UP ON THE 'PILE:
A STUDY OF PETROGLYPHS
IN NORTH CENTRAL SONOMA COUNTY, CALIFORNIA

by
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A thesis submitted to
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in partial fulfillment of the requirements
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MASTER OF ARTS
in
Cultural Resources Management

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Date
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ABSTRACT

Purpose of the Study:

The goal of this thesis is to place the Rockpile petroglyphs within context. Petroglyphs form one of the most long lasting examples of past cultures. The concentration of petroglyphs and other cultural material in this relatively small, dense drainage is situated in an ethnographic corridor near the boundary of at several linguistic boundaries. Therefore, it provides an excellent opportunity to examine hunter-gatherer complexity from a viewpoint different than the models typically used. In Northern California, no reliable dating methods for petroglyphs have been developed and petroglyph elements limit interpretation due to the forms consisting of cupules, lines, and other abstract shapes. A study of petroglyphs has the ability to illuminate other aspects of past culture that other types of archaeological analysis tend not to address.

Methods:

I examine the Rockpile petroglyphs utilizing an over-arching contextual approach, based on a model put forth by Carol Diaz-Granados (1993) that looks at the macro-environmental, micro-environmental, general cultural, and ideological contexts of petroglyphs. This approach carries an advantage of incorporating multiple data sources or contextual layers.

Findings:

The function of the petroglyphs at Rockpile varied over time, but held true to certain tenets. The coming together of power of place with the power of the ritual held meaning to the individuals. The ritual was not a singular one and the rituals held continuity of form for what, at minimum was over hundreds of years and more likely over thousands of years.

Chair:
Adrian Praetzellis, Ph.D.

M.A. Program: Cultural Resources Management (CRM)
Sonoma State University

Date: 18 January 2011
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To begin, I want to extend my deep, sincere appreciation and gratitude to Rod and Cathy. You opened your property up to throngs of students on numerous occasions and did so with such generosity I feel many of us have been spoiled for the future. While it might go without needing to be said, I must state the obvious, that none of this would have been possible without you.

Secondly, I want to thank my committee: Adrian, Leigh and John. Whether it was quietly prodding me into action or a gentle, “how’s it going,” you all have helped me in ways that you may not understand. Without your constant support and encouragement who knows if I would have ever finished this journey.

I also want to thank all the students, volunteers, ASC employees, and Kashaya and Dry Creek tribal members that helped me conduct the initial survey in 2004 and those that have helped in subsequent internships and visits. While I would like to name you all, I know I would leave out someone and regret it, so forgive me for this generic thank you. But know that without your help, I would still be walking around there trying to record stuff! Special thanks to Tim, Donna, Reno, Kathleen, and June for challenging and opening my mind to different interpretations.

Finally, to you my Anna, words cannot truly express my thanks. What started out as a conversation on “Buffalo Hill” is now over and you, more than anyone, have had to deal with all this became and all the anxiety that was born from my procrastination. I am sorry that Aurie was not here to share in its completion, but it is fitting that Zachary came into this world to share with us its closure. I love you both with all my heart.
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Chapter 1. Introduction

Petroglyphs form one of the most long lasting examples of past cultures because they have survived in much the same condition as they appeared in the past to those who created them. Due in large part to their isolation from public access and modern development, the concentration of petroglyphs in the thesis area are free from vandalism. In addition, the surrounding environment has undergone minor fluctuations and so probably conveys much of the same feeling that it did in the past. What is missing is the cultural context, and such is the goal of this thesis, to place the Rockpile petroglyphs within context.

To that end, I intend to examine the Rockpile petroglyphs utilizing an overarching contextual approach, based on a model put forth by Carol Diaz-Granados (1993) and Diaz-Granados and Duncan (2000), and similar in approach to other researchers (e.g., Whitley 1987, Parkman 1994, Jones 2004, Schaafsma 1985, and Price 1999). This approach carries an advantage of incorporating multiple data sources or contextual layers. This is quite similar to the analogy described by Sven Ouzman (1998:30) of the cable of interpretation being the strands of archaeological evidence twisted together to become stronger than the sum of its parts, which in turn draws from Wylie’s (1989) cable or tacking model of archaeological understanding. All the individual lines, or threads, of inferences that at times do not stand on their own individually, can be viewed as coming together to form a “cable” of archaeological inference, which then allows the argument to be made stronger by the sum of their parts (Wylie 1989).
To identify the macro-environmental context, I will examine the placement of petroglyphs in the landscape and the topographic relationships that exist at these sites. The petroglyphs I will study in this thesis are located within the southern portion of the North Coast Ranges. Regional studies of petroglyphs located in this area by Gillette (1998), Jones (2004), Jordan (1995), and Parkman (1997) have provided a well-documented backdrop for comparisons of petroglyph locations.

Just as the physical location of the outcrop on the landscape has an interpretable meaning, so does the micro-environmental context. The placement of the petroglyph forms on the boulder or outcrop, or micro-environments, is not random. The associations between the individual petroglyph form location and specific area of unusual mineral lithologies, crevasses, edges, or apexes, all add to the understanding of the various functions the petroglyph may have served.

The general-cultural setting will include an examination of the possible ritual contexts of the petroglyphs. These interpretations stem from a theoretical perspective of structuralism (Levi-Strauss 1963, 1968), which seeks to study the unobservable relationships that link and unite the various elements of a cultural group (Lane 1970:13-14). In a recent thesis, Jones (2004) examined ritual functions of cupules in the Southern North Coast Ranges utilizing a similar approach. While restricting his focus on cupules, his research into the ritual contexts related to petroglyphs, as depicted in the ethnographic literature, forms a strong foundation in this thesis. Here I, similar to Halpern (1953), Parkman (1994, 1997), Docktor (1983), Price (1999), Whitley (1987), and numerous others
looking at the dichotomy between public and private spaces across the landscape, will interpret the Rockpile petroglyphs.

The final aspect of the contextual model involves the ideological context. This context consists of the creator's belief systems and emic meanings that we will likely never recover.

**Survey Methods**

The first visit to the Rockpile property that I was involved with occurred in April 2004. Accompanied by Gina George, we meet Rod and Cathy Park, the property owners, at their house. Rod and Cathy have a passion for preserving the landscape. With over 800 acres of land, they grow grapes on only 27 acres. Both Rod and Cathy are also very interested in the history of the land and welcomed us warmly to their home and onto their property. Rod and Cathy also invited several members of the Kashaya, namely Otis Parrish, Reno Franklin and Walter Antone. Donna Gillette, whose dissertation research focuses on rock art, was also able to join us.

The group went on a walking tour of the property, examining some of the areas with the known, albeit unrecorded, archaeological sites. On this visit, one of the more prominent sites on the property would be discovered. As the majority of the group was looking at a petroglyph outcrop on the south bank of Bishop Creek, Reno Franklin made his way across the creek. After hearing shouts of amazement and jubilation, the rest of the group proceeded across the creek to see what the commotion was about. Reno had located an immense serpentine/schist outcrop with thousands of incised lines and hundreds of
cupules on nearly a vertical face. As a result, we now know this outcrop as Reno's Rock, or CA-SON-2446.

In October of 2004, I directed a five-day archaeological survey of the property with the help of many volunteers, students and archeologists from the Anthropological Studies Center at Sonoma State University. The goal of the survey was two-fold: first, to provide Rod and Cathy with a more thorough understanding of the cultural resources that existed on their property so that they could better manage them; and second, to provide an opportunity for graduate students of various skill levels to work with other graduate students in a cooperative, learning environment.

In addition to the 15 students and 10 ASC staff members and numerous volunteers that were a part of this field effort, June Dollar, tribal member of the Dry Creek Pomo, and Kathleen Smith, tribal member of the Federated Indians of Graton Rancheria, were invited up and spent the better part of the five days with us. On different occasions, they helped the crew working at Reno's Rock and the crew working around the 19th century Tennessee Carter Bishop homestead.

The field crews were split up with one team starting on the ridge at the east end of the property working west. Another team targeted the suspected location of the Bishop homestead. While those teams were working up on the ridge, others were surveying down in the drainage, working from the western edge of the property down Bishop Creek. A final team was working at Reno's Rock.
The concentration of petroglyphs and other cultural material in this relatively small, dense drainage is situated in an ethnographic corridor near the boundary of at several linguistic boundaries. Therefore, it provides an excellent opportunity to examine hunter-gatherer complexity from a viewpoint different than the techno-environmental models typically used. In Northern California, no reliable dating methods for petroglyphs have been developed and petroglyph elements limit interpretation due to the forms consisting of cupules, lines, and other abstract shapes. A study of petroglyphs has the ability to illuminate other aspects of past culture that other types of archaeological analysis tend not to address.

At Rockpile, the story would be incomplete if the petroglyphs were not considered in the interpretation. The story might focus solely on the use of the area in terms of the quarrying of local chert, use of the tan oak groves, and as an upland seasonal habitation area. There are a significant number of other areas that share these types of archaeological sites. What is missing at these other locations is the dense concentration of petroglyphs that are present at Rockpile. Their presence alone signifies that this area commanded a significant role in past cultures. Based on the continual use of the petroglyphs at Rockpile, as exemplified by the variety of petroglyph forms, this area has long been conceived of as a place embodied with power.

This thesis is structured such that the broader geographic area surrounding the specific thesis study area provides a contextual backdrop in both cultural aspects as well as the physical environment. The primary goal is to utilize
this backdrop to help examine the petroglyphs of the Rockpile locality. The
underlying thesis is that the Rockpile locality contains a high frequency of
petroglyphs of varying types that can provide additional insight in the past uses of
this landscape over thousands of years. This thesis continues forward with a
base assumption that the high frequency of petroglyphs is not random and that
some aspects of cultural meaning and function can be gleaned from this
concentration of petroglyphs.

Chapter 2 provides the natural and cultural overview for both the Rockpile
locality and the surrounding comparative region. Topics such as geology, soils,
vegetation, and the past and present environments are examined in relation to
past culture traditions of the area and with a specific interest in the nexus with
petroglyphs. This chapter then explores a brief archaeological and ethnographic
overview for the area to aid in placing the material culture observed at Rockpile
in a broader interpretive framework.

Chapter 3 defines the terms I use in this thesis and explores the body of
scholarly research associated with petroglyphs and, in some cases, pictographs
that informs the interpretive model that I utilize in this thesis. Chapter 4 provides
a description of the cultural material recorded within the study area, with
particular attention toward the petroglyphs. Chapter 5 contains a discussion of
the contextual model utilized in this thesis as it is applied to the petroglyphs and
associated cultural material.

In the final chapter, I end with the conclusions drawn from this research
that the petroglyphs present at Rockpile represent portions of a variety of ritual
activities. In addition, this ongoing project shows how honest cooperation between numerous interested parties (in this case archaeologists, landowners and Native Americans) can advance the interests of all, while respecting each party’s beliefs.
Chapter 2: Natural and Cultural Overview

General Setting

The general area of study, which I will be referring to for broader comparisons, is located in the southern portion of the North Coast Ranges. This area includes portions of modern-day Lake, Marin, Mendocino, and Sonoma counties (see Figure 1). The range of environments covered by this region varies extensively and includes maritime, riverine, lacustrine, and montane environments. The specific geographic area I focus on in this thesis, the Rockpile locality, is located in north-central Sonoma County, near the northwest portion of Rockpile Ridge.

Topography

Rockpile Ridge follows the dominant pattern of ridges in the North Coast Ranges and trends northwest southeast, separating the Russian River watershed to the east and the Gualala River watershed to the west. Along portions of the Park's southern property line, flows a perennial creek, which drains into the Wheatfield Fork of Gualala River. Although the creek has no official name, those that live in this area refer to this as Bishop Creek, named after one of the early American settlers whose homestead was located on the property. Along the northern portions of the property are the headwaters of Dry Creek. It is important to note that this area is not located near Rockpile Peak, which is 8.5 miles to the west-northwest in Mendocino County.

The elevation of the Rockpile locality ranges from 1800-2000 feet. Along both the northern and southern aspects of the ridge, exist numerous midslope
Figure 1. General setting of thesis study area.
terraces and benches that form sheltered locations with springs frequently located on the periphery of the terraces. The slope of the region is characterized as steep with slopes in most areas over 50%. These steep slopes help to funnel the movement cross the landscape toward the drainages and toward the ridgelines.

**Geology**

The geology of the southern portion of the North Coast Ranges is highly varied, but can broadly be classified into three geological units: Franciscan, Great Valley, and Volcanics. The Franciscan Formation is the most widespread and includes chert, greywacke, shale, mafic volcanic rock, and blue schist facies (Page 1966:255-275). The Great Valley is also comprised of greywacke, shale and other conglomerates. The range of the Great Valley Sequence is the most restricted, being largely confined to a band along the eastern side of the North Coast ranges. The presence of serpentine strata between these formations continues to be an enigma for geologists as its origin continues to be debated and geologists are still testing hypotheses to determine the order and formation processes of these geologic units (Bailey, Blake and Jones 1974:70-81).

The Volcanics are primary classified into two main groups, the Sonoma Volcanics and the Clear Lake Volcanics. Both of these Volcanics include obsidian, rhyolites, basalts, andesites, and tuffs (Anderson 1936; Weaver 1949). The Sonoma Volcanics are older than the Clear Lake Volcanics. Of importance in these geologic units are the principal obsidian sources for the region, with four chemically distinct formations. Two of these formations are located in the Clear
Lake Basin (Borax Lake and Mt. Konocti), one is located in between the Santa Rosa Plain and Sonoma Valley (Annadel), and the fourth is located in Napa Valley (Glass Mountain). Given the advancements in obsidian hydration, these locations and the materials derived from them have played a central role in modeling trade networks and the migrations of populations across the region.

