intended for their creations to be permanent parts of their locale, and they stressed that recording practices that abstract images from rock surfaces have omitted key information. The intentional placement of images on a rock face may denote a selected order, such as a visual narrative or sequences of a ritual performance. This kind of ideology is what Denton (1993:vii-viii) called the “invisible landscape”, and should serve as a critical component of rock art interpretation. It also is a good example of the microscale level of understanding rock art in its landscape context discussed above (Hyder 2004:87).

Keyser and Poetschat (2004) take a more direct approach and identify five forms of interplay between rock art images and the rock canvas from two sites in the John Day River drainage, in Eastern Oregon. Guided by insights gained from local ethnographies, they propose an interpretive model to help explain the interaction. More specifically, ethnographic information suggests that the reasons for this relationship between rock art placements and the particulars of the rock stems from the indigenous belief that the rock face itself was an interface that separated the physical and supernatural worlds and that vision quest experiences recorded on rock denote this relationship by incorporating natural rock face features into the imagery. The rock art is thus not placed “on” the rock surfaces, but are within or emergent from the rock faces. Keyser and Poetschat suggest that where this kind of panel face interplay is evident, this insight can serve as a model to enhance interpretations of rock art in regions where no ethnography exists.

What is readily apparent in the formal approaches I reviewed above is that few are purely formal. Whenever possible, researchers should strive to use both approaches in tandem, in order to propose more comprehensive explanations for the rock art. In the next section I review a selection of informed approaches to rock art that I found particularly relevant to my own study in

the Klamath Basin. A more thorough examination both formal and informal studies may be found in Blundell et al. (2010).

Informed Approaches

Researchers often derive and define more formalized structures based on information drawn from ethnographic texts, myth, and oral narratives. For example, Hann and Bettles (2006) derived their concepts of the Klamath-Modoc “sacred geography” from local myths. My own study is based on a formal structuring within the cultural landscape overlaid with interpretations informed by ethnography, myth, and oral narratives. The readings I reviewed below derive from similar studies and, in conjunction with the formal methods listed above, formed the foundation for the model which I later proposed for this dissertation.

Drawing upon modern ethnography and concepts of liminality to propose interpretations, Helskog (1999) investigates the topographical implications of prehistoric rock engravings in the shore zones of northern Scandinavia and in Karelia in Russia. Ethnographically, the shore zone is where land, sky, and water meet, and was thus a place where shamans could gain access to all three of these realms. Accordingly, Helskog argues that its liminal setting made the shore zone an appropriate place for rituals of passage that led to the production of the rock engravings. In a similar manner, Loendorf (2004) examines a number of Dinwoody style rock art sites in central Wyoming, pointing out that the unique images are related to vision questing by Shoshone peoples. Ethnographic informants reported seeing a variety of animal and human and human-like forms in their visions (Hultkrantz n.d. II:51). These are the same images depicted in the rock art. Loendorf also notes that the way these spirit beings are organized on the landscape offer a true reflection of Shoshone cosmological beliefs, with birds and three-digit anthropomorphs (sky people) located in the mountains, quadrupeds (ground people) in middle elevation sites, and water-related figures (water people) are most common at lowest elevation sites. Working in the county of Devon in England, Riley and Harvey (2005) are concerned with people’s lived experiences on the landscape, which they note has experienced numerous shifts in usage throughout the centuries. Arguing that the academic voice is privileged in representation and interpretation of cultural phenomena, the authors explore the ways in which an oral history approach to archaeological interpretation can augment, destabilize, and even challenge existing scientific knowledge, as well as offering alternative narratives.

Whitley (1998) draws upon multiple lines of inquiry related to landscape, cosmology, and iconography to derive interpretations for the rock art in far western North America. Interpreting rock art images in this region, he explains, is a matter of understanding the indigenous landscape as derived from ethnographic and ethno-historic sources. In addition to the images, the physical location, geomorphic attributes, and the rock panel faces themselves were also symbols in their own right and must be interpreted on their own and in conjunction with all other components of the site. Accordingly, it was the contextual association between the images and their surrounding multilayered context that gave them potency. Finally, Whitley, Loubser, and Hann (2004) draw upon ethnographic and mythological resources to propose interpretations for rock art on the Modoc Plateau of Northern California. Structuring their inquiry are notions of landscape symbolism, in which certain indigenous concepts of sacred space are thought to determine and justify where rock art appears on the landscape. These notions derive most directly from localized myth and are enhanced by other ethnographic clues. Guided by this, they

explore these rock art sites that, given their mythical warrant, were believed to be heavily imbued with supernatural potency.

Ethnographic Approaches to Rock Art Research

While the use of ethnographic materials for interpreting North American rock art has enjoyed a relatively recent resurgence (see Layton 2001:311-331), not all those who attempt to do this have resulted in a uniform level of success. Part of the reason for this stems from the fact that not all ethnographers of the late 19th and early 20th centuries were able to uniformly access clear and detailed information from Native American tribes concerning their rock art. For example, ethnographic explanations for the rock art of the Columbia Plateau groups are very descriptive and highly detailed (Keyser and Whitley 2000). On the other hand, ethnographic information concerning rock art in the Klamath Basin is cryptic at best, often shrouded in metaphor. This has made its use in rock art interpretation a dubious affair, and not all researchers are convinced of its utility or validity. In the section that follows, I focus on the variety of ways researchers have used ethnographic explanations to assist them in their rock art studies. Specifically, I review authors who have used ethnography to make analogies, those who have focused heavily on myth for insight, and those who offer critical perspectives toward its use in rock art research.

Ethnographic analogy has long been a topic for debate and discussion in archaeological reasoning (see Wylie 1985) and I will not here rehearse those discussions. In some instances, ethnographic texts from two groups such as the Klamath and Modoc can be used to complement one another, thereby providing a more complete context for the art, such as in the Klamath Basin, where I use ethnography from both Klamath and Modoc groups to derive interpretations for the art. In other cases, ethnographic analogies from one area can potentially provide insight or context for rock art in areas where no ethnography is available. For instance, although no ethnography exists that describes the life ways and customs of the prehistoric Cummini people of Valcamonica of Northern Italy, Fossati (2006) points out that previous researchers did record the original traditional names of rock art sites in that region. The folklore associated with these ancient names today enables researchers to gain important insights into the meaning of the rock art. Keyser et al. (2006) use analogies from ethnographic information collected from mobiliary or portable art for which this kind of information is available, to gain insights into Northwest Coast rock art in North America for which this kind of information is not available. Specifically, they focus on a stone sculpture from the Portland Basin locally known as the Beaver Bowl. Effigy bowls like this are among the most common on the Northwest Coast and on the lower Columbia River. Ethnographic information reveals that these zoomorphic bowls represent animals considered by western North American Indian tribes to be special spirit helpers because of their ability to transcend the boundaries between land and water, land and air, and day and night. Metaphorically, shamans were believed to transcend the same boundaries, including the boundary between life and death. Accordingly, these bowls functioned in a variety of ritually-related roles. Thus, Keyser et al. (2006) propose that this idea about shamans' paraphernalia can be extended to conceptualize rock art in similar terms. Elsewhere, David Lewis-Williams (2006) uses ethnographic information from San groups living in one region to gain insights about the rock art made by another group living elsewhere. This can be accomplished between groups that shared—or at least participated in—a common belief system, even when only one of those groups produced rock art. In another study, Lewis-Williams (1980) used ethnographic analogy to reconcile overtly contradictory explanations about rock paintings given by two 19th century

San informants. One informant was native to the area where the paintings were located while the other lived 600 km to the west. Deeper analysis of general San ritual and belief led Lewis-Williams to conclude that statements made by each informant show an overall uniformity in their explanations of the paintings. Finally, Loubser (2006) distinguishes shamanic from shamanistic rock art (see also Lewis-Williams n.d.) and proposes that this difference conditioned the way in which its creators placed it on the landscape. Focusing on the art of Sub-Equatorial Africa, he identified the characteristics for each type of art based on well-documented ethnography and ethno-history. Shamanic art was highly ritualized at every stage of production, including the manner in which the pigment was procured. Its production and imagery derived from trance and ritual dreaming, and the art was situated in conspicuous places, intended for public viewing. Moreover, the creation of the art took great skill and care and often incorporated features of the rock face to express interaction with the supernatural world. By contrast, shamanistic art was made by non-shamans who experienced a private trance or dream. No ritual was involved in the procurement or treatment of the pigments, and the art was situated in places not easily accessed or seen by the general public. Moreover, the art itself was done quickly and exhibited little skill or care. Although the distinction between shamanic and shamanistic art is not a rigid one, Loubser says that it might nevertheless give some clues on how to interpret rock art traditions that lack the benefit of ethnographic texts (Loubser 2006:248).

Although myth is a part of ethnography, I distinguish its use by the following researchers based on its heavy emphasis in their studies. Those who utilize myth in rock art research have applied it in a variety of ways that range from exploring the ways aboriginal peoples socialized their landscape, especially where rock art is located, to examining details of the stories to gain insights into the meaning of the designs themselves. Others, like Solomon (2002) have used it to provoke others to rethink established ideas about rock art symbolism. Referring particularly to studies that link San rock art to trance ritual (Lewis-Williams 1980), Solomon (2002) argues that direct linkages between San ritual and rock art do not exist. Rather, the ethnographic references that have been used to make a case for shamanic ritual as key to the rock art recount a number of myths that describe the predecessors of the San on earth. Instead of the trance metaphor proposed by Lewis-Williams (1980), she suggests that these paintings must be seen in relation to the version of the San's mythic past. Preoccupation with death, regeneration, and reversal in San myths are parallel to the central concerns of shamanism and its imagery, but according to her, do not necessarily represent ritual trance metaphors. Hann and Bettles (2006) focus on a small cave in Northern California that was believed to be the home of the Klamath-Modoc creator *Gmokam'c*, and his daughter. Identified ethnographically as a shaman's cave (Hann and Bettles 2006:186-187), the site's location corresponds well with the sacred geography described in myth (Hann and Bettles 2006:183). Accordingly, layers of mythic reference gave this site its sacred warrant. A careful application of mythic and ethnographic references helped Hann and Bettles to arrive at informed, insightful interpretations of the cave's overall function, the rock art, and the ritual remains therein.

In a similar way, Gunn (1997) cites Vinnicombe's notion of "site complex" and argues that archaeological sites may be either physical or symbolic sites, or both. He explains that while physical sites involve features that were modified by people who left behind traces of past activities, symbolic sites are cultural places related to a physical component that cannot be identified archaeologically. The symbolic landscape refers to the assignment of meaning to

natural features (see also Bradley 2000) Even though this kind of site will contain a record of ritual or art sites, their symbolic aspects (e.g. their association with a particular deity) will remain archaeologically invisible. Only people familiar with myth or local oral traditions can identify the symbolic aspects of a site. In a more recent study, I explored the relationship between Klamath-Modoc myths and selected items that shamans used in the performance of curing rituals, including rock art (David 2010). While local myths provided clues about the meaning of rock art symbols themselves, on a deeper level, they also helped to explain the where rock art and ritual objects were placed on the landscape.

As I previously indicated, the use of ethnography had met with resistance by some researchers and complete dismissal by others (Grant et al. 1968; Heizer and Baumhoff 1962; Malouf and White 1953; Over 1943:3; Steward 1937). In view of the resurgence of ethnographic inquiry related to rock art, a number of researchers have cautioned us about the various pitfalls we face when applying these sources toward rock art interpretation. Layton (2006), for example, cautions that there are internal dynamics that occur between the producers of rock art and the non-artist viewers, and as a result their common experiences later influence their interpretations. Layton states that this enculturation in knowledge influences not only how knowledge is recalled by those who participated in specific cultural systems, but also how archaeologists interested in rock art conduct their studies. Rather than construct a kind of generic shamanic “shopping list,” he calls on researchers to be as sensitive to variability as to common themes if we are to appreciate the ethnographic data on rock art provided by native instructors. Sundstrom (2006) similarly identifies pitfalls in using information recorded or reinterpreted by those outside the culture. Not all ethnographies, she says, were created equally. While some ethnographic statements related to rock art are straightforward and easy to understand, others are shrouded in metaphor and require a more complete knowledge of the culture under study. Good ethnographic statements, she says, are attributed to a specific person or persons, contain information about the speaker or informants, and are clear where the speaker’s text and comments leave off and the ethnographer’s interpretation begins. Moreover, she calls for a more centralized role of native and marginalized voices in rock art interpretation, but without abandoning scientific credibility. Working in Arnhem Land, Australia, Taçon (1992) explained that if one is to incorporate knowledge of Aboriginal elders to arrive at valid interpretations for rock art, then one must have access to the customs and beliefs of those who produced it. Much of the art in this region was produced in the 20th century by relatives of modern Aborigines. Thus Taçon proposes the direct historical approach to interpretation is possible through living descendants. But when this approach is not possible, the rules for using ethnographic analogies may still be established within a well-defined territory. In particular, analogies from other close or non-related cultures in similar environmental situations can still be used to make more generalized interpretations. But he cautions that ethnographic analogies should never be used by themselves. The most fruitful use, he says, is for the suggestion of hypotheses that can be tested by other means.

Summary

In this section I reviewed how other researchers have used ethnographic analogies and the application of myth in their rock art inquires, in addition to those researchers who describe the various pitfalls involved in using ethnography in rock art research. In my own study, I utilize the ethnographic materials from both the Klamath and Modoc in tandem to provide a more detailed

social context for shamanic ritual and rock art. I also utilized local myth to help me understand the conditions in which powerful mythical beings cured sickness and disease. Focusing on these beings, and the actions they took to enact their cures, gave me insight into how shamans structured their own rituals, which I have come to accept are imitations of those actions. In short, these myths did not only inspire rock art and ritual objects, but they also served to format the rituals in which they were produced.

Previous Research in the Klamath Basin

In this section I review research that has been done in the Klamath Basin throughout the past century, beginning with the monumental ethnographic work carried out by Gatschet (1890), and concluding with my most recent paper (David 2010) on the application of Klamath-Modoc myth in rock art interpretation. I divided the section into two parts. Part one lists the ethnographic studies that span a little more than a century, and part two lists the academic research specifically focused on rock art.

Ethnographic Studies

The Klamath Indians of Southwestern Oregon, by Albert S. Gatschet 1890.

Swiss-American ethnologist Albert Samuel Gatschet was born on October 3, 1832 in Beatenberg, Canton of Bern, and died March 16, 1907 in his Washington DC home. Trained as a linguist in the universities of Bern and Berlin, Gatschet moved to the United States in order to study Native American languages, in which field he was a pioneer. In 1877 Gatschet became an ethnologist of the US Geological Survey, and in 1879 he became a member of the Bureau of American Ethnology, which was part of the Smithsonian Institution (McGuire 1907:561-562). Gatschet completed his great monograph on *The Klamath Indians of Southwestern Oregon* in 1890, published in two parts as Volume II of Contributions to North American Ethnology (Gatschet 1890a:vii). He worked among the Klamath in the late 1870s through the 1880s, obtaining the majority of his texts in the autumn of 1877 at the Klamath Reservation (Gatschet 1890a:5; Carlson 1959:88). He was very aware of the inherent limitations of collecting texts from Indians whose command of English was limited. He believed that only texts written in their own language could yield clear insight into their traditions, myths, and mode of thinking. Thus, he reported the texts in the Klamath language and inserted interlinear translations, supplemented with commenting notes of linguistic ethnographic, and historic importance (Gatschet 1890a:8). Although Gatschet's work deals with Klamath beliefs, legends, traditions, and their government and social life, he focused more extensively on the language. To accommodate this, he introduced numerous ethnographic texts with which he used to produce an extensive Klamath-English Dictionary (Gatschet 1890b). More relevant to my current study is his discussion on mythical animals that make up the spirit-helpers of shamans (Gatschet 1890a:lxvii-cvi), along with his large list of Shamans' Incantations (1890a:173-197).

An emerging field of inquiry into Klamath Basin rock art focuses specifically on the role of songs and signing (see David and Keyser 2008). I found Gatschet's list of shaman's incantations especially useful in helping me to identify specific mythical characters that were also the subjects of curing songs. Another utility of Gatschet's work that cannot be overlooked is that it was written at a time when most of his informants had lived the aboriginal lifestyle prior to the advent of the reservation periods and still retained customs and mannerisms couched in the pre-

reservation aboriginal worldview. This helped me to better understand the social conditions under which the rock art had been produced.

Myths of the Modocs. Jeremiah Curtin 1912

Born in Detroit, Michigan, Curtin spent his early life in Milwaukee County and later attended Harvard College where he graduated in 1863. Following Harvard, Curtin spent a year in New York studying law and languages, then, under President Lincoln, spent the next eight years in St. Petersburg as the Secretary of the United States legation to Russia. When war broke out between Russia and Turkey in 1877, he and his wife Alma moved to the American Midwest where they lived for the next four years. In 1882, Curtin joined the Smithsonian Institution's Bureau of Ethnology, specializing in collecting Native American vocabularies and myths (BETA AnchsAdmin 2011). Jeremiah and Alma Curtin visited the Quapaw Agency in Indian Territory that is today, Oklahoma, in 1884 and collected a large number of myths from *Koalakaka*, an old Modoc woman whom Curtin noted possessed an amazing memory. She had been among the Modoc who were exiled to Oklahoma at the conclusion of the Modoc Indian war. Later in the same year, the Curtins visited the Modoc who remained on the Klamath Indian Reservation and collected more myths from Sconchin, who, "though old and infirm, his mind was clear and active" (Curtin 1912:ix). The Curtins collected a sample of 225 myths, but they believed that there were many more yet untold. In 1912, Jeremiah Curtin published a small and edited sample of these stories in *Myths of the Modocs*. His unpublished manuscripts are housed at the Smithsonian Institution, but in 1990, under a National Science Foundation grant, archaeologist Don Hann and Tribal Member Mary Gentry worked in a joint effort involving the USDA Forest Service, Bureau of Land Management, and the Klamath Tribes to commit Curtin's manuscript to digital media. I received a copy of the resulting compact disk in 2002.

Along with the digital manuscript, Curtin's edited book of myths provides incredible insight into Modoc and Klamath shamanism and ritual. A growing body of research is showing strong relationships between myths and rock art in this region (Lee et al. 1988; Whitley et al. 2004; Hann and Bettles 2006; David 2010) and it is in this I find Curtin's work most useful for my study. These stories identify particular mythical characters that often acted to keep cosmic order in the myths. Ethnographic work by Gatschet (1890), Spier (1930), and Ray (1963) helped me to confirm that shamans relied on these same characters in the performance of their own curing rituals. It was based largely on these associations with mythic curing and shamanic ritual that I identified some of the rock art characters in my study, and by extension, related them to ritual curing.

Klamath Ethnography. Leslie Spier 1930

Born in New York City on December 13, 1893, Leslie Spier received his Bachelor of Science in Engineering from the College of the City of New York in 1915. He completed his doctorate in anthropology at Columbia University in 1920 under the mentorship of Franz Boaz (Basehart and Hill 1965:1258). In ethnology, his favorite courses included those on California, the Great Basin, the Columbia Plateau, the Plains, Southwest, Old World, and Africa. Spier's influential teaching career began in 1920 and continued until his retirement in 1935 (Basehart and Hill 1965:1259). The major portion of the data upon which Leslie Spier based his ethnological contributions derived from field investigation. From 1916 through 1935, Spier spent at least a part of nearly every year engaged in field research, working with as many as thirteen American

Indian tribes, including the Klamath and Modoc (Basehart and Hill 1965:1260). Spier collected his information on the Klamath during two month-long visits to the Klamath Indian Reservation in 1925 and 1926. He noted that Gatschet's account of the Klamath contained many data on shamans' songs and allied topics, but did not provide any systematic notion of their meaning (Spier 1930). His work contains many of the formal aspects of prehistoric Klamath life, but with considerable space devoted entirely to shamanism. It is his specific attention to shamanism, along with his general description of prehistoric Klamath life that I find most useful to my study.

Primitive Pragmatists: The Modoc Indians of Northern California. Verne Ray 1963

Dr. Verne F. Ray was born in Illinois in 1905 and raised in Washington State. He earned his Bachelor of Arts at the University of Washington and his PhD from Yale in 1957. His anthropological interests included the Middle East, the Valley of Mexico, and Indian Tribes of the Pacific Northwest. One of the first anthropologists at the University of Washington, Ray helped dozens of Northwest Indian tribes win their land claim settlements for the wrongful taking of their lands. With Ray's help, the Cowlitz tribe gained federal recognition, and in 2000, the tribe voted him an honorary member (Lydia 2004). Ray's ethnography on the Modoc stemmed from a field session undertaken by Leslie Spier (Stern 1964:676). Five field workers under Spier's direction collected data on the life ways of the prehistoric Modoc in 1934. Spier selected the informants for the study from Modoc Indians living on the Klamath Indian Reservation. His notes were subsequently turned over to Verne Ray, who had been a member of the original field crew (see Stern 1964:676). Noting that the Modoc were situated at the crossroads of four culture areas, Ray made it a point to report his data in a way that clearly set Modoc culture apart from other groups, including their immediate Californian neighbors. The manuscript was nearly completed by 1946, but Ray intended to return to the field to collect more data before publication. Administrative work and other commitments prevented this and he finally published the nearly-completed manuscript in 1963 (Ray 1963:v-vi).

Ray's work offers an excellent opportunity to compare and contrast the Modoc with the Klamath, especially in terms of worldview, myth, shamanism, and ritual. His description of the shamanistic complex (e.g. the calling, the acquisition of spirits, the initiation, and finally, the practice itself) provided enormous detail that led me to make distinctions. It is in these fields that I find his work most useful to my project.

In addition to information from these above-cited sources, I obtained further information from John Allison's 1994 study, *The Cultural Landscape of the Klamath, Modoc, and Yahooskin Peoples: Spirit, Nature, History*, Theodore Stern's 1966 post-termination ethnography on the Klamath, *The Klamath Tribe: A People and their Reservation*, and Ella Clark's (1953) publication, *Indian Legends of the Pacific Northwest*. Though hardly exhaustive, the combination of these excellent references helped to paint a picture of Klamath-Modoc spirituality and life ways all throughout the proto/historic period while offering priceless glimpses into prehistoric life ways as well.

What stands out most obviously among all of these works is the consistency and uniformity of critical cultural information over the past century of Klamath Basin research. Spier (1930), for example, published *Klamath Ethnography* forty years after Gatschet (1890) published *The Klamath Indians of Southwestern Oregon*. Ray (1963) published his work on the Modoc some

thirty-three years after Spier's publication on the Klamath, although he conducted his fieldwork only a few years after Spier had completed his. Moreover, a later work by Allison (1994), which also described aspects of Klamath-Modoc spirituality, especially in relation to the landscape, strongly indicates that much of that spiritual memory had been retained in spite of the federal government's efforts to eradicate shamanism on the reservation (Stern 1966:112). Each work, then, provided valuable insight into Klamath-Modoc spirituality that can be considered valid, in spite of the times in which they were written.

Rock Art Studies

In this section, I review the rock art research that has been done in the Klamath Basin over the past century. Although some information about Klamath Basin rock art appears elsewhere as an isolated component within wider study areas (for example see Grant 1967), I only consulted studies that treated Klamath Basin rock art exclusively. The main reason for this stemmed from the main research paradigms that persisted prior to, and even during, the time of Swartz (1978). Earlier studies concentrated on styles and cultural boundaries using rock art symbols, where they made comparisons and defined culture areas and studied intercultural interactions. And even though these studies are useful, particularly in larger-scale comparative studies, I found little information from them that I could use in my current study. Thus, following Hyder (2004:99), I remained mindful of the limitations inherent in the scale of my study and structured my review accordingly.

Before the mid-twentieth century, rock art research in the Klamath Basin was relatively scarce (Abbot 1857; Mallery 1893; Sterns 1928; Cressman 1937). While these and a few others offered sporadic treatment of Klamath Basin rock art in journals, books, and newspaper clippings, a comprehensive analysis had yet to be completed. This began to change, however, when B. K. Swartz Jr. (1978) recorded some 119 sites for the Klamath County Museum, conducting the most comprehensive analysis to date and bringing this large corpus of rock art into academic discourse. In this work *Klamath Basin Petroglyphs*, Swartz established a plausible relationship between design style and rendering techniques of Klamath Basin rock art. Then, from these data, he commented on both the interpretation and chronology of the art. Commenting on work by Heizer and Baumhoff (1962), Swartz observed that the styles they had isolated for the Great Basin coincide closely with his own complexes and thus demonstrates the validity of his approach as a *bona fide* archaeological approach (Swartz 1978:23). Moreover, as Lee et al. (1988:134) observe, Swartz sees Heizer and Baumhoff's work as support for Steward's and Cressman's contention that Klamath Basin petroglyphs are affiliated with Southern California styles.

Working over a decade later, and focusing on a particular group of sites, Lee, Hyder, and Benson (1988) conducted an extensive rock art survey, mapping, and photograph documentation of sites within Lava Beds National Monument in the hopes of guiding planned development at Petroglyph Point. They pointedly reject previous claims (e.g., such as by Swartz) that had affiliated Klamath Basin rock art with that of the Great Basin and instead proposed that it represented its own distinctive style. Then, eschewing past so-called fanciful meanings attributed to the art, including the notion that the carvings on Petroglyph Point in particular are proto-writings extending from Native American sign language, they argue instead that it was a

manifestation of religious belief that resulted from ritual activities, prayers to the gods or spirits, or attempts to acquire supernatural power (Lee et al. 1988:135-136).

Though limited in focus, the study carried out by Armitage et al. (1997) has monumental significance, in that, they provide the only chronometric rock art dates in the Klamath Basin. Responding to the suggestion that certain rock art motifs in Fern Cave, Lava Beds National Monument depict the AD 1054 supernova, Armitage et al. (1997:718) provided three chronometric dates using Carbon -14 Accelerated Mass Spectrometry (AMS). These dates are 840 ± 70 (CAMS-27229), 230 ± 70 (CAMS-27860), and 330 ± 50 (CAMS-27861). Most significant was the fact that the images believed to represent the AD 1054 supernova had been painted at significantly different times.

Loubser and Whitley (1999) studied rock art from eight sites in the Lava Beds National Monument and proposed that they derived from the spiritual power quest rituals of both shamans and non-shamans. They reached their conclusions by careful application of the ethnographic record and recently obtained data from studies in neuropsychology (Loubser and Whitley 1999: see also Lewis-Williams and Dowson 1988). Two of the most vital insights I gained from this work are that, for the first time in the Klamath Basin, purposes other than commemorating shamans' vision quests were offered to explain the rock art. Even though they described in detail the frenzied trance state by Modoc shaman, Curly-Headed Doctor, they proposed that the rock art that they related to this trance was intended to harm their enemies during the Modoc War of 1870 (Loubser and Whitley 1999:63-64). This subtle paradigm shift away from vision questing as the primary or single function led me to realize that the function of Klamath Basin rock art took on many roles, and that these roles were likely related to the type of activities (e.g. frenzied trance during the Modoc war) that took place where rock art was located.

Whitley, Loubser, and Hann (2004) focused on three rock art site complexes on the Modoc Plateau, studying the art and its location in terms of Whitley's landscape symbol model (Whitley 1994). Drawing interpretive insight largely from local mythic narratives, they noted the sites under study were located away from places where ordinary activities took place and that the art there is related to shamanic vision questing. This study was particularly useful toward my dissertation in that it suggested that a structured approach could be undertaken to study a greater sample of rock art sites, and that ethnographic information could possibly yield clues about the art in particular contexts.

Guided by what they termed the "myth cycle," Hann and Bettles (2006) also examined a Modoc Plateau site that ethnographic accounts identified as a shaman's cave (Hann and Bettles 2006:186-187). Like Whitley et al. (2004), they noted that the location of the cave corresponded well with the sacred geography described in Klamath-Modoc myth, and that the application of myth was key to deriving interpretations for the art (Hann and Bettles 2006:183).

Guided largely by Hann and Bettles' (2006) groundbreaking study, I delved into Klamath-Modoc myth and used that information in conjunction with my understanding of the shamanistic complex as described by Gatschet (1890), Spier (1930), and Ray (1963) to find corroborating evidence between mythical characters and the medicine spirits utilized by shamans. The final work cited below emerged largely from this understanding.

More recently, I (David 2010) explored the use of myth as interpretive criteria for rock art and certain sacred objects used ceremonially by Klamath-Modoc shamans. Specifically, I examined in detail selected myths, focusing specifically on the behaviors exhibited by key characters. This approach not only provided me with insight into rock art symbols and ritual paraphernalia, and but also into the processes that drove their production.

Conclusions

In this chapter, I have reviewed the research approaches and literature I consulted for this project, discussing various landscape and ethnographic approaches to rock art studies that I found especially relevant toward my own study. I followed this up by surveying selections of both the previous research and the ethnographic studies that have been done specifically on Klamath Basin rock art and the Klamath-Modoc Indians. Taken together, these studies form important, interrelated components of a larger body of informing criteria that neither can nor should be expected to stand alone. Following after Wylie (1989:15-16), Bernstein (1983:69), and Peirce (1958:40-41), it is only when these strands are woven together that they form a strong cable of mutually reinforcing evidence.

Throughout this dissertation I attempt to construct an interpretation for the rock art images by employing this very method. Ethnographic statements, myths, shamans' incantations, descriptions of shamanic ritual, semiotics, archaeological context, and rock art panel face orientation have all contributed to these interpretations and help constitute a landscape model for where differing rock art manifestations occur. Together, these sources form the strands of evidence that support my shamanic explanation for the rock art.

In the following chapters, I hope to demonstrate that weaving a support structure based on scattered and fragmented ethnographic clues can be accomplished by incorporating information from myth, shamans' incantations, and structured comparisons between contexts and rock art design styles. Following after Wiley,

It is the independence of sources, and therefore of the constituent arguments about evidential significance, which ensure that the strands of the resulting cables are not just mutually reinforcing, but are also, and crucially, mutually constraining (Wylie 1989:16).

Chapter Five: Methods

Introduction

As detailed in previous chapters, I am concerned with understanding Klamath Basin rock art within specific social contexts. For more than a decade my rock art research in the Klamath Basin has made me acutely aware of the way rock art sites in this region vary, often drastically, from one setting to the next. This suggests that the rock art may have served different purposes and been directed to different audiences and in different social and site use situations. In order to explore this, I set out to investigate the archaeological materials associated with a sample of rock art sites, ranging from temporary resource-gathering camps in the hills to permanent village complexes along the lakes and marshes. Although research has been conducted on a few of these rock art and archaeological sites, most had never before been documented. Among those that had no previous site documentation, enough ethnographic documentation exists that made intensive archaeological investigation unnecessary, while others had no ethnographic support at all, making full-scale archaeological documentation and analysis necessary.

Many of the rock art sites in my sample are well-known Klamath or Modoc sites situated within or near well-documented archaeological contexts. Most of these are village sites, although two are caves. Others are located in places far from the core residential areas, near the territorial boundaries they shared with adjacent groups. They frequently procured resources from these “hinterlands” in common with neighboring groups, such as the Northern Paiute, Takelma, Molalla, and Shasta (Spier 1930:8-10; Jensen and Farber 1982:21-22). For these peripheral sites, I was concerned with three main tasks: establishing the rock art’s stylistic affiliation with the Klamath or Modoc; establishing the origin of the site’s obsidian from documented Klamath-Modoc sources; and arriving at an interpretation of the function(s) of the archaeological site in order to determine the social context for the rock art, assuming, of course, that the rock art and the archaeological site can be shown to have some relationship or association.

Site complexity among these differential settings ranged from an isolated rock art site with two or three small paintings to those with sixty or seventy images situated next to large, prehistoric village complexes. The wide variation in site locale and complexity made it clear from the outset that a flexible methodology would be necessary. Accordingly, the range of site documentation varied widely from one site to the next, with some investigation requiring me to simply consult previous archaeological reports and others requiring that I undertake to conduct intensive surface investigations and laboratory analysis.

Prior to launching such an investigation, I conducted on-the-ground reconnaissance of each site in order to identify their components, determine their boundaries, and to ascertain both the scale of documentation they required and the logistics necessary to complete the assessment. Given the range and complexity of documentation and data-gathering activities involved in this project, the most effective way to reduce variation in field data and interpretation would have been to conduct the fieldwork by myself. As Payen noted, the more people included in the recording process, the greater the potential for error (Payen 1962:12). However, considering the scope of the work involved, this was not a practical solution. Instead, I recruited the small crew of select volunteers who have regularly assisted me in documenting Klamath Basin rock art for the past decade, thus insuring about as much consistency as possible. Prior to documenting the first site

of this project in April 2009, I held a number of training sessions in rock art and archaeological site recording techniques, and in pedestrian survey and site mapping with a specific focus on my goals for this project. From that point on I maintained close supervision over the field and laboratory work until its completion in October 2011. I closed the field and laboratory portions of this research project satisfied that my approach helped me to reduce undue variation in the fieldwork methods and interpretations.

In this chapter I describe both the field and laboratory methods I employed in order to document rock art sites, to conduct initial documentation of archaeological sites, and to collect and process obsidian samples for chemical sourcing.

Field Methods

Photography

Photography is the most efficient available rock art recording technique (Wainright 1990:56). Not only is it relatively inexpensive, but it enables us to document without coming into direct contact with rock surfaces (Swartz 2006:1). Given the magnitude of the documentation effort I faced on this project, the often great distances my crew and I had to hike to reach sites, and the fact that I was collecting data for both conservation and research purposes alike, I elected to use photography as my primary means of documentation. I accomplished this using a Nikon D-40 digital camera, blue painter's tape, a set of homemade light reflectors, a metric scale, and one aluminum extension ladder.

Although my equipment and methods might seem overly simple, I maintained strict protocols throughout the whole documentation process to ensure consistency and efficiency. I established a datum point at each site from which I took perspective photographs facing the rock art site, and then took photographs of each site datum from roughly the center of each site. I photographed each rock art panel from an established sub-datum point and likewise photographed an away perspective from each panel. Finally, I photographed each image, both with an identification label and metric scale in frame and without.

