UTAH ROCK ART

VOLUME XIX

Papers presented at the Nineteenth Annual
Symposium of the
Utah Rock Art Research Association (URARA)
Vernal, Utah
September 1999

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Second Edition
Edited by Dorde W. Woodruff

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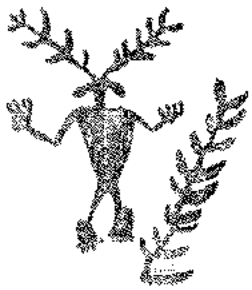
Table of Contents

Cover art by Jane Bush, Vernal area glyph.



Introduction

Giving a paper at URARA's annual symposium seems to be more fun for most members than the picky work of turning it into a print document. So it's always a challenge to reach URARA's goal of presenting the volume of proceedings of papers from the preceding year at a symposium, a task that doesn't seem to become any easier through the years. The process really has two parts, getting the papers in hand, and making them into a book, both requiring much time and effort.

Papers for this volume were compiled rather than edited, in yet one more attempt to accomplish this. Another innovation complicated the task that year, 2000. For the first time the book was published electronically. We had just discovered printing directly from computer file onto laser printer for *Vestiges*, URARA's monthly newsletter. Once the computer document is finished, copies can be made any time without the burden of copying from a whole book's individual paper sheets as in the past, print quality is better, and graphics are similar to what is in the document instead of being degraded as xerography always does. As a bonus, printing electronically is cheaper than using a copy machine.

But this was a paradigm shift, demanding different thinking. And a new employee at the printer's deleted our document by mistake before they made a copy for us. They had to reproduce it for free, but when they attempted to do that, they'd changed their layout program, and our different kinds of files didn't go smoothly into a document. We had files in Word, PageMaker, and files in Quark Express on Mac that our editors couldn't even read at that time, much less put into a single long book file. And Word documents are unstable if complicated or graphics-heavy. So we decided to take more time before reprinting the volume, edit it, try to improve some of the graphics, and put it into PageMaker, a more suitable format. Thus, a second edition.

Our first thanks always to our patient researchers and their curiosity about rock art. Thanks to Cindy Everitt, Nina Bowen, and Laurel Wright for their helpful proofreading. Thanks to Claris Clapp for collecting and compiling the papers originally, to David Sucec, 2002 vice president, which means he's in charge of symposium matters, for patient help and encouragement, and to Gerry Dean for years of storing and selling these publications.

Dorde W. Woodruff, Editor of the Second Edition, 2002

Prehistoric Women and Rock Art

B. Jane Bush

Certainly the most frequent female images in rock art are Great Mother images and Spider Woman or Spider Grandmother (Morris 1991; Mullet 1989). For this presentation, however, I chose to focus on the images that give us clues about the everyday lives of the prehistoric women.

Roles of women depended on whatever the current social order was. We find three different descent orders controlling social organization in our study area.

Patrilineal: in irrigation societies; these were the Pueblos along the Rio Grande. The water boss was the chief of the tribe.

Matrilineal: in most of the Pueblos and the Navajo. The mother owned all the property, and was responsible for raising the children.

Bilineal descent: this includes almost all the peoples of the Great Basin.

In the Great Basin the men did most of the hunting, prepared and took care of hides and leather, and made tools. The women tended the children, and did the gathering, preparation and preservation of food.

A photo from the Smithsonian collection taken in the early 1900s shows a Paiute woman with a large burden basket held with a tumpline, similar to many of the "backpacker" petroglyphs we find in Utah and surrounding states. Using this and other similar photos in the Smithsonian collection and a photo of a backpacker Clifford Rayl gave me, I made a drawing of backpackers (Figure 1). I'm not saying all the backpackers shown in petroglyphs are women, but given that gathering was their traditional role, certainly many of them were.

The Great Basin peoples utilized over 100 wild food plants. Women also collected insects. Wandering was not random or aimless. It was a stable, well-known, annual round of harvesting, collecting, and storing of plants, animals, and raw materials. The women also wove baskets, made blankets, made clothing, and in some cases made pottery. (In some tribes men made the pottery.) Alex Patterson showed us examples of pottery designs that are found in rock art (see Patterson 1994).

Women wove baskets from any of the grasses available. Some were fine enough to hold water. Hot stones from the fire could be dropped into a basket of water to bring the liquid to a boil. Archeologists think that perhaps a basket was woven and lined with a quarter-inch or thicker layer of clay. This was then put into a fire and as the basket burned away the clay was fired, leaving a cooking pot.