The geology of the Rockpile locality is largely consistent with the generalized description for the general area of study. The area is dominated by the Franciscan mélange that is characterized by chert sandstone, shale, conglomerates, greenstone, and metagreywacke. Geologic maps, however, have been compiled at such a scale that the fine-grained variation within the Rockpile locality is not represented (Wagner and Bortugno 1982). What is of significance to my interpretive model is that the locality includes high quality outcrops of Franciscan chert and numerous schist and serpentine boulders. A band of serpentinized ultramafic rock formations runs along the length of a vast portion of the ridge with numerous portions of these strata exposed with inclusions of varying quality.

**Soils**

The soils within the broad study area form a complex mosaic of soil types. A detailed description of these is beyond the scope of this thesis. Of principal concern to this endeavor is that these soils combine to form associations or complexes that speak to past regimes of flora and fauna of the area. As part of the Warm Springs Dam-Lake Sonoma Cultural Resources Study
MacDonald and Honeysett (1975) describe these associations as illustrated below.

Table 1. Vegetation-soil associations

<table>
<thead>
<tr>
<th>Mixed Evergreen-Oak Forest</th>
<th>Woodland-Grassland</th>
<th>Woodland-Chaparral</th>
<th>Infertile Chaparral</th>
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<tr>
<td>Hugo</td>
<td>Laughlin</td>
<td>Los Gatos</td>
<td>Mayman</td>
</tr>
<tr>
<td>Josephine</td>
<td>Yorkville</td>
<td></td>
<td>Henneke</td>
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<td>Sobrante</td>
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<tr>
<td></td>
<td>Laughlin-Suther</td>
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The soils within the Rockpile locality include Hugo, Josephine and Laughlin series (Miller 1972:44, 50, 57). The variety of these soil series provides excellent ecotonal settings that support a variety of flora and fauna. The south facing slopes are dominated by the Laughlin series, which are characterized as a well-drained loam with clay subsoil underlain by fine-grain sandstone and shale. Present on both the north and south facing slopes is the Hugo series. These soils are well drained and formed in material weathered from sandstone, shale, schist and conglomerates. Principally on the north facing slopes and along portions of the broad ridge top are the Josephine soils. These consist of deep, well-drained soils that have formed largely from altered sedimentary and extrusive igneous rocks.

**Climate**

Moderate temperatures and precipitation, with cool wet winters and hot dry summers, characterize the climate of this portion of the North Coast Ranges.
The largest variations are a result of proximity to the coast and elevation. More variation occurs during summer, with a daily maximum of 64 degrees along the coast and inland over 90 degrees. Winters are relatively mild, with temperature ranges from an average low of 42 degrees along the coast and below freezing frequently in the higher elevations and interior valleys. Rainfall is also variable, with ranges of less than 20 inches to over 70 inches. While little snow falls in the interior valleys or the coast, it occasionally falls in the higher elevations (Miller 1972:180-183).

**Paleoenvironment**

As part of archaeological data recovery investigations for the Rockpile Road Upgrade, Stewart (1989) sought to explain the bimodal distribution of obsidian hydration readings at CA-SON-1471/H. Differential land use based on environmental factors was one of the hypotheses Stewart examined in her interpretations. Considering the change in the climate over the last 12,000 years, this upland environment, which is located at a considerable elevation for the area, provides a unique contrast to the lower elevation sites that were studied as part of the WSCRs.

In Stewart's (1989) report she outlined a basic climatic model for the environment of Rockpile ridge that showed that throughout the Pleistocene temperatures would have been considerably colder, with vegetation consisting of pure stands of coniferous forest. A temperature warming trend, which later peaked during the Middle Archaic Period (the Xerothermic) accompanied the transition to the Holocene during the Lower Archaic. Vegetation was principally
open oak savanna with some chaparral, as compared to the firs and other conifers that had previously dominated. A spring adjacent to the archaeological site CA-SON-1471/H was presumed (based on the adjacent archeological materials) to have maintained its flow and provided a valuable, reliable source of water during the hotter, drier times. The diverse ecotonal setting of the ridgeline during this time period would have provided increased faunal and floral resources, as compared with the more unproductive, closed uniform stands of conifers (Stewart 1989:18-19).

A cooling trend with higher amounts of rainfall existed from ca. 3300-2500 BP through the Upper Archaic. The presumed oak savanna would have withdrawn downslope and been returned to mixed hardwoods and conifers. Given the increase in availability of water, the importance of year round springs on the ridgeline would have been reduced markedly. As the oak savanna-hardwood ecotone was reduced, the range of types of floral and faunal resources would have diminished (Stewart 1989:18-19).

Albeit with minor variations, the temperatures during the Emergent Period were closer to that of modern times and generally warmer than the preceding time periods, but cooler than the Middle Archaic. The year round water source of the springs would have again increased in importance. The tan oak groves would have also been important resources with the use of fire as a key part of the management of the density of tree stands (Stewart 1989:18-19).

Based on research from their Pilot Ridge study, Hildebrandt and Hayes (1983) also attempted to correlate climatic changes with a shift in settlement
patterns and associated food procurement strategies. They suggest that during a warming trend from approximately 4500 BP to 2500 BP, the Pilot Ridge area had abundant and varied resources that encouraged settlement in the upland areas rather than the riverine environments. As the cooling trend began, the montane forest gradually came down in elevation, which altered the food procurement strategies and settlement patterns (Hildebrandt and Hayes 1983:19).

Regional Archaeological Overview

In comparison with other geographic regions, the North Coast Ranges have only recently (in the last several decades) received significant attention from archaeologists. Much of this interest was due to influx of projects related to cultural resource management studies, with the major impetus stemming from the WSCRS. As with the more general transition in archaeological theory, early studies were largely concerned with culture history and chronology, with a later shift toward economic adaptations, including optimal foraging theories, and more recently into social factors of adaptive change involved in an “Integrative Model” (White and Frederickson 1992: 105-117).

For this thesis, I will begin with an overview of the archaeological taxonomies for the broader North Coast Ranges and then move closer into the Rockpile locality to provide a more localized context. More detailed reviews of the history of archaeological research for North Coast Ranges can be found in Fredrickson (1973, 1974, 1984, 1994), Jones and Klar (2007), Stewart (1993), White and Fredrickson (1992), and White (2002). Selected cultural resource
locations are depicted on Figure 2 in a generalized fashion to assist the reader in understanding the basic proximity of locations discussed in this thesis.

In his dissertation research, Fredrickson (1973, 1974) sought to resolve difficulties he observed with the chronological framework employed in Central California when applied to the North Coast Ranges. Working with Bennyhoff, Fredrickson provided a revised analytical foundation, based in part on Willey and Phillips' (1958) model for North American prehistory. To provide a temporal outline for the discussion he divided the chronologies into three periods: the Paleo-Indian period (from at least 12000-8000 BP), the Archaic period (8000-1500 Before Present), and the Emergent period (1500 BP to present). The Archaic period is further subdivided into three divisions: the Lower (8000-5000 BP), Middle (5000-2500 BP), and Upper (2500-1500 BP). The Emergent period is further divided into two divisions: Lower (1500-500 BP) and Upper (500 BP to present) (Fredrickson 1994:100, Figure 9.1).

While these temporal periods continued to be widely utilized by archaeologists, with only minor adjustments, more substantial revisions have occurred in regard to the geographic locations and cultural adaptations that are modeled through the use of the "pattern", "aspect", and "phase" concepts (Fredrickson 1994). These units, therefore, are not based strictly on temporal periods, and can occur simultaneously in regions and co-vary over time. In other revisions to the taxonomic system, White and Frederickson (1992) and White (2002) have sought to further refine these units to further model the cultural complexity and variation that exists in the North Coast Ranges.
Figure 2. General location of selected archaeological resources and obsidian sources mentioned in text.
The pattern relates to the broadest form of cultural adaptation shared by a number of separate cultures over a period of time within an area. It is characterized by similar technological skills, economic modes, and ceremonial practices, although regional variation may be significant (Bennyhoff and Fredrickson 1994:20-21).

The aspect is a more specific division of the pattern that is generally meant to refer to a specific region or district and the forms of economic adaption that have manifested in that area. The aspect is meant to be comprised of related sets of phases, as opposed to being comprised of a unique set of phases (White and Fredrickson 1992:38).

The phase is commonly known as the smallest recognizable cultural unit in time and space. It is a subset of an aspect and based on the similarities and differences observed in historically related artifact types, styles, and materials (Fredrickson 1994:35). The following is based on White and Fredrickson’s (1992:37-85) revisions to Fredrickson’s earlier models.

The Post Pattern (ca 11000-9000 BP) is associated with the Paleo-Indian period and is based largely on data from the Borax Lake site (CA-LAK-36). Due to lack of single component assemblages, little is known about these highly mobile peoples from their material culture. The diagnostic artifacts for this pattern include crescent-shaped artifacts and Clovis-like fluted points (White and Fredrickson 1992:45). Other Post Pattern materials have been found in isolated contexts, including coastal locations, and fail to provide substantial information regarding the adaptive system employed (Hildebrandt. 2007:86-87).
The Borax Lake Pattern (9000-7000 BP in Clear Lake Basin, to 2800 BP in the north) is characterized by large, wide-stemmed points, serrated bifaces, ovoid flake tools, handstones, and millingslabs that seem to represent mobile forager subsistence. This pattern is found both at Clear Lake and in upland locations in the northern North Coast Ranges, but generally has not been found in coastal locations (Hildebrandt 2007:87-88). In the Clear Lake Basin, it has been hypothesized that this pattern evolved into the Houx Aspect of the Berkeley Pattern (White and Fredrickson 1992:47-53).

The Berkeley Pattern (7000-1300 BP) is expressed in the Clear Lake Basin and surrounding areas as the Houx Aspect and begins with the Mastin Phase, then evolves to the Creager, the Houx, and finally the Terminal Houx. The Excelsior points are characteristic in all phases and a wide-stemmed series is present for the first three phases. Flaked-stone artifacts include heavily serrated flake tools, simple drills, and bifaces. Both mortars/pestles and millingslabs/handstones are present, along with a variety of bone tools and the first evidence of shell beads (White and Fredrickson 1992:49-63). This transition is important because it defines lifeways that are more sedentary. The presence of pestles and acorn remains is especially significant as it provides some of the earliest evidence for acorn utilization (Hildebrandt 2007:90).

The Mendocino Pattern (5000-1300 BP) is considered intrusive into the Clear Lake Basin and contemporaneous with the Borax Lake/Berkeley Patterns, with the related peoples often coexisting in the same broader region while occupying different environments. Those employing a Mendocino Pattern lifeway
do not appear to undergo the transition to a more sedentary lifeway, rather maintaining a more mobile lifeway. The pattern is further characterized by a lack of highly developed midden and low artifact density. Artifact types include Willits and Mendocino series points, handstones/millingslabs, and in a few instances pestles and mortars (Hildebrandt 2007:91-92). By 3000 BP, two variants appear, largely separated by geography: the Mendocino Aspect and the Hultman Aspect. The region generally north and west of Clear Lake Basin is the Mendocino Aspect and dominated by large notched points of chert (Willits) and McKee unifaces. The region south and east of the Clear Lake Basin is the Hultman Aspect and characterized by obsidian concave-base (Mendocino) and leaf-shaped points (White and Fredrickson 1992:63-73).

The Augustine Pattern (post 1300 BP) is characterized by smaller Rattlesnake series arrow points—corner-notched, side-notched, and triangular—found predominately in the southern portions of the North Coast Ranges; with the Gunther series overlapping from the northern areas. Dart sized Excelsior points are also present, along with chert drills associated with bead manufacturing. Milling tools are predominately pestles with hopper mortars or bedrock mortars, although some handstones/millingslabs are present (White and Fredrickson 1992:74-79). The variability of lifeways inferred from this pattern is considerable as some areas see increased sedentism, while others reflect a pattern of greater mobility (Hildebrandt 2007:94-95).

White and Fredrickson associate the Borax Lake Pattern, Houx Aspect and Clear Lake Aspect with proto-Pomoan speaking peoples, thus originating in
a Clear Lake basin homeland. They are described as exhibiting a mobile lifeway during the Borax Lake Pattern, with sedentism increasing during the Houx Aspect and reaching a climax in the Clear Lake Aspect. Conversely, the Mendocino Pattern is typical of more mobile lifeways and ascribed to proto-Yukian speaking peoples who occupied the upland settings. They are presumed to have occupied the area north, south, and west of Clear Lake when the proto-Pomoan speaking peoples began moving out of the Clear Lake Basin ca. 2500-1500 BP, ultimately pushing the Yukian groups north and south after a period of coexistence (White and Fredrickson 1992:97-101).

Closer to the Rockpile locality, I have the benefit of building on the data generated from the WSCRS. Information from that decades-long project spawned numerous, detailed technical and site-specific reports, professional papers, and thesis (e.g., Basgall 1982, 1987; Baumhoff and Orlins 1979; Basgall and Bouey 1991). Not without its critique (cf. Stewart 1993), the analysis of the data from the WSCRS led to a localized sequence, the goal of which was to avoid the cultural implications of Fredrickson's (1974) scheme and to focus on the temporal dimensions. Basgall and Bouey (1991:199-204) denote three local phases that are described below.