The most common challenge we faced in photographing individual rock art images was controlling the light. There seemed hardly a time of day when the sun did not cast shadows that obscured rock art images. To remedy such situations, Wainright recommended photographing rock art paintings under a light to medium overcast sky, or at night, when the photographer had total control of the light source (Wainright 1990:58, 63-66). But since it was not practical for us to wait for optimal light conditions, I sought instead to control the light by assembling sun reflectors in the field using regular aluminum foil, cardboard, and blue painters' tape. Due to mottled light created by the imperfections on the aluminum foil surfaces, it was necessary to use two reflectors in tandem. Two reflectors effectively cancelled out this mottling. Another less common obstacle we encountered was attempting to photograph rock art images that were out of reach. We compensated for this by using a standard aluminum extension ladder with the ends thickly padded so as not to damage the rock face, taking extreme care to avoid contact with rock art images when placing the ladder against the rock face.

Rock Art Site Documentation

We proceeded to document the rock art by identifying individual panels on each site and then labeling each image using blue painter's tape. We considered "panels" to be any rock face containing images that faced in the same general direction (see Loendorf 2001:60-61). We assigned each image an alpha-numeric designation and then photographed them, both with a label and metric scale in frame and without. We were extremely careful not to allow the tape to touch any of the images, including those that may have been faded or obscured by lichens. We chose the blue painter's tape for this project because it is widely recommended among rock art researchers, as it does not leave residue on rock faces (ARARA 2007:4). We next determined the direction for each rock art panel using an ordinary Brunton compass declinated at 19° east of true north. Then, using a standard folding metric ruler and rolling tape, we measured each image both length and width, its height off the ground, and its position on a metric baseline. Finally, we made a basic sketch map of each showing an outline of the outcroppings and the relative location of each panel. We accomplished this by walking along the border of the rock outcropping and charting its angles using the Brunton compass and Bushnell Sport 450 laser range finder, and then mapping in individual panels and the site datum.

Archaeological Site Documentation

During the reconnaissance phase of the documentation procedure, we identified archaeological site boundaries as best we could based on such features as the density of archaeological remains, natural features (water, rock, etc) that could have limited occupation, and established a datum more or less central to the site. Once this was completed, we recorded both the datum and boundaries using a Garmin 76S receiver, calibrated to within one meter. On our follow-up visits, we inventoried the archaeological components of each site. Armed with pin flags and standard field note books, the crew completed this using a variety of pedestrian survey techniques appropriate to each situation. Most typically, we walked transects along the long-axis of the site with no more than 10 meters separating each crew member. Sometimes, however, when the archaeological concentrations were less dense, we reverted to more meandering pedestrian surveys and pin-flagged every artifact or feature encountered. In both cases, significant artifacts and debitage concentrations were measured and mapped in relation to the site datum using a compass and laser range finder. For temporally-diagnostic projectile points we recorded the length, width, neck width, and thickness in centimeters using standard plastic calipers, and then photographed them on both faces *in-situ*, usually on a background of field paper with a scale in frame. Other artifacts such as monos and metates were likewise measured, photographed, and also left *in-situ*. This method is basically a variation of Lightfoot's "catch and release strategy" (Schneider 2005) in which the artifacts we recover are returned to their original provenience after they have been analyzed (see also Modzelewski and Gonzalez 2007:24). I used this method specifically in fulfillment of my agreement with the Klamath Tribes and USDA Forest Service to maintain site integrity and to curtail my need to curate recovered artifacts.

Crew members carefully recorded all of this information in field notebooks and on specialized forms and later, during winter laboratory sessions, completed site reports, artifact inventories, and produced site sketch maps. All of this information was then committed to digital formats and, along with all project photographs and photograph journals, was subsequently backed up on two external hard drives.

Debitage Collection

One of my goals for this project was to use X-Ray Fluorescence (hereafter, XRF) to help affiliate rock art and archaeological materials with the Klamath and Modoc tribal groups. I attempt to accomplish this in two ways. First, I identify the closest obsidian sources to Klamath and Modoc territories and demonstrate their use of these sources through comparative obsidian studies or reports in which XRF analysis have been done. Second, I conduct XRF analysis from one known Klamath Village site in order to establish a baseline for comparison with other sites. If I could demonstrate that the obsidian found at the site derived primarily from these known Klamath and Modoc sources, then the likelihood that the people at the sites were Klamath–Modoc was supported.

XRF is a method that allows an assessment of the chemical composition of the obsidian that can be compared with the known “signatures” of obsidian from specific sources (Shackley 2005:10-11). While my collection technique varied from site to site depending on local conditions, I kept the system as consistent as possible. In most cases, I established transects across the long axis of each site and placed sample plots at consistent intervals along each transect. Sample plot sizes varied between sites from two to ten meter squares depending on the density ofdebitage. As stated above, my arrangement with the Klamath Tribes and USDA Forest Service was to return anydebitage I collected to the field following laboratory analysis. To facilitate returning them to their original provenience, I recorded each sample plot with a GPS designation, each unique, thus making it easier and more precise to return thedebitage to its original sample plot after the XRF analysis had been completed. Establishing long-axis transects and sample plots worked best whendebitage was scattered more or less randomly about the site. But at other sites, wheredebitage was concentrated in just a few places, I designated each concentration as a sample plot in and of itself and obtained a ten percent obsidian sample from each.

At the conclusion of the 2011 field season, I took the 448 obsidian samples to the Berkeley Archaeological X-Ray Fluorescence Laboratory at the University of California campus for chemical analysis. Once I obtained the chemical signatures for my samples, I forwarded them to Craig Skinner, owner/director of the Northwest Research Obsidian Laboratory in Corvallis, Oregon, who attributed them to specific obsidian sources, providing me with that information.

Laboratory Methods

Given the difficulties involved in affiliating rock art with a particular cultural group, especially when there is a lack of supporting ethnographic or ethno-historic information, I conducted chemical analysis on 448 obsidian samples drawn from the four most problematic Klamath Basin sites in order to strengthen their archaeological association with the Klamath-Modoc. I considered these to be the most problematic because they are located near the periphery of their territories in places where neighboring groups may also have gone to exploit resources. The implication, of course, is that the rock art could have been made by either the Klamath-Modoc or by the other groups who used this region. This kind of analysis identifies the chemical signature of obsidian specimens by linking the samples to their parent sources. By identifying these sources, it is possible to track the routes prehistoric people travelled and to make inferences about the identity of the groups who introduced obsidian into the site. In this project, I used this information in conjunction with rock art stylistic analysis in order to establish Klamath-Modoc affinity for both the rock art and for the site occupants. It was anticipated that these two

independent lines of evidence might together help substantiate the cultural affiliation of the site occupants and presumed makers and “users” of the rock art.

Flake Attribute Analysis

Because debitage is a byproduct of stone tool production, debitage analysis can provide insight into the function of a site. Specifically, the analysis of debitage from a site can assist me in determining what kinds of lithic reduction that occurred there. *Flake attribute analysis* (Connolly 1995:139-142) is an analytical technique that examines flake morphology throughout a four-stage reduction sequence in which raw materials are continually reduced and shaped into bifacially-worked stone tools. According to this analytical method, flakes will exhibit more cortex on their dorsal surfaces at earlier reduction stages and less at the later stages. At the same time, flake sizes will generally decrease in direct proportion to the increased number of dorsal flake scars. The number of platform facets will tend to increase at later stages of reduction and, in general, platforms will also become thinner. For a fuller discussion on the 4-stage sequence, see Connolly (1995:131-133).

I conducted an analysis of the debitage from four of the eleven sites in my study, drawing upon principles from Connolly’s *flake attribute analysis* (Connolly 1995:121). These sites, 35LK1516, QzM-1, 35KL716, and 30-10-23-8P had no previous record of documentation or evaluation. Accordingly, I analyzed 386 flakes specimens drawn from sample plots I established using selected intervals along transect lines at all four sites. First, I sorted them into categories according to the amount of cortex present on their dorsal surfaces and listed as either *primary*, *secondary*, or *tertiary*. *Primary* flakes are those that are completely covered with dorsal cortex while *secondary* flakes exhibit less than 100% cortex coverage. *Tertiary*, or late-stage flakes are non-cortical. Next, we categorized flakes according to their completeness. Flakes with platforms, intact lateral edges and termini were considered to be *complete*, while those that lacked the terminus were considered to be *broken*. Flakes that lacked platforms but that exhibited other identifiable flake characteristics were considered to be *flake fragments*. Finally, chunks of material that exhibited no identifiable flake characteristics were considered to be *debris*.

Once the flakes were separated by category, we took a variety of measurements from individual specimens. The flake plan size was measured in centimeters using a template of concentric rings. *Platform thickness* was measured in millimeters using standard calipers, and platform facets were categorized as *single*, *multiple*, or *cortex*. Finally, the number of dorsal scars was counted for every scar over 2mm with the expectation that a higher number of scars on the dorsal surface would indicate later-stage reduction. The data were later input into Microsoft Excel spreadsheets, where attribute counts and percentages could be calculated and graphed. I discuss the results in Chapter 7.

Interpretive Methods

Ethnography

Two unavoidable pitfalls researchers encounter when they attempt to use ethnography to interpret rock art include the often incomplete nature of the ethnographic record itself and its temporal limitations. Ethnographic reports are, after all, temporal “snap shots” of a particular culture at a particular time in its history. Even when one is certain that the ethnographic informants are directly descended from the archaeological population, problems still arise when

one tries to reconcile statements made about rock art created hundreds or even thousands of years prior.

One way to effectively address the problem with incomplete or cryptic accounts of rock art in ethnographic texts is to make analogies with other culturally- and linguistically-related groups. By examining the seemingly incongruous statements made by informants from two separate San groups, Lewis-Williams showed that, with a greater understanding of San ritual, their statements were very much in agreement, and that the perceived incongruity derived from the failure of the ethnographers to evaluate the religious or ritual underpinnings of the rock art (Lewis-Williams 1980:468). In a similar fashion, Loubser and Whitley observe that the Klamath and Modoc are related groups that are culturally similar in almost all significant respects, and thus it is possible to make strong ethnographic analogies between them (Loubser and Whitley 1999:48). Two important factors make Klamath-Modoc analogies tenable. The first involves their common origins. Although these groups were distinct political entities in ethnographic times, they were once a unified group. Information from Gatschet (1890a:13) suggests that their cultural divergence took place around AD 1780. Yet in spite of this recent divergence, they retained a substantial common base, sharing the same language, myths, and customs (Stern 1966:4) and thus share ample commonalities for ethnographic analogy between them to be useful. The second factor involves a large body of myths they shared in common. I have observed before that these myths are key to the Klamath-Modoc worldview and form the fundamental structure of at least some shamanic ritual behaviors, including the creation of rock art (David 2010:374-375). Like the ethnographic work going on at the time, the myths that Gatschet (1890b:149) and others (Hann and Bettles 2006; David 2010) have related to the rock art were being documented at around the same time. In short, the worldview from which the myths and ethnographic information emerge are contemporaneous with Klamath-Modoc rock art production. These similarities are adequate for making strong ethnographic analogies that are culturally and temporally relevant. To a lesser degree, it is also feasible to make analogies with other groups in the broader region who share similar traits, linguistic origins, and spiritual practices and beliefs. As one might expect, information derived from this level of analogy would be less specific, but will nonetheless enable me to establish a general ethnographic context based on consistent and often redundant patterns and themes reported in ethnographies that relate to rock art.

As David and Keyser have noted previously, the Columbia Plateau has the richest rock art ethnography in North America (David and Keyser 2008:26). Before the turn of the 20th Century, government-sponsored expeditions to find wagon roads and railroad routes noted the presence of rock art along the Columbia River. Anthropological interest in those sites soon followed (Mallery 1893; Teit 1930), and rock art research began in earnest in the years that followed (Boreson 1976; Cain 1950; Corner 1968; Cressman 1937; Keyser 1992; Keyser and Knight 1976; Loring and Loring 1983; McClure 1978, 1984; Ray 1939).

Hann et al. (2010) have produced the most comprehensive ethnographic analysis of Columbia Plateau rock art and what Loubser and Whitley consider the most useful synthesis for developing an ethnographic context for the interpretation of Klamath basin rock art (Loubser and Whitley 1999:49). In their study they identified five main contexts in which Columbia Plateau rock art was produced. These include shamanic vision questing, non-shamanic vision questing, hunting magic, mortuary practices, and mythological relationships (Hann et al. 2010).

The Klamath Basin rock art style is considered to be a southern extension of the Columbia Plateau rock art tradition (Keyser and Klassen 2001:311-312; Hann et al. 2010:1-2). As noted by Loubser and Whitley (1999:52), even though a number of ethnographic studies have been completed in the Klamath Basin region, they commonly lack detailed information about rock art as is found in ethnographic texts from the greater Plateau, especially from groups along the Columbia River. Nevertheless, the references that do exist indicate its shamanic origins and confirm many of the patterns identified in other parts of the Plateau (Loubser and Whitley 1999:52), even though some of these contexts do not apply to Klamath Basin rock art. Nevertheless, it is within this broad framework I propose to interpret the cryptic and incomplete statements made about rock art in Klamath-Modoc ethnographic texts.

Overcoming the temporal limitations involved in the application of ethnographic texts to rock art poses other difficulties. Lacking good, solid chronometric dates for Klamath Basin rock art has made it difficult to provide interpretive models that have some degree of temporal validity. There is, however, some indication that an interpretive framework can be constructed based on historically-produced rock art. As noted by Loubser and Whitley, rock art production in the Klamath Basin is both a prehistoric and historic phenomenon (Loubser and Whitley 1999:47). This is significant because it suggests that the Klamath and Modoc produced rock art during the same time period when ethnographers were working in their country, meaning that ethnographic statements collected about the rock art at that time emerged from the same world view in which it was being produced. To some extent, then, ethnography is a useful information source for developing rock art interpretations. I consider rock art sites that have good ethnographically-based interpretations that are stylistically similar to sites whose production dates are uncertain to originate from a common world-view. How far back in time this approach is valid is a matter for future debate. But the perceptions about rock art contained in the ethnography provide a valid starting point for interpretation.

Neuropsychological Model

Lewis-Williams and Dowson's neuropsychological model derives from middle range research, which strives to understand the archaeological record by comparing it with materials produced by present behaviors (see Binford 1977). Before Lewis-Williams and Dowson constructed the neuropsychological model (Lewis-Williams and Dowson 1988), researchers from different disciplines had already identified a constant corpus of images that humans witness during altered states of consciousness (ASC). Klüver (1926, 1942:177) had abstracted redundant elements from laboratory subjects and concluded that visual precepts witnessed during ASC had constant forms. Some years later, Horowitz (1975:178) independently arrived at the same conclusions. Other researchers confirmed their findings and identified yet more redundant forms (see Figure-5), including grids, zigzags, dots, spirals, and nested curves (Knoll 1958; Horowitz 1964; Richards 1971; Eichmeier and Hofer 1974; Siegel 1977) as cited in Lewis-Williams and Dowson (1988:202). Although by no means the first to realize a similarity between "entoptic phenomena" and certain types of rock art, Lewis-Williams and Dowson (1988) argue that rock art images derived from shamanic ritual have their roots in the images generated by the human nervous system during altered states of consciousness (ASC) (Lewis-Williams and Dowson 1988:204). Thus, entoptic phenomena produced by ASC in modern *Homo sapiens* under controlled laboratory conditions (Klüver 1926; 1942:177) may be successfully compared to ASC-derived rock art images created by humans in the past.

Entoptic phenomena, as described by Tyler (1978:1633), are visual sensations that originate within the optic nerve. Essentially, these are basic geometric shapes generated within the eye during the initial stages of ASC. Two classes of entoptic phenomena occur: *phosphenes*, which can be generated by applying pressure to the eye; and *form constants*, which derive from the optic system itself. *Phosphenes* and entoptic phenomena form the *building blocks* for the hallucinations that occur in the later stages of ASC. Thus, hallucinations consist of both entoptic phenomena and iconic visions of images recognized by the subject (Lewis-Williams and Dowson 1988:202).

The way in which people experience entoptic phenomena during altered states is governed by seven principles of perception; *replication*, *fragmentation*, *integration*, *superpositioning*, *juxtapositioning*, *reduplication*, and *rotation*. Under *replication*, the entoptics initially experienced by the subject repeat themselves in identical or similar forms. *Fragmentation* occurs when entoptics are broken down into minimal components. Instead of witnessing a grid, for example, a subject may only witness a ladder form or a single square. *Integration* occurs when these images (fragmented or complete) combine with other entoptics to form complex patterns, such as a series of parallel lines whose ends transform into a series of zigzags. *Superpositioning* and *juxtapositioning* occurs when one image appears on top of another or beside it. *Reduplication* occurs when an image becomes a series of similar or identical images. A single line, for instance, might become a series of parallel lines, or a single circle may become a series of circles spanning the subject's field of vision. Finally, entoptic images may *rotate* in the subject's field of vision (Lewis-Williams and Dowson 1988:203).

Mental imagery during altered states of consciousness occurs in three broadly defined stages (see Figure 3). In stage-1, subjects experience entoptic phenomena alone. These images cannot be controlled by the subject (Lewis-Williams and Dowson 1988:203; Siegel and Jarvik 1975:III; Siegel 1977:132). As Figure 3 shows, the seven most common entoptic images subjects see during ASC are grids, parallel lines, dots and flecks, zigzags, nested curves, filigrees and meanders, and cortices. These images are hardwired in the nervous system of all *Homo sapiens*. In stage-2, subjects try to make sense of the entoptic images by transforming them into iconic forms, or images that they recognize. "In a normal state of consciousness, the brain decodes the constant stream of sense impressions it receives by matching it against its store of knowledge" (Lewis-Williams and Dowson 1988:203). During ASC, however, the *nervous system* governs this function (Heinze 1986). During Stage-3, subjects reported being surrounded by a vortex, a grid-like pattern marking its sides. Simultaneously, they experienced "a progressive exclusion of perceptual information" (Horowitz 1975:178). According to Siegel and Jarvik, it is on those "screens" that iconic hallucinations first appear (Siegel and Jarvik 1975:127,143; Siegel 1977:136). As the shift to iconic imagery occurs, the subject's perceptions become more vivid. "Subjects under laboratory conditions [in stage-3] stopped using similes to describe their experiences and asserted that the images are indeed what they appear to be". The distinction between iconic hallucinations and reality disappeared (Siegel and Jarvik 1975:128). At peak hallucinatory periods, according to Lewis-Williams and Dowson (1988), "subjects begin to feel dissociated from their bodies and frequently become part of their own imagery." They refer to this condition as "participation" (Lewis-Williams and Dowson 1988:211).

The three stages in the neuropsychological model, illustrated in figure 4, should not be thought of as discrete. Although it does appear that exclusively entoptic imagery occurs in the first stage, these three stages are *cumulative* rather than *sequential*. Entoptic phenomena may persist during all stages of ASC. Iconic forms seen in the later stages of trance are often “projected against a background of geometric forms” (Siegel 1977:134). In this frame of mind, the range of perceptions subjects may experience is limited only by the cultural experience informing them, and by the range of visual perceptions generated by the nervous system (Lewis-Williams and Dowson 1988:204).

Stage 1	Entoptic phenomena
Stage 2	Construal of entoptic phenomena
	Vortex
Stage 3	Iconic images Transformations Peripheral and integrated entoptic phenomena

Table 1: The three stages of the neuropsychological model.

From, Lewis-Williams, David 2001: Figure 12.1.

The neuropsychological model identifies seven consistent images that Lewis-Williams and Dowson (1988) argue are human universals. The three stages of the neuropsychological model are presented in figure 4. Figure 5 shows how a westerner might experience the three stages of altered states of consciousness.

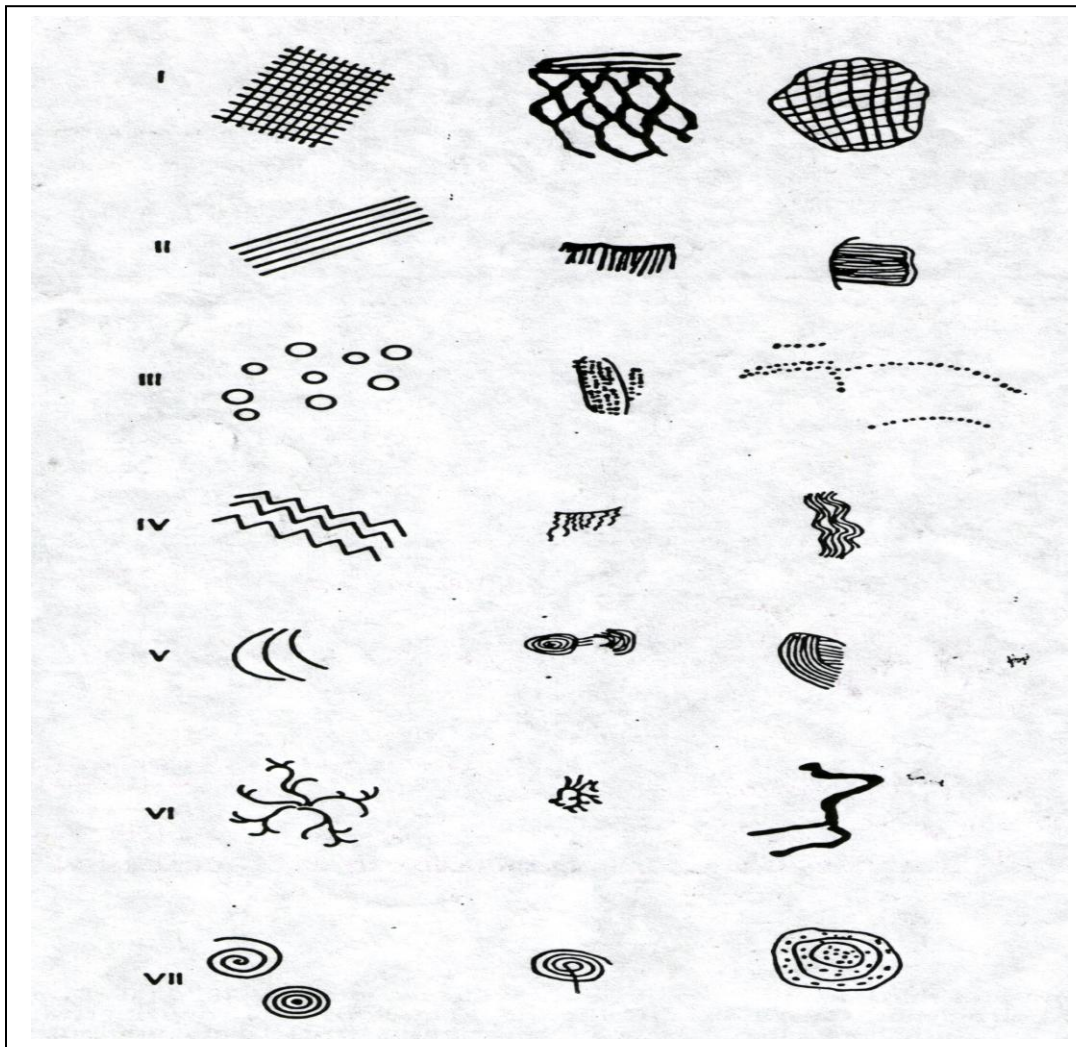


Figure 4: The seven recurring entoptic forms, the first component of Lewis-Williams and Dowson's (1988) neuropsychological model. The left column provides idealized entoptic patterns; the middle and right columns are examples using Numic petroglyphs from the Coso Range, California. The seven entoptic forms are: I-grids; II- parallel lines; III dots and flecks; IV- zigzags; V- nested curves; VI- filigrees and meanders; and VII- cortices. Various scales.

Adapted from Whitley, David S. 1994: Figure 1

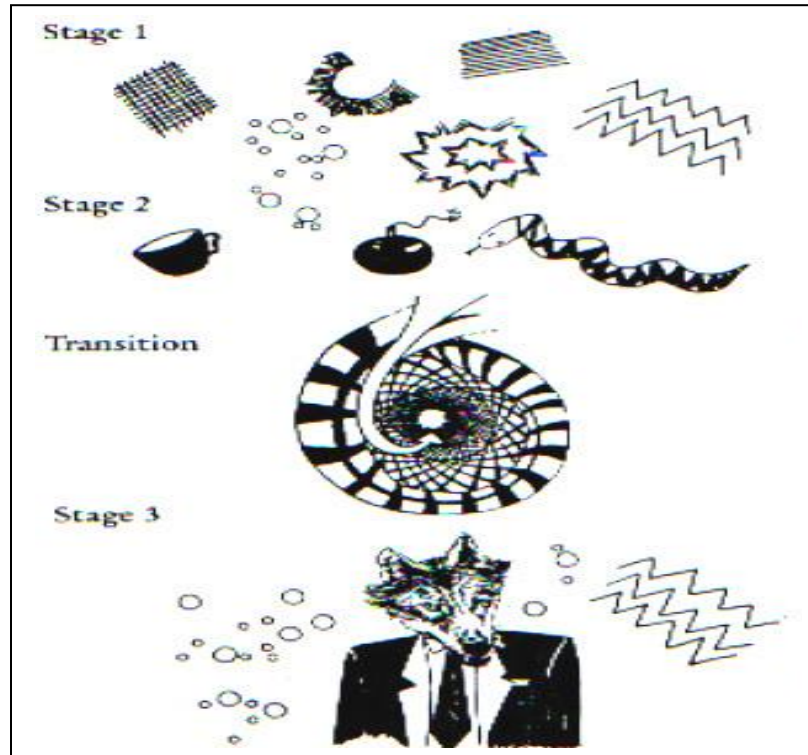


Figure 5: The three stages of the neuropsychological model, as it may be perceived by a Westerner.

Adapted from, Lewis-Williams, David 2001: Figure 12.2.

Because trance states, and by extension, hallucinations, are important components of shamanic ritual, the neuropsychological model may be used to link images in the model to the rock art produced by shamans in the distant past. Lewis-Williams and Dowson used the neuropsychological model to test its cross-cultural applications, focusing on South African and Great Basin rock art (Lewis-Williams and Dowson 1988:205-210). Thus, by virtue of middle range studies, it provides researchers with an effective tool for linking some of the forms and images of Klamath Indian rock art to shamanic rituals that involve mind-altering trance.

Of course there have been critiques of the model: Paul Bahn (1997), in particular, has voiced numerous reservations. Foremost among his observations is that shamanism, as an explanation for rock art, will always be no more than speculation, and neuropsychological explanations for certain rock art motifs are overly complex. “Zigzags could easily be inspired by lightning, just as circles can be inspired by ripples in water.” Images like these are easily mastered by children and require no ritual or trance to produce (Bahn 1997:62). Meanwhile, Solomon (2002) observes that San ethnography is concerned more with mythology and the natural cycles of life, death, and regeneration than with shamanism. “Examination of a key text suggests that an unjustified separation of myth and ritual has contributed to the prioritization of ritual in understanding San art (Solomon 1998:273).

Because, as we will see, the ethnography and ethnohistory of the Klamath region suggests that some individuals held and practiced roles that would come under the rubric of shamans, and who were reported to have undergone trance states as part of their vision quests and/or healing ceremonies, it seems potentially productive that I assess the images of Klamath rock art, especially those that I can support as being the product of such shamanistic practices, in terms of the neuropsychological model put forth by Lewis-Williams and Dowson (1988).

Site Descriptions

In order to understand the methods that I have selected to use for the rock art, it is relevant to note here some of the features of the sites that have been selected for the analysis. Given that there are many known archaeological sites in the study region, and many that may be associated with rock art, I have selected only a sample for detailed analysis.

To restate the landscape model, I am interested in probing if there are specific genres of rock art making/viewing associated with different types of site uses and site activities. Thus, I have selected the following "types" of sites based on specific kinds of archaeological materials and specific features of site location and probable site use as inferred from the archaeology and locational setting. To reiterate, the different site types in this model consist of *settlement sites*, *frequently used areas*, and *special use areas*.

Settlement Sites, otherwise defined by Thomas as "Residential Bases," (Thomas 1983:73-79), refer to sites at which there is a variety of evidence attesting to the fact that human groups settled here and used the location for a period of time, perhaps even months. This can be identified by the following evidence: house pits and their associated features, areas covered by occupational and activity remains; ceremonial paraphernalia, luxury items, and cemeteries. For this study, I focused on two *Settlement Sites* (35KL1062 and 35-7-10-5P) as described below.

Frequently Used Areas refer to places where people frequent outside of the village context. They can include field camps (Thomas 1983:79), resource procurement areas, pathways, and well-used springs. Given the wide range of possibilities, the archaeological evidence for such places will likewise vary. For this study, I analyzed three sites in *Frequently Used Areas*: QzM-1, 35KL58, and 35KL1516.

Special Use, or Ceremonial Areas are those set aside for otherwise "private" or restricted ritual use. Typically, these are places that are separate from ordinary activity areas, or are at least secluded enough to be hidden from general influences or view. Accordingly, the archaeological evidence for such places are entirely ceremonial, and any archaeological associations with non-ceremonial materials are incidental and unrelated. For this study, I analyzed four *Special Use sites*: Mod-17, 30-10-23-8P, 39-13-20-P2, and FHC-3.

Settlement Sites

35KL1062- According to Sobel (1992:91-92), 59 house pit features are scattered lengthwise between the edge of the marsh and the hills that form the western boundary of the site. Debitage, projectile points, ground stone, and a "rain rock" are also present on the site. The village stretches from approximately 3.2 kilometers along the shore of the marsh. The rock art

associated with this site consists of four rock art panels containing over 70 painted images concentrated on the western end of a basalt outcropping overlooking the remnants of the prehistoric village *gupgua'ksi* on the Klamath Marsh. The rock art is painted mostly red but with some instances of blue. A cyclone fence constructed and maintained by the Department of Fish and Wildlife protects the rock art site today.

35-7-10-5P- Situated on a west-facing basalt cliff overlooking the grassy floodplain of the nearby Williamson River, the old Klamath Village, *takalma'kcda*, was located on the flood plain on both sides of the river (see Spier 1930:14). Philipek and Ray documented the site in June 1979 and observed six house pit features, obsidian debitage, and middens that contained among other things, shell and more debitage. The rock art at this site stretches approximately 400 meters north-south and consists of nine rock art panels containing thirty-one mostly painted images.

Frequently Used Areas

Site QzM-1 is located about 9.6 kilometers southeast of Bly, Oregon in a low creek valley where the Klamath-Modoc visited seasonally in order to procure resources and to seek supernatural power. The site consists of the main petroglyph panel and two debitage concentrations in the immediate vicinity. The first of two debitage concentrations is located approximately 10 meters down slope of the rock art and included three projectile point fragments. The second is located approximately 165 meters downstream on the opposite side bank. Other archaeological debris including debitage, biface tools and points, metates and a small stone bowl, along with other rock art locations occur for about 2.4 miles up and down the valley. The rock art site itself is located on a basalt rim with flat vertical walls overlooking Paradise Creek from the east. The art consists of approximately 55 images, 47 of which are engraved concentric circles that often include a central nucleus or dot. Traces of red paint are evident in some of the figures, especially those near the upper part of the panel. More than thirty stacked rock features are concentrated on top of the rock art site itself.

35KL58 is situated on basalt rim rock overlooking a small meadow and spring that are 200 meters downhill. Three stacked rock features are associated with the site. A general survey around the rock art and of the meadow turned up no other artifacts or features. However, the site is located along a travel route between *35KL87*, a major occupation site (season unknown), and a series of power-questing sites at the confluence of Barnes Valley and Long Branch Creeks (Silvermoon 1994:147). Although Barnes Valley Creek lies some 500 meters below, access to the creek is difficult, and the creek all along this route is strewn with a jumble of boulders, many of which are the size of busses and cars. The only place along this route where travelers could obtain water was the springs emanating from the base of this site. For these reasons I consider this to be a *frequently used area*. The site has five main petroglyph concentrations consisting of thirty-one nucleated concentric circles clustered together, and one panel containing a series of incised vertical and cross-hatched lines. The two springs emerging from the base of the rim rock are each associated with the two main rock art concentrations.

35KL1516- The site is located in a U-shaped depression just below the scab rock plateau where Mill Spring Creek drops over the rim into a break between the north-south running rimrock. It is only at the base of the depression that water from the spring pools sufficiently to give people access. Although obsidian, basalt, and some crypto-crystalline silicate (CCS) debitage is

scattered lightly across the prairie above the site, none was specifically associated spatially with the rock art or spring. However, a large concentration of debitage is located less than a mile north of the site. It was from this concentration that obsidian samples were obtained for chemical sourcing analysis. Given the accessibility to fresh water and the presence of artifacts associated with hunting and resource procurement, I categorized this site as a frequently used area. Specifically, the availability of water here all but guaranteed that people would frequent the pool in this depression. The edges of the rimrock and the boulders around the meadow provide the panels for the five petroglyph concentrations containing twenty-three images that make up the site. All these images face inward, toward the pool. The images are typical of the Klamath Basin rock art style (Hann et al. 2010:2), predominated by circle, concentric circle, and zigzag motifs.

Special Use Sites

Mod-17 is a cave located today within Lava Beds National Monument that contains both rock art and archaeological materials. The cave is approximately 400 meters long and ranges from one to twenty meters wide. The only entrance is through a large hole in the ceiling. Over the millennia, a midden heap has formed beneath the entrance consisting of cultural material, wind-blown silt, and naturally deposited animal remains. This heap is the only place in the cave that is habitable and supports a lush cover of ferns and moss. In 1990, Eidsness and Smith evaluated the cave as part of the nomination process for the National Register for Historic Places and determined that the site had overlapping functions that included subsistence, domestic, and ceremonial (Eidsness and Smith 1990). The rock art is comprised of fifteen pictograph panels containing hundreds of black and white images painted on the dark surface of lava tube walls. All images are painted and include the same circles, zigzags, dots, crescents, anthropomorphic, zoomorphic, and stylized figures that serve to define the Klamath Basin rock art style. Vern Ray's Map 2 shows a ceremonial center in the vicinity of this cave (Ray 1963:207, cited in Lee et al. 1988:137).

30-10-23-8P- The site is a very small cave located approximately 140 meters up the slope of an east-facing ridge overlooking an open valley in the Upper Williamson River watershed. Rock art images are painted on the ceiling. A few isolated obsidian flakes are scattered along the top of the ridge, but none appear to attest any concentrated activity associated with the rock art site. By contrast, debitage, projectile points, and ground stone artifacts are scattered all along the base of the hill for well over a mile in each direction. Ethnographic and ethno-historic sources indicate that this area was a major seasonal camp (Allison 1994:158; Spier 1930:41; Gatschet 1890a:xxxv; Stern 1966:12). Our 2009 survey project confirmed this. Some stacked rock features are scattered along the ridge, but none were directly associated with the rock art site. Despite the site's vicinity to a prehistoric summer campground, and the stacked rock features along the ridge, it is quite obvious that this rock art site was not meant to be viewed or experienced by the general public. For that reason I classified this as a *special use site*. Discovered and brought to my attention by a local ranch-owner in 2009, the rock art had not been previously documented. The images include a single red anthropomorphic pictograph, superimposed upon two white stick figures chalked onto the shelter ceiling.