There were other woven items. The exhibit of Anasazi woven sandals toured the country a few years ago; many of you probably saw this exhibit. There were also mats of various sizes, cradleboards, and a few grass skirts. Some rock art shows examples of woven designs.

Everyone's Job

There were some duties shared by everyone. Among these were the communal hunts, especially important to the survival of the tribes before horses arrived. Of two hunting panels, one from Manila on the Utah and Wyoming border shows people chasing a bison to a jump (Figure 2), and the other from Santa Clara, Utah, shows people chasing deer (Figure 3). The typical method seems to have the people chasing herds over the cliffs and then going to the bottom to butcher the animals. Everyone participated and everyone shared in the harvest.

While large animals were great to have for dinner, the real protein mainstay for the people of the Great Basin was rabbits. These also were taken in communal hunts. Typically the shaman or leader of the tribe would have a vision as to when they should hunt. He would send a runner with a knotted string to other extended families in the area. (The families lived in groups of 5-12 members in one dwelling, and there were no set rules as to who lived together.) Each day the recipients would untie one knot and on the day of the last knot all would meet at the appointed spot for the hunt.

Catching nets were used. The women were responsible for making the twine. This was done by twisting the fibers of a kind of milkweed along their thighs. Then the men would tie the twine into nets. These were similar to the gill nets used for fishing. The mesh was designed so that rabbits could get their heads into it and then be caught behind the ears, not big enough for the rabbit bodies, or for them to back out. Some nets were thought to be as much as one mile long. The nets were stretched across the valley and staked in place. Then the whole tribe would scream and chase the rabbits toward the nets, where the squirming rabbits were clubbed.

Not only did rabbits provide most of the meat for the Great Basin peoples, but they also provided most of the clothing. While these people were not big on fashion – men wore breechclouts and women wore aprons – rabbit skin blankets were a must. The skins were cured and then cut in a spiral producing one continuous furry string. The women then wove these into blankets. It took about 18-20 skins for a man's blanket, 12-15 for a woman's, and 8-10 for a child's.

Ceremonies

In the Great Basin there were generally rituals for birth, puberty, and death. There were also many curing rituals, performed by shamans. Ghosts or sorcerers were thought to cause illness. The birth celebration didn't happen until it appeared the child would live. Typically this was when the infant developed teeth. At this time the child was given a name. Names often were status terms, and as the child grew and developed skills the name might be changed, perhaps several times in an individual's lifetime.

Certainly the most important ceremony for women happened at the first menses, marking the coming of age for girls. This idea seems to be common to all the Great Basin cultures. Custom dictated that the mother and the aunts constructed a menstrual hut. It was conical in shape, and called *nakanipi* in the Ute language. Green willows were poked into the ground in a circle, and then the tops were bent over and lashed together.

The first-timer might be confined as much as 30 days. Her mother or other relative would instruct her. Her hair was specially combed, and an attendant deloused her. Her diet was restricted to avoid meat, grease, blood, fish, salt, and cold water. The young woman would drink endless cups of warm water to help the blood flow freely. There were special basket dishes and drinking cups. She might be asked to lie in a heated pit (according to Boma Johnson, BLM archeologist, small

gravel pits are often part of puberty sites) or on heated ground. This primitive heating pad may have helped to relieve cramps. Cotton-like fibers from cottonwood trees, milkweed silk, and mosses when available were all used to absorb menstrual fluids. These materials were also used as diapers in cradle boards. The girl might be instructed not to talk or laugh, and to use a scratching stick to touch her body. She should avoid hunters, sick people, and in some instances all males.

In some areas the young woman wore a veil of fibers, and grass skirts (Figure 4). She sometimes made a show of doing hard work, such as gathering wood. This would display the girl to be industrious and suited for marriage. After the confinement the girl's family might then give a party to let everyone know she was eligible for marriage.

Figure 5 depicts a panel that may show a first menses. The central figure has a menstrual flow represented and perhaps a special veil over her face. An attendant at her shoulder gives her instruction. The rock art is found on a freestanding boulder, with space along the lower edges where red paint was applied. It is located on the Ute reservation south of Duchesne.

Menstruating women were thought to contaminate hunting and fishing gear. They spent their flow days away from the family in the women's lodge. This was also the place for child bearing. In some areas there was one lodge for all the women, and they could spend their days together. In others according to Ute ethnography (Smith 1974), each woman made a separate shelter every month.