Low site densities characterized the Skaggs Phase, dating from roughly 5000 BP to 2500 BP, which suggests short-term use and highly mobile groups. With the exception of CA-SON-572, which appeared to serve as a principal residential hub during this phase, the other sites are characteristic of task-specific sites for either vegetal processing or hunting stations. The majority of the
groundstone assemblage is dominated by milling slabs and hand stones, with a high frequency of mauls (characteristics of pounding tubers and roots). The flaked-stone tools present include large concave base and Willits series projectile points, including the atlatl, tend to be fashioned from local chert, with some from the Mt. Konocti and Napa obsidian sources present. The general variability of the tool kit is characterized as low, with no recognizable ideotechnic artifacts or features characteristic of this phase. Basgall and Bouey attribute the Skaggs Phase to a Yukian group of people (1991:199-200). This phase can be considered analogous to Mendocino Pattern peoples.

The Dry Creek Phase, dating from roughly 2500 BP to 700 BP, is characterized as an abrupt transition, which Basgall (1982:12) attests to the arrival of a Pomoan group. They describe a significant rise in sites assigned to this phase and in obsidian use, with the highest frequencies of the Mt. Konocti source. The tool kit becomes much more diverse and contains somewhat smaller projectile points including the Excelsior series along with some larger side-notch points. The bowl mortar and pestle are introduced and dominate the groundstone, although milling slabs and hand stones are still present (Basgall and Bouey 1991:200-203). The characteristics of this phase are similar to that of the Houx Aspect of the Berkeley Pattern.

If the Skaggs-Dry Creek Phase transition does in fact mark the arrival of Pomoan speakers into the area, higher population densities may have increased territorialism, especially if other groups were being forced out of areas, which would increase the need to manage both intergroup (marriage, trade, conflict)
and intragroup relations (resource management, storage, ceremony). From this need for management of social relationships, Basgall and Bouey assert that a complex organizational system would arise which would increase the importance of leadership roles. This progression would become more apparent in ethnographic times (1991:203).

Of additional interest to this thesis is Basgall’s and Bouey’s (1991) incorporation of the petroglyph sites into their cultural chronology. They found the major production of the cupules dating to this phase, based in part on a cupule boulder recovered from the base of the Dry Creek component of CA-SON-571 and dated to approximately 1800 BP (Basgall and Bouey 1991:151-152).

The final phase as defined by Basgall and Bouey (1991), the Smith Phase, dates from approximately 700 BP through the 19th century. Artifact assemblages from this phase are dominated by small corner-notched arrow points, with Konocti obsidian dominating early and use of Napa obsidian increasing closer to present time. Chert is also present as a source material. Bowl mortars/pestles and millingslabs/handstones are also present. A specialized drill/bead industry is apparent at several sites. During excavations at CA-SON-593/H, cupules were found to be associated with archaeological deposits from the late Smith Phase, dating to approximately 200 BP (Basgall and Bouey 1991:151, 203-206). This phase relates to the Clear Lake Aspect of the Augustine Pattern.

Although the data derived from the WSCRS serve nearly limitless utility for comparisons and contrasts, the data must be prefaced with a context in their own
right: the study area was limited to the high water mark of the proposed lake (480 feet in elevation) and certain auxiliary areas between 480-600 feet in elevation. Since the sample was based on project limits, not research goals, the subsequent analysis did not account for land use of the entire Warm Springs locality, but rather focused on the valley floor. The Rockpile locality, located on the fringe of the WSCRS project boundaries based on land ownership, ranges from 1800-2000 feet in elevation, and therefore, provides information for the upland component missing in the WSCRS analysis.

The closest comparison site to the current study area with established chronometric data is CA-SON-1471/H, which was excavated in 1985 and 1987 by Stewart (1989) and later the subject of her MA thesis (1993). This site is located in a sheltered terrace within an area of mixed conifer-hardwood forest along the ridgeline. This site appears to show a decided contrast to the lowland WSCRS database, with primary site use of SON-1471/H dating to the Skaggs and Smith Phases, lacking the intensive site use documented by WSCRS archeologists in the valley during the Dry Creek Phase. Another significant departure was the heavy obsidian ratios in the early components at SON-1471/H (Stewart 1993:51-52), as compared with the higher chert to obsidian ratios documented in the WSCRS data.

Stewart challenges the hypothesis set forth by Basgall and Bouey (1991) and argues that the Warm Springs locality was contemporaneously occupied by both Mendocino and Berkeley Pattern peoples during the Upper Archaic, with evidence of Pomoan occupation only minimally supported. She further posits that
the Berkeley Pattern peoples were Miwokan speakers (Stewart 1993:iv).

Regrettably, more information is needed to attempt to resolve these conflicting hypotheses. Data with finer resolution will be necessary and may not even be possible to acquire, as I agree with Fredrickson and White in that,

Evidence from regions north of the Bay Area, taken as a whole, indicates that both [proto Western Miwok] and Pomoan speakers employed a basic Berkeley Pattern material culture, interacted extensively, and thus may be indistinguishable using archaeological methods (1991:96).

In addition to the petroglyphs from SON-593/H and SON-571 that were recorded during the WSCRS, petroglyphs in the general vicinity of the Rockpile locality consist of the same petroglyph forms as that of the Rockpile locality. Coming out of the data from the WSCRS, eleven sites with petroglyphs were recorded along Dry Creek and its tributaries. The majority of the petroglyphs were recorded within the creek beds or on the adjacent creek banks and, as with the Rockpile landscape, numerous surrounding suitable rock outcrops or boulders were left unmodified. The number of cupules on each outcrop range from single cupules to over 300 cupules on one outcrop. Other petroglyph forms, including pecked curvilinear nucleated style and linear forms were also recorded (Fredrickson and Schwaderer 1982:2-3). One site, SON-1320, had the only example from the WSCRS of a cupule pecked into a pecked curvilinear nucleated style, which is also found at one of the sites in the Rockpile locality.

Another group of petroglyphs was recorded near Crane Peak, approximately 3 miles south of the Rockpile locality, which included 17 petroglyph sites clustered in less than a two square mile area (Gary 1994). Cupule forms dominate this cluster, although incised lines are also present. No chronometric dates have
been postulated for these petroglyph sites and no nearby habitation sites have been documented that might be able to provide a relative chronological context. This lack of habitation sites may be a factor of survey bias, however, this may also reflect a different use of the area than evidenced in the WSCRS or in the Rockpile locality, both of which contain habitation sites in direct spatial proximity to petroglyphs.

**Ethnographic Overview**

During the ethnographic period, the broader study area includes speakers of three distinct linguistic stocks: Hokan, Penutian, and Yukian. Out of these three language stocks developed a multitude of languages that include the Pomoan language family (comprised of seven distinct languages), Western Miwok (including Coast and Lake Miwok) and Wappo (Callaghan 1978; Kelly 1978; Kroeber 1925; McLendon and Oswalt 1978; Miller 1978). It is important to remember that these boundaries were documented at a particular point in time (19th to 20th century) and may only reflect the territorial boundaries at that time and as recollected by the informants that were used by the ethnographers. Furthermore, as indicated above, even into ethnographic times, the use of the landscape by more than one group is highly likely, as evidenced in the Clear Lake Basin (White 2002).

If the argument is made that the production of petroglyphs within the Rockpile locality was made during the later portions of the ethnographic period, then the fine-grained subdivisions presented below are significant. While I argue that the production of petroglyphs continued through the ethnographic period, I
also contend that the various roles petroglyphs served had much deeper roots in time.

Following this perspective, I will first begin with reviewing the ethnographic information available at a broad linguistic stock level, then examine how complicated the late ethnographic period became. In that spirit, I argue that it is paramount to conceptualize these territorial boundaries as zones, not as fine-grained lines. The overview presented here is not intended to be an exhaustive review of all ethnographic sources, rather to outline key facets of the information available to provide a context for later discussions.

During the ethnographic period, the Rockpile locality is situated near the confluence of several Pomoan linguistic and tribelet boundaries (see Figure 3). Pomo is a linguistic term that was used to group peoples primarily located in the southern portion of the North Coast Ranges that were speakers of seven distinct, but linguistically related languages of the Hokan Stock. The concept of “tribelet” was advanced by Kroeber, who defined the term as “groups of small size, definitely owning a restricted territory, nameless except for a tract or its best known spot, speaking usually a dialect identical to several of their neighbors, but wholly autonomous” (1932:255). Most ethnographers place the Rockpile locality within Southern Pomo territory (Barrett 1908; Kroeber 1925; McLendon and Oswalt 1978).

Southern Pomo speakers lived in village communities, usually comprised of several settlements, with one principal village in which the chief resided. Generally speaking, all members of the community were entitled to hunt, fish,
and gather within the boundaries of the land claimed by the community. Different tribelets maintain differing forms of political organization, especially amongst the Southern Pomo speakers (Kunkel 1962). The Southern Pomo traded regularly with other Pomo groups (e.g., Central and Kashaya), more than with other language speakers, and while there was no central political figure(s), there was a general sense of cohesion between the different Pomo peoples (McLendon and Oswalt 1978:293). Within the Southern Pomo area, tribelets and villages were interconnected through strong kinship networks based on secret society membership (e.g., Kuksu religion) and family affiliation.

Ethnographic evidence that indicates that an extensive network of trails (see Figure 4) existed in the region between the Russian River and the coast suggesting there was regular contact between the people of different tribelet territories and between different language groups (Theodoratus et al. 1975:214). Many of the trails were located along ridgelines in the low, coastal mountains similar to which the Rockpile locality is situated. The diaries from early American-period settlers of Rockpile note Indians stopping for water on the way to the coast (Park, personal communication 2005). The modern-day roads of the area also mark the general location of several ethnographically documented resource procurement areas such as aboriginal trails crossing through, or in the general vicinity of Rockpile locality, and tan oak groves. For example, during the ethnographic research for the WSCR, Theodoratus et al. (1975) note trail 6 as:

beginning at 'cold water village', crossing Dry Creek at the bridge and continuing along the Old Rockpile Road to the Rockpile Ranch. From here, the trail continues west, up the adjacent ridge...eventually reaching Annapolis or Stewart's Point (1975:214).
Figure 4. Map of trails for the Cloverdale Pomo (Peri et al. 1985:214, Map 9a).
A seasonal cycle of resource use across the landscape produced variations in population movement, depending on the need for labor and availability of resources in certain areas. In a region home to as many microclimates as northern California (both in modern and in the past), different resources were present in different environments at different times of the year. These seasonal migrations involved traveling to, and most importantly, occupying different environments during the various times of the year when specific resources were prolific. The distance and extent of the seasonal rounds likely changed over time as some areas became the domain of certain groups, thus requiring some form of payment to acquire a specific resource. In spring and early summer, the population tended to disperse to take advantage of sparsely spread plants and animals. In late summer and early fall, people converged to gather and process fish, acorns, and other nuts. These larger groups stayed together during the winter months, relying primarily on stored food (Kroeber 1925; Theodoratus et al. 1975:133-179).

According to McLendon and Oswalt, the most desirable living sites would be along the ridge tops given the available resources and close proximity to major travel routes (1978:278). Although there are several village sites to the west of the Rockpile locality along Rockpile Creek and the Gualala River (Barrett 1908:226), none of the ethnographers discussed below note that any "villages or campsites" existed within the Rockpile locality. This absence, however, does not rule out the potential for such villages or campsites. The closest reported ethnographic site to the study area (approximately 3 miles to the southwest) is
*kawante limani*, the location of which is generalized by Barrett (1908:225) as at the headwaters of Buckeye creek to the west. However, without question, the Rockpile locality is significant in that it is located along a major travel corridor, at a crossroad of linguistic boundaries as well as subdialect boundaries (Theodoratus et al. 1975:214).

Depending on which ethnographer one reads, boundaries ebb and flow for the ethnographic groups near the Rockpile locality; however the summary that follows attempts to look at the notions that exist for this area, as documented by ethnographers in the 19th and 20th centuries from existing conditions and oral traditions gathered.

The Dry Creek Porno, or Mihilakawna, occupied the Dry Creek drainage. The upper portion of this drainage appears to have held another group, the Shahkowe, possibly a political subdivision of the Dry Creek Porno (Kunkel 1962:308-310). The Mihilakawna tribelet center was located in the open area of Dry Creek Valley proper, with a principal village of Takotan reported at the confluence of Warm Springs and Dry Creek.

The Cloverdale Porno, or Makahmo, who occupied the area east of the ridge separating Dry Creek from the Russian River, later supplanted the Shahkowe in the 1830s (Stewart and Peri 1980).

The area that includes the drainages of Rockpile Creek, Buckeye Creek, and the upper reaches of the Middle or Wheatfield Fork of the Gualala River was occupied by the Wishachamay “ridge people” (McLendon and Oswalt 1978:280). They have been divided into two sub-groups: the Wishachamay, or Yotiya of
Rockpile, who were focused along the coast, and the Hiwalhmu, who are described as occupying the divide between the north fork of the Gualala River and the headwaters of Dry Creek (Stewart 1943). Bean and Theodoratus (1978) note that permanent villages were sometimes located over 20 miles from the ocean in this redwood zone uplands (Bean and Theodoratus 1978:289). Stewart (1943) describes the boundary between the Hiwalhmu and those living in the upper portion of Dry Creek Valley as being located at the present-day intersection of Rockpile and Kelly roads, just to the east of the study area (Stewart 1943:53-59). These peoples are almost completely unexplored ethnographically and archaeologically.

Other than the above Southern Pomo speakers, use of the Rockpile locality by the Southwestern Pomo, or Kashaya Pomo, is completely absent in the early ethnographies. However, during the ethnographic work that spawned from the WSCRSS, Kashaya use of the Warm Springs Creek drainage and the headwaters of the Middle or Wheatfield fork of the Gualala River is well documented as existing from the late 1800s with numerous Kashaya place names for the general area (Parrish and Parrish 1980).