39-13-20-P2 is located on the south side of Goodlow Mountain, and overlooks the Lost River and Langell Valley 1500 meters below. A dozen scattered stacked rock features are located in the vicinity of the site, but none were directly associated with the petroglyphs. This Modoc rock art site is a single panel containing fifty-seven pecked human figures joined at the hands on a

fractured rock face. The panel is small, measuring 160 centimeters long and 85 centimeters high, and all images are approximately 10 centimeters long with an approximate arm span of eight centimeters wide. Additionally, the panel is located in a small, natural alcove protected by boulders and vegetation, making it difficult to see. A survey of the area at and around the site turned up no other artifacts or features. The nearest village or significant camp is over 19 kilometers distant. Since there is little to support an interpretation of this site as either a settlement site or a frequently used site, this site is analyzed as a special use site.

FHC-3 is a petroglyph site located inside of a small hollow through which an active spillway and an intermittent waterfall each feed the canyon's main creek. A pedestrian survey turned up several stacked rock features, with a few located within 50 meters of the petroglyph site. Some flakes were also noted on the scab rock plateau above the site, but not close enough to be considered as associated with the site. The nearest known concentrated archaeological site is located approximately 0.8 kilometers upstream and consists of debitage, bifacially-worked points and tools, and ground stone artifacts. The site consists of two petroglyph concentrations. The first is located on a boulder that sits close to the hollow's opening and that is vaguely shaped like an owl. The engravings appear to have been added to enhance this resemblance. Eyes consisting of concentric rings, a chevron emulating a beak, and a series of diagonally situated parallelograms symbolizing wing feathers give the boulder the appearance of an owl looking at the viewer over its shoulder. An upside down stick-figured zoomorphic image enclosed in a pecked circle may represent the owl's stomach and its ingested prey. The second set of petroglyphs consists of two sets of concentric rings arranged to emulate eyes, perhaps the eyes of an owl. Other badly weathered images are located nearby, but these were not documented. These glyphs are located close to the ground and appear to have been situated in a way that gives them the appearance of overlooking a nearby pond.

Conclusions

In this chapter, I have outlined the core methods that I have used to pursue the landscape model for understanding the relationships between rock art manifestations and varied uses of the landscape by Klamath and Modoc peoples. Key methods have been the photographing and documentation of the rock art sites themselves; the archaeological survey and structured collecting that has allowed interpretation of possible site types and uses of locations; the targeted collection of obsidian samples for analysis using the XRF (X-Ray Fluorescence) method that can contribute to understanding the sources of obsidian used and thus the possible cultural affiliation of the makers. Additionally, I have described the specific sites that I have classified as being settlement sites, frequently used areas or special use areas. It should be apparent from this last set of descriptions that there is, however, considerable variation within each "category" of site. Nonetheless, by taking into account the archaeological materials recovered at the sites as well as within the wider landscape, and by considering some of the specifics of the natural settings for the rock art—in a hollow, near a spring, in a cave, overlooking a valley or in an obscure location – I can propose a more specified model of the landscapes of rock art for the Klamath Basin as based on a sample of the 10 sites described here. In the following chapter, I will provide an analysis of rock art associated with two Klamath villages.

Chapter Six: Settlement Sites

Introduction

In this chapter, I am going to discuss the first category of sites that appear, in various ways, to be associated with rock art manifestations or, more precisely, I am going to discuss in detail the rock art sites that are associated with a particular genre of occupation and activity referred to as *settlement sites*. As noted previously, the definition of categories of sites is not without some ambiguities or qualifications. There are two rock art sites featured in this chapter as rock art sites in association with settlement or residential locations. See the map (Figure 6) for the general locations of these sites in the Klamath-Modoc area under discussion. As a reminder, my locational model for the rock art sites in the Klamath-Modoc Basin would suggest that at or near *settlement sites*, the rock art would tend to have the following characteristics: the symbols would depict recognizable mythical characters that can be ethnographically identified as shamans “medicines;” these characters may be represented in whole or in part (e.g. as synecdoche); rock art symbols will exhibit differential weathering, which resulted from different painting episodes on the site over time; the rock art would not necessarily be publicly noticeable; rock art panels in this context will face west, toward the land of the spirits.

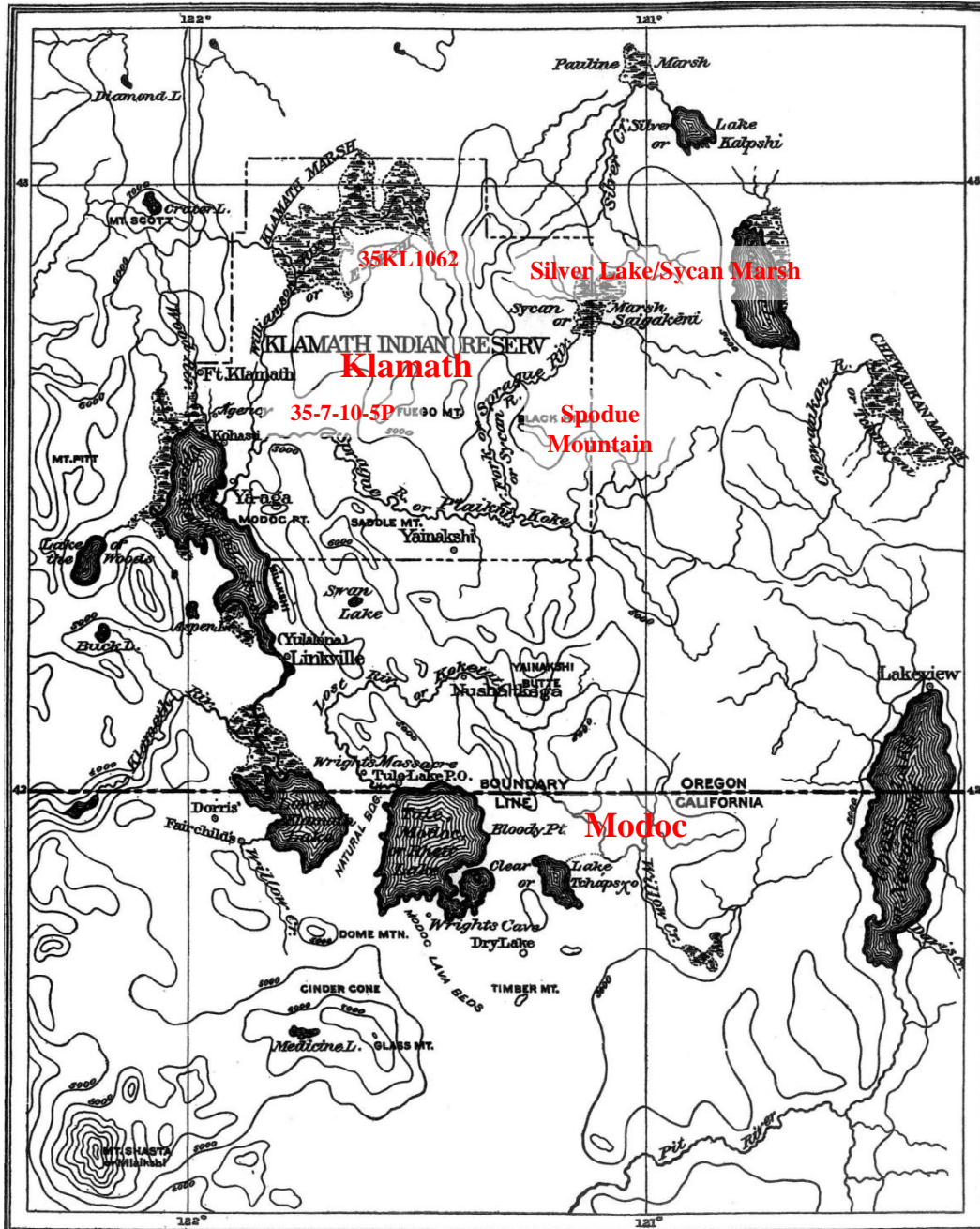


Figure 6: Settlement site in relation to obsidian source locations.

Adapted from Gatschet, 1890.

In this chapter, I use the term “*settlement site*” to indicate, in part, what Thomas identified as “the residential base:”

The typical base camp may contain evidence of domestic dwellings and site furniture, specialized utilitarian structures and outdoor work areas, service centers, diversified tool fabrication and repair, child rearing, diversified food consumption (and, perhaps, storage), temporary storage of raw materials and tools, a relatively high degree of internal site structuring, luxury items, and debris from recreational and ceremonial activities (Thomas 1983:73).

Some residential bases were situated where primary resources were seasonally abundant. During harvest periods, other tribal groups converged on these locations, causing populations to swell considerably. Accordingly, the archaeological record for such sites is comprised of materials from both permanent and transient cultural activities. I use the term “*Settlement Site*” in this study to include both.

By and large, Klamath-Modoc rock art sites are associated with most, if not all, *settlement sites* where suitable rock faces were available. Any interpretations offered for the rock art must take into consideration its surrounding social context (Whitley 1998:16). I propose that rock art in the *settlement* context represents the medicine spirits that shamans used for ritual curing. I derive this hypothesis largely from information gathered from ethnographic texts, recorded shamans’ incantations, and various properties of the rock art itself that include differential weathering between images, identifiable mythical characters or referents, greater variety of images relative to rock art in different social contexts, its visibility to ordinary villagers, and its general westward orientation. I base these assumptions on the propositions listed below:

- As I have previously proposed and supported with analyses, rock art images depict characters featured in Klamath-Modoc songs and myths (David 2010:387). Gatschet (1890a:c) reported that the shaman’s “power” animals and anthropomorphic characters are the same characters whose exploits are described in myth. We should therefore expect to see these characters, or even their body parts (see Spier 1930:132-133), depicted in the art.
- Whereas shamans employed any number of medicine spirits to both diagnose and cure diseases (Ray 1963:55; Spier 1930:108), rock art associated with *settlement sites* should contain a wide variety of images with identifiable mythical referents.
- Over time, as shamans encountered new challenges requiring new supernatural treatments, they created newer “medicines” resulting in new symbols, which they added to the sites. The gradual addition of these new symbols resulted in differential weathering between newer and older images.

In the following chapter I evaluate two rock art sites associated with Klamath villages in terms of the properties identified above.

The Rock Art Sites

35-7-10-5P

Site 35-7-10-5P is a rock art site overlooking the Williamson River floodplain near Chiloquin, Oregon, where the remnants of prehistoric villages are present on both sides of the river and on top of the cliff itself. The cliff face is 930 meters long and runs north-south along the base of Modoc Rim. Rock art occurs intermittently for about 500 meters south of the datum at the site's northern-most point. Nine rock art panels with close to thirty distinct images comprise the rock art site. The images include concentric circles, zigzags, abstract geometric forms, tally marks, anthropomorphic figures, and an insect. A list of all the images is available in table 2.

Circular	9
Anthropomorphic	6
Zigzags or Wavy Lines	5
Dots³	14
Ribbed Figures	2
Triangular	2
Straight Lines	2
Insect	1

Table 2: Image counts from site 35-7-10-5P.

Spier (1930) indicated that the rock art on these cliffs overlooks the prehistoric village, *takalma'kda*, and that several pit houses on either side of the river in this area below the cliffs could still be seen when he visited the area (Spier 1930:144-15). A 1979 archaeological report by Phillipek and Ray confirmed the existence of six house pit depressions on the east side of the river near the rock art site. Middens, debitage concentrations, and storage pits were also observed (Phillipek and Ray 1979).

Ethnographic/Ethno-historic Review

One of the earliest mentions of this rock art site came from Lt. H. L. Abbott's journal of his 1857 railroad survey:

August 20.—Mr. Daniels was much better this morning and able to ride his mule. As had been usual of late, a dense fog obscured the view for two or three hours after starting. Our course lay up the eastern side of the beautiful valley of Klamath River.⁴ The bottom was at first open, covered with green grass, and bordered by low timbered hills.

³ These are arranged in three separate rows.

⁴ Lt. Abbot mistook the Williamson River Valley for that of the Klamath River.

We passed several cliffs of basaltic breccias, from twenty to fifty feet in height, and occasionally ornamented with rude, Indian paintings (Abbott 1857:68).

The cliff Abbott referred to is *K'tai'ti*, which Swartz designated Chq-23 – 25 AS KCM (Swartz 1978)⁵. Gatschet also mentioned the site in both his list of camping places along the Williamson River, where he refers to the site as “at the rocks,” (Gatschet 1890a:xxix) and in his accompanying dictionary, where he related the term “*Kta'iti*” to a specific boulder in the same area. According to Gatschet,

Kta'iti, nom. Pr. given to a rock standing in the bed of the Williamson River, about three-quarters of a mile below the Sprague River junction. According to a myth, *K'mukamtch* was changed into this rock, after he had selected this spot as a fishing place. Lit. “At the Rock” (Gatschet 1890b:149).

Sometime later, Spier reported that the village *takalma'kcda* ran for 0.8 kilometers along both sides of the Williamson River, and he discussed the lodges located directly below the lava cliff that bears the art. “The houses are on the bottomland along the river with quite a number on the opposite... called *K'tai'di*, lava. Of the distinct pits at *takalma'kcda*, four are about twenty-five feet in diameter, one fifteen feet.” Other major villages such as *Bezukse'was* and *gla'tspak'is* are located along the river north of *takalma'kcda*, and both were heavily populated. North from *takalma'kcda* Spier also reported numerous storage pits and a fish dam (Spier 1930:14).

Curiously, Spier made no mention of the rock paintings, even though his description of the house pit features indicates that he visited the site personally. Even though he briefly discussed other rock art sites in his report, he appears to have been unaware of the paintings at this site:

The Klamath do not make pictographs. There are however a few in their country, said to have been made by Kemu kumps, the culture hero. They refer to them as shaman's mu'lwas, paraphernalia or, better, objects pertaining to a shaman. They are repainted from time to time by old men, “who work for a shaman,” by which my informant may have meant shaman's interpreters. They are all of simple form. My informants knew of only two pictographs (*su'malo'ta*) in the whole Klamath country. *Those on a rock slide on the eastern shore of Klamath Lake south of Modoc point* [emphasis mine]. This is near the former fishing village *Iula'u*... There are a dozen circles painted in white, the largest four or five inches in diameter. Another set of graphs is on the rocks *at the southern end of Buck Island* [emphasis mine]. A tale concerning one of these figures tells of a man shot in the eye with a straw so that the blood streamed down his face. This suggests the form of the figure, which I did not see. One informant said that the figure of a lizard was also sometimes drawn (Spier 1930:142).

⁵ Swartz (1978) also credits one, Charles Rau (1881:65-66), with a reference to this site. But upon closer examination it is clear that Rau was talking about Standing Rock, a different site located further upstream that was destroyed in 1909 by railroad construction. Rau made no mention of site 35-7-10-5P.

Based on the fact that neither Spier nor his informants mentioned the rock art paintings located so close to Chiloquin, it is clear that his informants were either unaware of their existence, or for some reason chose not to report them. Even Abbott's earliest encounter with the site (1857) was an offhand observation he had made himself: there is no indication that native informants or guides brought it to his attention.

Analysis

The most obvious feature on this site is the preponderance of circle and concentric circle motifs, which are quite common throughout the Klamath Basin (figure 10). This symbol appears individually seven times on the site, and at least thirteen more times embedded within other images. Clearly, this was an important symbol in the Klamath Basin.

In spite of this, the images on this site vary greatly in size and appear either individually or within small clusters. While a few of these clusters can be seen easily enough by people passing by who are looking for them, others are much more difficult to spot without knowing exactly where to find them. None of the images or concentrations, save for possibly one, appear to have been created to capture the attention of the nearby villagers. Thus, it seems unlikely that the rock art here was made for public display.

Differential weathering on this site has caused some images to be very bright, as though they had been only recently made, and others are to appear so faded as to be barely discernible at all. Some of this is the result of differential exposure to the elements. In other instances, where rock art on the same surface exhibit different degrees of fading, I assume that this is because of differences in the ages of the paintings. Other explanations, of course, may also account for them, such as different pigments, or different mixtures of the same pigments, etc. As figures 7 and 8 indicate, images were added to the site at different times throughout its history.



Figures 7 and 8: Differential weathering between these exposed images indicates that they were added to the site at different times.

Finally, all but one of the rock art images on this site faces west, or in a westerly direction in spite of the availability of suitable rock panels facing other directions (Figure 9). Although this means that most images faced toward the village, they were not readily visible to the villagers, as previously stated. Some images may have been very obvious to those who knew where to find

them, but others were clearly not intended for casual viewing. Either they were much too small to be seen, or they were painted on rock faces hidden from general view. Apparently, the direction they faced was more important than people's ability to see them. Taken together, these features play an important role in how we interpret the rock art at this site.

Panel Orientation Chart

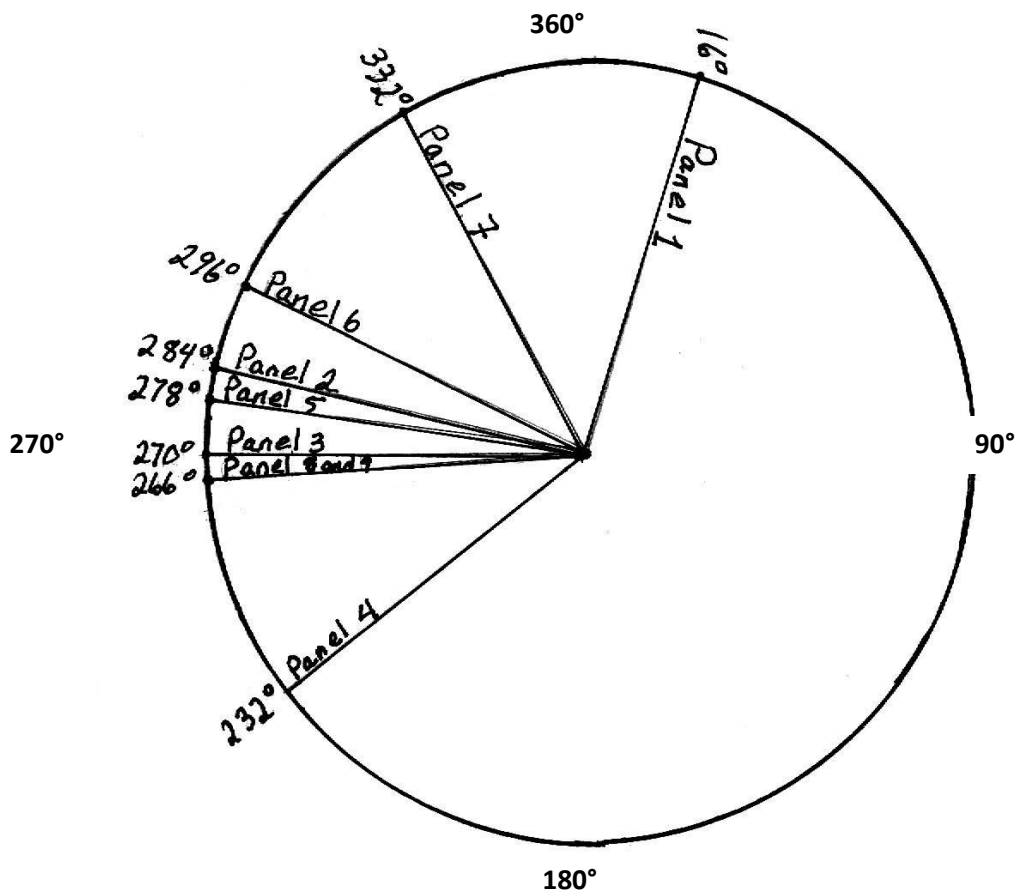


Figure 9: The Panel Orientation Chart indicates that most of the rock art panels face westward. North is at the top of the chart.

Interpretation

Although the rock art site at 35-7-10-5P is directly associated with a series of major Klamath villages, the images do not appear to have been meant for public display. Differential weathering between images indicates that the site was made over time. The available ethnographic information affiliates the rock art with shamanism and myth (e.g. *Gmokam 'c*) (see

Dennison 1879; Gatschet 1890a:179; Spier 1930:142). The condition in which they were created is unclear, but their connection with shamanism suggests that they probably provided symbolic value for ceremonies involving ritual curing (see David 2005:68-69; David 2010:394).

The west-facing tendency of the rock art suggests that its creation was related to the land of the dead, since it was located in the west (Spier 1930:102). Created by *Gmokam'c*, this is where souls are believed to travel upon death:

The land of the dead, No'liskan, lies in the west, the sunset. Everyone goes there. It was created by the culture hero, *Kemu kumps*, who made the humans that figure in the tales [called *psaudiwas*] and ordained that they should go to this land when they died. Nothing is said of the road thither but the characteristics of the land and its people are tolerably well conceptualized [Spier 1930:102].

The common belief of the Oregonians [Klamath] is that after death the soul travels the path traveled by the sun, which is the westward path; there it joins in the spirit-land (*E-ni*) the innumerable souls which have gone the same way before [Gatschet 1890a:xcv11].

The west was both a dangerous and respected direction for the Klamath and Modoc, and fear of it factored into much of their daily lives. It was possible to become ill or worse if one failed to observe proper protocols. Sick persons, for example, never slept with their head on the west side of the lodge, since this was the direction of the land of the dead (Ray 1963:55). During sleep, the soul might leave the body to wander. But its safe return was assured if the head faced any other direction than west (Ray 1963:24). Another custom was that sick persons lay with their heads to the east (Spier 1930:124). The logic behind this custom derives from the belief that sickness was caused by spiritual activity (e.g. *Skoks*). Since the land of the dead was, by definition, filled with spirits, it seems reasonable to expect that the Klamath-Modoc believed that sick persons might be more susceptible in their weakened condition to having their souls taken by *Skoks* (Spier 1930:101). By contrast, since upon death they believed that the soul exited the body through the top of the head and traveled to the land of the dead, the deceased were placed on cremation pyres with their heads facing west, in order to facilitate this journey (Gatschet 1890a:xcvii; Spier 1930:101; Ray 1963:116).

Given their beliefs about this direction, and its relationship with the land of the dead, it should come as little surprise that the west factored into shamanic rituals as well. For shamans, these dangerous influences provided strong medicine. Ray described one curing ritual in which a shaman sent the Dog Spirit to the "twilight land" (*No'liskan*) as a means of curing sick infants. He stated very clearly that shamans had to *face west* after nightfall in order to perform this ritual (Ray 1963:64-65). Thus, *direction* was something that factored into at least some curing rituals.

West-facing rituals that include the regeneration of life have their precedent in the myths. In the story, *Lok Snewedjas* (Bear Wife),

Lok Snewedjas' husband took their child down the mountain to his village to visit family while *Lok Snewedjas* stayed behind. As their son played with other children, they mistook him for a bear and killed him. Sensing his danger, *Lok Snewedjas* traveled to the

village in the form of a powerful whirlwind to save him. But when she arrived, the villagers killed her as well. Grief-stricken, her husband returned their child to life by stepping over his body five times holding *Gak*'s medicine basket, but was unable revive *Lok Snewedjas* in the same way. In desperation, the villagers called for an old woman who possessed *Skoks* as a medicine. When she arrived, she saw that the spirit of *Lok Snewedjas* was on its way west, toward the land of the dead, and she sent her *Skoks* into a nearby man to make him scream. Upon hearing the scream, *Lok Snewedjas*' spirit returned to her body in the village. *Lok Snewedjas* was thus returned to life (see Curtin 1912:219-227).

Commenting on this story in his footnotes, Curtin said that it was indicative of the powers that the "Indians" thought their shamans possessed: "If they called to the spirit of a dead man before the spirit reached the place where the sun goes down, it could come back to the body" (Curtin 1912:338).

It was based on this same belief that *Gmokam'c*, in another tale, had to travel west to *E'ni* in hope of bringing his daughter back to life (Curtin 1912:39-45). For *Gmokam'c*, it must be remembered, was author of all shamanic ritual (Hann and Bettles 2006:190). It is thus reasonable to conclude that the shamans' connection to the land of the dead influenced the direction of their rock paintings, as well as the nature of the imagery they portrayed on rocks.

It seems hardly coincidental that circular designs occur so frequently on a site in which nearly every panel bearing art faces to the west, and that these circular images figure so prominently in myth. Hann and Bettles (2006:190) have suggested that the circular motifs dominating the Klamath Basin rock art style represent *Gmokam'c*, who is both the Klamath-Modoc creator and *the spirit of the sun*. In myth, *Gmokam'c*'s power symbol is the *sun disk* (see Curtin 1912:1-7). If, in fact, these circular motifs represent the sun disk of *Gmokam'c*, and that their westward orientation is related in some way to the land of the dead, then this makes it all the more likely that shamans made the rock art in order to tap into *Gmokam'c*'s supernatural power. In short, shamans may have specifically sought *Gmokam'c*'s spiritual power at this site.

In fact, Spier reported that people *did* seek spirit power by sleeping on these very cliffs (Spier 1930:100). But instead of referring to ordinary lay people, it seems more likely that Spier's informants were referring to *shamans*, who were attempting to acquire *Gmokam'c*'s persona. This seems reasonable considering that, when ordinary lay people sought spirit power, they did so *in the mountains*, far away from camps and villages, and left rock stacks as a byproduct of their quest (Spier 1930: 95,100). But this site is much too close to the village for *ordinary* people to have sought supernatural power, and no rock stacks are associated at all with the lava cliffs. The people described by Spier's informants, then, were more likely shamans seeking out spiritual aid from *Gmokam'c*, whose sun symbol is well represented on this site.

Gmokam'c, Wus-Kumush, and Pshagekenik

The most widely depicted motif in Klamath Basin rock art is the circular motif, and is thus of particular interest in this study, especially given the preponderance of concentric circle designs on this site. However, even though previous researchers have suggested that the concentric circles that characterize Klamath Basin rock art may represent *Gmokam'c*, the original Klamath-Modoc shamans and spirit of the sun (Hann and Bettles 2006:190), I suspected that other mythical characters might be involved. That is, rather than representing *Gmokam'c* alone, these widespread “target” designs might represent as many as three. I describe them each below.

Gmokam'c

Gmokam'c is the Klamath-Modoc culture hero, having created both the world of the living and of the dead (Gatschet 1890a:lxxxi-lxxx; Spier 1930:102). In myth, he is described as the spirit of the sun. Because of his association with sun, *Gmokam'c* is, by virtue, immortal. For although he is killed time and again by his enemies, his medicine, Morning Star, always brought him back to life (Gatschet 1890a:lxxxii, ci, cii). Thus, in myth, *Gmokam'c* is associated with the sun disk and the regeneration of life. It was based on this very premise that Hann and Bettles reasonably attributed these circular motifs to *Gmokam'c*'s powerful sun disk.

This, however, offers only a partial explanation for the symbols we see at this site. Symbolizing *Gmokam'c*'s sun disk could have been accomplished with a simple circle. The added outer ring and nucleus seems like too much elaboration unless one considers the relationships *Gmokam'c* shared with other mythological beings. Thus, I propose that this emblem is, in actuality, a compound image that symbolizes as many as three characters simultaneously, all of whom are strongly connected in the myths.

Wus or Wus-Kumush

Wus-Kumush (hereinafter, *Wus*), is a mythical prairie wolf (coyote) in his physical form, and possibly the Dog Spirit described by Ray (Gatschet 1890a:cii; Ray 1963:64-65). In all the tales, *Wus* is a presager of war, death, and misfortune and is considered to be *Gmokam'c*'s “younger brother and constant companion” (Gatschet 1890a:ciii; Spier 1930:138; Ray 1963:25-26). Like *Gmokam'c*, he is intimately associated with the land of the dead, which lies in the west (Spier 1930:138). According to Gatschet, Wanaka

... figures as the constant companion of K'mukamtch, because he represents the silvery-white sun-halo, with its changing colors, *K'mukamtch* being the personified sun: one of the frequent mythologic examples of hunting scenes transferred to the skies. The Fire of Young Fox burns with a yellow flame (Gatschet 1890b:373).

Thus, *Wus* and *Gmokam'c* (the Modoc call him *Kumush*) are conceived as having consanguinal ties and are inseparable. His celestial manifestation is the sun halo (Gatschet 1890a:lxxxii; 1890b:474).

As a presager of all things negative, *Wus* has the powers of clairvoyance and to see what ordinary people could not, such as spirits and ghosts. This was the particular power he offered to shamans. Whereas shamans routinely used this power to identify bad spirits that caused sickness and disease, it should come as little surprise to learn that shamans would choose to depict

Gmokam'c's sun disk with its *constant companion*, the *sun halo* and is why we see two circles, arranged concentrically like the sun and sun halo, so widely displayed in Klamath Basin rock art, rather than just one.

Pshagekenik

Gmokam'c's most powerful medicine was Morning Star, or *Pshagekenik* (Gatschet 1890a:lxxxiii). Physically, *Pshagekenik* personified a gopher, probably because, like the morning star, gophers pop their heads up over the landscape much like the Morning Star emerges quickly and then disappears over the horizon at dawn and dusk. In the tales, *Pshagekenik* is credited with restoring *Wus* and *Gmokam'c* back to life after their numerous deaths (see Curtin 1912:48-49, 193). Thus, Morning Star is the medicine for both *Gmokam'c* (the sun) and *Wus-Kumush* (the sun halo) and is closely associated with both in the myths.

While no gopher motifs have yet been noted in Klamath Basin rock art, dots and orbs are prevalent, especially in close association with the concentric circle design. It is likely that the nucleus at the center of the concentric circle design— a solid dot— represents Venus, or the mythical character, Morning Star. Shamans depicted these three characters in this fashion to represent their combined power.

Taken together, these three foremost mythical companions— *Gmokam'c*, *Wus*, and *Pshagekenik*— represented the shaman's most powerful curing magic. That shamans would display that power all over the Klamath Basin should come as little surprise.

The notion that some of these designs depict *Gmokam'c* and one or more medicine-helpers combined into a single compound image makes a certain kind of sense. The Klamath and Modoc believed fervently that it was *Gmokam'c* himself who made the rock art (Rau 1881:66; Spier 1930:142). But *Gmokam'c* was a spirit, and as such he, like any other spirit, needed a physical medium through which he could act. Certainly this indicates that shamans made the rock art while under the *spiritual influence* of (e.g. possessed by) *Gmokam'c* (see Spier 1930:109).

The special objects shamans used in their rituals and ceremonies derived their power from their symbolic associations. This also included rock art. How the objects are perceived in the natural world figures into the supernatural abilities they were believed to possess. This, in turn, influenced how the shaman would use them. According to Ray,

A rough correlation was drawn between the characteristics of the animal or object whose name the spirit bore and the objective symptoms of the disease. Thus Buzzard, since the bird circles over its prey, might be responsible for an illness characterized by dizziness. A correlation was likewise drawn between the characteristics of the spirit and the nature of the curing technique. Thus, if an intrusive object were to be removed, a grasping and tenacious spirit such as Hawk (through analogy with the bird) was used (Ray 1963:46-47).

Similarly, Spier added,

The references to the spirits mentioned in Gatschet's song collection are not random but center on some particular characteristic, habit, or association of the animal. Thus, the swimming of the mink, the underground habits of the weasel, woodchuck, and snake, the soaring of certain birds, the standing of shitepoke, and position or movement of the reptiles, are signaled for song. The ducks figure as disease bringers. (These may be curing songs in which the birds are taxed with causing the sickness.). A number of birds control the storm and wind. (These may be songs used in changing the weather) (Spier 1930:133).

In myth, this kind of symbolic relationship between natural objects and the spiritual properties with which they were bestowed played out the same way. In the *physical* world, the morning star is associated with the rising and setting sun. But in myth, the *character* Morning Star was the medicine spirit dedicated almost solely to *Gmokam'c*'s longevity. Thus, in the *spiritual* sense, Morning Star is associated with curing and the rejuvenation of life. In every story in which the characters *Gmokam'c* and Morning Star appear together, Morning Star comes to his aid, usually to restore him to life:

And nothing remained except the disk. And Morning Star said to the disk 'why do you sleep so long? Get up old man!' And he [*Gmokam'c*] got up as before, and he will last as long as the [actual] disk and the morning star (Curtin 1884:book3/myth2).

The symbolic value of the morning star, then, is its relationship with the actual rising and setting sun. Because the morning star precedes the rising sun, it appears to bring the sun continually back to life. By analogy, the *character* Morning Star behaves the same way with *Gmokam'c* in the tales. Figure 10 shows all three of these characters symbolized in their most basic, celestial manifestations.



Figure 10: Nucleated concentric circles like the one from 35-7-1-5P are the most widely depicted rock art images in the Klamath Basin.

Skoks

Skoks are the souls of deceased people who have either returned from the land of the dead or have not yet departed thereto. Dangerous by nature, they constantly seek about to snatch someone's soul to take to the land of the dead (Gatschet 1890a:xcvi, 1890b:319; Spier 1930:101). According to Gatschet, "When seen in dreams, they are of the . . . objects of the most intense dread; after leaving the body of the deceased, they are supposed to travel through the air on sticks and rattle their dry bones against each other." There is some indication that the "ghost spirit," to which Ray referred, is actually a *Skoks*, since he described them much the same way. Ray reported that, during the ritual curing ceremonies, the ghost spirit served shamans as an important medicine spirit (Ray 1963:49-50). Because he was able to override all other spirits, the ghost spirit was called upon in curing rituals only when all other spirits failed to reach a consensus (Ray 1963:57). Nevertheless, *Skoks* can be either beneficial or pernicious toward human beings (Gatschet 1890b:319). In various tales, *Skoks* appear as both the cause of disease and as the most potent of medicines.

Recalling the story *Lok Snewedjas*, in which Bear-Wife and her child were slain, an old medicine woman used her *Skoks* to recall the soul of *Lok Snewedjas*, which had been on its way west, toward the land of the dead (Curtin 1912:226). In another story, *Skoks* killed a little boy who had passed too close to him. But the boy's mother called for *Koe* (Frog Spirit), the boy's spirit helper, and after painting him with ashes, *Koe* called upon her own medicine spirit, *Skoks*, who succeeded in restoring the boy to life (Curtin 1912:374).