Some jobs were considered unsuited for this time, one Ute informant reported. You could not split the willows for baskets with your teeth while you were menstruating, but you could spend your confinement days making baskets, sewing moccasins, or other handwork. While all the sources reported that the girls should spend their confinement days alone, this same informant said some girls would tell their sweethearts when they expected to be in their lodge and the sweetheart would come spend the night.

If a young man and young women displayed interest in each other, their families exchanged gifts and it was considered an official match. The newlyweds lived with whichever family needed gatherers.

Both men and women could become shamans, even if menstrual blood negated shamanistic powers. The average life span of these prehistoric people was only about 35 years. Given the high infant mortality it was unusual for a woman to be postmenopausal. An older woman past menopause often became a shaman, especially if the individual had curing talents.

Figure 6 shows the pregnant ladies of Quail Creek. It shows the progress of the pregnancy through the nine months, and the final woman holds her baby. There are many interesting events connected with the birth of a baby. The woman went to the women's lodge for the birth, and was assisted by a relative or any skilled woman. If it was a difficult birth the husband might attend or have a person with spirit power call the baby out.

After delivery the mother drinks warm water and is bathed by her attendant. The baby is also bathed, and placed in a cradleboard. In the Great Basin this was a basket board covered with skins. The baby was wrapped tightly, and taken out from time to time for cleaning. (Jennings [1986] says in the morning and evening, but I would guess no mother carrying the baby on her back would leave it quite that long.)

There were also some interesting taboos for the father. In the last stages of the pregnancy he must avoid making cordage or straightening arrows, lest the magic be transferred and the child be strangled by the umbilical cord or born too soon. After the birth the father was forbidden to smoke, take sweat baths, or gamble for one month. The function of these taboos was to acknowledge the father's responsibilities and spiritual tie to the child. Following the restriction the man assumes the

status of parent.

Figure 7 shows a panel in Nine Mile called the Escalante Panel by some. It depicts a praying woman with a baby, a cradleboard, and a gathering basket. She stands with the animals, next to the river. The glyph is also very close to where the pinyon trees start.

The Fremont Family panel in Nine Mile (Figure 8) shows a woman with her family.

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Figure 1. Drawing of petroglyph of person with a burden basket, and artist's conception of woman using a burden basket.