Aboriginal Religion

Shamanism has been a dominant religious aspect for much of human history in this region. It is generally accepted that some petroglyphs are products of the shamanistic experience (Heizer 1953; Lewis-Williams and Dowson 1988; Whitley 2000). Examples from the ethnographic literature document the relationship between petroglyphs and the Kuksu religion and other secret
societies (Loeb 1926:269-368, 1932:102-111). The Kuksu religion, one of the
dominant religious systems in place by the time of contact, is generally thought
been developed from one to two thousand years ago (Fredrickson 1994:100,
Figure 9.1).

The two primary religious ceremonies of the Pomo can be divided into two
overarching groups: the ghost society and the Kuksu religion (Gifford and
Kroeber 1937:160-163). Loeb (1926:338) places the ghost religion as more
ancient than the Kuksu religion, which is believed by Kroeber (1932:315) to have
originated with Patwin groups from the Central Valley and spread from there.

The ghost societies that functioned within Native religions are thought to
have their origins far back in time, even carried over from Asia. The ghost society
religion centered on initiation rituals that involved impersonations of ghosts by the
society members and was often open to all boys (Loeb 1932:96-97).

The Kuksu religion was composite of ceremonies that often involved
impersonations and probably began as a male-only secret society, but evolved to
include females in some areas. The differences of how the Kuksu religion was
organized varied dramatically form tribelet to tribelet, and continued the
independent, localized structure as modeled by the general tribelet socio-political
organization (Kroeber 1925:364-388). At times, members of neighboring groups
would participate; as the Lake Miwok had the Pomo initiate their boys (Loeb
1932:123). Loeb (1932) differentiated a western versus eastern division. The
western division, which includes the general area of study and its adherents,
focused more on initiation, healing, and general power (Loeb 1932:132).
Significant to this thesis is the number of references to the Kuksu members conducting their ceremonies outside of the village area (Loeb 1926:269-368, 1932:102-111).

Pomo secret societies had a “ceremonial elite responsible for handling most ceremonies and public affairs” (Bean and Theodoratus 1978:297), however, as is true in most generalizations of “the Pomo”, the manner in which the secret societies were articulated in the particular tribelet most likely differed substantially. In discussing the old ghost dance for the Pomo and the Yuki, Loeb describes it as both a secret society and as an initiation ceremony involving only males, with the Central Pomo and Kashaya retaining more of its original elements (1926:250).

As practiced by the Pomo and the southern Yuki (the Yuki north of Round Valley did not practice the Kuksu religion), the Kuksu religion dances were held outside in brush shelters and may have involved both boys and girls for initiation ceremonies. By in large, Southern Pomo Kuksu rites were tied to first fruit ceremonies and did not involve curing ceremonies (Kroeber 1932; Loeb 1926, 1932). Loeb (1926) believes that the Kuksu religion, as with the old ghost society rituals, became more elaborate among the Inland groups compared to the Coastal groups where the initiations and displays of power by the secret society members were subsidiary to the ceremonial impersonations (1926:354).

For the Coast Kuksu societies, these ritual components were the initiations (the grizzly bear stab); the djaka djaka or cutting ceremony; djaukau djaukau, a cutting and pole ceremony; and the djok djok, a chief making
ceremony, practiced only by the Kashaya Pomo. In the inland Kuksu societies, boys and girls were admitted to certain societies and were initiated when that ceremony was held.

The Inland Kuksu cycle consisted of the pole ceremony; the cutting ceremony; the rattlesnake ceremony; the bird imitations; the thunder ceremony; the basket dance; the deer claw ceremony; the bear impersonation; and the closing ceremony (Kroeber 1932:312-315, 364-374, 319-420; Loeb 1926:354-384; 1932:6772, 123-124). Loeb (1926) identifies four traits that are found worldwide in secret societies, such as the old ghost dance: (a) the use of the bullroarer, (b) the impersonation of ghosts, (c) the 'death and resurrection' initiation, and (d) the mutilation by cutting (Loeb 1926:249).

Following this overview of natural and cultural contexts, the focus of the thesis will now narrow toward petroglyphs; how they are defined, how they have been generally studied, and what basic interpretive foundations currently exist.
Chapter 3: Review of Petroglyph Definitions and Research

This chapter will examine previous recording efforts related to petroglyphs and interpretive models relating to petroglyphs that are pertinent to this current study. While the focus is on those efforts within California, interpretive models will draw from a worldwide perspective where appropriate. One goal of this chapter is to provide a proper terminological background. In addition, I will highlight the research that has informed my thesis and draw those connections with the research that form a basis for my interpretive model.

Definition of terms

Before continuing, it is important to clarify some basic terms in order to provide a sense of consistency and a common point of reference. In general, it is my intent to continue with those terms that have been established by past researchers. Regrettably, there exists much inconsistency and disagreement related to terminology in the study of “rock art”. Here we see a first point of disagreement in terminology in the name “rock art” itself. This term, however, is so engrained in the literature that it seems that it cannot be abandoned. I will utilize the term only when the previous researcher has used it, in keeping with their research. What does need to be stated is that I do not prefer this term, as the word “art” contains far too many cultural biases.

Instead, I will use the following two terms to describe those markings found on exposed rock surfaces: petroglyphs to mean those markings on boulders, outcrops, or other suitable exposures of rock that have been pecked, ground, incised, or otherwise abraded into that rock surface; and pictographs,
which are those markings found on the surfaces of rock that have been painted or drawn (Whitley 2000:832). While there exists numerous additional types or forms of petroglyphs, the petroglyph forms described below are those that are recorded within broad study area and the only petroglyph forms located within the Rockpile locality.

First defined by Baumhoff, Heizer, and Elsasser (1958:1-17), the “pit-and-groove” petroglyph is defined as generally pecked or battered pits measuring 1-2 in. in diameter and 0.5-1 in. deep. Grooves, when present, measure 0.5-1 in wide, and are seldom more than 0.25 in. deep.

In keeping with the size parameters documented by Jordan (1995), cupules consist of a circular depression with a diameter ranging from 2.0 cm to 7.9 cm, and a depth of 0.1 cm to 3.9 cm. Cupules are pecked and ground into rock surfaces. Also known as pitted boulders, rocks containing these small depressions are found in a variety of contexts: in association with paintings, in clusters on both vertical and horizontal surfaces, and in association with bedrock mortars. The placement and size of cupules suggests that, at minimum, they served additional functions rather than a solely utilitarian purpose (Jordan 1995:53-57).

Another petroglyph form that is discussed in this thesis is the punctate, which is ambiguously described in the literature as a “dot”. Jordan (1995:57) defines this petroglyph form as morphologically to the cupule, only smaller in depth and diameter, and usually found in groups.
While not explicitly defined by previous researchers, incised lines serve as a catchall for those grooves, either straight or curvilinear, that are carved into the surface of a rock. These form the "groove" in the pit-and-groove style documented by Baumhoff, Heizer, and Elsasser (1958) and are included by Hedges (1983:20) as an integral part of the Pomo "baby rocks".

The final form of petroglyphs that warrants definition for this thesis is the "pecked curvilinear nucleated" (PCN) petroglyph, which is defined as "circles and ovals, which have nuclei that appear raised" (Miller 1977:44). Miller defined the PCN term as part of her thesis, as she sought to define the petroglyph element by virtue of its morphological characteristics.

**Previous Research**

With a few, minor exceptions, petroglyphs are undeniably a worldwide phenomenon. Whether it is the association of petroglyphs (specifically cupules) with archaeological deposits that date to a minimum of 50,000 BP in France (Peyrony 1934); or cupules and incised lines found on a boulder in India below an intact deposit dating ca. 200,000 BP (Bednarik et al. 1991); or research in Australia dating cupules ca. 40,000-50,000 BP (Taçon et al. 1997:960-962), the great antiquity and far reaching distribution of these petroglyphs is considered fact by most of the archaeological community.

Hill and Hill (1974) have noted the antiquity of the "pit-and-groove" form of petroglyph in the New World:

The pit-and-groove type of petroglyph is not only the easiest to make but it is also the most widely disseminated around the world. As a widely distributed feature is generally older than one with a limited range, we may
consider the pit-and-groove type of petroglyph to be our oldest tradition, probably brought in by the immigrants from Asia. (1974:18)

The interpretations for the worldwide distribution of these petroglyph forms often fall back on the simple, elemental form of these petroglyphs. Frequently the cupule has a definitive root in nature itself, emulating solution pits or natural cavities in rock outcrops (Steinberg and Lanteigne 1991). What becomes significant is that even though the form may have near universal distribution or originated as a natural feature, later to be culturally modified, the meaning ascribed to the form can vary extensively from portals into the sacred world, to by-products from ritualistic pounding, to metaphors of female genitalia.

The history of research into petroglyphs and pictographs has undergone several transformations in approaches, not unlike the general approaches taken by anthropologists and archaeologists throughout the 19th and 20th centuries. The early focus on classification and chronologies, such as Steward (1929) whom I discuss below, tended to focus on distributional studies related to diffusion of petroglyph elements or styles. Later theories centered on “hunting magic, as proposed by Heizer and Baumhoff (1962). Just as New Archeology began shifting the paradigm toward explanations of human behavior vis-à-vis external causes like environmental determinism, the interest in research of petroglyphs and pictographs diminished substantially. As the postprocessualism movement took shape, the pursuits began to meld both “scientifically-oriented” approaches and the recognition that “art, symbolism, belief, and cognitive phenomena” have the potential to contribute to our greater understanding of past cultures (Whitley 2001:20).
The focus from this point will narrow in on those forms of petroglyphs that are found in the broad thesis study area, leaving behind the more complex, highly representational form of petroglyphs found in areas such as the Santa Barbara region, Coso Ranges, or the Northwest Coast. The petroglyphs found within the general thesis study area consist of cupules, incised or pecked lines, (together forming the basic pit-and-groove style) and PCNs. In some locations, I will show how even these simple forms can come together in highly complex patterns.

Garrick Mallery conducted one of the earliest focused studies of petroglyphs and pictographs covering California in the late 19th century. In his publication (Mallery 1883), he included descriptions and sketches of numerous petroglyphs and pictographs. Significant as a first thrust into inventorying petroglyphs and pictographs, it was not until over 40 years later that California’s petroglyphs and pictographs would receive attention in their own right.

In 1929, Julian Steward published his doctoral research results as the *Petroglyphs of California and Adjoining States*. This seminal study catalogued petroglyphs and pictographs from 293 sites in California, Nevada, Utah, Arizona and Baja California and examined their geographic distribution. As part of his study, he differentiated petroglyphs and pictographs, and attempted to classify style areas and provide dates for these sites. Steward’s Style Area A, which included the Rockpile locality, consisted of nine petroglyph sites, with Sites 6 and 7b potentially being recorded in the Rockpile locality (see page 71 for more on this aspect). Based on relative dates of nearby archaeological sites, the degree
of erosion and build up of desert varnish, and concepts of superimposition, Steward determined that the petroglyphs dated between 4000 - 3500 BP (Steward 1929:57, 221).

Continuing this research toward a statewide inventory, Heizer and Clewlow (1973) published research that attempted to further document the statewide distribution of petroglyphs. They sought to break down the state into style areas (Great Basin, Central Sierra, North Coast, and the Southwest Coast) with five principal element categories (human, animal, circle and dot, angular, and curvilinear). Early interpretations were largely based on the visual relationship of the petroglyph form to that of human genitalia (vulva forms) and from proximity of the petroglyphs to water sources and game trails. Heizer and Clewlow interpret the production of these petroglyphs to be related to either “rain making” or “human female fertility” (1973:29-30). Heizer and Baumhoff (1962:222) have suggested that pit-and-groove rocks are related to hunting magic in the Great Basin area. To date, however, this correlation has not been found for North Coast sites.

By 1973, Heizer and Clewlow felt the petroglyphs in the North Coast area dated to no earlier that the later 1500’s and largely considered the petroglyphs not worthy of further attention as compared with the other style areas. They summarize the North Coast Petroglyph Style as:

...a series of artistically unconnected lines or incisings. Most of these...appear as random scratches, as do the curvilinear elements, which differ from the angular ones in execution only...Stylistically, in fact (due in part to the small size of the sample...), all that can be really said of the North Coast pecked style is that it lacks representational (i.e., Animal or Human) elements, that it consists overwhelmingly of a number of
angular incisions on soft boulders and that these incisions appear in no particular pattern, and seem to have been placed upon stones at random, perhaps over a lengthy period of time...Archaeologically, there is no evidence that rock art was an ancient practice in the area...there are not a great number of scored boulders in the known (Heizer and Clewlow 1973:29-31).

When the California volume of "Handbook of North American Indians" was released in 1978, Clewlow (1978) provided the summary chapter. In the chapter Clewlow again refers to the North Coast Petroglyph Style area as randomly produced angular incisions or random scratches on soft boulders lacking any human or animal representations. He dates the style ranging from 400 BP to the historic period, and relates the production to either weather control or fertility rituals (1978:622).

While the relationship to the ethnographic record seems plausible, I would argue that the emphasis on arbitrary production has more to do with a western bias, than the emic mindset at the time the petroglyphs were produced. It is common to see the objective concept of "random" or without preference mixed with a subjective interpretive usage of the production of the petroglyphs as "random" or arbitrary. It appears as if these petroglyphs were largely downplayed given they were not directly interpretable and require multiple lines of evidence to arrive at meanings that could be further analyzed.

In David Whitley's review of California's petroglyphs and pictographs, he groups the current southern portion of the North Coast Ranges in the "California Tradition" and defines the petroglyphs as part of the "Far Western Pit and Groove tradition", to which he regards as most likely a more recent phenomenon (2000:47-50). Whitley discusses the similarities in the petroglyphs form as

In terms of the connecting cupules with Hokan-speaking populations, True and Baumhoff postulate, “where Hokan peoples survived ethnographically the pitted boulders should exist both early and late while in areas occupied ethnographically by non-Hokan peoples they should be early but not late” (1981:266). The lack of direct dating makes this hypothesis difficult to test, but not to be ignored.