While in the stories *Lok Snewedjas* (Curtin 1912:219) and *A Medicine Story II*, *Skoks* is presented as a powerful shaman's medicine, *Skoks* is likewise considered to be the agent of sickness and of disease in a Klamath shaman's incantation, as presented by Gatschet:

In the spirit-land I blew out from me the heart of *sko'ksh*, (Gatschet 1890a:174).

Concerning this incantation, Gatschet explained,

The weasel, returning from its errand, reports to the conjuror that having found the cause of the patient's disease to be a wicked *sku'ks'* heart, this was brought by the weasel to the spirit-land and breathed out, to be left there (Gatschet 1890a:176).

Although they were considered powerful medicine for shamans, *Skoks* were a cause of terror for others. For people to see a ghost or hear the rustling of bones was the most threatening and dangerous of all experiences. Because ghosts traveled only at night, leaving the house at night was a traumatic experience for both children and adults alike. Those who had the unfortunate experience of encountering it unanimously described the rustle of bones and the distinctive cry, "*sqo—qs*," the sound of which probably inspired its name (Ray 1963:49-50).

Skoks have been described physically in a variety of ways, but seldom in detail. Spier reported that they resembled neither humans nor skeletons (Spier 1930:101), and Ray described them as bones, skeletons, or skeleton-like shades with a hump on their backs and a bundle at their sides (Ray 1963:50). In myth, *Skoks* are female, and like the Frog spirit, they occasionally appeared as an old woman bearing a bundle (Curtin 1912:370). In many tales, *Skoks* is a personified wood tick whom Gatschet reported to be one of *Gmokam's*⁶ many wives (Gatschet 1890a:civ). Other references described *Skoks* with red eyes and nails longer than her fingers. One side of her face is painted and the other side is painted white (Curtin 1912:374). Finally, Gatschet reported that *Skoks* inhabited the bodies of living fish. If a person should see the "spirit-fish" (*Shko'ksh=kia'm*), he or she was likely to die. This could be averted, however, by singing the proper medicine song (Gatschet 1890a:129-130).

Their descriptions as skeletal, as wood ticks, and spirit-fish are particularly important interpretive clues. The images in figures 11 come from 35-7-10-5P and represent *Skoks*. An interesting feature of these pictographs is that the "head" of the inverted figure on the right is haloed by two concentric circles. While the rounded heads most likely symbolize the human spirits believed to inhabit them, the skeletal-fish aspect is likely a reference to Gatschet's "spirit-fish" (Gatschet 1890b:319). Compound images are not at all unusual in that most curing rituals involved the use of multiple medicine spirits simultaneously (Ray 1963:56). This image depicts *Skoks*, *Gmokam'c*, and *Was-Kumush* simultaneously, each of which are strongly associated with the regeneration of life and the land of the dead. The inclusion of *Skoks* in this painting indicates that it represents the most dreaded and powerful medicine available.

⁶ Curtin reported that the wood tick was the wife of *Tskel*, or *Old Marten*, whom Gatschet described as the physical manifestation of *Gmokam'c*. (see Curtin 1912:288 and Gatschet 1890a:cii).

In a similar fashion, Figure 12 depicts what at first appears to be a haloed sunburst. But upon closer examination, one can see that all of the rays do not emanate from the central disk. Rather, four of them originate from its upper edge, giving it the general appearance of a bug, or, more specifically, a *wood tick*. The overall affect is a haloed *Skoks*. The initial confusion between a sunburst and wood tick may, in fact, have been a purposeful tactic use by the artist in order to imply the simultaneous presence of both *Gmokam 'c* (represented by the implicated sunburst) and his wife, *Skoks*. The halo, as previously indicated, represents *Wus-Kumush*.



Figure 11: The skeletal structure of these fish-like designs probably represents *skoks*.



Figure 12: The circle insect in this figure can easily be mistaken for a sunburst.

To summarize, many of the symbols on this site can be identified as mythical characters which shamans utilized for a variety of reasons that included ritual curing. Most of the rock art panels face west, in spite of the availability of rock surfaces suitable for rock art that face other directions. This implies a structured connection with the spirit land, which lies in the west. Differential weathering between images suggests that symbols were added to the site over time. Taken together, these occurrences suggest that this rock art site was related to shamanic curing.

35KL1062

Site 35LK1062 is located within the Klamath Marsh National Wildlife Refuge. The site consists of the remnants of the prehistoric village *gupgua 'ksi* and a pictograph site, which is located approximately 200 meters east of the village just up a small on a wooded ridge. The rock art contains over 70 painted images concentrated on the western end of an elongated basalt outcropping protruding from the hillside.

I visited the site on four separate occasions during the 2010 and 2011 field seasons with Archaeological Assistant, Melissa Morgan. Our goal was to both document the rock art site and to collect obsidian samples for chemical proveniencing in the X-Ray Fluorescence (hereinafter, XRF) Laboratory at the University of California, Berkeley campus. I was interested in conducting XRF analysis on obsidian from this particular site because it helped me to identify

obsidian sources from a well-known Klamath village where the identity of the prehistoric occupants was not in doubt.

Ethno-Historic/Ethnographic Review

There exists no direct ethno-historic or ethnographic reference to the rock art of site 35LK1062, even in the most recent ethnographic study on the Klamath Tribes (see Allison 1994). There are, however, numerous references to the villages along the shore of the Klamath Marsh and the cremation sites interspersed among them. A brief review of them will help to establish how rock art functioned in villagers' lives.

Ethno-Historic

The earliest historical description of the Klamath Marsh comes from Peter S. Ogden, a trapper from the Hudson's Bay Company who reached the Marsh in 1826. On Wednesday, November 30, Ogden made the following entry:

Course south to Clammitt⁷ River 25 miles from River of the Falls. Mr. McKay proceeded ahead to an Indian village distant 3 miles. It was composed of 20 tents built on the water surrounded by water approachable only by canoes, the tents built of large logs shaped like block houses the foundation stone or gravel made solid by piles sunk 6 ft. deep. Their tents are constantly guarded. They regretted we had opened a communication from the mountains. They said "The Nez Perces have made different attempts to reach our village but could not succeed. Even last summer we discovered a war party of Cayuse and Nez Perces in search of us; but they did not find us. Now they will have yr. road to follow. We have no fire arms. Still we fear them not." They are well provided with bows and arrows. They have only one horse. Snow is so deep, horses perish for want of food. In winter, they live on roots. In summer on antelope and fish (see Elliot 1909).

Later, when Fremont reached the Marsh in 1843, he thought he had reached an arm of Upper Klamath Lake. On December 10th, he described the scene in his journal as a lake of grass surrounded by timbered mountains. "It was a picturesque and beautiful spot, and rendered more attractive to us by the abundant and excellent grass which our animals, after travelling through pine forests, so much needed; but the broad sheet of water which constitutes a lake was not to be seen" (Stewart 1999:88). Fremont also reported that the Klamath Indians wore shells in their noses, had shoes made of grass, and that the women wore basket hats. Like Ogden, he provided descriptions of village huts. Within the huts, suspended on strings, he noted that there were great quantities of fish that had been smoked and dried (Stewart 1999:89-90).

A decade later, Lt. H. R. Abbott and Lt. R. S. Williamson passed through the Klamath Basin on their railroad survey from the Sacramento Valley to the Columbia River. They arrived at the shore of the Klamath Marsh on August 21, 1855 and described it as

. . . a strip of half submerged land, about twelve miles long and seven miles broad. It was covered by clumps of Tule and other aquatic plants separated by small sheets of water.

⁷ Whenever making a direct quote, I defer to the author's own spelling.

Thousands of ducks, plover, and other water birds, made it their home. They were so tame that they would hardly fly at the report of a gun, but it was useless to shoot them, as the deep mud rendered it impossible to secure them afterwards. We surprised two Indians on the shore, and endeavored to make them understand that we were friendly; but they evidently distrusted our professions, and escaped as soon as possible (Abbott 1857:68).

Following along the eastern shore of the Marsh, Abbott's party reached a village on the water's edge. Having been warned about their approach, the inhabitants had abandoned their lodges and took refuge on the water. As they harried him from dugout canoes, Abbott reported the scene:

Large quantities of food, consisting mostly of seeds of water plants and dried fish, several canoes made of hollowed logs, many baskets formed of reeds curiously woven together, and divers and other valuables, were scattered around in wild confusion. The fires were burning in front of the huts, of which there were three distinct kinds. The summer lodges had vertical walls supporting flat roofs. They were composed of a framework of sticks, covered with a matting of woven Tule. The winter huts were shaped like bee-hives, and made of sticks plastered with mud. We noticed only one of the third kind, which was apparently used for a council house. A hole, about four feet deep and ten feet square, had been excavated, and the earth heaped up around the sides. Large sticks planted in this mud wall supported a roof made of cross poles covered with earth. The entrance was by a flight of mud steps that conducted to the roof, from which a rude ladder led through a hole to the floor below. Each of these structures is represented in the accompanying wood cuts, together with some conical graves described below (Abbott 1857:69).

These early explorers provide a brief description of the village and village life on the Marsh, as well as the variety of Klamath lodges in use at the time, along with their construction methods. Abbott also described some burials and stacked rock features, but made no mention of the rock art. Notably, his description indicates that the burials he saw were taking place within the village rather than up at the cremation site(s) or near the rock art. This directly influences how we interpret the art, and will be discussed further below.

Ethnographic

While the Klamath Marsh is mentioned rather frequently in the ethnographic literature, only a few passages directly reference the village sites by name. Like the 35-7-10-5P site, no mention is made of the rock art at all. Gatschet described the village site 35KL1062 as a camping place called *Kapga'ksi*, "dwarf pine thicket" (Gatschet 1890a:xxviii), and in his accompanying dictionary, he refined his translation to "at the thicket of *kapka*-pine trees" (Gatschet 1890b:118). "*Kapka*" is a Klamath term that describes a species of low pine growing on the Klamath Lake whose fibrous bark was peeled and eaten in the spring. Gatschet also translates "*Kapka*" as "young pine tree" (Gatschet 1890b:118). Spier described *gupgua'ksi* (his spelling) as a site with lodges stretching for about 2 miles along the edge of the Marsh, with a cremation pile nearby (Spier 1930:13). Similarly, Barker (1963:192) identified *gupgua'ksi* (*gapga?akksi*, his spelling) as "little pine place." Finally, in a more recent ethnographic study, one informant referred to the site simply as "the burning grounds," in reference to the cremations located in the area (Allison 1994:199).

To some extent, each of these ethnographers described the village and various activities that took place therein. Spier, in particular, provided a good (if brief) summary of the villages along the Marsh and indicated which had cremation sites associated with them (Spier 1930:12-13). He also described a group of small boulders on the southern side of the Marsh called *ne'knuk*, “doctor” stones, and warned that children who played among them were believed to go crazy (Spier 1930:143). Accordingly, sufficient information about the Marsh in general has been reported so that the social circumstances within which the rock art had been produced and experienced can be adequately understood, even if nothing at all had been written about the rock art.

Analysis

Rock Art

The pictographs on site 35LK1062 include circles and concentric circles, ovals, triangles, human forms, and dots. Image counts are presented in table 3. These images are clustered into four groups from which my panel designations derive. Most are made with red paint, but a few also include the aqua blue as described by Cressman (1937:24-25). Differential weathering between images, even on the same panels, indicates that they were added to the rock face at different times.

Dots	41 ⁸
Anthropomorphs	11
Lines	7
Triangular	7
Circular	7
Oval	6
Zigzags	3
Barred Rectangles	2
Toothed Angular	2
Lines	
Owl's Face	1
Headed Zigzag	1
Ribbed Line	1
Zoomorphic Figures	1
Inverted “U”	1

Table 3: Image counts from 35KL1062.

Although the site is situated near a major Klamath village, topography and vegetation disrupts the viewshed: villagers could not view the images without having to hike up to the site. Moreover, no artifacts or features, save for the cremation cemetery, are directly associated with

⁸ Notably, twenty-seven of these dots are arranged into a single line.

the rock art, including stacked rock features. Even though this site is located where villagers could have visited the rock art and cremation cemetery if they so chose, archaeological evidence suggests that they did not. If villagers visited the site at all, it was likely under very special circumstances. No mundane artifacts are located near the rock art site. The absence of rock cairns indicates that non-shaman power-questing did not take place at this rock art site either. Accordingly, like the 35-7-10-5P site, the rock art site was not designated for ordinary public viewing or use. It seems that the rock art, while it may have been made for the benefit of the village, was not a part of everyday village life.

Although some images are large and sufficiently concentrated to be seen by any villagers who had a mind to seek them out, many others are small and situated near cracks, fissures, and beneath overhangs, and are thus not apparent to anybody who did not know where to look for them. Panel 3, for example, is large and flat, with plenty of suitable rock face for displaying many images, yet less than half of this rock face was used for art. As previously noted, differential weathering between images, along with traces of faded paint on remnant rock surfaces indicates that the site was constructed over a long period of time. If the art had been created for public display, certainly more of the rock face would have been used, and the images would have been large, clustered, and perhaps created all at once. Whatever else the artists had in mind, the ability for people to see their images does not seem to be among them. Rather, it seems more likely that the art had relevance only to the individuals who created it.

Panel Orientation Chart

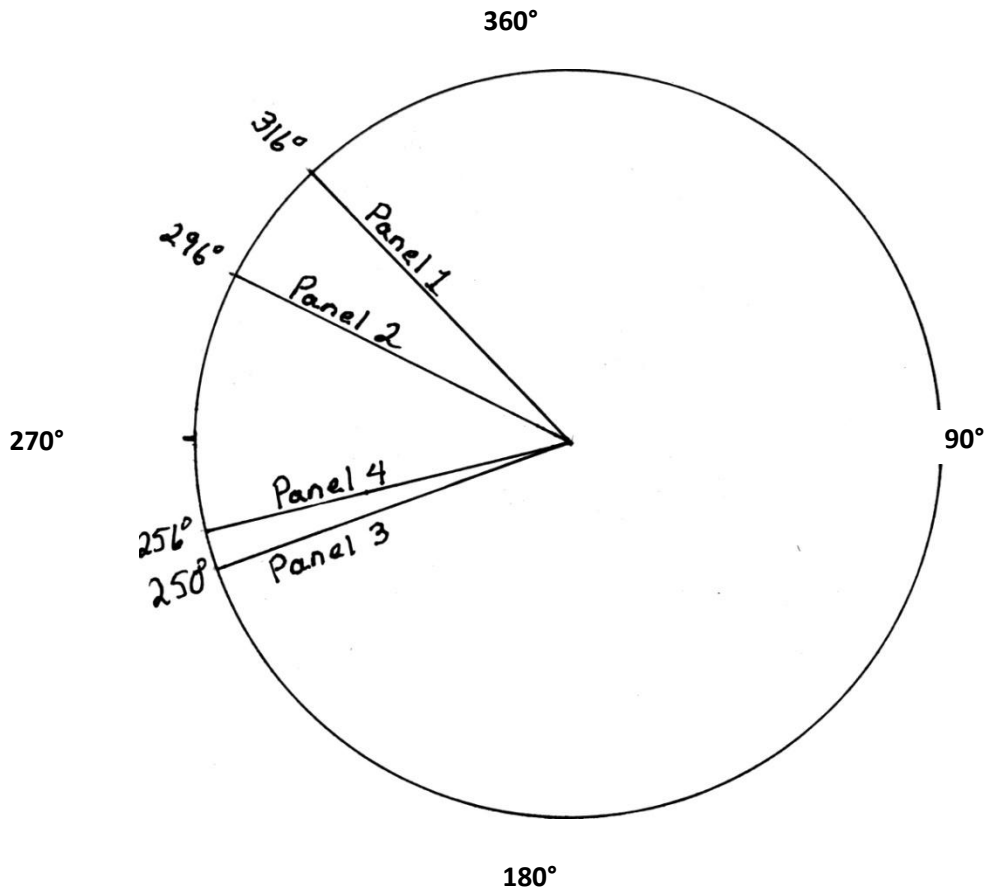


Figure 13: All rock art panels and figures on site 35KL1062 face toward the west, despite the availability of rock faces facing other directions. North is located at the top of this chart.

Finally, as figure 13 shows, all of the rock art is concentrated on the outcropping's western tip and faces west, in spite of the abundance of suitable rock surfaces that face other directions. West, we must recall, was the direction of the lands of the dead (Spier 1930:102), and at least in some shamanic curing rituals shamans needed to face that direction (Ray 1963:64-65). Taken together, these significant features play an important role in how we interpret the rock art. The implications will be discussed below.

Artifacts and Features

In addition to the rock art, we observed house pit features, ground stone, a "peel tree," in which people stripped away the bark to get at the fibrous cambium layer for food, four temporally-diagnostic projectile points, and a "rain" rock, which consists of cupules that shamans ritually pecked out in an effort to control the weather. Although we analyzed the projectile points *in-situ*, we declined to analyze the other artifacts and features since they have been so thoroughly

documented by Sobel (1992). The results of the XRF and Projectile Point analysis are summarized below.

Debitage Analysis

While some of the rock art sites in this study have well-established Klamath-Modoc cultural affinities, others are located in areas where their cultural affiliation is in doubt. The latter sites tend to be located in areas where the Klamath-Modoc camped and/or procured resources in common with other unrelated groups such as the Shasta and Northern Paiute. For these sites we took two approaches to establish the rock art's cultural ties with the Klamath-Modoc. The first was to evaluate the rock art symbols to see if they could be placed within the greater Klamath Basin rock art style. The second was to conduct chemical sourcing on obsidian samples collected from these peripheral sites. The reason we conducted chemical sourcing on obsidian from this well-known village site was because we felt that, knowing the obsidian sources for this well-established Klamath village would provide comparative information for rock art sites whose affiliations are not so well-established.

One hundred thirty-five obsidian samples were systematically collected from the site and processed at the Berkeley Archaeological X-Ray Fluorescence Laboratory at the University of California campus, Berkeley. Once the Quant'X EDXRF identified the chemical source at this facility, we sent the data to Craig Skinner, owner and director of the Northwest Research Obsidian laboratory in Corvallis, Oregon. Skinner attributed the chemical signatures to specific volcanic obsidian sources. As figure 14 shows, the majority of the obsidian came from Silver Lake/Sycan Marsh and Spodue Mountain sources, both major obsidian sources located well within traditional Klamath territory. Figure 6 (above) shows the location of the obsidian sources in relation to the settlement sites.

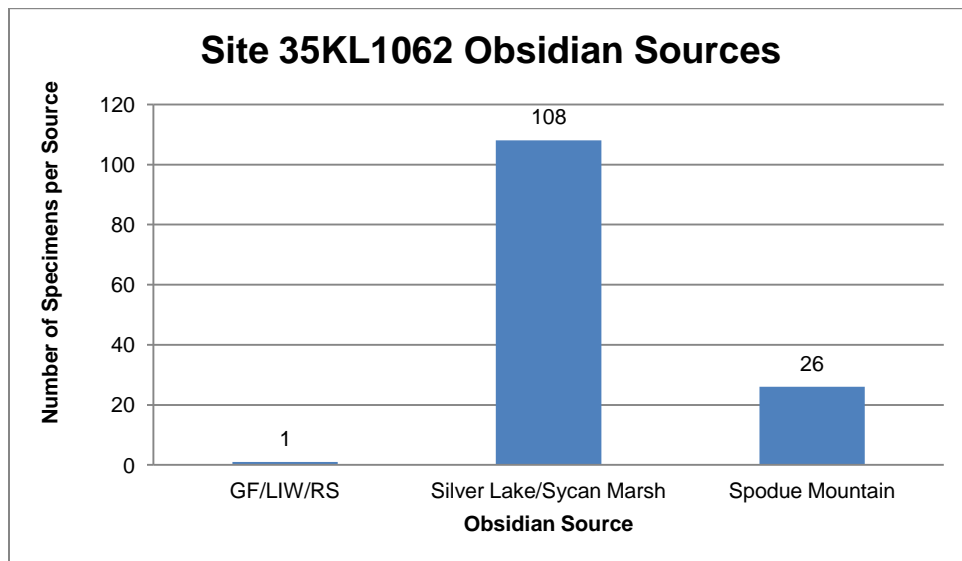


Figure 14: Obsidian source and procurement locations for Klamath Marsh debitage samples.

Projectile Points (dating)

During the course of our debitage collection survey, we observed and analyzed four projectile points *in-situ*. Even though the projectile points have no direct bearing on the art, they can still offer information about the dates of site use. We identified their typology using information provided by Justice (2002), Sampson (1985), Bettienger and Taylor (1974), and Thomas (1981). Table 4 provides the points and their basic information, while figure 15 shows all four points in the order in which they were found, arranged from left to right. They include two Eastgate Expanding Stem points, one Rose Spring point, and one Northern Side-Notched point. The Eastgate Expanding Stem dates to between AD 600-700 and 1300 (Justice 2002:330-331), while the Rose Spring Corner Notched type is considered to represent one of the first arrow points in the Great Basin and dates from AD 500 to AD 1300 (Justice 2002:320-321). Finally, the Northern Side-Notched point dates to between 6,000 B.C to 3,000 B.C (Justice 2002:168, 173).

Site Point Number	Material Type	Point Type	Length	Width	Thickness	Neck Width	Photograph Number
Ppt. #1	OB	Eastgate	4.3cm	2.1cm	0.5cm	0.8cm	October 2, 2010: DSC_63
Ppt. #2	OB	Rose Spring	2.1cm	1.8cm	0.3cm	0.5cm	August 17, 2011: DSC-90
Ppt #3	OB	Northern Side-Notched	5.2cm	2.0cm	0.5cm	1.2cm	August 17, 2011: DSC_92
Ppt. #4	OB	Eastgate	1.4 cm	1.1cm	0.3cm	0.5cm	August 17, 2011: DSC_95

Table 4: Projectile points found on site 35KL1062, their measurements, and locational information. Note that they are listed in the order in which they appear in **Figure 15** photograph.



Figure 15 Projectile points found on the Klamath Marsh date to between 8,000 and 700 years before present. From left to right they include Eastgate, Rose Spring, Northern Side-Notched, and another Eastgate.

Because the projectile points were not collected, they were not chemically provenienced. Thus, we do not know from which source they came, or for how long the known sources were in use. Nevertheless, in concert with Sampson (1985:507), and Cressman (1956:463), our findings further support the notion that the Klamath have used or occupied the Klamath Marsh for the past 8,000 years, and that their primary obsidian sources included Sycan Marsh/Silver Lake and Spodue Mountain.

Interpretation

Although the rock art at site 35KL1062 is associated with a major Klamath village, or series of villages on the Klamath Marsh, it was not located within the direct view of the village. The images vary in size: most are large enough to be seen by anybody ten or twenty meters of the site, particularly those on Panel 3, beneath the overhang. But the absence of archaeological materials or features near the site, coupled with its distance from the village, suggests that it was not viewed or encountered under casual or routine circumstances. Accordingly, the creation of the art has little to do with the everyday lives of the villagers. Instances of superimposition, differential weathering, and traces of paint on the remnants of rock surface that has long since spalled away indicates that shamans/artists added new paintings to the rock face over time. Whether or not the villagers could see the images did not seem to concern the shaman/artists who painted them. Instead, it only seems to matter that they were there.

While there is some temptation to propose that these painting episodes had something to do with the nearby cremations, this is not ethnographically supported. Although treatment of the dead

was carried out with honor and much respect, ethnographic information indicates that no further memorials or honors were held for the deceased after cremation or internment (Spier 1930:71; Ray 1963:122). In fact, there was a great emphasis on destroying the lodge and property of the dead, solely for the purpose of eliminating any reminder of deceased loved ones, and to ease the mourning (Ray 1963:119). This makes it seem very unlikely that memorials, including paintings, would have been created to commemorate the deceased, especially when we consider that there are other cremation sites in the area that are not associated with rock art.

Lt. Abbott and his company encountered a burial in progress as they passed along the eastern shore of the Klamath Marsh:

We passed on the way one of their burial places. The bodies had been doubled up, and placed in a sitting posture in holes. The earth, when replaced, formed conical mounds over the heads. Near the other graves, but on a slight eminence, stood a new wall tent, such as is used in our service. It was regularly pitched and the front tied up. On looking inside, we saw a large mound about two feet in height, the base of which covered the whole space enclosed by the walls. A new blanket was spread over the top. Here, doubtless, was the grave of some great chief: but how the savages became possessed of the tent remains a mystery (Abbott 1855:69-70).

It is clear from his account that Abbott and his party were riding through the villages along the Marsh, and that this burial was not associated with any rock art site. Certainly, if the rock art were meant to commemorate the dead, especially some “great chief” as Abbott postulated, the burials would have presumably been positioned much closer to the rock art, though one cannot completely rule out that nearby rock art images could have been made.

Instead, it seems more likely, given other lines of evidence, that the rock art has more to do with shamanic ritual than public display. Unfortunately, while a few scattered ethnographic references connect Klamath rock art to shamanism (Dennison 1879; Gatschet 1890a:179; Spier 1930:142), none have offered a clear explanation regarding the actual nature of this connection. For this, it is more informative to consult the myths.

The role mythical characters play in the shamanic curing process derives, as Gatschet indicated, from their ability to see disease-causing spirits and/or to effectively remove them from the patient (see Gatschet 1890a:xcviii, 159). My intention here is to show that it is these characters that are portrayed on this site. Although there are some 70 individual rock art images on site 35KL1062, I discuss only three different ones below. My main purpose here is not to interpret every image, but to present my case for this site being related to the Klamath shamanic curing practice. The characters I describe include the *Owl Spirit*, *Tskel*, and the brothers *Gmokam’c* and *Was-Kumush*, who are represented together in a composite image.

Owl Spirit (Mukus)

Much like the Lightning spirit described by Ray (1963:56), the Owl spirit (*Mukus*) gives shamans the supernatural vision necessary to discover the causes of sickness and disease. One of the many shamans’ incantations listed by Gatschet is that of the horned owl (Incantation #14).

This incantation simply reads, “I possess the horned owl’s sharp vision; my roof-ladder is of speckled wood” (Gatschet 1890a:175). Gatschet goes on to interpret this incantation thus:

My eyes are well fitted for the discovery of the patient’s disease, hovering in the air, for they are acute, being those of the owl; I am just stepping up my lodge-ladder, the speckle bark of a tree, on the search for the disease (Gatschet 1890a:176).

The owl’s eyes were thus considered especially important for shamans who were expected to see what others could not. Like Lightning (Ray 1963:56), an owl’s eyes are especially important *mu’lwas* for diagnosing sickness and disease. For that reason I propose that the owl’s face shown in figure 16 probably represents the horned owl medicine spirit described in the above incantation, and was thus a vital part of the shaman’s ritual tool kit. The resemblance between the owl’s eyes and the nucleated concentric rings associated with *Gmokam’c* is not likely to be coincidence. Both symbols are strongly associated with ritual diagnosis and curing. As we have seen in other cases, the artist most likely incorporated both concepts into the same image, creating a compound image that probably was intended to denote its enhanced power. A short story related by the late Klamath Elder, Edison Chiloquin supports this:

Many, many generations ago, sometime in the Beginning, the Great Creator made all the Bird people, as he did most other things in this world. But there was an evil one, the Evil Spirit who tried to imitate the Great Creator. He wanted to show that he had power, too. So he made a bird that was not noisy and noticeable like all the other birds. This one was quiet, deadly quiet. No one could hear it fly. No one saw it during the day, and seldom did anyone hear its voice because it did not sing. And no one ever saw it with other birds.

Anytime the Indian people went on a vision quest to ask for help from the Great Creator and to quest for a good power and spirit guide, this strange bird would be the first thing to come in. He would say:

Look at my eyes; see how strange they are, but how much power I have in them. *My eyes look like the Sun and I can see anything*, here, [emphasis mine] far away, or even in the future. This is why nothing can hide from me. And I am strong; I can kill anything with my claws. I am a good hunter and warrior; I am silent and can sneak up on anything and kill it without it noticing me. This is what I do, so if you really want power, then take me (Lake-Thom 1997:117-118).

Its location near the top of the 40-foot-high rock face may well factor into the metaphor of the owl’s lodge ladder mentioned in the incantation.

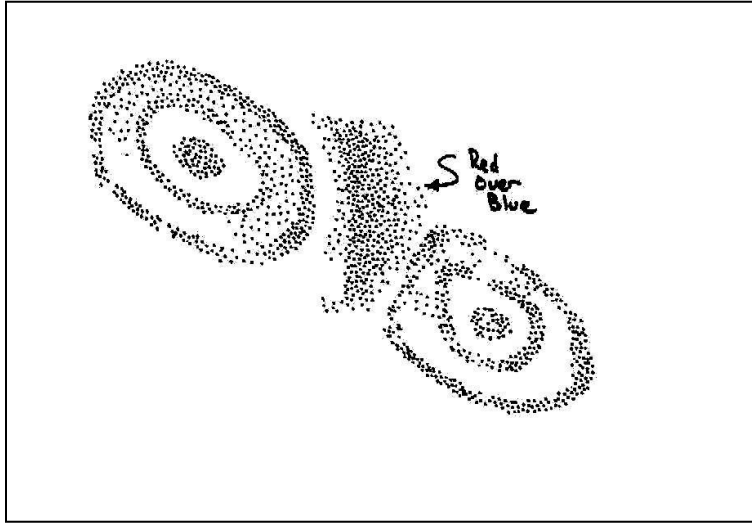


Figure 16: This depiction of an owl's face from 35KL1062 is probably a metaphor for a shaman's ability to "see", and thus diagnose, sickness and disease.

Tskel

Like the Owl spirit, ethnographic information suggests that the triangular motifs in Klamath Basin Rock Art represent *Tskel*, the spirit of the pine marten (see Gatschet 1890a:ci).

A very powerful spirit, *Tskel* ruled over the Klamath Marsh country and lived near the Yamsay River (Clark 1953:56). In myth, *Tskel* possessed a medicine stick that he carried behind his ear and used to cure people (Curtin 1912:326, 330). His association with medicine and curing suggests that *Tskel* played an important role in shamanic curing ritual.

Accordingly, *Tskel*, the pine marten, also called *Skelamtch* (Gatschet 1890b:316), is the subject of various shamanic incantations. One Klamath incantation translates: "I am the black marten, I travel around this land" (Gatschet 1890a:154). Elaborating on this brief refrain, Gatschet wrote, "The animals mentioned in these songs are all supposed to have been *sent out by the conjurer to look out for the whereabouts of the personified disease*, from which the patient is suffering, and whatever the conjurer sings about the animals refers to what he sees them doing on their errand," [emphasis mine] (Gatschet 1890a:159). From Gatschet's explanation it can be inferred that the shaman sent the black pine marten in the aforementioned song in search of a disease (e.g. as part of the diagnostic procedure). Similarly, the Song of Old Marten or *Skelamtch*, probably derives from the same logic: "I go up and stick fast to the tree," (Gatschet 1890a:168). In this instance, the marten is scouting the village for any signs of a disease (caused by a malicious spirit) from above, much like the horned owl spirit in Incantation 14 (Gatschet 1890a:175). Finally, the Incantation *Pe'p* translates, "I am the pine marten. I, the pine marten, am called by that name. I, the pine marten, am arriving from afar; I am running within sight of the one speaking" (Gatschet 1890a:177). In the context of the previous songs, this incantation probably indicates that the pine marten spirit is answering a shaman's summons who is calling him into service. This is consistent with Ray's description of shaman's helpers calling their spirits to make him/her potent for ritual curing:

The second phase of the [curing] ritual, the diagnosis, began with the summoning of the spirits, one by one, to the bedside. The doctor accomplished this by singing the appropriate song for each. The spirits were hovering nearby as a result of the invoker's earlier prayer. From the many the shaman chose those he felt would be most useful in diagnosis (Ray 1963:55).

Spier also writes,

The prompter [shaman's assistant] first commands the spirits to come to the shaman. The first he calls is Frog, for this is the principal spirit, and Frog makes the shaman call all the other spirits (Spier 1930:124).

So, the above incantations indicate that *Tskel*, the pine marten spirit functioned ritually for both diagnosis and curing (by means of his medicine stick). As figure 17 shows, the pine marten is characterized by its elongated body, long bushy tail, and his triangular head.



Figure 17: The North American pine marten is characterized by its elongated body and triangular head.

Shamans who carved or painted the pine marten spirit on the rock face did not need to depict the creature in its entirety: in fact, complete depictions are extremely rare in Klamath Basin rock art. Instead, it is more common to see the animal depiction based on its most recognizable features (e.g. its elongated body, triangular head), and the most useful attributes to the ritual for which it was used. As Figure 18 shows, different aspects of the pine marten spirit have been depicted on this rock art site.

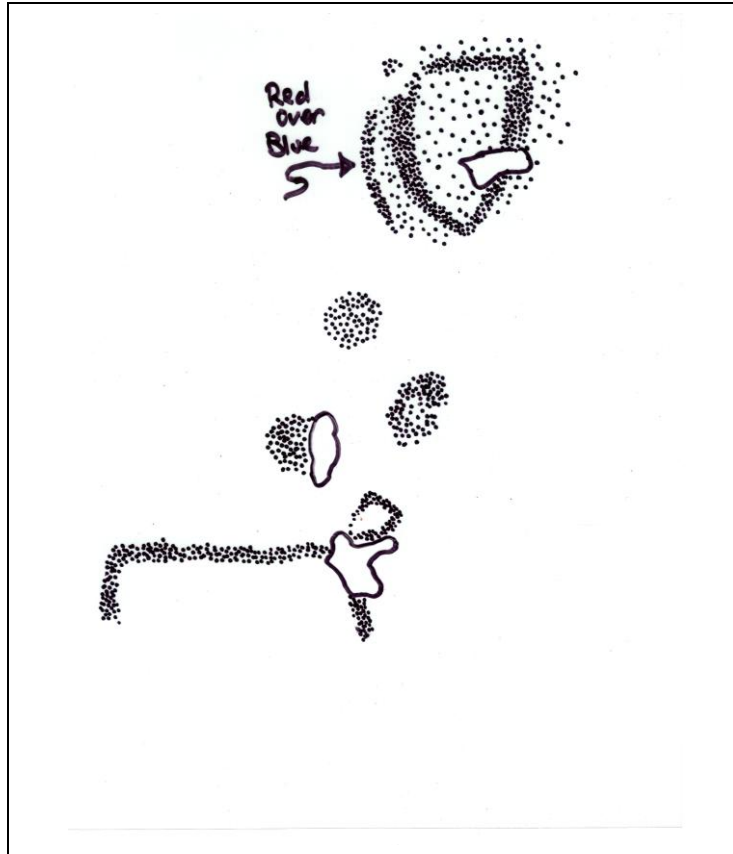


Figure 18: The triangular image on the top depicts the head of *Tskel*, the mythical pine marten, while the image on the bottom depicts both body and head. The slightly curved line to the left of the “head” probably depicts *Tskel*’s medicine stick. From, site 35KL1062, Panel 2, Image B.