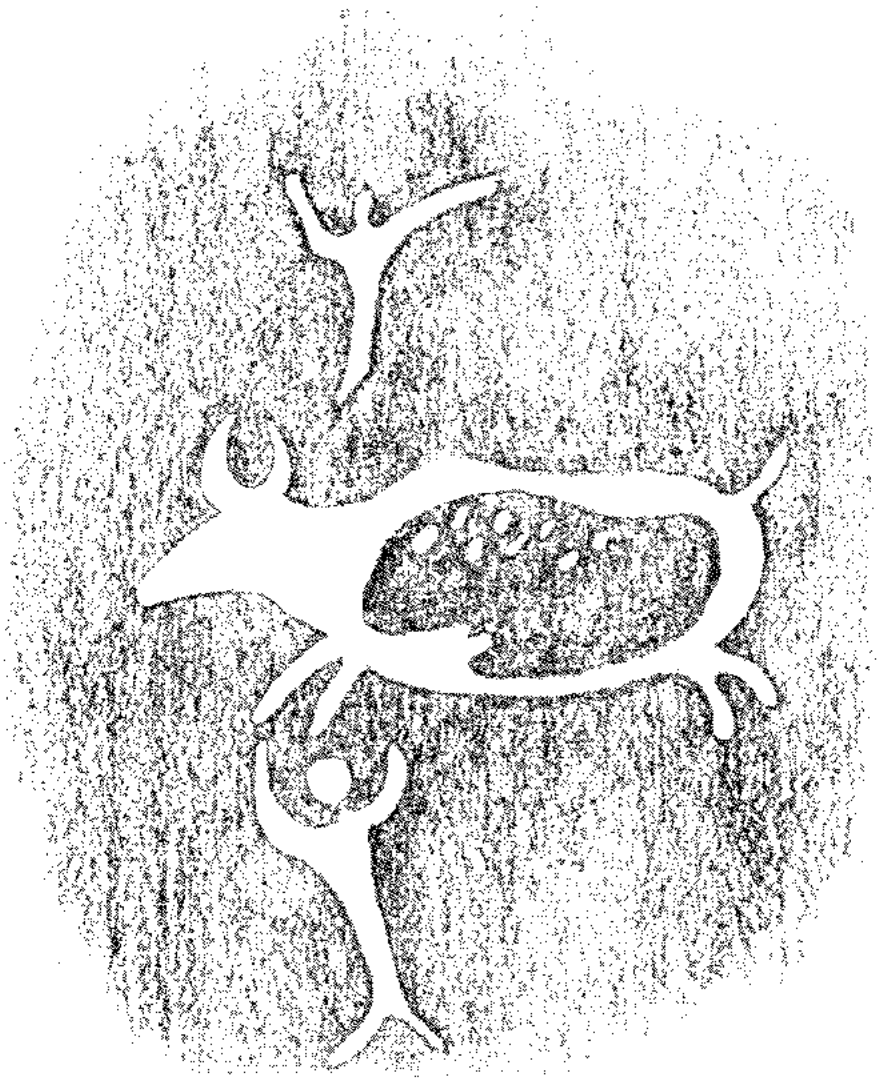

Figure 2. Manila, Utah, jump site

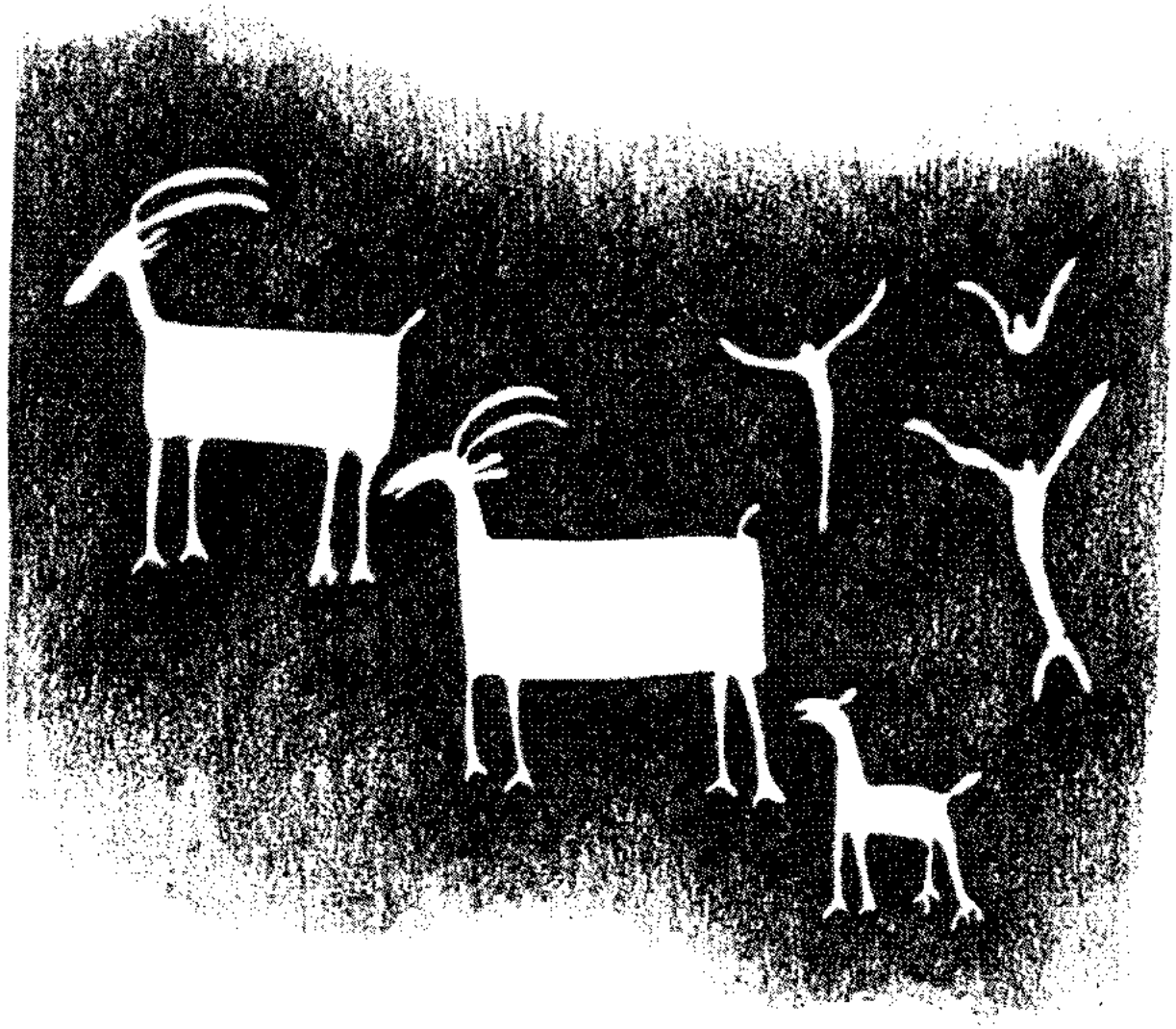

Figure 3. Santa Clara, Utah, jump site.