While these overviews have served invaluable for amassing and organizing the broad inventory of petroglyphs and pictographs across California into definable units for further analysis, they place the interpretive emphasis at a broad scale that has its limitations. I will now review those smaller scale investigations that have a more direct relationship to the study area I am examining in this thesis.

In his 1992 thesis, Fentress examines the various type of rock art found in Alameda and Contra Costa counties. In his analysis, he examines the different forms that are present: cupules, PCNs, pictographs, and other “abstract and representational petroglyphs” (1992:1-2). His goal of attempting to provide plausible interpretations of the various forms of rock art and relating them to specific ethnographic groups is much like Jordan’s (1995) for the Southern North Coast Ranges. He concludes that the rock art of Alameda and Contra Costa Counties contain a variety of forms and contexts, Fentress associates the pictographs at Vasco Caves with Yokuts due to the similarity in style. He also
supports the notion that the production of cupules spans a long period, beginning with proto-Hokan speaking peoples; and, therefore, the stories that emerge must reflect the myriad of possibilities (Fentress 1992:65-67).

In 1977, Teresa Miller developed a predictive model for identifying the locations of PCNs (based largely on geologic maps) and recorded nearly 30 PCN sites in Marin County (Miller 1977). Following up where many others had noted a need for further clarification of this petroglyph style, Parkman (1993a) sought to divide PCNs into two categories: ideological and technological. Ideological use for PCNs was inferred through accounts in the ethnographic record (Barrett 1952: 387, Loeb 1926:247, and Heizer 1953:35), the resemblance to vulvas or female genitalia, and the removal of the nucleus by virtue of a ritual expression (1993a:354). Parkman based his technological function on two observations: use by native peoples of artifacts manufactured from the same host material on which the PCNs were produced and the use (or reuse) of some PCN sites as quarries (1993a:357). Gillette built on this paper as the basis of her 1998 thesis in which she concludes that PCNs were ideological in nature as their production was based in some form of ritual (broadly related to fertility or world renewal) and any material removed (either in whole form or powder) was done so in a ritualistic setting (1998:104).

In another thesis based in contextual analyses, yet with different methods, Rushing (2004) focused on PCNs located in Marin and southern Sonoma County. Rushing noted that PCNs, based on a comparative analysis of associated archaeological material, were likely produced no earlier than the
onset of the Middle Archaic Period, or sometime after 5000 BP (2004:222-223). The locational relationship he documents between PCNs and the bay shore has less comparative basis for my thesis, however, the environmental context of hillside location, frequently overlooking water fits well with portions of the Rockpile locality (Rushing 2004:214-216).

Perhaps no question resonates louder in my mind: "why this rock and not that one?" Context is everything becomes the familiar refrain. Many researchers have sought to explain this facet with an examination of the difference between public and private space, as they argue that the production of petroglyphs occurred within an over-arching cultural or behavioral construct that determined the location of ritual activities (e.g., Docktor 1983, Halpern 1953, Parkman 1994, Weinberger 1980, 1981, Whitley 1987).

Working in Southern California, Docktor found that in attempting to arrive at an understanding of petroglyphs in her study area, "archaeological context may suggest whether it functioned as a tribal, village, family, or individual ceremonial area (1983:64). Building on Weinberger's (1980, 1981) work in which he compared the settings around petroglyph sties in the southern San Joaquin Valley, Docktor separated out "public", "private," and "semi-private" based on a combination of archaeological and natural setting. Docktor (1983) continued that the function could be inferred through its relationship to nearby cultural materials, natural environmental characteristics that determine the use of the landscape, and the performance characteristics of the specific ritual (1983:63).
In her seminal study of petroglyphs from 174 sites found throughout the southern portion of the North Coast Ranges, Jordan (1995) sought to determine if specific styles, meanings, or functions were possible to interpret through a mixture of symbolic, environmental, and entopic analyses. In addition, she sought whether one could identify a creator or creators, or even if the distribution reflected territorial boundaries. In numerous cases, she brought forth significant evidence that has proven to the significant foundation for further research and many of her probability statements will be discussed in later portions of this thesis.

Jordan (1995) also touched upon this public vs. private setting in her study of petroglyphs in the southern North Coast Ranges. In her study, she found a high frequency of petroglyphs (predominately cupules) located away from habitation deposits in Central, Kashaya, and Northern Pomo ethnographic territories, when compared with Southern and Southeastern Pomo, Lake Miwok, and Yukian ethnographic territories (1995:176).

Building largely on Bean’s (1975:27) and Halpem’s (1953:151) work, Parkman (1994) examined how the notions of “community” or “Inside” was structured differently from the “wilderness” or “Outside” in a Pomoan worldview. Parkman asserts:

...village rock art, given its public setting, involved corporate power, which was acquired for the good of the community. On the other hand, wilderness rock art, given its private setting, suggests private rituals focused on the acquisition of personal power (1994:34).

Further connected to the concepts of power acquisition and release, Parkman defined what he termed the “Western Rain-Making Process” as an...
insight garnered from the ethnographic record for the production of petroglyphs (1993b:93). The “Western Rain-Making Process” was based in the belief that rain could be brought on through the ritual creation of one of four components of a storm: thunder, wind, clouds, or rain. In this process, the creation of ritual thunder held the most salient tie to the creation of petroglyphs through rhythmic pounding. The pounding served to release the power held within the rock and to imitate the sound of thunder. The bi-product of this ritual left the boulder marked with cupules, further reinforcing the power inherent within (Parkman 1993b).

Among the Hupa, Karok, Shasta, and Tolowa, weather control involved ceremonies performed at particular rocks or boulders. In his early report on the rain-petroglyph relationship of the Shasta, Heizer describes:

The rock that is of tan-colored low-grade soapstone or talc was scratched, presumably with a hard, pointed stone. A white dust or powder was thus produced. If the series of long, straight parallel grooves were scratched, snow would fall, and to stop a snowstorm a scratch was made across (i.e., at right angle to) the parallel grooves. The shallow conical pits were made to produce wind and rain, and the rock was covered to stop the rain (1953:35).

Most frequently drawn from the ethnographic data, however, is the reference of pitted boulders as fertility rocks or "baby rocks". Barrett (1952) referred to these boulders as "sterility rocks" among the Pomo, as these were believed to have the ability to cure sterility. Below are two accounts, the first from Barrett (1952) and the second one from Loeb (1926):

The sterile pair went to one of these rocks and there first a prayer for fertility was made. Then, by means of a pecking stone, some small fragments were chipped from the sides of one of the grooves or cuppings in its surface. These were then ground to a very fine powder which was wrapped in some green leaves and taken to some secluded spot Here this powder was made into a paste and with it the woman's abdomen was
painted with two lines, one running from the top of the sternum to the pubes, the other transversely across the middle of the abdomen. Some of this paste was also inserted in the female. Intercourse at this time positively assured fertility, due to the magic properties of this rock (1952:387).

If a woman wants a child, she fasts for four days, taking only a little mush after dark. On the fifth day, she goes alone to the rock at daybreak, taking with her a small flint knife. She walks around the rock counter-clockwise four times, then clockwise four times. Then she stops, facing the carved surface of the rock. She raises both hands and extends them before her, the finger tips level with her eyes, then draws them in and lays them on her breast, finger tips meeting. This is done four times. Then four times she bends her knees. The fifth time she sits back on her heels. With the flint knife she makes four motions as though to cut the rock. Then four times she really cuts it and with the dust she has ground from it she marks upon her body two long lines from lower lip to navel, from left armpit to right, and then a circle around the point of crossing, and, to make four, a dab upon the forehead where the parting of the hair begins. Then she speaks to the rock, asking for a child. There are no set prayers for this. She rises and, beginning again with the lifting of her hands, goes through her ritual four times. Then four times she walks about the rock counter-clockwise, then clockwise four times. She stops where she has been crouching, turns her head to the left four times and then goes home. Four times on the way she stops and turns her head to the left, but on no account must she look back. All this must be kept secret from every one (1926:247).

Although lacking the ethnographic account, the Pomo "baby rocks" resemble the cupule/incised groove rocks found in San Luis Obispo County (Fleshman 1975) as well as the sites in Santa Barbara County (Lee 1981).

Jones (2004) sought to advance the concepts of ritual settings as he identified the ritual functions that can be attributed to cupules in the southern portion of the North Coast Ranges and emphasized the importance of the location of the cupules as a key in formulating an interpretation. By examining the ethnographic record for references to ritual types and locations, Jones identifies two primary settings, with three broad, associated ritual forms. In the Isolated
setting, fertility, poisoning, and puberty/initiation rituals are commonplace; while in the Village setting, puberty/initiation, milling/fertility, and world renewal are commonplace (2004:85). The ritual settings and associated ritual functions identified by Jones (2004:85) serve as a significant basis to the contextual model that I am building to interpret some of the functions of the petroglyphs that exist at Rockpile.

Cupules on horizontal surfaces have been described as depressions to aid with the cracking of nuts or seeds (Fentress 1994:69). A food preparation use for cupules on horizontal surface is plausible for those that are adjacent to a milling/bedrock mortar activity area. Hedges (1983:15) has pointed out a problem with this interpretation: often only one locus in an area, or one boulder at a site will have cupules in association with milling features, whereas many milling sites will have none. When cupules are located on the horizontal surfaces and vertical surfaces, this functional approach become more problematic. Additionally, the close placement of cupules on horizontal surface negates the argument that they also may have served as incipient mortars.

Cupule rocks are often located near occupation sites. In southern California, according to Minor (1975), cupule rocks are associated with camps and village and are possibly connected with initiation ceremonies of the Luisefio and Diegueiio Indians. He also refers to their possible use as boundary markers, but finds no evidence for their utilization as weather control or hunting magic (1975:15-17).
While the petroglyph form may derive a different meaning depending on the cultural setting (Jones 2004; Jordan 1995), the production of the petroglyphs exists within a cultural setting that, at its core, is based on cross-cultural ritualistic aspects. One way in which this perspective is frequently interpreted is via the neuropsychological model (Lewis-Williams and Dowson 1988).

In their seminal paper on “entopic phenomena”, Lewis-Williams and Dowson argue (1988) that it is possible for all humans to experience a similar form of internally produced mental imagery, as the human nervous system is a universal system of mammals (1988:202). Lewis-Williams (2001) states this law as “certain altered states of consciousness produce specific and definable visual percepts and other effects because they are wired into the universal human nervous system” (Lewis-Williams 2001:336). This mental imagery has with it three, albeit not necessarily linear, stages of development.

The first stage is comprised of entopic phenomena, or fast successive geometric patterns or images that include six forms: grid patterns, sets of parallel lines, dots and short flecks, zigzag lines, nested curves, and meandering lines (Lewis-Williams and Dowson 1988:205-210). During stage 2, the individual attempts to control these images, as the nervous system does during a normal state of consciousness. This is how geometric forms can be perceived as commonplace objects to the individual. During stage 3, fully recognizable forms from “everyday life” are perceived without the need to decode the previous shapes. Significantly, these altered states of consciousness do not have to be reached via external chemicals or psychoactive drugs, rather other forms of
sensory stimulation or deprivation can cause the individual to enter an altered states of consciousness (1988:203-204).

The use of ethnographic analogy via the direct historical approach has received considerable attention given the existence of numerous references to the creation of petroglyphs found in the ethnographic literature, especially concerning Pomo (for a detailed review of ritual settings associated with petroglyphs, see Jones 2004:71-97). These ethnographic accounts aid in the use of ethnographic analysis given the applicability of the direct historical approach compared to the general comparative approach. The applicability of this approach stems both from the time depth in which ethnographic groups have been present and the quantity of the rich (albeit fragmentary) ethnographic accounts for the peoples of the southern North Coast Ranges.

With these various approaches discussed, I will later build on these concepts in the application of my interpretive model in chapter 5. In the following chapter, I will introduce the sample of petroglyphs and associated archaeological materials that were recorded throughout the Rockpile locality that form the database for the subsequent analysis.
Chapter 4. Study Area Petroglyphs and Other Resources Recorded

In this chapter, I will describe the number and variety of petroglyphs that were recorded throughout the Rockpile locality to date (see Figure 5 for location of petroglyphs and selected resources). In addition to the petroglyphs that are described, additional information is also presented that describes other archaeological sites that were recorded throughout the Rockpile locality. While no obsidian hydration or other dating techniques have been utilized on the materials form these sites, relative dates based on diagnostic materials are included when appropriate.

Description of Petroglyphs

The known petroglyph sites in the Rockpile locality range from isolated outcrops with a few cupules, to clusters of outcrops with multiple cupules, to single outcrops with hundreds of cupules, incised lines, and/or PCNs. While the creators of the petroglyphs of this area were not concerned with modern-day land ownership issues, we must remain cognizant of them. Given the limitations of accessing neighboring property, the entirety of the drainage and the associated terraces and ridges have not all been surveyed completely. The descriptions that follow are based on those petroglyphs that have been officially recorded as part of the California Historic Resources Information System and those that I have been given access to based on the kindness of the landowners. As part of the access agreement I have made with the neighbors, I have respected the desire of those landowners who do not wish the petroglyphs to be officially recorded and therefore only provide what observations I was able to garner given at the
Figure 5 contains confidential archaeological site location information. It has been removed from this copy of the thesis in order to protect these non-renewable resources from artifact looting, vandalism or other disturbances. Access to this information is restricted to those with a need to know and is available at the Northwest Information Center of the California Historical Resources Information System. The legal authority to restrict archaeological site location information is in California Government Code 6254.1.
time. It is presumed that, even with the density observed in the recorded sample, even more petroglyphs exist in the area, as this area is indeed a "rock pile".