Gmokam’c and Was-Kumush

The last mythical characters I want to discuss from this site are *Gmokam’c* and *Was-Kumush*, both of whom I have previously described. As previously indicated, *G’mokam’c* is the chief deity for the Klamath and Modoc. He is the creator of both the world of the living and the world of the dead (Gatschet 1890a: lxxxii-lxxx; Spier 1930:102). Moreover, *Gmokam’c* is the spirit of the sun. His possession of the sun disk made him indestructible, immortal (Gatschet 1890a: lxxxii, ci-cii). In myth, *Gmokam’c* used the sun disk not only to cure himself, but to cure mortals as well. In the tale *Latkakawas*, for example, he restored Blue Boy to life in his sweat lodge with the aid of the sun disk, after Blue Boy had been mistaken for a salmon and slain (Curtin 1912:1-16). His association with the sun disk (circle) and the regeneration of life (e.g. medicine) thus makes *Gmokam’c* a very powerful medicine spirit that shamans might utilize for curing sickness and disease. Because the sun disk represented strong medicine, it is reasonable to conclude that the circular motifs so pervasive in Klamath Basin rock art (see figure 19) represent *Gmokam’c*’s sun disk, as proposed by Hann and Bettles (2006:190).

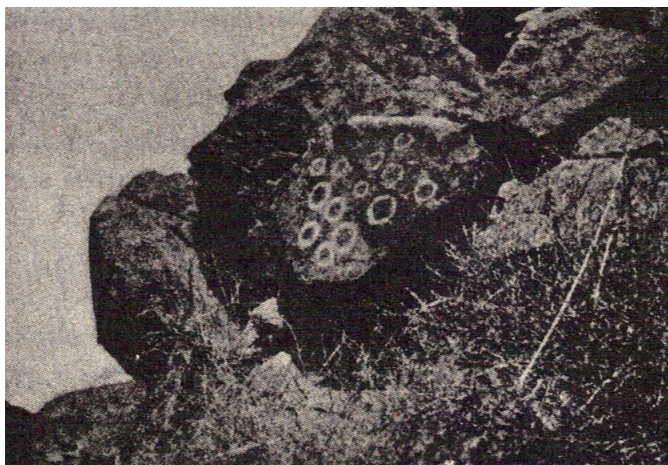


Figure 19: The circle design in Klamath Basin rock art is thought to symbolize the culture hero Gmokam'c.

From Spier 1930:142, Figure 9.

As his older brother, *Gmokam'c* appears together with *Wanaka* all too frequently in the myths (Gatschet 1890a:lxxxii,102). It should also be noted that *Wus-Kumush's* original name was *Wanaka*. Throughout the myth cycle, however, *Wanaka* underwent a transformation until finally, in the tale *Wanaka Becomes Was-Kumush*, he came into his own spiritual power and separated himself from *Gmokam'c*. It was in this tale that he adopted the name *Was-Kumush*. Though not explicitly stated, this was probably the point where he also became the guardian of the land of the dead (Gatschet 1890a:cii). Like *Gmokam'c*, *Wanaka* has both celestial and physical manifestations. In his physical form, *Wanaka* is represented as the red or silver fox. In his spiritual, celestial form, he appears as the sun halo (Gatschet 1890a:102).

Given their association with the regeneration of life and the land of the dead, it should come as little surprise that shamans would use these characters as medicine symbols, and have some precedent for doing so in myth. The story *Kumush⁹ and His Daughter* particularly stands out, as it involves *Gmokam'c*, *Was-Kumush*, and the land of the dead. In this tale, *Gmokam'c's* daughter foresees her own death and asks her father for her burial dress. Grief stricken, *Gmokam'c* refused to let her have it at first, but eventually he relented. As she prepared for her journey west, toward the land of the dead, *Gmokam'c* elected to go with her, desperate to save her life. They traveled for some distance until at last they came to a plain where the daughter was joyfully welcomed among other souls. But *Gmokam'c* was not welcomed because he was not yet dead. *Was-Kumush*, his younger brother, was in charge of this world. He warned *Gmokam'c* that some of the spirits were angry at him because he was not dead and might thus try to kill him. Sooner or later, he would have to leave. In this place, the spirits danced around a bright fire all night long, but during the day they lay down and became disjointed bones. Feeling pressured to depart, *Gmokam'c* at last filled a bag with the bones of some of the dead, including

⁹ *Kumush* is the Modoc name for *Gmokam'c*.

those of his daughter, and carried them to the upper world, following the path of the rising sun. The bones resisted his efforts, causing him to fail several times to reach the top, but at last he reached the upper world. There, he took out the bones and threw them in all directions. Wherever they landed, they became the tribes that today inhabit the Klamath Basin. Then *Gmokam'c* gave the Modoc instructions for living and for seeking supernatural power in the mountains. He also decreed that some of the people would become doctors (shamans) so that the Modoc would always have someone to save (cure) them. Finally, after finishing his work among mortals, he took his daughter to the middle of the sky, where the sun rests at noon. There, *Gmokam'c* stopped and built her a lodge. He lives with her there to this day (Curtin 1912:39-45).

This story is replete with implications regarding shamanic curing and the importance of the land of the dead. Likewise, it also denotes the importance of *Wus-Kumush*, who was the guardian of this land and all the spirits therein. For it was only with his tacit cooperation that *Gmokam'c* was able to bring his daughter and some of the other inhabitants to the upper world and give them a physical, mortal existence. This tacit cooperation may be the reason *Wus-Kumush* is depicted together with *Gmokam'c* in the rock art. Accordingly, these two characters would serve any shaman as potent medicine for any ritual involving the regeneration of life, especially when the patient's spirit was believed to have gone prematurely to the land of the dead.

The rock art images that symbolize *Gmokam'c* and *Wus-Kumush* in figure 20 show a stick-figured jaw opening around a painted circle or sun disk. Even though the artist could have expressed these characters just as effectively by painting a set of simple concentric circles, denoting both the sun and the sun halo, as we have previously seen, he or she chose instead to emphasize *Wus-Kumush's* physical aspects by depicting an open stick jaw that exhibits a very pronounced canine tooth. But rather than painting a whole coyote, the artist painted only a stick jaw, representing *Was-Kumush* as a synecdoche. This is very much in concert with Spier's earlier assertion that not only the animals, but *also their parts*, can be a shaman's *mu'lwas* (Spier 1930:132-133). The painted circle, as I have suggested from the evidence would represent *Gmokam'c's* sun disk, the symbol of his regenerative power and immortality.

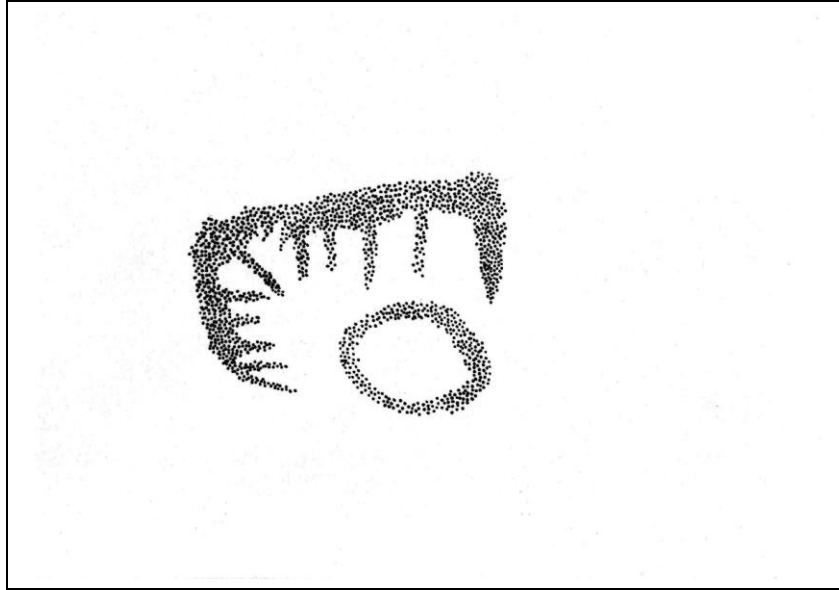


Figure 20: *Gmokam'c* and *Wus-Kumush* depicted at the Klamath Marsh. The large canine tooth at the far right of the open “jaw” identifies the stick jaw as *Was-Kumush*. Image from 35KL1062, panel 4, image d.

Panel Direction

As I stated earlier, all of the rock art on this site is concentrated on the western tip of the whole outcropping, and it also faces to the west. Considering the significance of this direction in Klamath-Modoc cosmology, it seems unlikely that this arrangement was accidental.

While I have not attempted to interpret every image on this site, I feel I have discussed the paintings with sufficient support from Gatschet’s list of shamanic incantations, Curtin’s myths, and various ethnographic statements to confidently postulate that the rock paintings on this site symbolized medicine spirits that shamans used ritually in their curing practice.

Conclusions

Throughout this chapter I have attempted to construct an interpretation for rock art images at *settlement sites* by constructing “strands” of information after Wiley (1989:16). Ethnographic statements, myths, shamans’ incantations, descriptions of shamanic ritual, semiotics, archaeological context, and the west-facing direction of the rock art panels have all contributed to these interpretations. However, this does not suggest a monolithic explanation for the art. Variation, especially in how they functioned, exists, even within the same social contexts. In the next chapter, I describe rock art located in frequently used areas. The petroglyphs at 35KL58 offer a good example of how rock art symbols serve multiple functions within a single site.

Chapter Seven: Frequently Used Areas

Introduction

In this chapter I use the term “*frequently used area*” to indicate places where people went to perform tasks outside of the village context on a regular or seasonally-regular basis. Such places included commonly used hunting areas, well-used springs, pathways between villages, and places where people traditionally went to acquire supernatural power.

Although the rock art symbols at *frequently used areas* derive from the same mythological principles as those in other settings, there are a number of important differences that are largely related to function. For example, while rock art images in residential contexts, as discussed in the previous chapter, can best be understood as being associated with ritual curing, the symbols in *frequently used areas* captured peoples’ attention and probably served to advertise the shamans’ supernatural power. For this reason, the symbols tend to differ drastically from those near settlement sites in terms of variety, size, and degree of concentration (e.g. how closely they are clustered together).

Reinforcing power structures and ideologies in this fashion is nothing new. Thomas (1993), for example, shows how the megalithic builders of Neolithic Britain controlled and reinforced ideology by bringing sacred space into the community where people worked, played, and lived (Thomas 1993:77). Similarly, Loubser (2006) contrasts the shamanic art of South African hunter-gathers with the shamanistic rock art of the later Irangi agriculturalists and shows that the highly skilled shamanic art of the hunter-gatherers appears in widely public places while the unskilled shamanistic art of the agriculturalists appears in private, secluded places (Loubser 2006). Citing Lewis-Williams (2001), Loubser explains that the shaman often went to great lengths to explain those present about supernatural events that they witnessed under trance, but what non-shamans were not able to see. Accordingly, he states that rock art was one way of making these invisible experiences in the supernatural world visible for everyone to see (Loubser 2006:232). Earle (1990) examines the way the chiefdoms of Hawaii and the Olmec used iconography to legitimize their systems of inequality and control built into complex chiefdoms. Citing Wobst (1977) and Conkey (1978a), he sees style as an active medium of communication by which individuals and social groups define relationships and associations. In socially-stratified societies, Earle points out that “style” is actively constructed within the iconographic system. “It is used to create and manipulate knowledge and thus to fashion consent as the necessary adjunct to power based on economic control” (Earle 1990:81). Finally, drawing from information exchange theory, McDonald (2008) argues that the rock art in the Sydney area of southeast Australia functioned as a prehistoric information superhighway along which groups around the region who are not in constant verbal contact were able to communicate important social messages and demonstrate both broad-scale group cohesion and within-group distinctiveness (McDonald 2008).

As I explained in chapter 2, seasonal hunting and gathering places were located near the edges of their territories areas, where the Klamath and Modoc shared access with other groups. Arguably, rock art in these areas could belong to any of these groups. Thus, it is necessary to affiliate the rock art in these marginal regions with the Klamath-Modoc using ethnographic information, stylistic analysis of the rock art symbols, and chemical proveniencing of obsidian artifacts using

X-Ray Fluorescence. The implication is that the rock art in *frequently used areas* was intended to be seen and understood by passers-by, unlike the rock art at *settlement sites* where people's ability to see the art was not a major concern to the artist. Differences in the function(s) of the archaeological site thus go hand-in-hand with differences in rock art function and how it was displayed. In order to test this proposition, I evaluate the following hypotheses below:

If the rock art in *frequently used* contexts was meant to be displayed, then the rock art symbols should be highly visible to passers-by. The images should be large, clustered, and situated where there is little chance of missing them.

If the rock art images in *frequently used* contexts were meant to be understood by those who encountered it, then the images should be monolithic, exhibiting little variety. Moreover, the images should be recognizable to the intended viewers. Here, I consider recognizable images as any image that is widely repeated in the Klamath Basin, appearing in all social contexts.

The *frequently used area*, where such images occur must display a pattern of reuse. This could include places where specific kinds of activity took place over a long period of time, such as the quest for supernatural power or procuring particular resources. Naturally, the associated archaeological context will vary according to what activities took place there. For instance, with rock art sites located on hunting trails one might expect to find points, worked flakes, and debitage, while rock art located at places where people sought supernatural power, one should expect to find stacked rock features, which are byproducts of such rituals.

Finally, if rock art in *frequently used* contexts was meant for dramatic public display, then the images were likely created all at the same time. There should be little or no evidence of differential weathering as there is among the rock art associated with *settlement sites*.

In this chapter, I test these hypotheses by examining three rock art sites located in the Klamath-Modoc hinterlands that appear to fit the criteria for frequently used areas (see map in figure 21).

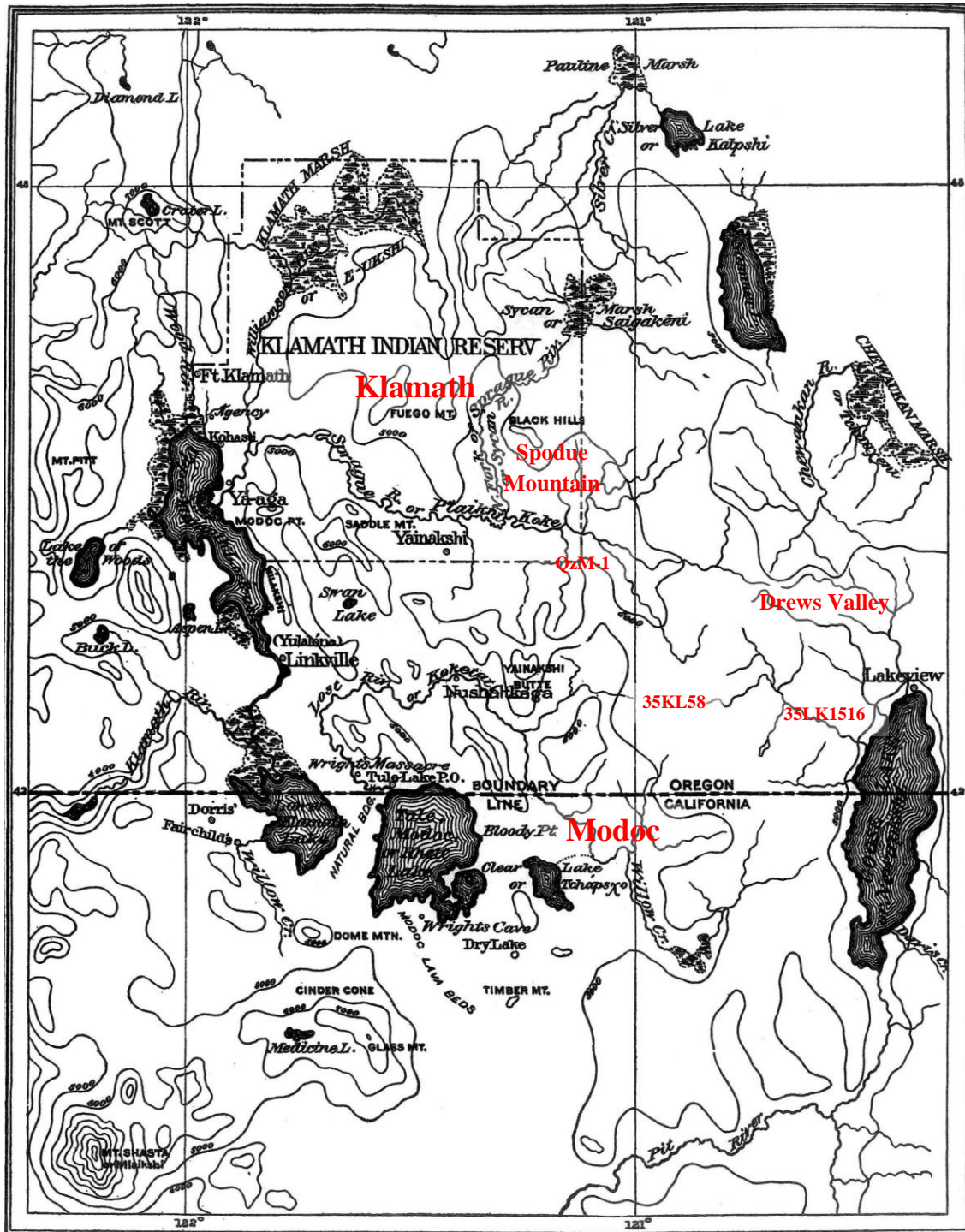


Figure 21: Map of rock art and obsidian source locations discussed in this chapter.

Adapted from Gatschet 1890.

QzM-1 AS-KCM

Site QzM-1 AS-KCM (hereinafter, QzM-1) is situated in a low creek valley southeast of Bly, Oregon, in the Upper Sprague River Watershed. The site today is on private land. The rock art consists of approximately 55 images, 47 of which are engraved circle and concentric circle figures. Traces of red paint are evident in some of the figures, especially those near the upper part of the panel. Several bullet holes scar the rock face, as are shown in *Rock Art of the American Indian* (Grant 1967:101). No new vandalism was apparent when I visited the site in July, 2009.



Figure 22: This single rock art panel from QzM-1 contains 57 separate images and measures approximately 15 feet high by 15 feet wide, and is situated along a well-used hunting trail. Note the faded red paint in some of the designs.

Debitage and broken biface tools litter the ground up and down the valley. Two distinct debitage concentrations and a concentration of stacked rock features were found within one meter of the rock art site. Three projectile points found among the debitage were identified using Sampson (1985) and Justice (2002). As table 6 shows, projectile points 1 and 2 are Rose Spring corner-notched points, which coincide temporally with the advent of the bow and arrow in the region. Based on evidence from the type site in California, this point dates from AD 500 – 1300 (Justice 2002:320-321; see also Lanning 1963). Projectile Point 3 is a Gunther Barbed point and is quite common in this region. It appears in the archaeological record around AD 800 and lasts until the

time of the California Gold Rush (1848-1855), and perhaps as late as the turn of the century (Justice 2002:415).

Site Point Number	Material Type	Point Type	Length	Width	Thickness	Neck Width	Photograph Number
PP-1	OB	Rose Spring Corner-Notched	1.8cm	1.2cm	.3cm	.4cm	July 9-13 and 17-21, 2009: DSC-22.
PP-2	OB	Rose Spring Corner-Notched	1.0cm	1.7cm	.3cm	.6cm	July 9-13 and 17-21, 2009:DSC-26.
PP-3	OB	Gunther Barbed	1.1cm	1.2cm	.3cm	.5cm	July 9-13 and 17-21, 2009: DSC-28.

Table 6: Projectile point types found in association with the QzM-1 rock Art site.

There are also thirty-three stacked rock features located directly above the main panel and are concentrated within a 50-meter area behind the site. Other stacked rock features occur all along the low rim rock exposures lining this shallow valley, but were much too spread out and numerous to count.

Flake Attribute Analysis

An analysis of the debitage I recovered from the site revealed that late-stage reduction was not taking place in the area. Generally speaking, if biface reduction is taking place the number of dorsal scars on a flake should increase as flake size decreases throughout the reduction process (Connolly 1990:145). But as figure 23 shows, this is not the case at this site. Accordingly, flake debris must have been a byproduct of some process *other than* bifacial tool manufacture, and the projectile points and finished biface tools were brought into the valley in complete form. Given the seasonal use of this area, it makes sense that the prehistoric users of this creek came with their tools ready to use. The debitage in my sample is therefore most likely the byproduct of tools made for more immediate and expedient use, such as cutting edges, scrapers, and choppers— in short, tools that are commonly used to process game and plant resources. Thus, the result of my flake analysis is consistent with ethnographic accounts for the Klamath-Modoc seasonal use of this region in resource-procurement activities.

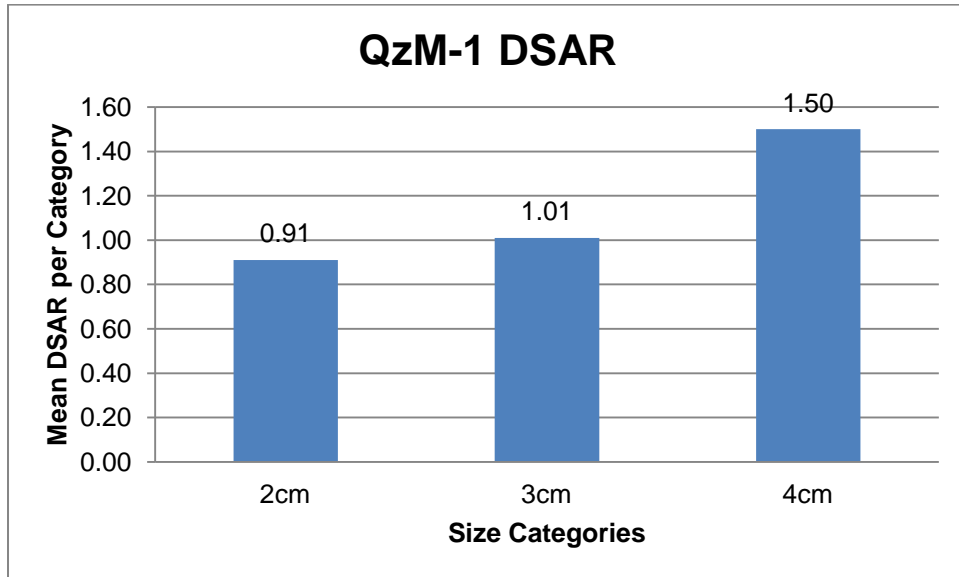


Figure 23: Dorsal Scar Area Ratio analysis suggests that late-stage reduction was not taking place in the project area.

Affiliation- Ethnographic

The Klamath called this part of their territory “*Plaikni*, which means “high country” (Helfrich 1974). In this region, the North and South Forks of the Sprague River join just north of Bly, Oregon. The name of the town of Bly derived from its root word “*plai*” (above). The river flows west past the prehistoric settlements of Yainax and eventually joins the Williamson River before draining into the Klamath Lake. The creek valley in this study is located just east of Bly and is a tributary to the South Fork of the Sprague River.

After the advent of the Klamath Indian Reservation in 1870, this creek valley fell into disuse by the Klamath and Modoc, since it was located some fifteen miles outside of the established reservation boundaries. For these reasons, ethnographic information about this canyon is virtually non-existent. However, ethnographic information about the general area shows that the Klamath and Modoc had used this area regularly, and may have even maintained prehistoric settlements (Allison 1994:202).

By the time whites settled the area, the Upper Sprague and Sycan River watersheds were considered to be primarily Yahooskin territory, although the Klamath and Modoc had continued to visit this region in common with them on a seasonal basis:

The Quartz pass area was a central gathering place for the Klamath, Northern Paiute, and Modoc tribes primarily in the summer months from May through July. Generally, the Klamath tribes came from the Sprague River Valley to the west, the Northern Paiute from the east and the Modoc tribes from the south. The tribes would congregate for trading,

gathering roots and berries, obtaining obsidian sources, and possibly fish and game curing (Rosetti et al. 1995).

Ethnographers appear to be uncertain about which group or groups occupied this region prior to this period, although sufficient clues suggest Klamath-Modoc. Spier offers a few seemingly conflicting accounts. Although he appears uncertain as to whether permanent settlements existed above Yainax in pre-reservation times (Spier 1930:21), Spier listed one Klamath village west of Gearhart Mountain (*hicdichue'lukc*) and noted that there were at least three settlements on the Sprague River at Yainax before the coming of the whites (Spier 1930:14). Moreover, he added that the area had been used at least seasonally by the Upland Klamath for gathering resources during the summer months, and states that the “towns [along the Middle Sprague River] are widely separated and extend a considerable distance up the river; the easternmost is somewhere west of Gearhart mountain” (Spier 1930:13). This would place the prehistoric village somewhere north of its confluence with the Sprague River, somewhat northeast of Yainax, near Bly, Oregon.

Other ethnographers seem to agree. Stern (1966:19) reported that the Upland Klamath (*Plaikni*) actually *occupied* the Sprague River Valley in prehistoric times, and in an article written for the *American Antiquarian*, Gatschet wrote that the Klamath subgroup, the *Plaikni*, were called the “Uplanders” and *occupied the country along the Sprague River* [emphasis mine] (Gatschet 1878). Only after the advent of the Klamath Indian Reservation did the Snake Indians (e.g. the Yahooskin and Walpapi) settle in the upper part of the Sprague River Valley (*Plai*) above Yainax (Gatschet 1890a:xxxv). Speaking strictly of the Modoc, Verne Ray stated that *Yainax* was a summer village site, possibly with a small winter population, situated south of Yainax Butte, and was a site where ceremonial and gambling activities took place (Ray 1963:210). Allison (1994:202) added that the prehistoric Klamath probably occupied the Sprague River Uplands prior to around 1800, when the Shoshonean mounted bands began raiding the area.

Although it is not clear, it seems likely that Klamath or Modoc maintained permanent settlements in the Upper Sprague River Watershed, and shifted to seasonal use after the Shoshone began infiltrating the area in the early 19th century. From that time forward, they visited this region seasonally, exploiting resources in common with the Yahooskin, Shoshone, and Northern Paiute.

Affiliation- Chemical Analysis

Based on one hundred obsidian samples I recovered from the site and processed at the Berkeley Archaeological X-Ray Fluorescence Laboratory at the University of California campus, the majority of the obsidian from AzM-1 came from the traditional Klamath and Modoc obsidian sources of Spodue Mountain and Drews Valley, respectively (Connolly and Jenkins 1997:242; Hughes 1986:199-200; Sampson 1985:240-241). The outliers in this study are the samples that entered the site from Tucker Hill and Buck Mountain in an area located on the periphery of the Klamath-Modoc and Northern Paiute territories, and thus may represent a partial Northern Paiute use of the valley as well (see Gatschet 1890:Stern 1966:280; and Ray 1963:206). These sources are located well within the Yahooskin territorial boundaries, which were known to use the *Plaikni* area seasonally in common with Klamath and Modoc groups. But after the advent of the Klamath Indian Reservation none of these groups reportedly used this valley because of the

influx of white settlers. Thus, the obsidian most likely reflects the pre-reservation use of the site and is predominantly Klamath-Modoc.

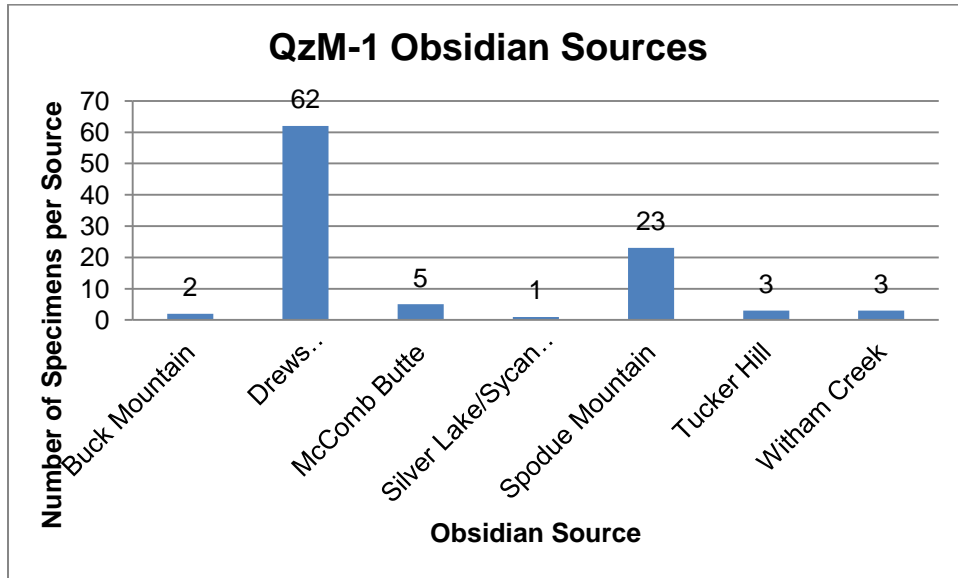


Figure 24: Results from XRF analysis shows that Modoc and Klamath show a predominance of Modoc and Klamath obsidian.

Affiliation- Stylistic Analysis

As shown in table 7, the rock art symbols from this site consist entirely of the painted petroglyph¹⁰ circular designs, lines, and zigzags that define the Klamath Basin rock art style (Hann et al. 2010:2) and were probably created sometime prior to the early 1800s. The affiliation of the rock art style with the Klamath-Modoc is consistent with the chemical analysis of obsidian artifacts found in association with the site.

Circular Designs	47
Circle-Line	4
Combinations	
Lines	3
Zigzags	1

Table 7: Circular designs are the most dominant symbols on site QzM-1.

¹⁰ Many of the petroglyphs had been subsequently filled in with red pigment. Hence, painted petroglyph.

Site Interpretation

From the XRF analysis we can infer that the creek valley was used predominantly by the prehistoric Klamath and Modoc peoples. The Klamath visited the site from the north, by way of Spodue Mountain, while the Modoc visited the site from the southeast, by way of Drews Creek and Butcher Flat. Projectile point data indicate that they had used the creek for at least the past 1500 years and continued into proto-historic times. The valley's plethora of resources drew them there each spring, and the archaeological materials observed along the creek bed indicate that the people intensively exploited them. The regularity of its use is perhaps what inspired shaman-artist(s) to place the art where they did: it was a perfect place to advertise their supernatural power.

Taken together, the presence of stacked rock features and lithic debris all up and down the valley floor shows intensive seasonal use between A.D. 1500 and historic times. The QzM-1 rock art site certainly fits the criteria as an advertisement site for shamans' supernatural power. It is large, concentrated, and situated in a place where people routinely went for a variety of purposes. Great effort was made to ensure that those who passed close by saw it. The designs are simplistic, virtually monolithic in nature, and derive directly from Klamath-Modoc myth. They would have been easily understood by all those who encountered them. By situating the rock art in such a regularly and well-used place, the shaman-artists effectively "presenced" their supernatural power in the valley.

35LK1516

Site Description

Site 35LK1516 is located at the head of a basalt canyon just below the scab rock plateau where seasonal runoff from a spring drops over the rim into a break between the north-south running rim rocks. A small clearing, cross-cut by the intermittent stream, is located at the base of the rim. Around the clearing, five petroglyph concentrations comprised of mainly circle and zigzag motifs make up the site. Above the site, obsidian, basalt, and some crypto-crystalline silicate (CCS) debitage is scattered around, intermixed with twenty or more stacked rock features.

Besides the original two panels already identified by Loring and Loring (1983:47-48) and a third by Poetschat, Keyser, and Loubser (Poetschat et al. 2010:95-99), we identified two more panels on our 2008 site visit. These are shown in figures 25-26. Notably, the engravings on panel 2, figure 26 (bottom), were so badly faded and covered by lichens that they did not show up well in the photographs. For that reason, I did a field sketch of the panel as well (see figure 27). The presence of debitage, a few broken points, and numerous stacked rock features indicate that people visited this area for a variety of reasons that included subsistence activities and seeking supernatural power.



Figures 25 (above) and 26 (below): The symbols on panels 1 (above) and 2 (below) from site 35LK1516 are characteristic of the Klamath Basin rock art style. Because of the lichens, many of the images on panel 2 are no longer visible.

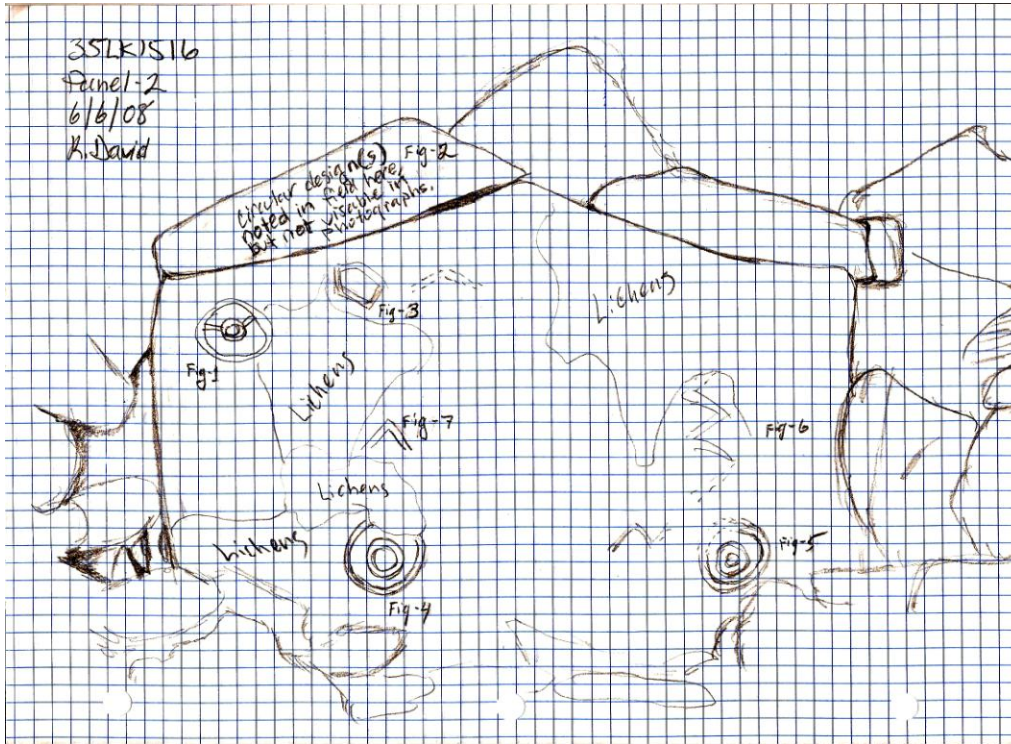


Figure 27: A sketch of panel 3 from the same site shows that many more images once covered this rock face, creating a much more noticeable display.