Those officially recorded sites are listed by their trinomial designation followed by their field designation in parentheses.

**Recorded Petroglyph Sites**

**CA-SON-2403 (ASC-25-04-140)**

Located on a terrace midway between the ridgeline and Bishop Creek, with a commanding view, is CA-SON-2403, a large serpentine/schistose outcrop with petroglyphs (Figure 6). The outcrop measures nearly eight m east-west by six m north-south. The southern, or downslope edge is 3.7 m high with a small overhang formed underneath the outcrop.

![Figure 6. View of CA-SON-2403, looking northwest.](image)

No cultural materials were observed in this overhang. Only four incised lines were noted on the vertical or eastern face of the outcrop, with the rest of the
petroglyphs located on the top, horizontal surface, which slopes down to the south. Preliminary counts of approximately 75% of the outcrop indicated 112 incised lines, 64 cupules and eight PCNs.

Worth noting on this outcrop are the number of “V” shaped motifs, similar to chevrons noted on some Lake County petroglyphs (Figure 7).

![Petroglyphs on CA-SON-2403](image)

**Figure 7.** View of petroglyph elements on CA-SON-2403, looking southwest.

Also important are examples of superimposition with a cupule in the center or nucleus of a PCN, an incised line in the center of a PCN, and a line across the pecked ring (Figure 8). Some of the PCNs exhibit bisected nuclei that share similar wear and pecking to that of the pecked ring, indicating a more contemporaneous production of the bisected nuclei, rather than separate events such as the incised line superimposed on the pecked ring. This is the only evidence of PCNs found to date on the property and provides significant contrast
to the majority of the other petroglyphs, given its commanding viewshed and relatively long distance to water.

Figure 8. View of petroglyph elements on CA-SON-2403. Note cupule in center of a PCN and a PCN with bisected nucleus in center of photo.

**CA-SON-2435 (ASC-25-04-115)**

SON-2435 consists of a cluster of four outcrops, three sandstone and one schist, with cupules on both the horizontal and vertical surfaces (Figure 9). The outcrops are all located in the active channel of Bishop Creek, near the confluence with an intermittent tributary. It should be noted that portions of these outcrops contained a high degree of natural erosion and as such, several possible cupules were not included in the counts due to this ambiguity. However, the presence of ten clearly identifiable cupules, with definitive signs of pecking (Figure 10), leads me to believe that these may have in fact been cupules that
Figure 9: View of CA-SON-2435 (Feature 1), looking west.

Figure 10: View of CA-SON-2435 (Feature 4) close-up.
have since eroded to the point where their cultural origin cannot be properly
determined. As discussed by Taçon et al. (1997:961) or Diaz-Granados and
Duncan (2000:26), the enhancement of natural features with the use of
petroglyphs is not uncommon. No other cultural materials or features were
observed in the vicinity.

**CA-SON-2439 (ASC-25-04-133)**

SON-2439 is an isolated petroglyph boulder with nine cupules, located on
the north bank of Bishop Creek (Figure 11). The northern side of the boulder has
been partially covered by what appears to be a debris slide, obscuring the
ground surface and northern face of the boulder. No other cultural materials or
features were observed in the vicinity.

![Figure 11. View of CA-SON-2439, looking southwest.](image)
CA-SON-2440 (ASC-25-04-134)

SON-2440 is located on a finger ridge directly above Bishop Creek and consists of three boulders located in close proximity (Figures 12-14). Together, these boulders contain eighteen cupules, all of which are on the horizontal surfaces of the boulders. Two of the boulders exhibit large block fractures. No other cultural materials or features were observed in the vicinity.

Figure 12. View of CA-SON-2440 (Feature 1), looking southwest.
Figure 13. View of CA-SON-2440 (Feature 2), looking west.

Figure 14. View of CA-SON-2440 (Feature 3), looking west.
CA-SON-2441 (ASC-25-04-137)

In addition to flaked and ground stone (which will be discussed below), SON-2441 contains two petroglyph boulders. These consist of two schist boulders located at either edge of the terrace with six cupules noted on the boulders. The site is on a terrace adjacent to Bishop Creek (Figure 15), at the confluence of an intermittent drainage. Approximately 100 m up the intermittent drainage the water flows over portions of exposed bedrock that cascades of nearly vertical portions in places. This creates a series of plunge pools, some of which are large enough for individuals to submerge themselves.

Figure 15. View of CA-SON-2440 (Feature 3), looking northwest. Photograph taken from one petroglyph boulder looking at second in background.

CA-SON-2444 (ASC-25-04-313)

SON-2444 is located on the edge of a large, sheltered ridge top terrace, north of where the former Ornaun house is located and commands a near
panoramic view of the Dry Creek watershed. There are six cupules located on
the western edge of the schist outcrop. The terrace that the outcrop is located on
contains some of the most extensive evidence of habitation located on the
property.

CA-SON-2445 (ASC-25-04-400)

Located on the south side of Bishop Creek, is SON-2445, a large
schistose outcrop that measures approximately eight m east-west by 12 m north-
south. This outcrop has a large crevasse on its eastern side (Figure 16).

![Figure 16. View of CA-SON-2445, looking west.](image)

While some petroglyphs were noted on the vertical surface of the outcrop
as one approaches from the south, the majority are located on the horizontal
surface and consist of over 125 cupules and 100 punctuates along with eight
incised lines (Figure 17).
Figure 17. Overview of CA-SON-2445, looking south.

Figure 18. Close-up of cupule with superimposed lines.
Four of these incised lines are superimposed on the cupules (Figure 18). The petroglyphs seem to be concentrated on the southern half of the horizontal surface. Most are located on raised ridges of the outcrop, with a large percentage located along a portion of the outcrop that is an inclusion of unknown lithology, while the lower "sinks" appear largely unmodified. While no additional cultural materials or features were located directly adjacent to the outcrop, a habitation site (SON-2438) is located approximately 20 m to the west.

CA-SON-2446 (ASC-25-04-500)

Located northeast of SON-2445, on the north bank of Bishop Creek, at the toe of a slope, is Reno's Rock, or SON-2446, a serpentine/schistose outcrop that stands over 6.5 m at its highest point and is over 12 m wide at its base. The outcrop has a near vertical face with a northern aspect. The southern side of the outcrop is strewn with boulders several meters in diameter (Figure 19).

Figure 19. Overview of CA-SON-2446, looking southwest.
To date, petroglyphs have only been identified on the north-facing panel and on the apex of the outcrop proper; however, petroglyphs are located on numerous other boulders surrounding the primary outcrop. Preliminary counts on the northern face of SON-2446 identified 237 cupules and 204 incised lines, along with 45 cupules and 11 incised lines on the apex ridge (Figures 20-23). Ten examples of incised lines superimposed on cupules were noted on the northern face.

At the foot of the main face, near the eastern portion of the outcrop exists a piece of schist that contains over 70 cupules. This portion of the outcrop extends below the surface and appears to contain additional petroglyphs (Figure 24).

Just west of this, at the base of the outcrop, I located a small D-shaped piece of schist, with use-wear present on the curved edge. Given this artifact’s location and the presence of the incised lines, it is interpreted that this tool was used in the production of at least some of the incised lines. In addition, just to the east of the outcrop, a chert biface along with a nearby scatter of obsidian flakes was found.

A large spall, apparently from the main outcrop, measuring 80 cm by 25 cm, contains ten cupules on its presently horizontal surface. If this is a spall of the larger outcrop, it is unclear if the petroglyphs post-date or predate the spall.

A small intermittent tributary flows south from a spring located closer to the primary ridge, past the west side of the outcrop. A boulder in this creek also contains three well-defined cupules (Figure 25).
Figure 20. View of petroglyph elements of CA-SON-2446, looking southwest, taken at night.

Figure 21. View of petroglyph elements of CA-SON-2446, looking southwest, taken at night.
Figure 22. Close-up of crossed line elements from CA-SON-2446.

Figure 23. Close-up of chevron line elements from CA-SON-2446.
Figure 24. Close-up of panel below primary face of CA-SON-2446.

Figure 25. Overview of boulder with cupules in creek adjacent to CA-SON-2446, looking southeast.
Sites not officially recorded

In addition to these recorded petroglyph sites, I have been able to visit, but not officially record, several other petroglyph sites located in the immediate vicinity of the property. Time and access constraints have limited the amount of documentation available for these petroglyph sites, but the findings warrant some discussion, as they add to the knowledge of the density of petroglyphs in the Rockpile locality.

In the southwestern portion of the property, Bishop Creek jogs in and out of the property boundary. One of these areas is strewn with boulders of all apparently suitable host material. Out of the scores of boulders, only one has cupules. On this outcrop, there are 12 cupules located on the horizontal surface. Just downstream from this location, on the south side of the creek channel, is a large boulder (four m high). On the top, horizontal surface of this boulder are eight cupules.

In addition, on the southern side of the creek, on a terrace directly adjacent to Bishop Creek, high densities of flaked obsidian and chert were observed and on one occasion, shell was noted. In the western portion of the terrace, a small portion of an outcrop was visible on the surface. After clearing away some of the loose soil, several cupules were visible. One of them contained a cupule within a large cup. From this cupule within a large cupule, a deeply incised groove connected this to another cupule. Based on some informal probing around the exposed portion, the petroglyph boulder appears deeply buried on this site, with only a small portion visible on the surface.
In addition to the petroglyphs along the drainage, I was fortunate enough to be able to visit two petroglyph sites west of the property, one on the top of Mt. Tom and the other on a finger ridge just off of Cole’s Divide.

On the finger ridge just below Cole’s Divide a large schistose outcrop is present with numerous cupules, incised lines, and at least two PCNs. The setting of this site bears a striking resemblance to that of CA-SON-2403 and the two are visible from each other across the drainage.

The site on top of Mt. Tom is one that hopefully will receive further attention at some point. Just off the trail, the bedrock is exposed at the surface and the surface is extensively covered with cupules. Making one’s way down the rock outcrop, several natural steps lead to a terrace below the ledge covered with cupules. On this ledge exists a horizontal slab of rock that forms a natural bench, nearly encircled by a ring of rocks. Several cupules are visible on portions of the exposed outcrop. While it is unclear if the creation of rock ring has any time depth, the rest of the site similar to the rest of the petroglyph sites recorded.

It is important to note an unexpected outcome during my research. During the early stages of this project, I examined Julian Steward’s 1929 study, *Petroglyphs of California and Adjoining States* and had incorrectly determined that none of his petroglyph sites related to the petroglyphs in the Rockpile locality. After a reexamination of his Sonoma County petroglyphs and their nebulous locations, a couple of his sites stood out, especially Steward’s Site #6, which has no known location on file with the state inventory. Steward notes its location as “Roche La Motte, Sonoma County”, and described the petroglyphs as
“a group ten miles north of Skaggs” (Steward 1929:57). The Rockpile locality is located almost exactly ten miles north-northwest of Skaggs. Furthermore, in 1911 Casper Ornbaun, a successful San Francisco lawyer, formed a group of investors and purchased the present-day project area, with the intent of ranching sheep and setting up a hunting retreat. The initial name for the ranch: La Roca Monte Rancho (Park, personal communication 2005). This name did not last forever, and later Rockpile Ranch would come back into fashion, however, La Roca Monte Rancho did last long enough for the name to take hold and perhaps form the basis for Steward to describe his Site #6.

In addition to this, Steward indeterminably locates his site #7b, near Healdsburg, at Cole’s Pass (Steward 1929:57). The state inventory has its location noted as downtown Healdsburg. Located to the northwest of the Rockpile locality is a portion of the divide between the Gualala River drainage and the Russian River drainage that is referred to as various names including Cole’s Divide, Cold Divide, and Cole’s Pass. While this association may be tenuous, I regard it as one with a high degree of probability given the circumstances surrounding Steward’s methodology that involved some of his information regarding petroglyphs from postmasters. This is important since a post office (Throop) once existed on the Rockpile property in a comparable time period to when Steward was collecting his information.

Other Resources Recorded in Study Area

A variety of prehistoric archaeological site types exists in the Rockpile locality. Brief descriptions of these resources are needed to help place the
petroglyphs within their context, as in many cases these resources are spatially proximate. It should be noted that in addition to these recorded sites, numerous isolated artifacts were observed across the landscape, which to some degree exhibited characteristics of dispersed use, similar to Thomas' (1975) non-site concept. After Thomas (1975), Lightfoot et al. (1991:112) defined a non-site manifestation as a product of foraging and hunting ventures over an extensive resource zone in which various tools are lost or discarded.

The site types range from seasonal camps on the ridge proper, with raw cobbles of Konocti obsidian, finished flaked stone tools, and bowl mortar fragments and pestles, to camps located down in the drainage with millingslabs and handstones and chert tools. Others are characterized with varying degrees of midden development, heat affected rock, and late-stage obsidian debitage. Elsewhere they are recorded chert quarries and locations characteristic of hunting locals dominated by distal projectile tips and fragments characteristic of impact fractures. As with the previous sites, the sites are listed by their trinomial designation followed by their field designation in parentheses.

CA-SON-2402 (ASC-25-04-138)

This habitation site is composed of a dense artifact concentration associated with dark, friable midden soil. Chert and obsidian (primarily Napa) were the predominant debitage material types identified, with some quartz also present. One exhausted chert core and an obsidian biface were identified. Ground stone tools were also noted including two pestle fragments, an intact hammerstone, and one hammerstone fragment.
CA-SON-2406 (ASC-25-04-600)

A small lithic concentration was also recorded near a spring. The artifacts consisted of several point bases, with possible retouching, and several edge-modified flake tools. Material at this site includes, projectile points indicative of the Upper Emergent Period, edge modified flakes, debitage representing nearly all stages of reduction, and groundstone. Both chert and Napa obsidian were noted.