The obsidian and CCS debitage scattered lightly in and around the stacked rock features above the site were not analyzed. One Rose Spring corner notched projectile was observed and analyzed *in-situ*. According to Justice, this point type coincides with the introduction of the bow and arrow, and has dates ranging from A.D. 500 to A.D. 1300 (Lanning 1963, cited in Justice 2002: 320-323).

Site Point Number	Material Type	Point Type	Length	Width	Thickness	Neck Width	Photograph Number
PP-1	OB	Rose Spring	1.4cm	1m5cm	0.3cm	NA	June 15, 2008 DSC_182

Table 8: The Rose Spring point observed in association with site 35LK1516 suggests that the area was used for hunting game.

Affiliation- Stylistic Analysis

In light of the Klamath Basin Rock Art style description given in chapter 1, and taking into consideration the statements in support of this site being Modoc in origin offered by Loring and Loring (1983:47) and Poetschat et al. (2010:106), I find little evidence to affiliate this site with any group other than the Modoc. A count of the designs represented at this site is found in table 9.

	15
Circular	
Squared “U”	1
Zigzags	2
Chevrons	1
Triangular	1
Anthropomorphic	1

Table 9: Circular symbols are the most dominant on the site, and in Klamath-Modoc rock art as a whole.

Affiliation- Chemical Analysis

We returned to the site on September 18, 2010 and recovered an obsidian sample for XRF analysis from a nearby lithic scatter. As figure 28 shows, most of the obsidian came primarily from Drews Valley and Spodue Mountain, both traditional Modoc and Klamath sources, respectively (See Connolly and Jenkins 1997:242; Hughes 1986:199-200; Sampson 1985:240-241). While it is true that a few obsidian flakes entered the site from sources that are likely Snake and Northern Paiute, these are comparatively negligible.

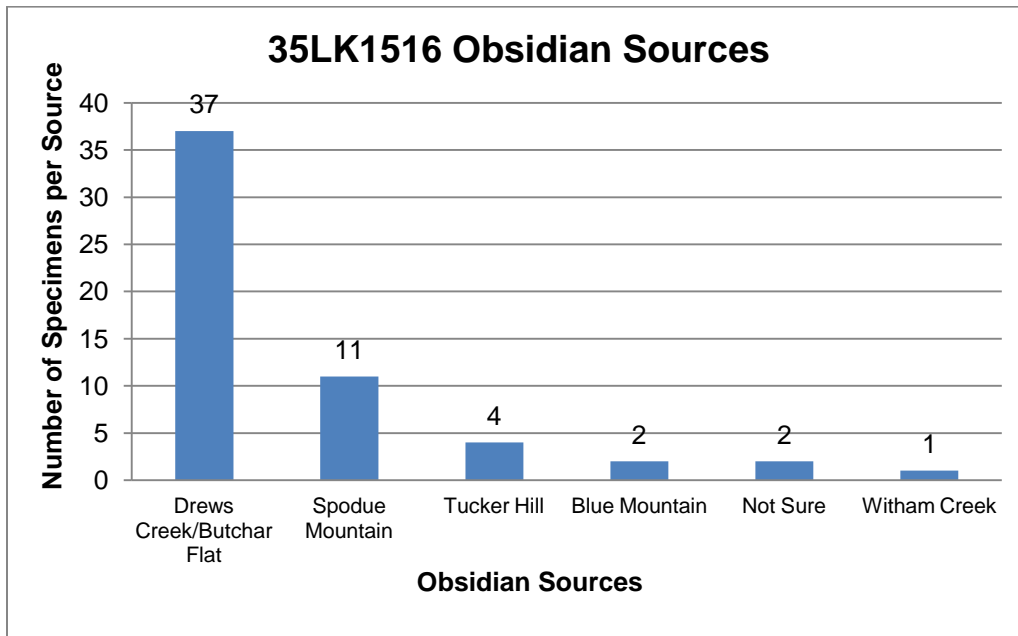


Figure 28: Obsidian recovered from site 35KL1516 entered the area primarily from the Drews Creek/Butcher Flat source, and from Spodue Mountain. .

Affiliation- Ethnographic

Site 35LK1516 is located in the Goose Lake region, where territorial boundaries between the Klamath, Modoc, and Northern Paiute overlapped, at last late prehistoric times (Connolly and Jenkins 1997:242), and lasting until protohistoric and historic times. Gatschet reported that the Klamath, Modoc, and especially the Snake visited this region during the hunting and fishing seasons (Gatschet 1890a:xxii), and according to Howe (1968:75), this area was the frontier between the Snakes and Modoc, but there were no established lines or “territorial borders” since both were semi-nomadic. Congruent with this information, during the course of my fieldwork, I also observed other rock art sites in the area that do not fit within the Klamath-Modoc rock art style pattern. Thus, this rock art site is situated in an area where there exists a significant overlap in cultural materials and rock art. Nevertheless, there is sufficient evidence to affiliate both this rock art site and the archaeological materials with the Modoc.

Although Drews Valley is located in territory that Spier attributed at the time to the Northern Paiute (Spier 1930:8), Ray points out that the Modoc maintained a summer camp there called *Nja'ktis*, for root digging, seed gathering, and hunting, particularly of bears (Ray 1963:210). The Modoc also maintained a permanent village on the west side of Goose Lake, on a peninsula which they called *Lu'kmtsis*, “big nose,” in reference to the peninsula’s shape. According to Ray, this was a major base for hunting deer, antelope, and waterfowl, as well as for gathering roots and seeds (Ray 1963:210). Another winter village (35LK1519) not mentioned in any of the ethnographic reports, is located approximately 1.6 kilometers north of the rock art site. This village has been identified as Modoc by John Kaiser, Fremont National Forest Archaeologist

(John Kaiser, Pers. Comm. February 12, 2012), and the results of my recent XRF analysis conducted on obsidian debitage from the site adds strong support.

Site Interpretation

Results from the XRF analysis revealed that the Klamath and Modoc utilized the area surrounding the rock art site. Projectile point data indicate that they had used the creek for at least the past 700 years, and the presence of rock cairns indicates that some of those activities included quests for supernatural power (Spier 1930:93-95). Moreover, the style of the art is strongly indicative of the Klamath-Modoc. The area's abundant resources drew them there each spring, and the observed archaeological materials indicate that the people intensively exploited them. The regularity of its use, and its proximity to potable (and possibly sacred) water, is perhaps what inspired shaman-artist(s) to place the art where they did. However, the volume and visibility of the rock art makes it apparent that it was meant to be encountered and experienced by people approaching and utilizing the spring.

Maintenance

A final comment should be made regarding discoveries made by Poetschat et al. (2010:97). I refer specifically to their observation that some of the rock art at this site had been re-pecked and re-painted on at least two, but perhaps as many as four occasions. The reason for this, I propose, was to maintain its visibility for those who were anticipated to encounter it, and to maintain its power. According to Spier, it was customary for shamans' helpers (interpreters) to maintain rock art sites:

The Klamath do not make pictographs. There are however a few in their country, said to have been made by Kemu'mumps, the culture hero. They refer to them as shaman's mu'lwas, paraphernalia or, better, objects pertaining to a shaman. *They are repainted from time to time by old men*, "who work for a shaman," by which my informant may have meant shaman's interpreters [emphasis mine] (Spier 1930:142).

Just like the telling and re-telling of myths over winter campfires, the re-painting of rock art motifs probably served to keep alive group ideology and at the same time maintain the power foundations of shamans.

35KL58

Site Description

Site 35KL58 is a rock art site located in the Klamath-Modoc highlands at the base of a rim rock on an unnamed mountain rim in the southern reaches of the Plaikni region and the northern reaches of Modoc territory. Small springs emerge from the base of the rim rock immediately below panels A and E. The rock art is comprised almost entirely of circle designs and concentric circle designs that are typical for the Klamath Basin (Hann et al. 2010:2), save for panel B, which is comprised entirely of incised parallel and crosshatched lines, first observed by Loring and Loring (1983:30). During my 2007 survey, I observed only two basalt flakes and three stacked rock features on the plateau above the site. The first and largest stacked rock feature is located on the rim rock above the petroglyphs, while the remaining two are located downhill in a meadow just below the rock art site. Other stacked rock features are located in the surrounding area, but not in direct association with the site (Jones 2006). Nevertheless, their presence in the

surrounding area indicates that the predominant activity on this part of the mountain was power questing.



Figures 29 (left) and 30(right): The circular images on panels A and C from 35KL58 are characteristic of those on the site. Because of natural weathering, the photograph showing figures 30 has been digitally enhanced.

Affiliation- Ethnographic

The rock art site is located in what was the territory of *Kowiwas*, the “people of the far out country,” in Modoc territory (see Ray 1963:295), and was very close to territorial boundaries belonging to the Northern Paiute in the east and the Klamath to the north, who used this area seasonally. An ethnographic reference to nearby site 35KL87 supports a Modoc association with this site (Silvermoon 1994:31).

Affiliation- Rock Art

As table 10 shows, the site is comprised of major concentrations of circular symbols that are characteristic throughout the Klamath Basin. By contrast, panel B, which contains the incised parallel and crosshatched lines, presents an anomaly on this site, but does not detract from its affiliation with the Klamath-Modoc. Other scratched sites appear at well-known Klamath-Modoc rock art sites, but are not included in this project. I discuss their significance further below.

Image Type	Count
Circular	32
Straight Lines	5
Chevrons	1
Grids	1
Zigzags	1

Table 10: Circle and concentric circle designs from 35KL58 are the most frequently represented on this site.

Site Interpretation

Whereas eighty percent of the motifs on this site are circular designs, large and clustered into three distinct groups, it is apparent that shamans created this site for dramatic public display, characteristic of sites in *frequently used areas*. However, the incised lines on panel B strongly suggest that the site served another purpose over the course of its history.

Incised Petroglyphs

Among the Klamath, supernatural power was open to all (Spier 1930:94), and as noted above, rock cairns are a byproduct of power-seeking rituals, which shamans also had to undergo in their training to become shamans. Typically, however, when one encounters an area where power-seeking took place, dozens if not hundreds of stacked rock features are present. Encountering as little as three in a group is common in an area where other cairns generally occur, but isolated groups like this are quite uncommon. Accordingly, the rock cairns on this site appear to derive from some other sort of power-seeking ritual, perhaps that of an individual. It is thus tempting to speculate that the rock cairns on this site have something to do with the scratched petroglyphs on Panel B, since it, too, is an uncommon feature of this site. Moreover, making rock piles and incising the rock face require the same kind of strenuous and repetitive behaviors associated with power questing. Scratched petroglyphs in Klamath Basin rock art are extremely rare. It is perhaps for that reason alone that no research on them has been completed for this region. Nevertheless, some insights might still be gained by exploring related research on other incised rock features on the Columbia Plateau and in Northern California.

On the Columbia Plateau, Keyser and Taylor have proposed that incised petroglyphs constitute a distinctive rock art style in that region from the categories identified by Keyser (1992), and may be related to ritual self-mutilation that was carried out by some of the more fearsome shamans called *isxiipin* (Keyser and Taylor 2006:213). Local ethnographic texts report on the wide belief among Columbia Plateau peoples that the body was the seat for supernatural power. By cutting themselves, the *isxiipin* released the supernatural power through their blood, and then ingested it in order to feed their spirit-helpers (Keyser and Taylor 2006:219). By way of analogy, Keyser and Taylor noted that Columbia Plateau peoples believed that spirit power was also contained in certain rocks, and that by cutting into them, supernatural power was released in the form of rock powder. The purpose of making it into a powder was to ritually transport it elsewhere for future

preparation and use, possibly by ingesting it in order to feed their spirit-helpers (Keyser and Taylor 2006:217-218).

While the Columbia Plateau has no direct ethnography relating to the removal and retention of rock chips or rock dust for later ritual use, northern Californian ethnography has detailed accounts of people using rock powder from rock cupules for these same purposes (Whitley 2000:98-101). With this behavior possibly occurring both north and south of the Klamath Basin, it is tempting to speculate that the use of rock powder to enhance or feed one's own spirit-helpers provides a reasonable explanation for the scratched petroglyphs at site 35KL58, especially since the presence of rock cairns is likewise indicative of power-seeking ritual. However, among both the Klamath and Modoc, there is no ethnographic indication of either self-mutilation or gathering rock powder for ritual use. In order to provide an ethnographically-supported explanation for these incised lines, we must look to local customary ritual.

Shamans underwent rituals similar to those of ordinary villagers in their quest to either gain or to renew supernatural powers (Ray 1963:32-36). While activities such as running up and down hills, breaking twigs, and making rock piles were a part of these rituals (Ray 1963:77), incising rock faces is not listed among them. However, the act of creating deep incisions in a basalt rock face constitutes the same kind of repetitive, strenuous, and mundane pointless type of activity characteristic of other power quest rituals. Whereas ethnographic accounts of Klamath Basin rock art unanimously attribute its production to shamans (Denison 1879; Gatschet 1890:179; Riddle 1890; Spier 1930:142), it seems reasonable to conclude that the incised petroglyph panel on this site resulted from a variation of the same ritualized repetitive behaviors people performed in order to gain supernatural power.

As we have seen, we can associate incised petroglyphs as well as stacked rock features, with the acquisition of supernatural power. Thus, I propose that this site served first and foremost to advertise the supernatural power of Klamath-Modoc shamans, and at some point in its history, one or more later shamans visited the site to seek or renew their supernatural power through incising the rock face and stacking rocks.

Conclusions

Each of these rock art sites shares important properties that are relevant to this study. Although they are located away from residential bases, they are nonetheless situated where people were likely to encounter them. This appears to be intentional. The images are clustered, tend to be larger compared to those from other contexts, and some had even been enhanced with paint, making them more noticeable. In some cases the rock art was situated exactly where people could not help but encounter them, such as over the springs at site 35KL58, and along the well-used trail at QzM-1. In short, unlike the rock art at *settlement sites*, symbols at these sites appear to have been intended for public display.

People who encountered these sites visited the area not only for resources, as evidenced by the presence of lithic artifacts, but also for supernatural power. The stacked rock features associated with many of the sites are byproducts of those power quest rituals (see Spier 1930:93-95). It is even possible that the rock art sites were perceived as places where supernatural power was especially concentrated.

The Klamath Basin rock art style is thought to have a tradition extending as far back as 4,500 years before present (Fitzgerald 1992:34; Hyder and Lee 1990:240). Armitage et al. (1997:18) provide three relatively recent chronometric dates from another Modoc site in Lava Beds National Monument. These are 840 ± 70 , 230 ± 70 , and 330 ± 50 years before present. More directly, Rau reported that he had received a letter from Albert S. Gatschet stating that the practice of painting figures on rocks was still going on among the Klamath at the time of his visit to the area. The letter had originally been written by Dennison and sent to Gatschet in 1898. In it, Dennison commented on a series of rocks along Upper Klamath Lake that were covered with circular designs and stated that his Klamath informant, Minnie Froben, said that they had been made by shamans and “mean nothing but to inspire fear of the doctor’s [shaman’s] supernatural power” (Dennison 1879). Rau further commented,

According to my correspondent, there are in that neighborhood many rocks bearing painted figures; but his description refers especially to a single rock, called *Kta’i Tupahski* (Standing Rock), situated about 50 yards north of Sprague River, and one hundred and fifty yards from the junction of Sprague and Williamson Rivers. It is about ten feet high, fourteen feet long, and twelve or fourteen feet deep. *The most frequent designs are single or concentric circles*. . . . [Emphasis mine] which consist of a dark-red circle surrounded by a white one, the centre being formed by a red round spot (Rau 1881:65).

This letter offers us a historical explanation for just this kind of rock art, since Froben’s explanation for the art appears to be related to their function. These rock paintings, all circular symbols, were clearly intended to be seen by passersby and to have a prescribed affect on the viewer. This is the very essence of what I am proposing to be a *frequently used area* rock art!

Circular designs are the most frequently represented symbols in the Klamath Basin, and especially in the *frequently used area* context. While zigzags, chevrons, and straight lines are also depicted, circular designs are overwhelmingly larger and much more noticeable. Clearly these were important symbols and must have been psychologically powerful. Ethnographic informants related their creation to *Gmokam’c*, the Klamath-Modoc creator, who is also known as the spirit of the sun (Spier 1930:142). In myth, *Gmokam’c* played a very prominent role, especially in terms of shamanic curing. For insights into the nature of this symbol, it is thus prudent to turn to the myths. Now codified in writing (see Gatschet 1890 and Curtin 1912), these myths formed the foundation for the Klamath-Modoc worldview. Symbolizing important mythical characters on a rock face certainly would give shaman-artists added powers of influence over those who encountered it. These myths constituted the very foundation of the Klamath-Modoc spiritual system. By extension, these symbols, based on myth, would have had great meaning to those who encountered them.

As I stated in chapter 6, the nucleated concentric circle motif (Figure 9) represents the mythical characters *Gmokam’c*, *Wus-Kamush*, and *Pshagekenik*, which are the physical manifestations of the sun, sun-halo, and morning star, respectively. Given their roles in myth that involve the regeneration of life, these characters would have been the most powerful curing magic at hand. It is therefore no wonder that shamans would want to identify with their power and symbolize it on stone all over the Klamath Basin. Placing their symbols in such *frequently used* places (e.g.

trails, well-used springs, etc.) was most likely the efforts by shamans to promote and reinforce group ideologies as well as to display their own supernatural powers.

As ritual practitioners of the community, shamans specialized in things such as healing, clairvoyance, and weather control. They relied on supernatural power to accomplish these feats, specifically the regenerative power associated with the sun, sun halo, and morning star as related in the myths. It was essential that laypersons believed both in the spiritual universe and the shamans' ability to harness and control its power. Myth provided the link between the physical and spiritual worlds. Creating rock art enabled shamans to make the spirit world more tangible in the mindset of ordinary villagers, and it helped them to understand the specific powers that beings like *Gmokam'c*, *Wus*, and *Pshagekenik* possessed, and subsequently offered to shamans. To that end, rock paintings and engravings at *frequently used areas* enabled shamans to both reinforce a general belief in the supernatural world and to advertise their own abilities to control it.

Chapter Eight: Special Use Areas

Introduction

In this chapter I use the term *special use areas* to describe rock art located where there is either no other archaeological context or where archaeological materials appear to have no relationship with the rock art. These sites are typically located away from areas where ordinary, mundane or everyday activities occurred, and involve rock art related to ritual quests for supernatural power.

While it is plausible that rock art located in these areas would have features and attributes that are characteristic of Klamath Basin rock art, and are recognizably Klamath-Modoc, their association, as I shall try to support here, with the ritual and power quest practices marks them as different rock art sites, including in this case some variable symbols, forms, and panels likely, that are commonly associated with ritual trance. Among many known prehistoric hunter-gatherers, the quest for spirit power typically involved activities that led to individuals entering into altered states of consciousness. As I describe in chapter 5, rock art imagery deriving from such mental states should have characteristics that are identifiable as entoptic phenomena and feature any of the seven principles of perception described by Lewis-Williams and Dowson (1988:203). These are the basic assumptions that underlie my discussion of the rock art at several sites that I hypothesize to have been *special use areas* for ritual trance and related rock art. The sites I examine include CA-Mod-17, 30-1-23-8P, 31-09-16-3P, 39-13-20-P2, and FHC-3.

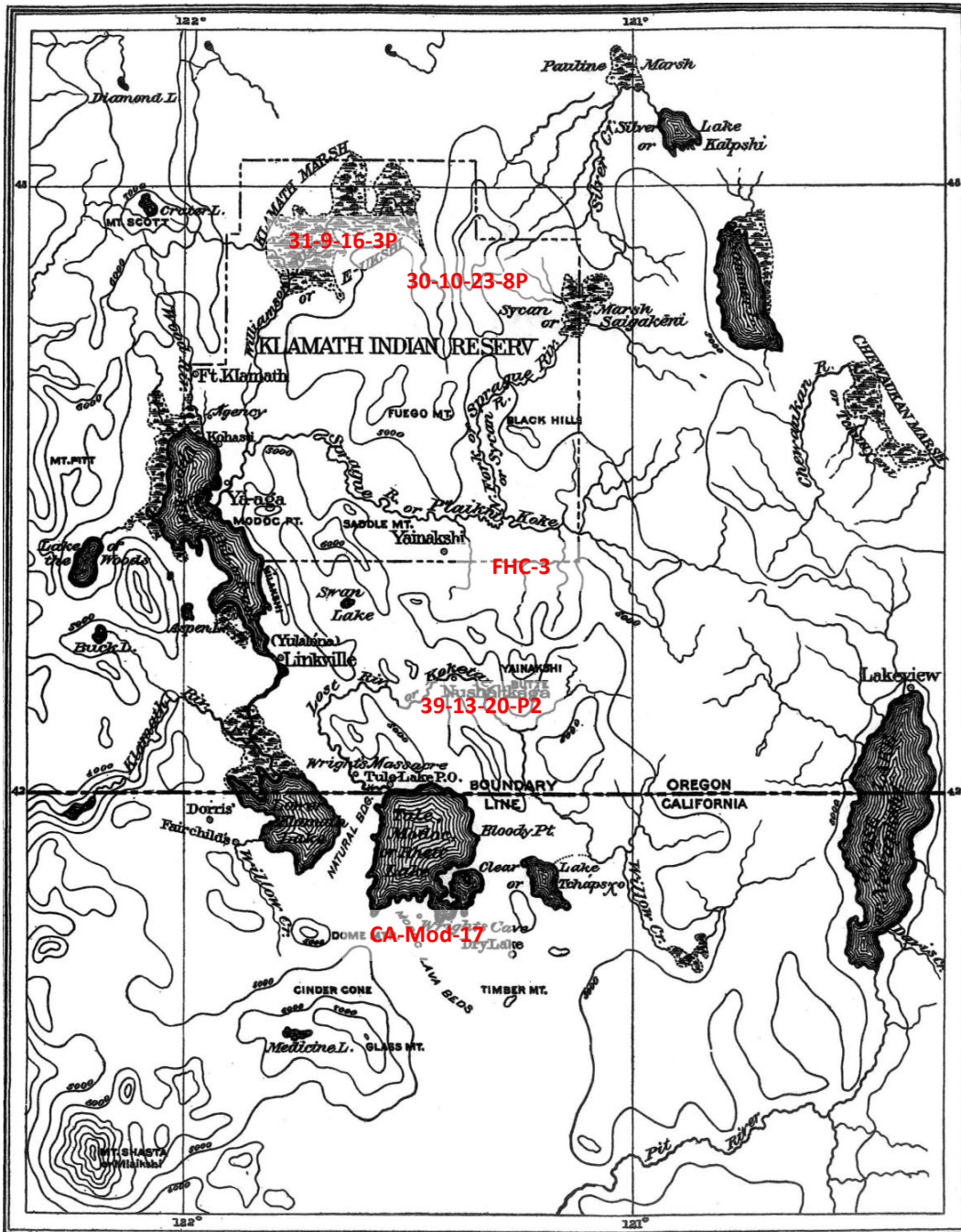


Figure 31: Special use rock art sites are located all throughout the Klamath-Modoc culture area.

Adapted from Gatschet, 1890.

CA-Mod-17

Site Description

CA-Mod-17 is a lava tube located within the boundaries of Lava Beds National Monument in Northeast California's Modoc County that contains prehistoric paintings and a midden around the entrance. The lava tube is approximately 440 m long, ranging in width from 10 to nearly 20 m with ceiling heights roughly 4 m in the southern leg, 7 m in the entrance area and 1 to 2 m in the northern section. The cave can only be accessed through a hole in the ceiling caused by an ancient collapse. Over the millennia, a midden heap below the entrance has formed, comprised of wind-blown silt, naturally-deposited animal remains, and cultural material. The majority of the cave is uninhabitable by plants and animals but there are floral and faunal remains that have been deposited by animal and human activity throughout the cave (Haertel and Wilson 2003:3-4).

Twelve distinctive panels of pictographs line the eastern and western walls near the entrance (Lee et al. 1988:60). Although an actual count of the pictographs is not forthcoming, I suspect that an estimate ranging into the hundreds is not an exaggeration.

The only known systematic and comprehensive photo-documentation of the pictographs was carried out by Lee et al. (1988). The photographs and sketches resulting from that effort are now in the custody of Lava Beds National Monument and the Klamath Tribes. Although I obtained access to their published monograph, I did not gain access to the photographs. The observations I put forth below are based on my own, incomplete photographic collection of the pictographs, and are not to be taken as exhaustive or representative. At the request of the Klamath Tribes, images from this site will not be shown.

Based on the photographs I took, I have identified ten distinctive motifs that occur regularly in the cave and at other Klamath Basin sites I have visited. In the table below, I list the motif types and then describe all of the observed variants within each category. All images on this site are pictographs.

1. *Circular* images range from simple, unornamented monochromatic designs, to elaborated polychrome images that are sometimes connected with straight lines. Ornamentations include internal spokes, external rays, and combinations of the two. Some circles have a series of internal parallel lines or a row of dots. Still another variant of the rayed variety include "petals" in the place of rays, giving some images the appearance of an incomplete daisy.
2. *Centipede* designs are monochrome images comprised of a single elongated line bisected by a series of perpendicular lines running all along its length. No polychrome designs in the category were noted, although I have noted such elsewhere in the Klamath Basin.
3. *Anthropomorphic* figures are a frequent occurrence in the cave. Most, if not all, are elaborated in some way. Though one can recognize them as human-like in appearance, few exhibit proportional, naturalistic qualities. Rather, elongated features prevail, especially the bodies and limbs. Sometimes, the black-painted anthropomorphs are outlined or embellished in some way with white pigment. Elongated limbs are sometimes made of wavy lines or include too many joints. Sometimes the limbs morph into a weapon or tool, and in at least one instance, it morphs into another

anthropomorphic being. Several anthropomorphic figures have what appear to be wings. These figures may represent butterfly wings. Ray noted that “The spirits are like butterflies and yet they are human, their bodies are small, somewhat larger than butterflies. They have small waists and are crystal clear” (Ray 1963:34). Figures that exhibit hands and feet show only three digits on each. None are depicted with proportionate heads. Many heads are simply missing, while others appear as split sticks or as rayed triangles. Finally, whenever phallic symbols are present, they are always elongate, leading some to speculate that the figures are actually lizard (Lee et al. 1988:140).

4. *Stylized Beings*. I use the term “stylized” here to describe particular figures that, although they have possible anthropomorphic, zoomorphic, or insect-like attributes, cannot be securely identified as such. One example of such images include a being with a small head, elongated arms that terminate in hands with too few digits, and a long, wavy body that ends in either a fanned out tail or a foot with disproportionately long digits. Other figures are skeletal and may represent ribbed humans, insects, fern stems, or any combination of the three.
5. *Sun- or starbursts* include dots or circular designs with rays emanating from them.
6. *Zoomorphic* figures include one recognizable canine. Lee et al. (1988:140) also reported seeing bird-like figures. I observed one, but one of its “wings” terminated into an exaggerated human hand. Thus, I categorized it as a spirit figure.
7. *Zigzags* and *wavy lines* appear alone, in combination with other zigzags or wavy lines, and sometimes morph into other designs that are sometimes vaguely anthropomorphic.
8. *Parallel lines* occur either alone or as an embellishment to some other design, such as the inside of a circle. Sometimes, they appear as slightly wavy parallel lines.
9. *Dots* appear all over the cave, either in isolated groups, rows, or as embellishments to other designs. The most prominent use of dots in this cave is their arrangement into an elaborate latticework that connects many of the figures, giving them a celestial appearance, as though the images are projected against a background of stars. The implications of this are discussed below.
10. *Human hands* are also present, probably more than the two I observed in my photograph collection. These appear side by side and appear to be a right and left hand, but represented in reverse order.

Where this imagery fits within the Klamath Basin rock art style, as well as within the model I propose here, will be discussed at the conclusion of this chapter.

Archaeological Materials

Mod-17 is one of only two caves in Lava Beds National Monument that contains habitation debris. In late 1935 Lava Beds Chief Ranger, J. Carlisle Crouch conducted preliminary archaeological testing in Mod-17 with the hope of drawing attention from academia to, “...the archaeological potentialities” in the area and to “...obtain the services of a qualified archaeologist to make a more thorough investigation of the area” (Crouch 1936, cited in Haertel and Wilson 2003:5-6). Crouch excavated a cross-shaped trench in the cave’s floor of Mod-17 intersected by a shorter, 16-foot trench, to a depth of 78.7 centimeters, revealing layers of ash and charcoal, organic, and inorganic soil, as well as artifacts left by former occupants of the cave. Cultural evidence included a fire hearth, mortars and pestles, obsidian debitage, bifacial

tool fragments, projectile points, bits of coiled basketry, shell beads, water-worn pebbles, charcoal, bone fragments, and fragments of a pipe or sucking tube. The excavations were conducted before radiocarbon had been developed as a dating method for archaeology. Crouch concluded, based on the trench profiles, that the cave was occupied at two different time periods but added that the findings were inadequate to determine when the cave was inhabited. The nature and duration of the occupation is thus uncertain. Lee et al. (1988:102) point out that the closest source of potable water is more than 1.6 kilometers from Fern Cave (Gary Hathaway, personal communication 1988), which suggests occupation of the cave must have been for restricted or limited use.

Affiliation- Ethnographic

Although I am unaware of any ethnographic references relating directly to CA-Mod-17, Ray (1963:206) shows that the site is located well within Modoc Tribal Territory. The map in figure 32 shows the approximate location of the site and its position within Modoc territorial boundaries as described by Ray (1963:206).



Figure 32: Mod-17 is located well within Modoc territorial boundaries. The red star shows the approximate location of the site.

Adapted from Sampson 1986:4, Fig. 1-2.

Affiliation- Stylistic

Although Swartz (1978:22) suggests that Klamath Basin rock art resulted from “numerous cultural influences that this region has received,” most significantly from the Great Basin, Lee et al. (1988:132) contend that a stylistic analysis of the art indicates that the site is Modoc. Citing Kroeber (1922:319), they observe that the Modoc were isolates who rebuffed outside influences, and their tribal solidarity is one of the key reasons for their rejection of design elements from neighboring tribal units. Thus, they argue that the pictographs are Modoc in origin and that nobody who is familiar with the Great Basin and Klamath Basin rock art styles would ever mistake the two (Lee et al. 1988:132).

Affiliation- Archaeological

Janet P. Eidsness and Ann King Smith (1990) evaluated CA-Mod-17 for inclusion on the National Register of Historic Places. In the nomination, Eidsness and Smith (1990) reported that

the site exhibited overlapping functions that include subsistence, domestic, and ceremonial (see Haertel and Wilson 2003:7-8).

Eidsness concluded that *subsistence* activities occurred within the cave because of the organic materials recovered by Crouch in 1935. More recently, Haertel and Wilson noted that processing and procurement items have been found in the cave's entrance area, thus adding support to Eidsness' claim (Haertel and Wilson 2003:7). Eidsness also placed the site in the short-term or special use *domestic* category, presumably because of the large midden, and possibly because of smoke blackened ceilings or walls. Whether house pit depressions have been observed is not apparent. Finally, Eidsness categorized the site as a *ceremonial* space because of the large concentration of pictographs it contains (Eidsness 1990, cited in Haertel and Wilson 2003:8).

It is, of course, very possible that the nature of the cave's use has shifted over time. AMS dates generated from pigment testing, conducted by Ruth Ann Armitage in 1997 (Armitage et al. 1997:718), provide three relatively recent dates from CA-Mod-17 pictographs. These dates are 840 ± 70 (CAMS-277229), 230 ± 70 (CAMS-27860) and 330 ± 50 (CAMS-27861) uncalibrated years before present. The findings of the Armitage research revealed that there were multiple episodes of painting over the past 1,000 years. Coupled with Crouch's hypothesis that the cave had at least two occupations, it is possible that its function could have shifted between domestic to ceremonial numerous times over the centuries.

Concerning the pictographs, Lee et al. (1988:136) suggest that they may be associated with Modoc power quest rituals. Although Ray reports only those ceremonies that took place in or near the villages, his map (Ray 1963:Map 2) of Modoc villages shows a ritual center in the vicinity of the cave. This cave is unusual in that it contains a midden, and several house pits are located nearby. The cave seems to be located too close to Tule Lake to have been a seasonal camp location, given the number of villages located nearby. It may be that the prehistoric Modoc shamans conducted initiations, contests, or other rituals at Fern Cave (Lee et al. 1988:137). The collection of more data based on controlled excavation and exhaustive analyses that include radiocarbon dating, obsidian sourcing, and pollen studies are certainly warranted.

Site Interpretation

At this time I am not prepared to make an assessment of the archaeological materials recovered by Crouch, or those observed in the 2003 survey reported on by Haertel and Wilson (2003), of which I was a participant. It is important to note, however, that the feature Crouch excavated was a midden, and the items on which Eidsness (1990) and Crouch (1936) based their interpretations may well have been *ceremonial* in nature, given the presence of the pictographs and the presence of human remains. While I do not outright reject their interpretation of multiple functions, especially those that suggest the Modoc used the cave as a habitation site, more exhaustive analysis of the artifacts is needed. The unspecified food remains¹¹ on which Eidsness used in part to base her *subsistence* category, for example, may well have been ceremonial in nature. According to Spier, before eating, people cast bits of food toward spirit places in order to feed the spirits first (Spier 1930:91). What more spiritual place could there be in the region than this rock art filled cave? Moreover, whether or not the *domestic* items noted by Crouch (1936)

¹¹ Eidsness used the term "organic materials" in place of "food remains" (Haertel 2003:7)

and Eidsness (1990) might have entered the cave ceremonially also merits serious consideration. It seems unlikely that the Modoc would carry out ordinary activities such as food processing in this most spiritual place, especially in the presence of human remains.