CA-SON-2436 (ASC-25-04-116)

This campsite is located on a small north facing midslope terrace above Bishop Creek. Artifacts include obsidian, chert, and quartz debitage, several early stage chert bifaces, two groundstone fragments (one millingslab fragment and one handstone), and two small circular depressions. The site has dense ground cover indicating that actual density of artifacts is probably much higher than observed.

CA-SON-2437 (ASC-25-04-124)

This resource consists of an extensive chert quarry and lithic concentration recorded on the both sides of Bishop Creek and the hillslope. Three primary chert outcrops are present were primary reduction waste was noted, with later stage reduction presumably concentrated on the terrace below the outcrops. Interestingly, few discards were located in the area. Two of the outcrops consist of reddish-brown chert and the other consists of a blue-green
material. Both of these types of chert occur as finished tools throughout the locality.

**CA-SON-2438 (ASC-25-04-131)**

This site is located on the south bank of Bishop Creek in close proximity to CA-SON-2445. The site is characterized as a lithic concentration with what appears to be a fairly deep and extensive loamy midden soil. Artifacts consist primarily of obsidian retouch flakes and small chert flakes, however, we noted one obsidian biface and one millingstone fragment, as well as several edge modified chert flakes and heat affected rock was seen throughout the midden soil.

**CA-SON-2441 (ASC-25-04-137)**

This site, located on a terrace on the north side of Bishop Creek is interesting in a number of aspects. First, it is one of the few sites that had petroglyph boulders (see above discussion for more information on the cupules) located in immediate proximity to other cultural material. In addition, it is the only site that had flaked stone material present, but no obsidian was observed, rather only consisting of chert debitage. Lastly, of the two projectile point bases, one was non-diagnostic, but the other was the only recorded Mendocino concave base. In addition, two pieces of groundstone were noted.

**CA-SON-2443/H (ASC-25-04-310)**

Two year round springs are present in the area near the former Orbaun house and barn. During our fieldwork, dense concentrations of flaked and ground
stone fragments were noted in the areas around the barn and lighter, yet discrete concentrations of lithics were observed near the house and on several knolls throughout the vineyards. Initial indications based on projectile point morphology indicate use from the Mid to Upper Archaic through the Emergent period, or representing Dry Creek and Smith phases. The obsidian was visually sourced as Napa and Konocti obsidian, however significant variation was noted in the material and further XRF sourcing would be needed to determine the actual sources. Although there has been ground disturbance in the existing vineyards related to the agricultural activity, the concentrations still appear horizontally discrete. When the existing pond areas were constructed and during subsequent maintenance, numerous millingslabs, bowl mortars, a hopper mortar, pestles were unearthed. Other artifacts ranged from obsidian preforms, large obsidian knifes, Excelsior series points, chert drills, and obsidian nodules with cortex.

Overall, the landscape of the Rockpile locality exhibits significant evidence of use that spans all three phases (Skaggs, Dry Creek, and Smith) introduced by Basgall and Bouey (1991). The use of the landscape contains a wide variety of uses that ranges from lithic procurement to tool refinement, from flora and fauna gathering to processing, to short and long duration visits. This evidence of land use provides the needed archaeological context for the production of the petroglyphs. The following chapter will place this landscape into an interpretive contextual model to draw on some of the possible functions of the petroglyphs.
Chapter 5. Application of Contextual Model

In this chapter, I will focus on bringing together the ethnographic and archaeological information presented in earlier chapters and applying a model of interpretation that seeks to examine the petroglyphs in the Rockpile locality from a variety of contextual levels to seek what functions these petroglyphs may have served to those that created them.

Contextualism, the general theoretical underpinning of this thesis, has long had a place in the study of petroglyphs or pictographs (e.g., Bradley 1991, 1994; Diaz-Granados and Duncan 2000; Jones 2004; Jordan 1995; Price 1999; Rushing 2004; Schaafsma 1985). Contextualism seeks to understand the petroglyphs or pictographs in their cultural and physical contexts and the petroglyphs or pictographs were created for a variety of purposes with a myriad of functions based in the social, economic and ritual realms (Schaafsma 1985:244-259). The utility of this approach stems from its ability to interweave different levels of analysis to form an interpretation. The manner in which a contextual approach has been applied in past studies differs in certain aspects, but at the core carries several shared assumptions. Most notably, it is assumed that the placement of petroglyphs on the landscape is non-random and is directly tied to natural and cultural factors. Given that the petroglyphs (with some noted exceptions) are fixed on the landscape, the location is presumed to be an integral departure for analysis.

The contextual approach applied here, builds on a model used by Diaz-Granados and Duncan (2000:49-50), that sought to analyze the context of
petroglyphs at four levels: the macro-environment context, the micro-environment context, the general-cultural context, and the ideological context. These multiple levels of analysis are similar in many ways to the three levels defined by Butzer (1982:38) as the micro-, meso-, and macro-environments, or the local site environment, the topographic environment, and the regional environment. Different interpretations can be derived depending on the scale or level of analysis. Therefore, the goal here is to apply the contextual model at the appropriate scales and draw together those inferences that are appropriate given the information that is available.

In my interpretive model, the broadest level of analysis comes from the macro-environment. At this level, I will compare the locational context of the petroglyphs to the broader topographic features of the landscape including the landforms themselves, water sources, geology, flora, and fauna. At the micro-environment, I will focus the analysis on the outcrop or boulder itself as well as the relationship of the placement of the individual petroglyph elements. When I encounter atypical variations of the local environment, I will include them in the discussion as well. The general-cultural setting will include an examination of the possible ritual contexts of the petroglyphs. In a recent 2004 thesis, Jones examined ritual functions of cupules in the Southern North Coast Ranges. While restricting his focus to cupules, his analysis of ritual contexts as depicted in the ethnographic literature forms a strong foundation in this portion of the model. Here, similar to Halpern (1953), Parkman (1994, 1997), Docktor (1983), Price
(1999), Whitley (1987), and numerous others, I will examine the dichotomy between public and private space.

At the core of the general-cultural contextual level is the theoretical perspective of structuralism, which was introduced into anthropology by Claude Levi-Strauss (1963, 1968) in the post-World War II era. The concept of structuralism seeks to study the unobservable relationships that link and unite the various elements of a cultural group (Lane 1970:13-14). One basic tenet of structural analysis defines a universal characteristic of the human mind that is unconscious and seeks to classify and impose order on all aspects of its environment (Leach 1977:169; Leone 1982:742-743). A second tenet is the classification of binary oppositions, such as black/white, man/woman, inside/outside, and raw/cooked. Binary oppositions can be utilized to gain information about the abstract social and cultural realm of the archaeological record (Gibbon 1993:711). By doing this the structural method can attempt to understand the underlying rules that govern the structure of a particular culture. Pettit (1977:109) argues that this method gives archaeologists an entirely new way to view their material.

Use of this theoretical orientation then sets forth the basis for the structuralist separation of the mind with the dualism of community vs. wilderness or Inside vs. Outside (Halpern 1953; Parkman 1994). Linguistic evidence shows a division of the Pomo worlds into two mutually exclusive spheres. These were translated in the “Inside” and the “Outside”, with one facet of that dichotomy described as wild vs. tame. The Outside is seen as a source of power,
sometimes favorable, other times malevolent; and is viewed as a source of supernatural endorsement for moral and religious conventions of the group (Halpern 1953:151-154).

Finally, we have the ideological context that reflects upon the creator's belief systems and emic meanings that we will likely never recover.

The placement of petroglyphs on the landscape was not random. The context incorporates multiple facets into understanding the functions that they may have served. If the location of petroglyphs is treated as a non-random event, then the placement of the petroglyphs is treated as a meaningful aspect of the petroglyphs themselves. This notion of "power of place" resonates within Tilley's (1994) phenomenological approach to landscapes in which the approach attempts to understand the landscape as contexts for the human experience. Aptly stated, "There may be a strong affection for place (topophilia) or aversion (topophobia), but places are always far more than points or locations, because they have distinctive meanings and values" (Tilley 1994:15). As I move forward with this analysis, the notion that the landscape is significant in that it was "lived in and through, mediated, worked on and altered, replete with cultural meaning and symbolism" (Tilley 1994:26) factors heavily in my interpretations for functions of the petroglyphs at Rockpile.

The placement of a petroglyph boulder within an area where individuals lived, either seasonally or permanently, implies that that boulder served a function that had benefits for the group or village (e.g., the community), rather than a specific individual. In contrast, petroglyphs found outside of a village
sphere, on the fringe or in the wilderness proper, served a function that may have been more personal or private. While a petroglyph boulder that served a fertility function may have served this function for the community as a whole, the rite performed was one of a private process, not for public viewing. Additionally, if the production of some petroglyphs were linked to old ghost dance or Kuksu initiation ceremonies, these would have served an intermediary function between public and private. This semi-private class would be considered private in terms of the broader group, or those not part of the ceremonies, but public to all of those taking place in the initiation.

Petroglyphs (especially those with PCNs) have been regularly found in hillside settings, near water and typically in oak woodland environmental settings. The location of these petroglyphs (both SON-2403 and the outcrop at Cole's Divide), along trail corridors is also common. These outcrops are both downslope from the primary route that connected the inland resource and population areas with those located on the coast. This route may have served both as a route traveled frequently in more recent times, as the ethnographic period documents, or as an older trading or migration corridor. If you consider these an older form of petroglyph, as do Gillette (1998), Jordan (1995), and Parkman (1993a) then this may add even more antiquity to this corridor and to the land use of the area as a whole.

A critical aspect to the presence of petroglyphs is the need for suitable hoist material. In many cases, this means existing outcrops of schistose rock. Cupules however, seem to be placed on a variety of rock types as compared with
PCNS and incised lines. However, the existence of suitable host material does not itself form a direct correlation with the occurrence of petroglyphs. Throughout the Rockpile locality numerous boulders or outcrops of suitable rock type exists. In some cases, a boulder with apparently more suitable schistose would be untouched, while an adjacent boulder would be the location of the petroglyphs. However, when the locations of known petroglyphs are compared to geologic maps, the relationship between the availability of adequate host material and existence of petroglyphs is quite apparent and demonstrated successfully by Miller (1977) in relation to the occurrence of PCNs.

Based on a review of the ethnographic record as related to fertility rituals and field visits of selected petroglyph sites, Hedges determined that the analogy of “Pomo baby rock” is applicable when the petroglyph are located on “chlorite schist, serpentine, or some other soft material which can be reduced to a powder” and “consists of deeply incised grooves, with or without cupules and/or pecked oval forms” (1983:20).

In the following section, I will apply the model described above to the petroglyphs recorded throughout the Rockpile locality, with my interpretations toward the possible function(s) of the petroglyphs examined at the separate contextual levels. After the individual petroglyphs are examined, I will look at the locality as a whole to determine what meanings can be drawn form the petroglyphs a group and what characteristics are shared and which are dissimilar. Below, Table 2 summarizes the officially recorded petroglyphs within the Rockpile locality:
Table 2. Listing of petroglyph sites with identifiers, types of elements, and setting.

<table>
<thead>
<tr>
<th>Field Id</th>
<th>Trinomial</th>
<th>Primary Number</th>
<th>Types of Petroglyph Elements Present</th>
<th>Setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>25-04-140</td>
<td>CA-SON-2403</td>
<td>P-49-003258</td>
<td>single outcrop; eight PCNs, 112 incised lines, and 64 cupules</td>
<td>hillside, midslope terrace below primary ridgeline</td>
</tr>
<tr>
<td>25-04-115</td>
<td>CA-SON-2435</td>
<td>P-49-003396</td>
<td>four outcrops; ten cupules present (total)</td>
<td>within active channel of Bishop Creek</td>
</tr>
<tr>
<td>25-04-133</td>
<td>CA-SON-2439</td>
<td>P-49-003400</td>
<td>single boulder; nine cupules</td>
<td>terrace adjacent to Bishop Creek</td>
</tr>
<tr>
<td>25-04-134</td>
<td>CA-SON-2440</td>
<td>P-49-003401</td>
<td>three boulders; 18 cupules (total)</td>
<td>terrace adjacent to Bishop Creek</td>
</tr>
<tr>
<td>25-04-137</td>
<td>CA-SON-2441</td>
<td>P-49-003402</td>
<td>two boulders; six cupules</td>
<td>terrace adjacent to Bishop Creek</td>
</tr>
<tr>
<td>25-04-313</td>
<td>CA-SON-2444</td>
<td>P-49-003405</td>
<td>single outcrop; six cupules</td>
<td>periphery of ridge top terrace</td>
</tr>
<tr>
<td>25-04-400</td>
<td>CA-SON-2445</td>
<td>P-49-003406</td>
<td>single outcrop; &gt;125 cupules, &gt;100 punctuates, and 8 incised lines</td>
<td>terrace adjacent to Bishop Creek</td>
</tr>
<tr>
<td>25-04-500</td>
<td>CA-SON-2446</td>
<td>P-49-003407</td>
<td>single primary outcrop and three adjacent boulders; &gt;365 cupules and &gt;215 incised lines</td>
<td>terrace adjacent to Bishop Creek</td>
</tr>
</tbody>
</table>

Petroglyphs with multiple forms

**CA-SON-2403**

At the macro-environmental context, the outcrop differs from the majority of the Rockpile petroglyphs in relation to the distance it is located from Bishop Creek. It is also one of the few petroglyphs at Rockpile that is closer to the ridgeline than the drainage. This location tends to favor a function more geared toward fertility or general world renewal, as compared with connections to water in relation to weather control.

Looking at the micro-environmental context, the area where the petroglyphs are primarily located tends to lead toward use that is more individual based, or perhaps a couple, given the limited accessibility and useable work area of the outcrop. The PCNs in particular are also somewhat clustered near the
edge of the outcrop and would have only allowed one, or at most two, individuals to be present during the period of petroglyph production. If we follow that these petroglyphs were created in a ritual context, then the placement of the petroglyphs near the edge of the outcrop in a seemingly precarious location, reinforces an aspect of acquired power.

When we examine this at the general-cultural level, we see a petroglyph outcrop that is located away from any other habitation sites. The closest sites with any archaeological evidence of habitation are the campsites located in the drainage and up off the ridge. All of these sites are within close traveling distance, however, they are definitely not within the viewshed, and so the outcrop would provide some level of privacy in relation to those sites. Using concepts from Jones' model (2004:71-97), I would contend that these petroglyphs were produced in relation to isolated rituals, such as fertility and/or some type of initiation ritual given the isolated nature of the outcrop and its location on the landscape. In addition, this outcrop fits the classification of “baby rock” as discussed by Hedges (1983:20), which furthers the hypothesis for use in fertility rituals in ethnographic times. These uses do not preclude its use in earlier times, or even the ethnographic period, as a trail marker or territorial signpost.

CA-SON-2446

At the macro-environmental context, this outcrop is located adjacent to the creek, but the topographic setting provides an interesting mixture of both public and private spaces. Given the scale of the outcrop, it forms a noticeable feature on the landscape and can be seen from selected vantage points along the
ridgeline. When standing at the base of the primary face of the outcrop, the creators would be shielded from view of the recorded habitation sites, as a hill slope forms a type of amphitheater at the outcrop creating a semi-private space that allows for numerous individuals to access the outcrop and also view the production of the petroglyphs.

At the micro-environmental level, the petroglyphs are primarily present in areas of immediate accessibility or in areas that the creator could walk up and stand or sit to create petroglyphs with numerous other individuals present. One area that has petroglyphs at locations that are beyond the reach of an individual also has a natural rock ledge forming a step for the creator. Of particular importance at this outcrop is existence of additional petroglyphs along the apex of the outcrop. If one goes to the south side of the outcrop, a series of boulders form a simple path up the back of the outcrop to the apex ridge. Along this ridge are numerous cupules and incised lines.

At the general-cultural level, the ritual production of petroglyphs along a portion of the outcrop that is not immediate accessible requires additional explanation for why they were placed at that location compared with the other areas where the petroglyphs are present. If these petroglyphs were produced as part of a liminal ritual, for example an initiation ceremony, then the placement of the petroglyphs along the apex might relate to the liminal state that the initiate might be in at that time of the ritual. Continuing along this working hypothesis, the ethnographic information from Loeb (1926:361) discusses that “boys and girls camped in the hills for four days as part of the “cut-cut” ceremony”. Numerous
other references are made to individuals, either briefly or for a period of a time, going off into the hills (Jones 2004:75, Table 3). Several camp areas have been recorded in the general area and while I myself have not visited them, I have been told by locals that a larger habitation site with house pits exists on private property just downstream from this area. The location of a large habitation site within short travel distance would place this petroglyph boulder within the "wilderness" that fits the ritual setting for these initiation ceremonies.

One of the tentative motifs recorded on the primary face of SON-2446 forms an example of importance of the boulder in initiation ceremonies, as it potentially was marked for its use. At two separate times, two different tribal elders walked up to this spot, and pointed and remarked about the "arm" with its cuts (Figure 26).

Figure 26. View of tentative arm motif on CA-SON-2446.
CA-SON-2445

Looking at the macro-environmental context, this outcrop is located adjacent to the creek on the more wooded, less open southwest side of Bishop Creek. While it is only located 35 meters away from Son-2446, there is no visibility between these two petroglyph sites due to their orientation. The visibility of SON-2445 in relation to the campsite of SON-2438 provides an interesting contrast, as it entirely visible from the habitation area of SON-2438.

At the micro-environmental context, the majority of the cupules are located on raised ridges of the outcrop, with a large percentage located along a portion of the outcrop that is comprised of some unknown mineral inclusions, while the lower portions of the outcrop appear largely unmodified. When looking at the general-cultural setting, this outcrop seems to border the realm of public and private. For those at the campsite on the adjacent knoll, the outcrop is a vivid feature on the landscape. Continuing with this working hypothesis, the function is in a more public based ritual context, which necessitated a larger group for the production of the petroglyphs or for the power acquired from the associated ritual, as compared to a private doctoring ceremony that would need to be conducted in privacy.

CA-SON-2444

At the macro-environmental context, this outcrop is located at the edge of a large, sheltered ridge top terrace and commands a near panoramic view of the Dry Creek watershed. The terrace that the outcrop is located on contains some of the most extensive evidence of habitation located on the property.
Looking at the micro-environmental context, there are six cupules located on the western edge of the schist outcrop and no other petroglyph forms. In terms of the general-cultural setting, the placement of this petroglyph boulder, overlooking the valleys below provides a powerful view, but what is even more important is the presence of the largest habitation site on this terrace, SON-2443/H. I would argue that in this instance, the setting that is more oriented toward the village than the wilderness and its function was more oriented toward the group than the individual.

**Petroglyphs with only cupules**

Now, I will examine the petroglyph sites that consist of only cupules on boulders or outcrops located intermittently throughout the drainage. At the macro-environmental level, they all share the same basic characteristic in that they are all within the drainage, either in the creek bed or directly adjacent. Most of these locations appear to offer a level of privacy or seclusion from other areas of activity. The majority of cupules are located on the horizontal surface of the outcrops. When we begin to examine the general-cultural setting and look into the ethnographic accounts, there are some brief references to the use of secluded areas by poisoners (Loeb 1926; Price 1999). Poisoner sites are expected to be secluded as these rituals would have necessitated privacy and would have been conducted by an individual working alone. The cupules in these instances may reflect the work area of a particular poisoner, who may have also acquired some power from the outcrop in the process of conducting the ritual. When looking at the descriptions of fertility ceremonies, these various outcrops
seem to hold the proper private location, however, almost all of the references to fertility rocks also involve some sort of linear petroglyphs, either incised or grooved, and none are solely described as cupules.

When we look at the macro-environment characteristics exhibited by the petroglyphs at Rockpile as a whole, it is immediately apparent that a relationship exists between the location of petroglyphs and proximity of Bishop Creek. Nearly all of the petroglyphs are located within or adjacent to the creek. Jordan (1995) found distribution similar to this, with water a constant nearby feature. We also see the Rockpile petroglyphs forming a "clustered complex" similar to those described by Jordan (1995) and Jones (2004). As previously discussed, the Rockpile locality is situated near the confluence of several linguistic and tribelet boundaries and contains well-documented trails. The petroglyphs may have also served as territorial markers.

In a broad general-cultural setting, did the place have power and thus was marked by petroglyphs or did the placement of the petroglyphs create the scared place? This does not have to be a mutually exclusive answer. Some boulders, such as Son-2403, contain numerous types of petroglyphs that likely span considerable time. In many instances, these petroglyphs exhibit superimposed elements, and thus provide evidence of reoccurring use. Although it is not possible to define the exact start and end point of the production of the petroglyphs, it has been demonstrated that at minimum there is a considerable passage of time between the production of certain superimposed elements.
To the first creators of the petroglyphs, the location may have held sacred meaning and petroglyphs were produced as part of a cultural process to acquire aspects of the location’s power. Then, at a later date, the presence of the petroglyphs may have signified to newcomers of an area that this place was sacred. This may explain the defacing of PCNs, the placement of incised lines across cupules or PCNs, or the removal of nuclei of PCNs. Whether the newcomers sought to acquire the power or cancel the power may not be known and we may never be able to order these. They do, however, represent one of the few instances when the cultural feature or artifact remains undeniably in situ. Just as artifacts are recovered from excavations, and later associated with a particular context from the matrix, petroglyphs need to be examined in relation to their matrix, the landscape.
Chapter 6. Conclusion

The cooperative environment set forth by the various stakeholders has significantly strengthened this thesis research. The landowners, Native Americans, and archaeologists all contributed to this collaborative environment by respecting each other's values and freely providing information. This concept is not new to this thesis and has been documented in several studies (Wylie 2000; Swidler et al. 1997). The approach has long been utilized, but appears to be increasing in utility as cultural resource management goals and needs are thrust upon tribal needs and beliefs. The approach used in this thesis research builds upon Ian Hodder's (1999) reflexive method in that utilizes mutual respect, reciprocity, and inclusivity. This approach has also been successfully used and documented by the Kashaya Pomo and California Department of Transportation archaeologists to arrive at as they term it, "a meaningful disturbance of the earth" (Dowdall and Parrish 2002:125).

When I step back and look again at the landscape as a whole, I see a complex picture of land use for this area. The archaeological record puts the focus of land use beginning at a minimum of 5000 BP, with evidence to the east and west of even earlier dates. If this area contains trails used up into ethnographic times, there is no reason to doubt that as highly mobile family groups moved between the coast and inland resources, they would have moved through this area in previous times as well.

The uplands between the coast and the interior valleys have been frequently referred to as a low value, mountainous area, or only thought of as a
region to cross over. Now, as more archaeological sites have been documented during archaeological surveys of these upland environments, we continue to expand our understanding of the region, and see extensive archaeological records that reflect a long period of use. In similar concept to the models applied to the coastal areas west of Rockpile, I hope that additional chronometric dating, combined with more fine-grained data relating to seasonality, will allow us to further refine the myriad of uses of this landscape. In conversations with various tribal elders, it is quite clear that this area was also abundant in medicinal plants and other vegetal resources that may not leave archaeological signatures to speak to usage over time. Careful analysis, therefore, needs to continue to assure that we are not leaving out significant uses of the landscape that may not be approachable given standard archaeological methods.

People came to the Rockpile area for various purposes. It is clear that this area contained certain qualities that favored the production of petroglyphs, some as obvious as appropriate rock types and others more ambiguous as power on the landscape. However, groups or individuals did not just come here to produce petroglyphs. Numerous types of sites can be found, from chert quarries to lithic concentrations. At certain moments in time, the campsites along Bishop Creek served as a rest stop for travelers moving across the landscape. Some stayed and others continued to move through the area. At other points in time, the seasonal village on the ridge was bustling with activity processing acorns and meat. It is also important to note the presence of these petroglyphs along the travel corridors and near the boundaries of these linguistic and tribelet groups.
Given the combination of long time depth to these ceremonies and the presence of incised line continuously superimposed on cupules and PCNs, along with the more recent ethnographic accounts, it appears that, as with the cupule, the incised line is a petroglyph form that has a long trajectory of use. Change is slowest in the core parts of rituals and the symbols used as part of the ritual would therefore be some of the slower portions to change over time.

During the early to mid 1900s, only minimal ethnographic information was shared that directly relate the production of petroglyphs to specific functions, if petroglyphs were mentioned at all. This largely appears to be the case because cultural traditions surrounding petroglyphs were associated with a portion of knowledge that was seen as being confidential when compared with more mundane aspects of culture like basketry or foods eaten. Both of Gifford’s and Kroeber’s informants, one southern Porno (Makahmo) and one Southeastern Porno, talk about petroglyphs being used in initiation ceremonies (Gifford and Kroeber 1937:537). Loeb (1932), admitting that his information related to the Southern Porno was limited, did state that the Southern Porno only initiated boys in their Kuksu ceremonies, which were structured differently than other Kuksu ceremonies in other Porno areas (Loeb 1932:101). The ceremonies were more similar to a “first-fruit ceremony...no way connected to doctoring or health-giving qualities” (Loeb 1932:104). Southeastern Porno incised lines can be linked to boys’ initiation ceremony as part of the old ghost and Kuksu religion. In Central and Southern Porno, as part of the Kuksu religion, both boys and girls initiated. I contend this as one of the functions of SON-2446 and SON-2445. Evidence for
the relation of the Kuksu religion to incised lines is further bolstered due to the relative absence of incised line elements in the ethnographic areas of the Coast Miwok and Wappo, both of whom also practiced a more restricted form of the religion (Loeb 1932:123).

Given the location of numerous cupules in association to the creek channel, coupled with the historic accounts of fish runs, it is also possible that the cupule petroglyphs served to control weather to insure abundance of fish and floral resources.

The function of the petroglyphs at Rockpile varied over time, but held true to certain tenets. The coming together of power of place with the power of the ritual held meaning to the individual. The ritual was not a singular one and the rituals held continuity of form for what, at minimum was over hundreds of years and more likely over thousands of years. What these processes were at the specific moments in time we may never know. What I can surmise from the body of evidence, however, is that the production of these petroglyphs held specific cultural meaning to the creators. Whether it was in the process of a fertility ritual with a loved partner, as part of an initiation ritual into a secret society, or even signifying the travel corridor or later boundary between ethnographic groups, the acts of producing the various forms of petroglyphs provides a window into both the mindset of the individuals that created them and the rituals that were valued by the larger group.

I propose that some of these petroglyphs represent vestiges of initiation and world renewal rituals or ceremonies, while others represent fertility and/or
poisoner sites. The fact that these petroglyphs likely served different purposes to different people over time is not to be seen as a negative outcome. Frequently overshadowed and overlooked, this aspect of material culture forms a lasting mark on the landscape that, although difficult to date absolutely, represents an important aspect of indigenous culture. The use of a contextual model adequately provides various interpretations that can be further examined, as the petroglyph database is refined.
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