In spite of their great diversity, the paintings exhibit a high degree in uniformity in that they categorically defy naturalistic depictions. As I indicated above, the anthropomorphic, zoomorphic, and even geometric designs are highly stylized. Moreover, these are intermixed with spirit beings, or images that cannot be placed in any other category. All of this strongly suggests that the paintings depict expressions of Modoc spirituality. More specifically, they are indications that Modoc shamans sought and found spirit power in this cave.

Information from Armitage et al. (1997:718) demonstrates that painting episodes took place within approximately the past 1,000 years, suggesting that the site was not created for public display, but, rather, the rock art imagery accumulated through repeated use. This, also, suggests that Modoc shamans repeatedly visited the cave to seek supernatural power over many centuries.

30-10-23-8P

Site Description

Site 30-10-23-8P is a rock art site situated in very small cave located approximately 140 meters up the eastern slope of the open grassland of the Upper Williamson River valley in southern Oregon. Williamson River itself runs through and along the grassland's center. The cave is situated just on the north side of an intermittent drainage that is today overgrown with aspen, Ponderosa Pine, and various bushes including Klamath Plumb. Yamsey Mountain can be seen directly east across the valley from the site. Given its small dimensions, its distance from the archaeological site, as described below, and the fact that the pictographs are situated on the shelter's ceiling, it is reasonable to suggest that the rock art site was meant for private use and had nothing directly to do with the activities represented in the archaeological remains below.



Figure 33: The 30-10-23-8P cave is only about 1.5 meters high and 2 meters deep.

While there are a few isolated obsidian flakes scattered along the top of the ridge above the cave, none show any concentrated activity associated with the rock art site. The few scattered rock cairn concentrations along the ridge denote power questing activity as well, but once again, none are associated with the rock art site.



Figure 34: These figures from 30-10-23-8P were painted on the ceiling of this small, isolated cave, suggesting that they were meant only to be viewed by the artist who created them.

Located approximately 140 meters downhill from the cave, ground stone, diagnostic projectile points, broken bifacial tools, and lithic debitage indicate the remnants of a seasonal camp. Some of the artifacts associated with the site were collected in previous years and are included here. The artifact owner, who no longer collects, agreed to show me where these points were found and made them available for analysis. Accordingly, I assigned them their GPS location, and they were numbered, and analyzed for identification. I analyzed the projectile points associated with the camp in order to establish their the time depth of the site, while the obsidian debitage was subjected to XRF analysis for a chemical provenience in order to establish site affiliation and to compare with other sites whose affiliation is in question. The results of these analyses are provided in figure 35.

Affiliation- Stylistic

Given the fact that there are only two or possibly three identifiable images on this site, stylistic affiliation with other Klamath-Modoc sites may only be marginally helpful. The white stick figure on the left in figure 34 is identical to at least one figured in Ca-Mod-17, which is another cave site. Moreover, the white chalk figure on the right is also reminiscent of the stylized human figures in the cave at CA-Mod-17. But it is not clear whether it represents a headless anthropomorphic figure with curved, elongated arms over a torso and exaggerated phallus, or if the long inverted curve represents the figure's stylized head instead of arms and the appendages

below represent the arms. If the latter is the case, then the image exhibits no apparent phallus. It is interesting to note, however, that both types appear at CA-Mod-17 where there are abundant elongated human figures much like the red one superimposed over the chalked designs on this site. Taken together, these few similarities indicate some probable affiliation with the Modoc rock art site CA-Mod-17.

Affiliation- Ethnographic

The project area is located in the Upper Williamson River sub-basin in the river valley situated between Yamsey Mountain and Wildhorse Ridge. The Williamson River flows north through this valley before it turns west and then south again around Wildhorse Ridge to become the Klamath Marsh. Jackson and Irving Creeks drain into the Williamson River in this area. The ethnographic map in figure 32 shows this region resting within the northern parts of Klamath tribal territory (see figure 31).

Traditionally, the head of the Williamson River functioned as an old Klamath fishing camp (Allison 1994:155). Further north, between the head of the river and where the river swings around the mountain to become the Klamath Marsh, there is not much ethnographic information available, save for various discussions about the now famous Yamsi Ranch. According to Allison,

This is now part of the central camping area for use of the Yamsey Mountain property. The very name of Yamsi Ranch indicates its location within the shield of Yamsey Mountain, a spiritual center for all of the tribes. This ranch was part of some of the most valued areas of all the nearby peoples (Allison 1994:155).

Local author, rancher, and essayist Dayton Hyde also describes the many projectile points, knives, stone bowls, mortars, net weights, and other artifacts he has observed along the banks of the Williamson River as it cuts through Yamsi Ranch (Hyde1971:145). Given his description of the artifacts and their native use, it is likely that this area had been used as a seasonal camp.

Further north, and closer to the project area, Jackson Creek was also an important resource procurement area. Various informants told Allison that it was used for hunting, fishing, and gathering even today (Allison 1994:158). Speaking of Yamsey Mountain and Jackson creek, one informant said,

Those are sacred places. That was where the Indians worked and worshipped and gathered their food, *wocus*; and they hunted, gathered duck eggs, *wocus*, gathered everything else that pertained....and up Jackson Creek and into Yamsey, we used to hunt all of that. That's good hunting ground for the big bucks (Allison 1994:158).

Ethnographic information about this area of traditional Klamath territory thus describes it as a seasonal campsite for procuring and processing resources rather than as a winter village.

Although there are several winter villages reported ethnographically all along the eastern edge of the Klamath Marsh, the influx of people during the spring and summer months to harvest *wocus* seeds, fish, and hunt would have swelled the local population. The Klamath were not the only

people to gather at the marsh. The Warm Springs Indians used to occupy camps along the northern part of the marsh (Ray Royce, personal communication, July 15, 2009; Spier 1930:41) as did the Snake Indians from the east (Gatschet 1890a:xxxv). Stern (1966:12) reports that the Klamath were also joined by a few Paiute and Modoc as well.

It is entirely possible that the archaeological site within the project area may have been used by any of one or more of these groups at any given time. Discovering which of these groups utilized the area in the vicinity of the rock art site can be further inferred based on evidence provided by the analysis of obsidian using X-Ray Fluorescence.

Affiliation- Chemical Analysis

Results from XRF analysis indicate that the majority of the obsidian entered the site from the Silver Lake/Sycan Marsh source, with additional materials coming from Spodue Mountain. Both sites are well-established Klamath-Modoc obsidian sources (Connolly and Jenkins 1997:242; Hughes 1986:199-200; Sampson 1985:240-241). However, the Northern Paiute shared access to the Silver Lake-Sycan Marsh source, raising the possibility that the archaeological site component could have at times been a Paiute summer camping place. However, a comparison with XRF results from obsidian found at the well-established Klamath village site 35KL1062 in chapter 6 (figure 35), demonstrates that the proportional use of obsidian sources are nearly identical. Thus, I conclude that chemical analysis supports a Klamath-Modoc use of this site.

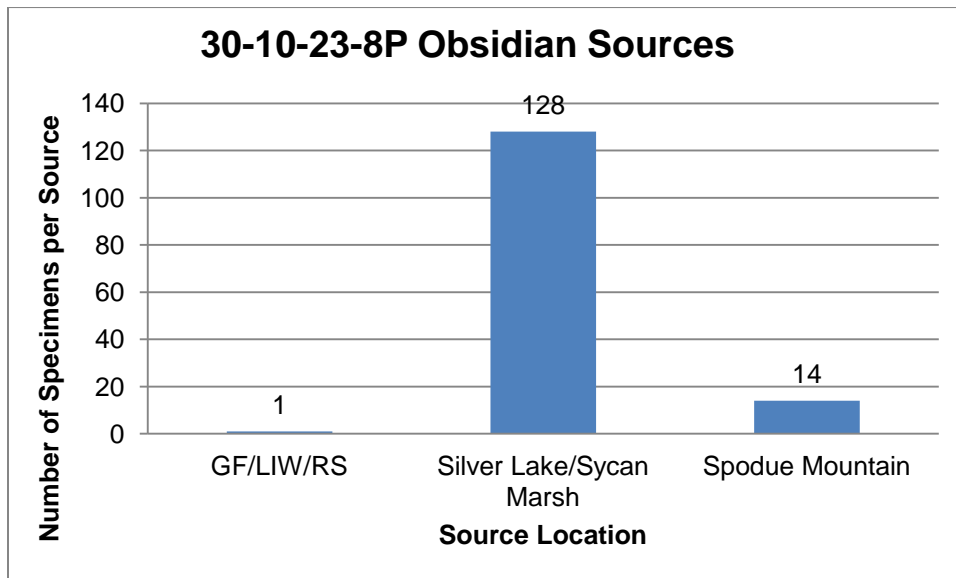


Figure 35: Chemical analysis demonstrates that most obsidian entered site 30-10-23-8P from traditional Klamath and Modoc sources.

Site Interpretation

Whereas the images on this site were painted on the cave ceiling, it is reasonable to conclude that they were not intended for public display. Instead, the images appear to have been made for private ritual use. Although the site is not structurally restrictive, its small size and location away from the camp suggests that people would have little or no reason to go there. The lack of archaeological materials on the cave floor or around the cave's entrance supports this assumption. Thus, whatever use the artist made of these images in this cave can be reliably postulated to have been both special and private.

31-09-16-3P

Site 31-09-16-3P, otherwise called the "Stickman" site in reference to human stick figures spray-painted on the site, is located in the foothills overlooking the Klamath Marsh in a region the prehistoric Klamath referred to as *A'ukckni*. The site is on a large basalt outcrop with rimrock faces. Originally recorded in 1980, the outcrop contains ten rock art panels that consist of pictographs and incised petroglyphs. White spray-painted figures, including four stickmen, a "swastika-image," a double "T," and the word "countre ea." The initials "T.R" and the date "8-26-54" have also been scratched over some very faded red pictographs. The outcrop is "U" shaped and faces northwest, west, southwest, and south. The rock art panels occur along the western and southern sides of the outcrop, and are situated in locations where smooth surfaces occurred on the rock. Of particular interest is the fact that, with the exception of the incisions that occur over Panel 1, the incised panels are located below an overhang close to the ground and are difficult to spot unless one is specifically looking for them.

It is worth noting that Loring and Loring (1983:16) mentioned nothing about the white spray-painted figures in their report. Although previous recorders have suggested that these spray-painted figures may be a continuation of the Klamath rock art-making tradition (see Swift 2002), I am of the opinion that they are not representative of the same underlying concepts as those that were painted in prehistoric times. For that reason I do not include them in this analysis.

Affiliation-Stylistic

Both pictographs and petroglyphs on this site are highly abstract in nature, resembling the paintings at CA-Mod-17 and other sites associated with special ritual use activities (Hann and Bettles 2006:184; Loubser and Whitley 1999:64-74; Whitley et al. 2006:209-223). Like the incised petroglyphs located at 35KL58, the incised petroglyphs on this site are likely affiliated with the ritual cutting described by Keyser and Taylor (2006:216). These include complex geometric forms, stylized human figures, crosshatches, parallel lines, and figures that appear to be in flight (see figures 36 – 37). The use of triangular designs to depict the heads of elongated beings is also a hallmark of Klamath-Modoc rock art and occurs at this site on panel (see figure 36). These comparisons suggest that the rock art symbols at this site are representative of the kinds of activities that produced similar markings at other Klamath-Modoc sites.

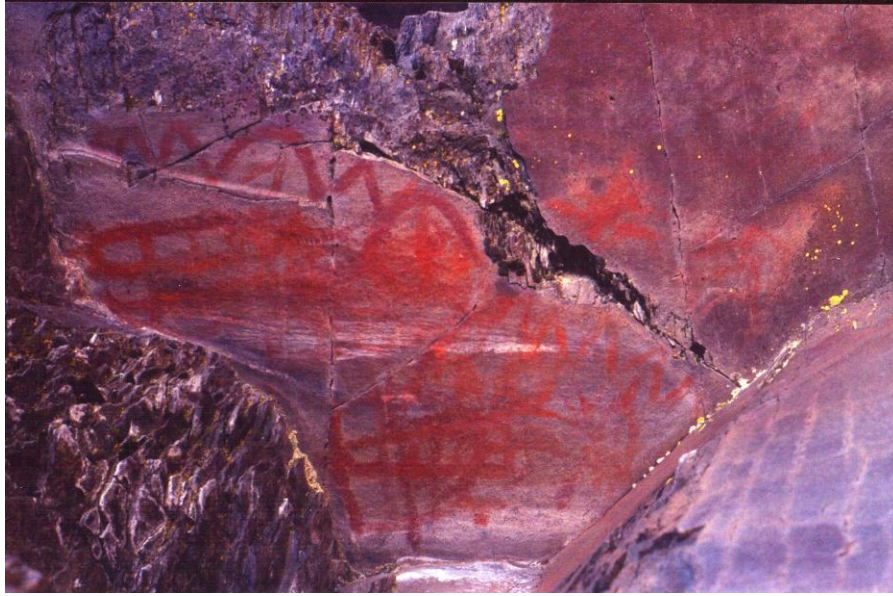


Figure 36: The abstract designs at site 31-09-16-3P are thought to derive from rituals involving altered states of consciousness.



Figure 37: The incised images from site 31-09-16-3P are reminiscent of those at 35KL58.

Affiliation- Ethnographic

There exists no direct ethno-historic or ethnographic reference to the rock art of site 30-09-16-3P. There are, however, numerous references to the villages in this area, some of which have cremation sites interspersed among them. Spier's map (1930:12) indicates that the prehistoric village of *K'etaiws* was located approximately one half mile downhill from the site. *K'etaiws*, according to Barker, means "rock-nest" (Barker 1963:192). While the Klamath Marsh is mentioned rather frequently in the ethnographic literature, only a few passages directly reference the village sites by name. Nothing at all is mentioned about the rock art site. As far as I can tell, the earliest mention of the site in the literature is from Loring and Loring, who visited the site sometime between 1964 and 1967 (Loring and Loring 1983:17).

Affiliation- Archaeological

Thirty-two rock cairns are concentrated around the site, many of which rest atop the outcropping. A cremation mound is also associated with the site. The mound was damaged in 1983 by land surveyors, who removed its protective boulders and then attempted to protect it covering it with brush and slash. The site was subsequently lost until I relocated it on a 2003 site visit. No other artifacts or features are located near the site. Notably, stacked rock features and the use of cremation as a treatment for the dead are exclusively Klamath-Modoc practices in the region. Moreover, the site is located within the traditional boundaries of the Klamath tribe and within 0.8 kilometers from villages both to the north and south. It is not likely that the rock art was made by any other group than the Klamath.

Interpretation

Notably, with the exception of the triangular-headed "serpent" figure, there is a distinct lack of images representative of characters associated with myth. Instead, this site features the abstract and geometric designs found in other "special use" contexts such as the cave at CA-Mod-17 and Petroglyph Point.

The presence of rock cairns is likewise a hallmark of an isolated site, since power quest rituals, by nature, required a period of ritual isolation. There is no way of telling which came first between the stacked rock features or the rock art, or even whether the paintings or scratching were made at the site at different times (although the scratches over Panel 2 suggest that the paintings were first). However, it is clear from these paintings that the artist regarded the site as sacred, and the later supplicant believed supernatural could be obtained by incising the rock face. Thus, its regard as a sacred place, in addition to its isolation from villages or frequently used places indicates that this site can be included in the category I have defined as a site of special, ritual use.

39-13-20-P2

Site Description

Site 39-13-20-P2, also called the "Holding Hands Petroglyph Site," is located on a bench just below the top of Goodlow Rim in Klamath County, Oregon. It is situated well within the traditional boundaries of the Modoc Indians of southern Oregon and northern California.

The rock art site is located on the rimrock just below the summit of Goodlow Rim. Goodlow Rim overlooks Langell Valley, where numerous Modoc villages lined the banks of Lost River

(Ray 1963:201). The rock art site is a single panel containing fifty-nine identifiable pecked human figures joined at the hands and arranged in three rows across the entire rock face. A few of these figures appear to be walking or dancing to the right, as if in a procession.

Affiliation- Ethnographic

Goodlow Rim is not mentioned in any of the major ethnographic resources relating directly to the Klamath and Modoc Indians. Information concerning the significance of this region in Modoc culture is thus gleaned largely from the archaeological evidence, with supplementary ethnographic information concerning the surrounding area that can lend indirect support to the *special use* interpretation given above.

According to Ray, numerous villages were located in Langell Valley far below, most of which dotted the banks all along Lost River (Ray 1963:210). The closest of these are *Nushaltka'ga*—an especially populous village during fishing season, at the present site of Bonanza, and *Ulga'na*—which is located near the present town of Langell Valley. *Nushaltka'ga* is located about 16 kilometers from the site while *Ulga'na* rests about 19 kilometers away (Ray 1963:210). There are also seasonal camps at site 35KL87, about 8 kilometers east. While these seasonal camps are much closer to the site, they, like the villages in Langell Valley, are still too far to bear any direction spatial association with the rock art. The rock art site is thus separated daily life, from groupings of people for varied subsistence and settlement activities. The rock cairns scattered around above the site suggests that this rock art was a location where supernatural (spirit) power was sought. This ritual necessarily took place far from living areas. A description of some features of this ritual is provided below.

Site Interpretation

The small size of this rock art panel, its obscure locality, and the absence of mundane cultural materials such as debitage and ground stone, indicates that the petroglyphs were not intended to be viewed by the general public under ordinary circumstances. Based on the archaeological evidence so far, people engaging in everyday activities did not encounter this site. Instead, the presence of rock cairns identifies the surrounding area as that reserved for ritual activity—specifically, for seeking supernatural power. Thus, in terms of the current study, this site is situated within a *special use area*.

The images are reminiscent of the spiritual procession described by Ray (1963:33-34), in which all the spirits of the cosmos presented themselves before the aspiring shaman in a dream. While Ray stated that many of the spirits were animals, he also spoke of human-like figures, both male and female. The monolithic nature of the images, appearing to show humanlike figures facing the onlooker and/or moving to the right suggest that they represent a spiritual procession similar to those witnessed by aspiring shamans as described by Ray (1963:33-34). As previously indicated, this occurred in a pit or depression at an early stage of the initiate's training. But this rock art is located far away from the village well above the valley floor: definitely not within a pit or depression. Thus, the rock art produced here does not conform to having been a part of the shaman's initial spirit quest. Because it is located in the same area where general power or crisis quests took place, it is tempting to attribute these petroglyphs to a shaman's private ritual where he or she was attempting to refresh or regain spirit power.

FHC-3

Site Description:

This site is located inside of a small hollow formed by the high canyon walls over which fall two seasonal waterfalls. The spillway has a north and south fork. The petroglyphs are located in the south fork and consist of two panels. The first is located on a boulder that is vaguely in the shape of an owl and sits close to the mouth of the spur. The second is located low on the rock wall at the canyon's apex, where the seasonal waterfall has left a permanent pool on the canyon floor (Figure 38).



Figure 38: Pond associated with the FHC-3 rock art site. The “eyes” petroglyph is located on the rock face to the right and is situated near ground level.

Panel 1 consists of several circles and concentric circles, and some lines that appear to emulate wing feathers. The rock art today looks decrepit and partially overgrown with lichens. Nevertheless, the whole panel has the strong suggestion of an owl in twisted perspective (see figure 39). As figure 40 shows, the petroglyphs on panel 2 consist of two sets of concentric rings arranged to emulate eyes, perhaps the eyes of an owl. These glyphs are located close to the ground and appear to have been situated in a way that gives them the appearance of looking over the nearby pond, or anybody crawling out onto the bank.



Figure 39: The main panel at FHC-3 has been modified to resemble and owl.



Figure 40: Panel 2 at FHC-3 consists of a pair of concentric circles arranged like eyes looking over the pond. Note that they are made of the same concentric circle motif used throughout the Klamath Basin.

The nearest seasonal camp is located approximately 0.4 kilometers upstream on the plateau, south of the lake that feeds the spillway in the spring. In spite of its proximity, however, there appears that no archaeological relationship can be established between the site and the petroglyphs.

Affiliation- Ethnographic

FHC-3 is located within the region known to the Modoc and Klamath as *Plaikni*, which means the “uplands.” This region forms the headwaters for the Upper Sprague River Watershed. Although it was not considered part of the Klamath Indian Reservation when the ethnographers Gatschet (1890), Spier (1930), and Ray (1963) visited the region, they unanimously place the canyon in which FHC-3 is located within the traditional territorial boundaries of the Klamath in pre-reservation times. Allison (1994:202) added that the Upper Sprague River Watershed was occupied by the Klamath-Modoc in prehistoric times, but Shoshonean raids forced them to abandon their permanent camps somewhere around the early 19th century. From that time forward Klamath-Modoc groups continued to use the area seasonally along with the Snake and Shoshonean groups until the advent of the Klamath Reservation in 1864 Treaty:

The Quartz pass area was a central gathering place for the Klamath, Northern Paiute, and Modoc tribes primarily in the summer months from May through July. Generally, the Klamath tribes came from the Sprague River Valley from the West, the Northern Paiute from the east and the Modoc tribes from the south. The tribes would congregate for trading, gathering roots and berries, obtaining obsidian sources, and possibly fish and game curing (Rosetti et al. 1995).

Neither of these sources discussed the site or the canyon in their respective ethnographies. However, one ethnographic reference to a prehistoric fishing station within the same canyon system suggests that the canyon was used by the Klamath, Modoc, and Northern Paiute. In particular, Wheeler-Voegelin (1955:254) referred to the stream as *Ish-tish-en-wax*, which derives from the Klamath term, *ishtish*, meaning “little fish.” In a later footnote, she stated,

At the time Applegate was writing, [deleted] Creek was considered to be within the Reservation line, and *Motcunka'skEt* and his people were living on or near it, in the vicinity of the present town of Bly, Ore. At one point [deleted] Creek had been dammed, and in April and May small fish in great numbers, known as *ishtish*, were collected by the Klamaths, Modocs and Paiutes at this dam, the site of which was known as *Ishtishweawax*. When the Reservation boundary lines were run in 1871 and [deleted] Creek fell outside the eastern line, the Walpapi and Sprague River Klamath apparently moved a few miles west, within the Reservation line and near the present town of Beatty, Ore (Wheeler-Voegelin 1955:269).

Affiliation- Stylistic

The petroglyphs at FHC-3 are comprised of the same concentric circle motifs found throughout the Klamath Basin Style as defined by Swartz (1998; Crotty 1979, 1981; Hyder and Lee 1990; Lee et al. 1988; Hann et al. 2010:2). Swartz pointed out that “sun disks” are design elements that are unique to the area (Swartz 1978:21), and Steward (1929:223) added that concentric circle motifs dominate the rock art style in the Bly Series, by which he meant the Upper Sprague River Watershed. Based on this stylistic similarity, I identify the rock art here as Klamath-Modoc in origin.

Affiliation-Chemical Analysis

With the exception of stacked rock features, no archaeological materials were found in association with the FHC-3 rock art site. The nearest archaeological site, 35KL716, is located approximately 5.6 kilometers downstream, and it is the only other archaeological site that has any information concerning the canyon's use. An analysis from 107 obsidian samples from 35KL716 shows that the majority of the obsidian entered the site from the Drews Creek/Butcher Flat and Spodue Mountain obsidian sources (figure 41).

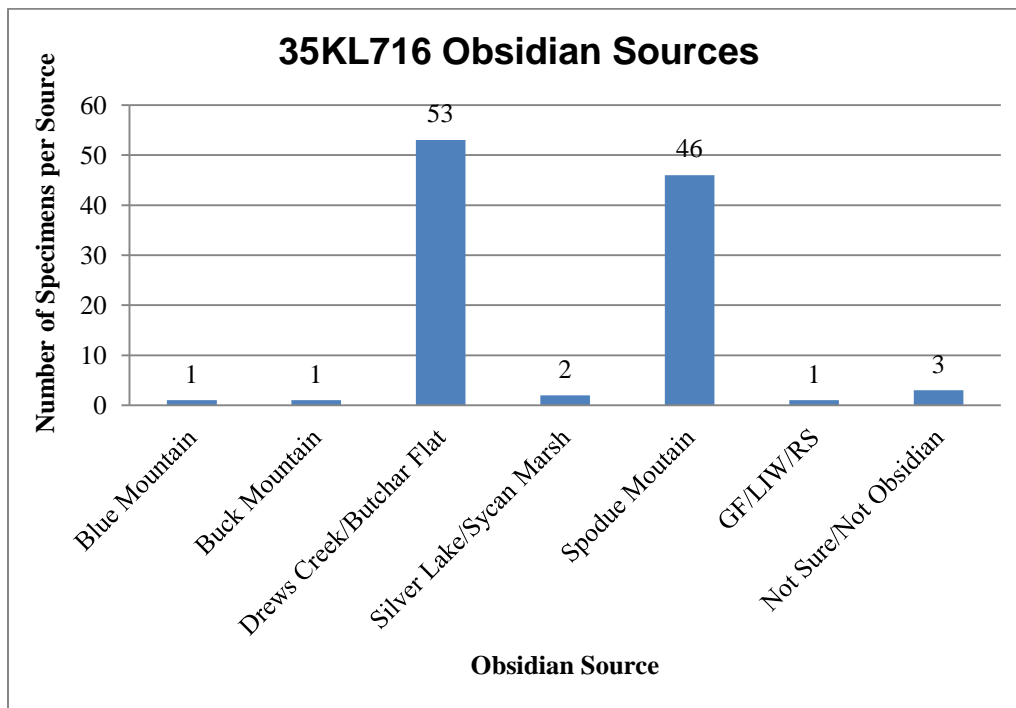


Figure 41: Obsidian chemical analysis shows that obsidian entered site 35KL716 from well-known Klamath-Modoc obsidian sources.

Based on results from my XRF analysis, the majority of the obsidian from 35KL716 came from Drews Valley and Spodue Mountain, both of which were traditional Klamath-Modoc obsidian sources (Connolly and Jenkins 1997:242; Hughes 1986:199-200; Sampson 1985:240-241). However, while Spodue Mountain sits securely within traditional Klamath territory, Drews Valley is located in a boundary area used by the Modoc, Klamath and Northern Paiute (Spier 1930; Ray et al. 1938; Ray 1963, cited in Connolly and Jenkins 1997:242). This raises the possibility that some of the obsidian entered site 35KL716 from Northern Paiute use of the canyon. However, Ray identified the valley as a Modoc summer village site (Ray 1963:210).

Based on the ethnographic information provided above, we can affiliate the site more strongly with the Klamath and Modoc using dates from the three Rose Spring series projectile points found on the site. These points date from AD 500 to AD 1300 (see Justice 2002:321), indicating the site's prehistoric use. While it is impossible to understand the dynamic history of the site without further investigation, these early dates suggest Klamath-Modoc use of the site, since the Shoshone and other groups were not reported to have used the area until after the early 19th century.

Interpretation

The site's location away from seasonal camps and processing sites indicates that it was meant to be privately encountered and experienced. Clues to the role these petroglyphs played in Klamath-Modoc ritual practices can be derived from the site's general surroundings.

Numerous rock cairns surround the site and a pond fed by the intermittent spillway is directly associated with the “eyes” that comprise Panel 2. In particular, the eyes are located near ground level and appear to be overlooking the water. These associations suggest that these glyphs had something to do with the Klamath-Modoc crisis or power quest rituals in which the Owl Spirit (Old Man *Mukus*) played a primary role.

The Owl Motif

Various elements that make up the owl motif on Panel 1 focus on those aspects of the owl that provided supernatural metaphors for those seeking his spirit power. Even though the symbols were clearly arranged to emulate that of an owl, the eyes markedly differ. While the eye on the right is comprised of the concentric rings typically found in the area, the eye on the left is comprised of a single circle containing an inverted chevron.

It is possible that the inverted chevron is a synecdoche that symbolizes a zigzag. The reason that makes this likely is that other rock art panels that depict “owl’s eyes” using concentric circles are always associated with zigzag figures. Depicting concentric circles and zigzags together appears to be a standard motif. One explanation for this may be their relationship to spiritually-enhanced vision. As I observed in chapter 3, Lightning was among the first spirits called in the shamans’ curing practice because it enhanced their vision, thus enabling them to “see” the supernatural causes of sickness and disease (see Ray 1963:56). This kind of enhanced vision would also be very useful to gamblers, whose stakes depended greatly on their ability to read their opponents expressions and guess their thoughts (Ray 1963:123-127). For this reason I suggest that the zigzag synecdoche represents the Lightning spirit.

With this in mind, the use of the sun symbol simultaneously represents *Gmokam’c* and the unparalleled eyesight of the owl. For even in the darkest night an owl can pinpoint the exact location of its prey (Andrews 1996:173). By the same token, lightning, like Old Man Owl, allows one to see what is hidden from the ordinary person. Adding lightning to the eye of an owl symbolically increases or enhances the already supernatural eyesight of the Owl Spirit, thus giving him something akin to “super vision”. This, by extension, offers a very powerful metaphor for the kind of “vision” supplicants would need in order to be successful at gambling, or for shamans to diagnose the causes of illness and disease.

Another aspect of the owl rock is the circle enclosing a stick-bodied zoomorphic figure, which appears to symbolize the owl’s stomach. That the stick-figured quadruped is arranged head-down constitutes another gambling metaphor. According to Andrews,

Much study has been done on owls in regards to their prey. This is possible predominantly due to ‘owl pellets.’ An owl will usually swallow its prey whole and *head first* [emphasis mine]. The parts of the prey that are indigestible (bones, fur, teeth, claws, and such) are then regurgitated in the form of pellets. This is a very symbolic act in which much significance can be found. In the swallowing of the prey head first, the owl takes into itself the wisdom and energy of the prey. The regurgitation reflects its ability to eliminate those aspects that are unbeneficial and unhealthy for it (Andrews 1996:177).

That the stick-figured quadruped is positioned down in the owl's "stomach" indicates that the owl ingests its prey head-first. I propose that this motif constitutes a metaphor for aspects of gambling, which I describe below.

The Owl in Gambling

The primary Klamath-Modoc gambling games utilized marked pieces, using sticks or bones, which the player arranged and then kept hidden until his opponent offered a guess as to the arrangement, whereupon they were shown. The principal game is the four-stick game called *so'kals* (Spier 1930:77). The guesser was permitted unlimited preliminary guesses, without being committed to them until he gave a subtle formal signal that made it official. Likewise, the opponent was privileged to shift the position of the pieces at will until such a signal was given. The result was a contest between two men, *who studied one another's eyes and suggestive face and body movements intensively*, as preliminary guesses or the arrangements of the pieces were varied to suit all possible combinations. Considerable skill was required on the part of the primary players. As the leader of the inactive side intently studied the actions of his opposite, he made gestures indicating one or another possible arrangement of the gambling pieces. These guesses were merely preliminary and exploratory until the left hand was clapped against the chest on the right. Until that signal was made the opposing player disregarded the gestures except as danger signals. If he feared the guesser's next indication would be correct he hastily rearranged the pieces, as was his privilege. The greatest danger to him came at the point when the guesser had tried all possible arrangements except the correct one. It was an accomplished gambler who could keep from letting his opponents know, by some reaction, that he had reached the point at which the next guess would be correct. Seeing this, the player, of course, immediately indicated an effective guess and won the point, or points. Play was then resumed and continued until a correct guess for the remaining pair reversed the sides (Ray 1963:123-127).

In this context, the two most important aspects of owl's supernatural abilities would be its extraordinary vision and its habit of ingesting its prey head-first and keeping only those parts that were most beneficial. These serve as powerful metaphors for the skills necessary to be a successful gambler. The ritual procedure by which supplicants approached Old Man Owl was set forth in myth. I offer a brief summary below.

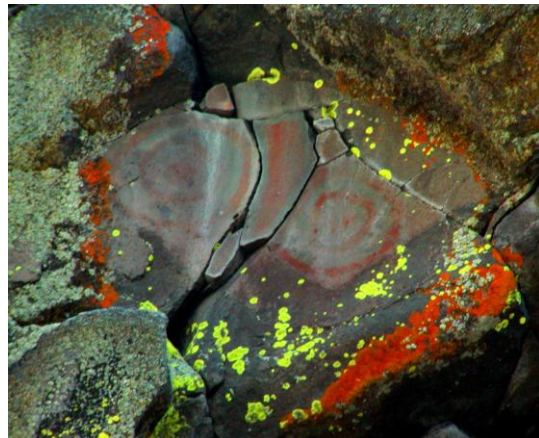
The Owl in Myth

Effectively making successful guesses in the gambling game was not left to mere chance: supernatural power was essential. According to Klamath-Modoc myth, this power came from *Mukus*, Old Man Owl, and always involved ritual procedures that were nearly identical to the power quest I described in chapter 3. In the story of *Latkakawas*, for example, *Kumush* (*Gmokam'c*) sent *Isis* to see Old Man *Mukus* on a journey for gambling power. Because *Mukus* had been the greatest gambler in the world before *Gak* (Raven) turned him into stone, *Isis*' quest for power took him to *Owl's Rock* to seek this power (emphasis mine) (Curtin 1912:9). In another story, the mother of a young man who lost all of his family's possessions gambling sent him to *Owl Rock* for gambling power, telling him that if Owl pitied him, he would give him the gift of gambling. When he arrived at Owl Rock, the boy spent several days *piling rocks and swimming in the owl's pond* (emphases mine) before finally falling asleep at the rock's base. Armed with Owl's power, the boy returned to the village and won back all of his family's possessions plus those of his opponents (Curtin n. d.: Myth-03). In a similar story, a young

man's grandmother sent him into the mountains on a quest for gambling power. During his ordeal the boy *piled rocks*, prayed to the mountain, fasted, sweated, *bathed*, and dreamed before his return to the village to beat his opponents and win the daughter of *Bliwas*, the village chief for his wife (Curtin n. d.: Myth-204.0).

Based on the mythical description of ritual activities associated with Owl Rock, it seems very apparent that site FHC-3 is perfectly set up to function as a power-seeking place for gambling. The rock face modified to simulate an owl was thus intended to portray Old Man Owl from the myths, while that of the pond and the stacked rock features in the surrounding area demonstrate that seekers followed the ritual power quest protocols. Upon emerging from the pool after ritual bathing, seekers found themselves staring back at the stark, piercing eyes of the owl spirit in Panel 2, which had been placed there for that very purpose.

FHC-3 is certainly structured around the gambler's power quest. However, as I describe below, the owl's power is not restricted to gambling. Shamans relied on its power for certain aspects of their practice as well.



Figures 42 and 43: Numerous rock art designs across the Klamath Basin have strong “owl” themes. These compositions come from the Modoc Plateau and Klamath Marsh, respectively. The image on the left is an undocumented Modoc site while the image in the right comes from 35KL1062.

Owls and Shamanism

Another important role the Owl spirit played in Klamath-Modoc cosmology was its service to shamans. According to Spier, the owl was one of the many animal spirits important to shamans (Spier 1930:103). Klamath and Modoc shamans incorporated certain of owl's characteristics into their ritual performances and ceremonies. One of the most recognized characteristics is its vision. According to Gatschet (1890:175-176), the owl's eyes were considered important for shamans who wanted to see what others could not. This extraordinary vision helped them to identify spiritual diseases that hovered in the air over the village. In several tales, owl's vision is recognized by his role as a spy (Curtin 1912:341) and as carrier of fire in the night (Curtin 1912:341). In the tale, *Gak and Mukus*, Raven (*Gak*) and Owl (*Mukus*) vie for the hand of a

young woman and spend considerable energy insulting the characteristics of the other. In so doing, Raven recognizes Owl's ability to see, hunt, and fish at night, and his ability to presage death (Curtin n.d.: Myth-057).

Presaging death probably speaks to the owl's ability to foretell certain futures, and is thus metaphorically related to his extraordinary vision. Gatschet calls this ability the owl's "fatal augury" (1890a:193). Spier and Ray both note that the owl's cry means that someone would die (Spier 1930:138; Ray 1963:25). Although shamans, too, presaged death, or at least predicted who would die in battle, this ability was not attributed specifically to owl medicine. According to Spier

The shaman's prevision of what will happen in battle is decidedly more important [than finding lost objects or identifying thieves]. This ability is acquired through the eagle and weasel spirits, and perhaps others. During the war dance preparatory to setting out or at camp on the march, the shaman dances in front of the line of warriors, looking "through" them. He predicts who will be killed or wounded, and how the enemy will suffer. He sees them bleeding. One informant stated that those for whom disaster was predicted would not go to war, but others said this was not so and they are probably right. For example, while a mixed group of Klamath and Modoc were encamped on the way to Pit river, a Modoc shaman predicted, "If you are to be shot, then your bowstrings will snap," and the strings of two did snap. Shamans accompany war parties, not only to fight, but to watch over them and cure the wounded (Spier 1930:122).

While these references do not specifically identify the owl, many of the supernatural abilities listed here certainly make direct reference to the power attributed to the owl, even by Spier himself (Spier 1930:103, 138). Moreover, the shaman's incantations I referred to in chapter 6 indicate strongly that shamans routinely sought out and utilized spiritual properties associated with owls in their curing practices (see Gatschet 1890a:175-176).

In addition to presaging death and diagnosing sickness, the song of the horned owl also brought rain (Spier 1930:119). And even though I found no tales or ethnographic accounts of any specific instances, rainmaking is one of the shamans' many well-known enterprises and the use of owl's medicine should not be ruled out (see Spier 1930:118-120). As figures 42 and 43 show, owl images are certainly represented in Klamath Basin rock art.

Site Interpretation

Taking into consideration the presence of the permanent pool and the numerous rock cairns at this site, and the strong owl theme represented in the rock art, what we know of power quest rituals, the nature of gambling games, and finally, the information available in myth, it is apparent that the search for gambling power is an important element of the Klamath-Modoc power quest tradition and offers strong interpretative potential for this site. Specific places seem to be designated for such a quest, especially those places where Old Man Owl was changed to stone. Given this, every aspect of FHC-3 indicates that the rock art at this site was, in fact, Old Man Owl, and that the rock cairns located around the area were constructed and left behind by those seeking his supernatural aid in gambling.

In spite of these strong connotations involving gambling power, any interpretation for this site must equally consider shamans' ritual uses of owl medicine as well. While power quests for gambling prowess most likely took place at FHC-3, it is also likely that shamans visited the site to acquire or renew their own powers which derived from the supernatural abilities of the owl. As I indicated in chapter 6, the Owl Spirit is, after all, one of the shamans' many important medicine spirits. If this were the case, then this site fits the criteria for *special use areas* both in relation to the gambler's power quest rituals, and in relation to the shamans' own power quest rituals. The absence of mundane archaeological materials lends support to this interpretation, since both purposes would necessarily take place away from villages, camps, and other everyday use sites.

Conclusions

In this chapter I have evaluated Klamath Basin rock art sites in "special" settings, by which I mean sites that are separated in some way from the mundane world, and where private rituals led to the production of rock art. To the extent possible I have affiliated these sites with the Klamath and Modoc peoples using obsidian sourcing through X-Ray Fluorescence, ethnographic information, and stylistic analysis of the symbols themselves.

Differences between the motifs at *special use* sites as opposed to settlement sites are subtle but apparent. In particular, the nucleated concentric circle and other of the more standardized motifs generally attributed to myths so prevalent in *settlement* or *frequently used* settings are either missing or minimally represented at *special use sites*. This is probably because these figures represent mythical beings, and they occur at *frequently used areas* and *settlement sites* because they were meant to be recognized by others, while images at *special use* sites were important only to the individuals who created them. By virtue of their restrictive locations, special sites were not meant for the public at all. In the *settlement* context, these images were believed to be the curing tools of shamans (Spier 1930:142). Their mythical associations made them particularly powerful because through their familiarity with myth, the Klamath and Modoc would have understood why they were powerful (see David 2010:394; Hann and Bettles 2006:183). This is also true for rock art at *frequently used areas*, where rock art symbols were meant only to "inspire fear of the doctor's supernatural powers" (Dennison 1879). In those settings, one motif is typically dominant, and this motif has been attributed to the most powerful figures in Klamath-Modoc myth. By contrast, the motifs associated with *special use areas* derived from private rituals of shamans and are more typical of the imagery others have associated with altered states of consciousness (Lewis-Williams 2002:204; Whitley 1994; Whitley et al. 2004; Keyser and Taylor 2006: 120-121), and what Ray may have been attempting to describe when he reported that spirits visited shaman aspirants in "kaleidoscopic transition" (Ray 1963:31).

Given the private and secluded nature of their settings, special use areas were probably places where shamans underwent various ritual self-deprivations in order to induce dreams, or trances. Ray's description of these rituals, which I described in chapter 3, though detailed, lays out a process that could have been completed in just a matter of weeks (Ray 1963:31-36). While this seems feasible, Gatschet reported that the shaman's apprenticeship took a period of up to five years to complete (Gatschet 1890a:xcviii). This discrepancy is likely due to the varying degrees of knowledge held by Ray's informants. By definition, power quests were private affairs,

especially for shamans. Accordingly, there is every chance Ray's informants simply did not know the whole procedure. One source that could account for the discrepancy may be found in the mythic tale, *Latkakaws* (Curtin 1912:7-10). In this story, *Kumush* (*Gmokam'c*) sends his son *Isis* to a number of sacred places throughout the Klamath Basin to swim, fast, pile rocks, and pray to the mountains for wisdom and strength. In a later text, *Kumush* specified that only certain men would undertake such quests: "Those who go to the mountains must ask to be made wise, or brave, or a doctor [emphasis mine]. They must swim in the *gauwams* [springs or ponds] and dream," (Curtin 1912:45). Curtin's description of the quest is much more extensive than Ray's; the places *Isis* was sent to visit for power were located as far as 169 Kilometers from the heart of Modoc territory. This is, perhaps, the reason why Ray's description falls short of the five year-period for becoming a shaman as proposed by Gatschet.

In spite of these differences, the one thing they share in common is that the quest requires a period of ritual isolation. *Special use* sites, by definition, are structurally or socially isolated and in many cases were considered to be especially dangerous places where lay persons would have little need or desire to go (Clark 1955:55; but see also Deur 2008:81-84). Accordingly, non-shaman individuals would have no idea that rock art was located in these places, much less be aware of the underlying principles that lead to its production. That is, most likely Ray's description is only a fragment of larger ritual processes described by Curtin.

In light of the ethnographic descriptions of shamans' power quests provided by Ray (1963:31-36) and Curtin (1912:7-10, 45), in which exertion and sensory deprivation were key to producing the desired "dreams," it seems apparent that these dreams were, in fact, altered states of consciousness (ASC), and the imagery in the rock art constitutes a direct record of those experiences. Unlike the myth-inspired rock art situated in public locations, ASC-inspired rock art was not made privy to everyone. If we return to the neuropsychological model, outlined in chapter 5, we can see that entoptic forms and the seven principles governing the trance experience are well represented in the rock art located within *special use* contexts in my study area. In table 11, I provide only a small number of possible examples of how *special use* iconography denotes fundamental aspects of altered states of consciousness.

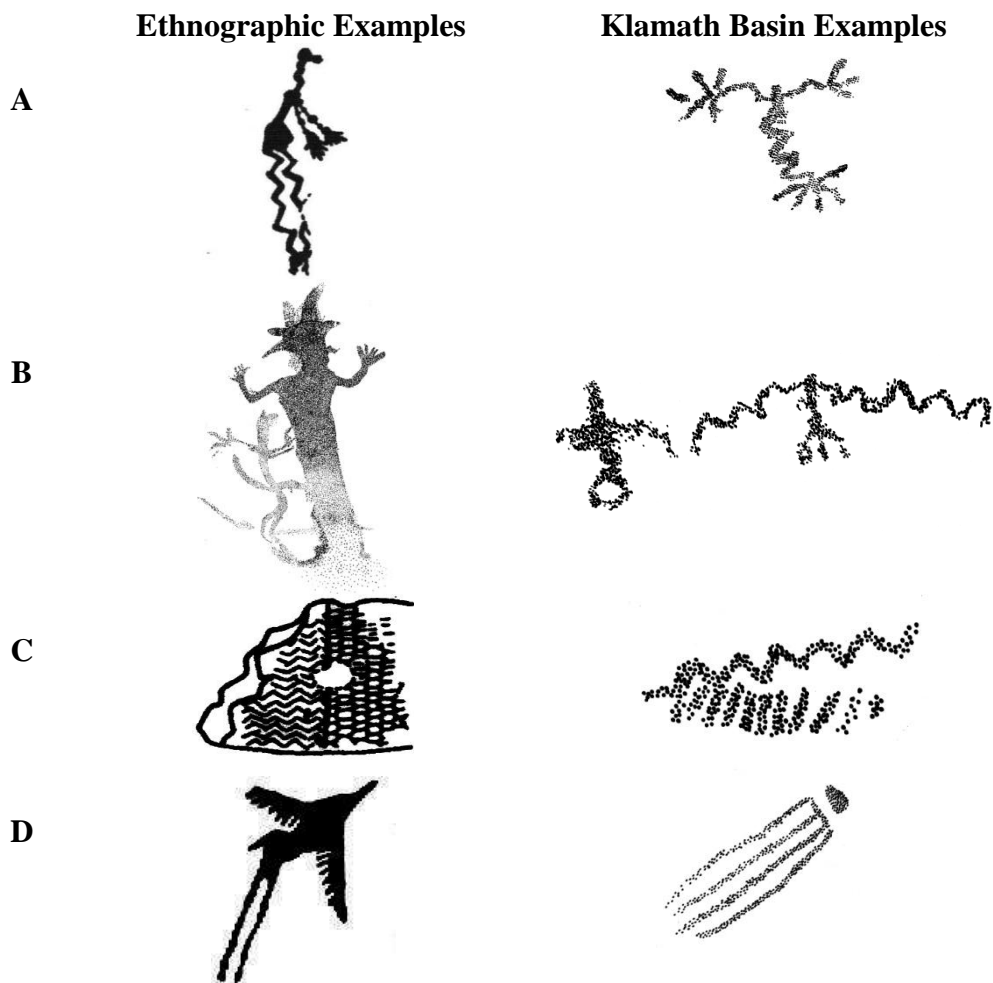


Table 11: Ethnographic examples of ASC-derived rock art compares favorably with images from CA-Mod-17. They include, A and B) integrated entoptic and iconic anthropomorphs; C) integrated entoptic phenomena; and D) flight sensation (astral projection), commonly experienced in late ASC.

The ethnographic example in row A from Lewis-Williams and Dowson (1988:209) are said to represent the artist's experience in the third stage of an altered state of consciousness. In this stage, entoptic images integrate with iconic forms. At the same time, subjects lose the distinction between themselves and their hallucinations and become part of the imagery (Lewis-Williams and Dowson 1988:211). By analogy, the same processes led to the production of the anthropomorphic figure in the Klamath Basin Example (A).

Keyser et al. (2004:43-44, fig. 43) identified the ethnographic example in row B as a spirit figure, and indicated that it represents a vision experienced by a shaman in contact with the spirit world. Both examples in row B feature the integration of entoptic and iconic forms, and have transformed into other figures. Like the images in row A, the blending of anthropomorphic

figures with other imagery suggests that the subject had become a participant in the hallucination (Lewis-Williams and Dowson 1988:211).

Both the ethnographic and Klamath Basin examples in row C are classic examples of the integration of entoptic phenomena (Lewis-Williams and Dowson 1988:209-210). While the Paleolithic figure in row C juxtaposes parallel rows of zigzags with a grid design, the Klamath Basin example juxtaposes a single zigzag with a series of parallel lines.

Finally, both images in row D denote the complete participation of the subject-artists as they portray their sensation of flight, or astral projection. Lewis-Williams (2001:342) stated that another common somatic hallucination is the sensation of attenuation, rising up and, eventually, flight. According to Eliade, “. . . a distinguishing characteristic of shamans is a trance state in which the soul leaves the body in flight and ascends to the heavens or descends into the underworld” (Eliade 1964:5). Winkleman described the phenomena thus:

One of these neurognostic structures characteristic of shamanism is known by a variety of terms — soul flight, soul journey, out-of-body experience and astral projection. These refer to a universal, central and essential feature of shamanism — the experiences of travelling to and/or encountering entities from the spiritual or supernatural world. The psychophysiological basis of the prototype soul flight or journey experiences is indicated by their cross-cultural distribution, manifested in the out-of-the-body experience; near-death or clinical death experiences; and ‘astral projection’ (Winkleman 2002:73).

With regards to the Klamath Basin images in the table, it is apparent that these images are records of the artists’ trance experiences, and their encounters with the supernatural universe. The use of the neuropsychological model as an interpretive mechanism bespeaks the ritual nature of the rock art in *special use* settings. The special use location is thus critical for deriving interpretations for the art and for distinguishing it from art in other settings.

Special use rock art sites were either physically isolated and/or structurally restrictive. Moreover, in many instances, the rock art was hidden from general, casual view, indicating that, in most cases, the general public was excluded. The obvious exception to this is the Owl petroglyphs at FHC-3. The “Owl” site is the only site that I have listed as “special use” that features ethnographically-supported rituals that were open to everyone in the Klamath and Modoc communities. The more or less standardized design elements used to create these petroglyphs indicate that they were not necessarily ASC-induced: instead, they were meant to convey specific attitudes and feelings through their metaphoric connections. In essence, they were meant to guide the supplicants’ ritual experiences. As I discussed above, the eyes, stomach, and inverted zoomorphic stick figure are related to the skills that are most useful to gamblers.

The “Owl” site at FHC-3 is rather dubious in that it meets the specifications for “special use” in archaeological terms, but in social terms, it becomes something more like a *frequently used area*. This is because the owl rock in the myths indicates that it was intended to be visited by people seeking supernatural power related to gambling. This, in effect, would make it the only known site that is culturally associated with the power quest rituals of non-shamans among the Klamath

and Modoc. It was expected that all of the same activities associated with the ordinary power quest would occur at this site: the only difference was that only a specific type of power was being sought and that it took place in the presence of Old Man Mukus.

Nevertheless, there is some suggestion that shamans' power quests may have taken place at this and similar locations as well. As I indicated in chapter 6, shamans relied heavily on the supernatural abilities of owls for a number of feats that included diagnosing diseases, creating rain, and presaging death. Accordingly, shamans may also have visited owl rock sites in order to seek or refresh their supernatural power that derived from the owl.

In the next chapter, I evaluate the sites from each of the contexts in my study area, and discuss both the utility and limitations of the model I propose. I briefly describe my status as both an indigenous stakeholder and a professional archaeologist, and reflect on how that affected my current study, and what it will mean for future research.

Chapter Nine: Conclusions Outline

The Goals of the Dissertation

In this dissertation, I set out to assess the validity of a model that might predict where one would find rock art manifestations of different styles and formats. Based on previous knowledge and analysis (e.g. David 2005; 2010) I developed what I am calling a landscape model that looked for associations between certain kinds of archaeological sites and varying rock art locations, motifs and formats. My analysis of Klamath Basin rock art sites discussed in this dissertation has been based on three broad settings or types of archaeologically attested sites: *settlement sites*, *frequently used areas*, and *special use areas*. I based these categories on field observations I made during previous studies drawing on the kinds of archaeological materials found at the sites, their size and extent, and locations and the inferences about what kinds of activities took place at the sites.

My expectations regarding the associations between site types and the rock art are as follows: 1) for the *settlement sites*, I expected to find distinct rock art motifs that could be matched with mythical characters which, in turn, were ethnographically identified as shamans' medicine spirits; 2) for the *frequently used areas* I expected to find rock art symbols that were largely monolithic, clustered together, and situated in places where they would be difficult to miss, if not impossible to avoid; and 3) for the *special use areas* I expected to find rock art concentrations that were either spatially and/or structurally isolated from everyday activities and consisted of motifs that were characteristic of those obtained from trance-induced visions.

By and large, the apparent patterning exhibited by each of the eleven sites in this study matches the expectations I held, although, as described above, there were some deviations from the model or some associations that were less compelling than others. The patterning also appears to reconcile ethnographic explanations, and at least some shamans' incantations, with the rock art. These references offer us clues about the shamans' behaviors within each setting. Klamath-Modoc shamans placed their symbols purposefully in specific locations with the expectation that people would encounter and experience the imagery in certain ways. What we derive from a contextual analysis of this kind and why it holds great potential and insight is that we get much closer to understanding the intentions of the shamans' as they placed their designs. With empirical grounding and demonstrable patterns of association between place, functions, and rock art, we can infer more details about the shamanic practices that have, on other grounds, been suggested as the primary motivation for making rock art.

Many of the rock art symbols associated with *settlement sites* can be identified as mythical animals and beings that appear in shamans' incantations (Gatschet 1890a:153-181) and curing rituals (Gatschet 1890a:c-ci; Spier 1930:133). Moreover, this was the only context in which the west-facing rule applied to the rock art. Other sites I have examined in previous studies support this. *Iu'lalonkni-101* and *Gu'mbotkni-101* are rock art sites that I studied in my master's thesis that correspond with either villages or long-term summer camps (in either case, *settlement sites*) whose rock art panels likewise face to the west (see David 2005:62, 110-112). Rock art panels in other contexts face in no particular or patterned direction. This implies an intentional association between the rock art and the spirit land, which the Klamath-Modoc believed to be located over the western horizon (Gatschet 1890a:xcvii; Spier 1930:102; Ray 1963:55). Given

this relationship between the rock art, medicine spirits, incantations, the spirit land, and ethnographic statements that refer to rock art symbols as “shamans’ tools’ (Spier 1930:142), it seems reasonable to conclude that shamans created rock art at *settlement sites* in order to store their medicine spirits for anticipated use.

The symbols at *frequently used areas* were comprised largely of *Gmokam’c’s* sun disk, the most powerful and recognizable symbol in Klamath-Modoc cosmology; these images were situated where people were certain to encounter them. This suggests the intentional “presencing” of the shaman’s powers in common areas that people used and frequented on a regular basis. Accordingly, these sites appear to have been made for public display. There are indications that other ritual activities took place at these sites (e.g. associated stacked rock features, incised petroglyphs, etc.), but these do not occur uniformly among frequently used area sites. Explanations for these occurrences will certainly be a topic for future research.

Rock art in *special use areas* is located in secluded, private places and the symbols are stylistically related to what has been argued to be the images experienced or “seen” when one has been in an altered state of consciousness. From this we can surmise that these rock art motifs derive from private rituals in which shamans sought for or to renew their relationship with the supernatural world. Whitley et al. (2004:232-233) has shown that rock art sites like these tend to be strongly associated with significant mythical events, such as the creation of the volcanic tubes at Lava Beds National Monument. A future inquiry into myth, especially with a focus on the places named within the tales and the events that occurred at such places will certainly yield further clues into rock art found at these locations.

Limitations and Future Research

Modeling rock art based on its social context thus appears to be a promising archaeological pursuit. There are, however, a number of limitations that affected this interpretation and simultaneously provide guidelines for future research. The first and most obvious is the problem with temporal association between the rock art and archaeological sites. We are not yet in a position to be able to confirm the contemporaneity of the rock art sites with what appear to be their associated social contexts, such as the villages or camps of the settlement sites. As previously indicated, to date there is only one set of chronometric rock art dates in the Klamath Basin (Armitage et al. 1997), which are supplemented with relative dates for Petroglyph Point provided by Lee and Hyder (1990). Thus, the rock art sites I studied here have not been temporally associated with the archaeological sites with which they are presumed to share a relationship. Given the nature of the rock art (not made with organic materials) and the state of rock art dating, there is not any “quick fix” for showing a precise correlation between the rock art and the presumed settlement sites in the immediate vicinity. However, we can make some starting assumptions about probable associations and it was these that guided my inquiry in the case of the specific sites that are discussed in this dissertation.

The association between archaeological contexts and rock art display patterns show a high degree of consistency, indicating that we can make some valid inferences about the rock art and its landscape context. Statements made in the ethnographies about Klamath Basin rock art correspond well with the rock art that is discussed here. In particular, we find in the ethnography the idea that the meaning of rock art is primarily to inspire fear of the shamans’ supernatural

power. This is simply another way of saying that shamans created certain rock art sites in order to advertise their supernatural abilities. This is a hallmark characteristic of rock art in *frequently used areas*. Dennison's (1879) own description of the rock art to which Minnie was referring (in chapter 7) was exactly this kind of site! Similarly, the rock art at village sites also displays a consistent pattern which, in turn, likewise corresponds to Spier's (1930:142) statement that relates rock art to shaman's tools. I have shown in both of my *settlement site* examples that the images comprising these kinds of sites represent the medicine spirits shamans used to diagnose and cure illness and disease. Finally, Ray's (1963:31) description of the aspiring shamans' visions of spirits as they appeared in "kaleidoscopic transition" strongly indicates that these were trance-induced visions resulting from deliberate attempts to contact the supernatural world. While there is no known ethnographic statement that connects these vision quests to Modoc rock art at this time, the rock art images in *special use area* are strongly indicative of just these types of visions, as has been proposed by the neuropsychological studies described in Chapter 8.

In each of the three primary social contexts I have identified in this model, the rock art patterning and iconography correspond well to the available ethnographic information (including songs and myths). There is a certain redundancy in the pattern that rock art context, its location within the landscape, and its archaeological context, even if we are not yet able to correlate precise dates for the rock art with the age of relevant sites (such as the settlement sites. At the very least, the associations or patterns outlined in this study merit further inquiry that could involve some sort of further investigation of the settlement sites, for example, to confirm chronometric attribution. Or one could expand the sample of rock art sites and their landscape contexts to see if and how well the pattern "holds".

In a similar fashion, the strongest affiliation I made between the rock art and other material culture is through stylistic analysis and obsidian sourcing, respectively. While these affiliations may be sound, this fails to address the very real possibility that the Klamath-Modoc worldview and thus material practices (such as where to obtain obsidian or what stylistic motifs were considered to be most potent) changed over time. As Hughes (1986:201) pointed out, during the period in the Klamath Basin that was dominated by Elko series projectile points, more distant and numerous obsidian sources were used than in previous and subsequent periods. He attributed this to a rupture in a regional exchange network that likely led to a discontinuation of the making of Elko series projectile points. By contrast, Connolly and Jenkins propose that this pattern (the later lack of Elko style points) only showed a shift in settlement patterns, with an emphasis on the utilization of more localized resources (Connolly and Jenkins 1997:247-248). Regardless of the explanation, the fact is that significant changes occurred among the Klamath-Modoc at the time, (about AD 1000) and they must be factored into any interpretation offered up for the rock art. To achieve this, more robust temporal associations must not only be established between the rock art and the archaeological context, but we must also understand this relationship over time if we hope to answer those kinds of questions. Until then, my explanation for the relationship of the rock art to other aspects of landscape use in this dissertation must remain tentative.

Another issue with the present study concerns certain limitations inherent in my study. For example, other rock art sites exist that do not appear to fit readily into the model. One example comes from the same valley where the QzM-1 type site (as a *frequently used site*) is located. The

rock art site is comprised of a single nucleated concentric petroglyph circle situated beneath a small overhang at ground level. Although it overlooks the main pathway along the stream channel, the petroglyph is not easily noticeable. Aside from the occasional lithic materials scattered up and down the valley, no archaeological materials were concentrated near this petroglyph. I have noted at least three other instances where petroglyphs like this occur as well. These glyphs were not meant for blatant or obvious public display, as in the frequently used area rock art sites discussed herein, but neither were they deliberately hidden from view. Of course, we do not know if just because today and to our eyes these locations are not “obvious” that they could have nonetheless been “known” to people who surely had a different visual and experiential understanding of their landscape. Since they do not readily fit the hypothesized criteria for any of the rock art-archaeological site patterning I suggested in this study, they cannot be unequivocally explained in terms of my model. This does not, however, detract from the relationships that I have established. What these outlier sites suggest, at worst, is that my model may need to be expanded to take them into account. Certainly, other explanations that I have offered in this study have been proposed for some Klamath Basin rock art.

Loubser and Whitley (1999:63-64), for example, point out that one instance of rock painting in Lava Beds National Monument may represent an act of “sorcery,” in which a shaman attempted to defeat his foes. Using supernatural power to bring harm on one’s enemies was certainly known among the Modoc (see Ray 1963:68-70, 226). This, by extension, raises the possibility that some rock art may have resulted from such ritual instances more so than as a medium for the various shamanic practices and actions as discussed for each of the three site types. This ambiguity or open possibility for other ways of “using” rock art provides at least one new or different dimension to rock art placement on the landscape for future inquiry.

On a larger scale, rock art site CA-SIS-288, which was not included in this study, defies any attempt to place it within a single context category. Comprised of both petroglyphs and pictographs, this Modoc site is situated along a mountainside where a number of seasonal camps and shelters are also located in the rock exposures. Most of the shelters contain rock art of some kind, but nothing that is overly elaborated or concentrated. By contrast, CA-SIS-288 is comprised of seventy-six known images that meet the display patterns proposed for all three of my context categories. Yet there are no archaeological materials associated with the site. The nearest shelter containing archaeological materials is located approximately 200 meters away, suggesting that the rock art site stood apart— at least in the terms that have informed my current study— from the shelters and camps. The painted rock art symbols display a significant degree of differential weathering, are mostly small, and are comprised largely of the same designs I affiliate with *settlement sites*. But then there is one panel that is made up of a concentration of large circles and concentric circle designs that are typically found at *frequently used areas*. Unlike the symbols around it, these are large enough to be seen from a distance greater than fifty meters. Another section of the site is devoted entirely to the scratched designs much like those found at 35KL58 and 31-09-16-3P, indicating that the same or similar power-seeking rituals thought to take place at those sites also took place at CA-SIS-288. Still, within cracks, along fissures, and in deep recesses are also painted the same wavy lines and meanders typical of art associated with altered states of consciousness, and thus were affiliated with shamanic power quest ritual. With very few exceptions these are on surfaces that otherwise seem impossible to reach in order to paint. Most of these images are comprised of black paint and cannot be viewed

without deliberately seeking them out. These images are the hallmark of rock art associated with *special use areas*, where shamans' vision quests took place. Do we have here a rock art site that had multiple audiences and multiple functions in the landscape? And could these be manifestations of imagery made over time as the area was used differently? As a whole, this particular rock art site exhibits properties from all three of the context categories I propose in my model. As such, this site could provide an excellent case study to test the validity of the model I propose in this dissertation. Through a combination of advanced rock art dating methods and archaeological excavation, future research could be able to detect stylistic shifts in the rock art style over time in conjunction with shifts in archaeological site function over time and compare these findings with the model.

Given the difficulties involved in obtaining dates from petroglyphs and non-organic pictographs, we must seek to create a chronological framework using other methods, supplemented by the rare instance when direct or chronometric dates can be obtained. The possibility of making comparisons with dated portable art, for example is fertile in the Klamath Basin. Cressman excavated a number of bird bone fragments decorated with circle and dot combinations, in addition to a decorated maul and an "owl" stone (Cressman 1956:430, 505). Sampson (1985:472) also recovered a number of decorated pipe stems from his excavation at Nightfire Island, with designs comparable with most Klamath Basin rock art. Ethnographic accounts of portable art, wherever available, may also yield insights into interpreting similar themes represented in rock art.

The Klamath Basin is ripe for much more rock art documentation and research. As Swartz noted more than 3 decades ago, it is full of undocumented sites that are in dire need of protection (Swartz 1978:13). Future research should certainly be directed toward understanding the rock art as it occurs in its various social contexts using larger samples with more secure rock art and archaeological dates. However, this is only a part of the larger picture. Swartz (1978:22) has proposed that, whereas the Klamath Basin sits at the crossroads of Sacramento Valley, the Klamath River, the Great Basin, and Columbia Plateau, it serves as a corridor for the transmission of ideas and objects of trade. This makes the region favorable for conducting comparative rock art studies with these surrounding regions. Similarly, Ritter (1998:81) commented that the Keno Pictograph Site is located at the interface of Klamath, Modoc, and Shasta culture areas and thus offers researchers an opportunity to study questions concerning interaction, age, boundary, style, and function through rock art.

Consultation and Collaboration

One thing I tried to do throughout this whole project was to approach my study as an indigenous archaeologist and stakeholder while maintaining the standards expected of me as a registered professional archaeologist. While I relied heavily on "insider" knowledge to supplement my interpretations for the rock art, I also strove to create a basis for those interpretations within a formal, plausible framework. While I feel that this has helped me to offer a more detailed interpretation than I would have been able to offer using either approach alone, I am also aware that this does not close the book on Klamath Basin rock art.

We cannot forget that rock art in the Klamath Basin is part of a living culture that has persisted in archaeological terms for the past 14,000 years (Jenkins 2012), and in Klamath-Modoc terms,

since time immemorial. It must be approached with the same level of respect one would afford a church, temple, or synagogue. The first step down this path is always to consult with indigenous communities who represent the first among stakeholders. While doing so will ultimately result in certain limitations being placed on our research, it does and should not represent a stop gap. As Lightfoot (2008) pointed out,

The challenge of producing a research design, where diverse people with different backgrounds and experiences in archaeology are involved, is the need to have both formality and flexibility built into the plan (Lightfoot 2008:216).

Consulting with tribal governments in good faith and a timely manner can smooth the research process, and may even lead to greater insights. The best time to consult with tribal representatives on any archaeological project is during the planning process. A properly planned research design that incorporates indigenous knowledge, concerns, and input, will certainly proceed more smoothly and may lead to more detailed insights into site interpretations.

The Significances of this research

The last several decades of archaeological research in a global context has seen the development of a more thoughtful landscape approach to understanding the relationships past peoples had with their environments, including their social and spiritual contexts. The very study of landscape has evolved to consider the experiential, the sensorial, as well as the ways in which even natural landscapes can be integral to the world views and cultural practices of human groups. At the same time, these decades have witnessed a certain “coming of age” of rock art research to judge from the multiple conferences and edited volumes, and that, as a cultural phenomenon, it is increasingly integrated into archaeological studies and research carried out in the context of consulting (CRM) archaeology. Not surprisingly, many of the studies that have expanded landscape concepts and research (e.g., Tilley 1994, Thomas 1993, Helskog 1999, Bradley 2000) have drawn upon rock art and/or monuments as core to their new approaches. This dissertation, then, has been an attempt at pursuing a landscape model for a corpus of rock art that is within this developing theoretical framework. Specifically, this research contributes to studies in landscape archaeology by focusing on how indigenous cultural practices were carried out in particular places and exploring how ancient artists utilized these practice spaces to generate and reinforce group ideologies. Because the locality types in this study identify three archaeological contexts in which people practiced daily and seasonal routines, while at the same time encountering visual representations of group ideologies (e.g. rock art), multiple levels of culture converged on a single point in space and time. Thus, following Whitley (1998:16), my study makes it possible to examine the multi-layered context of *place* that is present in the archaeological materials, visual culture, and the mental landscape that validated the location as a place.

In addition, this dissertation it should stand as an attempt at an indigenous archaeology in that it is not only carried out by a native scholar, but draws on sources of evidence that have increasingly been taken more seriously in archaeological interpretations, especially oral traditions and ethnographic accounts. Some of these latter sources of evidence may be more recent perhaps than the archaeological materials, such as rock art. This may be an expanded

version of what has long been called the “direct historical method” for rock art research (Taçon 1992).

At an empirical level, I have offered here detailed descriptions and illustrations of some Klamath Basin rock art sites that have not been fully interpreted before. My dissertation is making this information more accessible to archaeologists and others. Furthermore, these eleven sites offer a comparative understanding of the range of rock art sites that comprised one small part of the repertoire of rock art making. As well, this only accentuates the call for more systematic description and discussion of the sites that remain to be not just documented but investigated within a conceptual framework that focuses on the central role of shamans in being active agents in the structuring of the cultural landscape. Since, as discussed above, the focus on the role and actions of shamans in the making of rock art has enjoyed considerable popularity that some say has been taken up less critically than needed (e.g. Lewis- Williams n.d.), this dissertation on the Klamath Basin show how shamans are very much integral to the rock art. It provides a strong example of a positive and well documented instance of where shamans *are* key to understanding the rock art and its social contexts. To that end, I have brought together a number of key ethnographic accounts of the Klamath Basin peoples in relation to the rock art in ways that have not previously been done in scholarly work. I offer this to not only the academic audience for which this dissertation is intended but also for the Klamath Tribes, who are key stakeholders in this endeavor.

Finally, this research contributes to indigenous archaeology because it brings together the western discipline of archaeology with native epistemologies encapsulated within oral codex. In particular, it demonstrates how Native American myths may be used to further enhance, enrich, and inform modern archaeological interpretations of rock art within specific situational contexts. In my project, the archaeological concept of *place*, identified through conventional field methods, receive added layers of significance through the inclusion of information from mythology and living tribal informants, as well as detailed insights of the rock art as viewed within the broader landscape and archaeological contexts.

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