Figure 4. A posible first menses site at Dirty Devil Canyon, Utah, shows a woman with her veil and grass skirt.

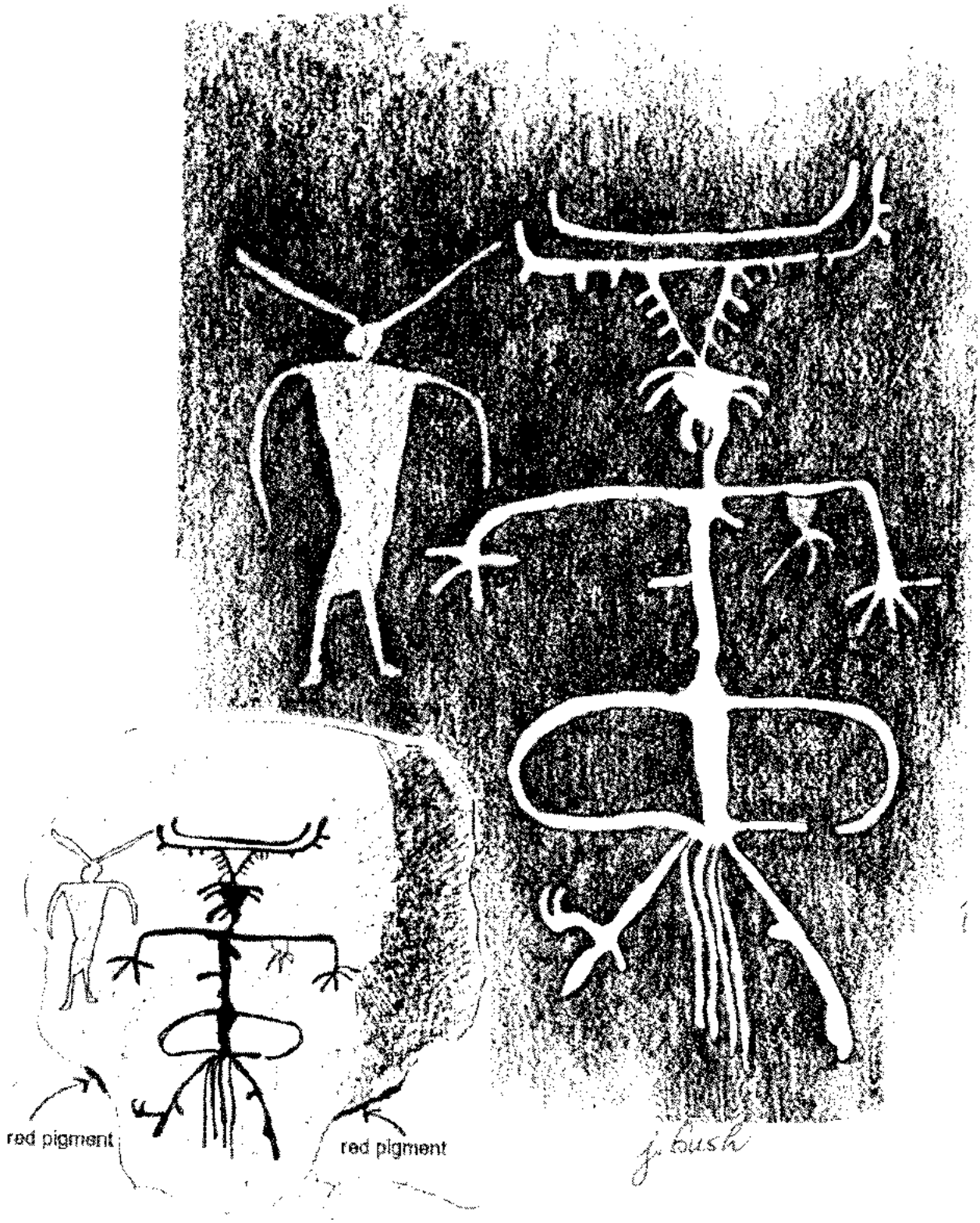

Figure 5. Another possible first menses site from the Ute reservation south of Duchesne.

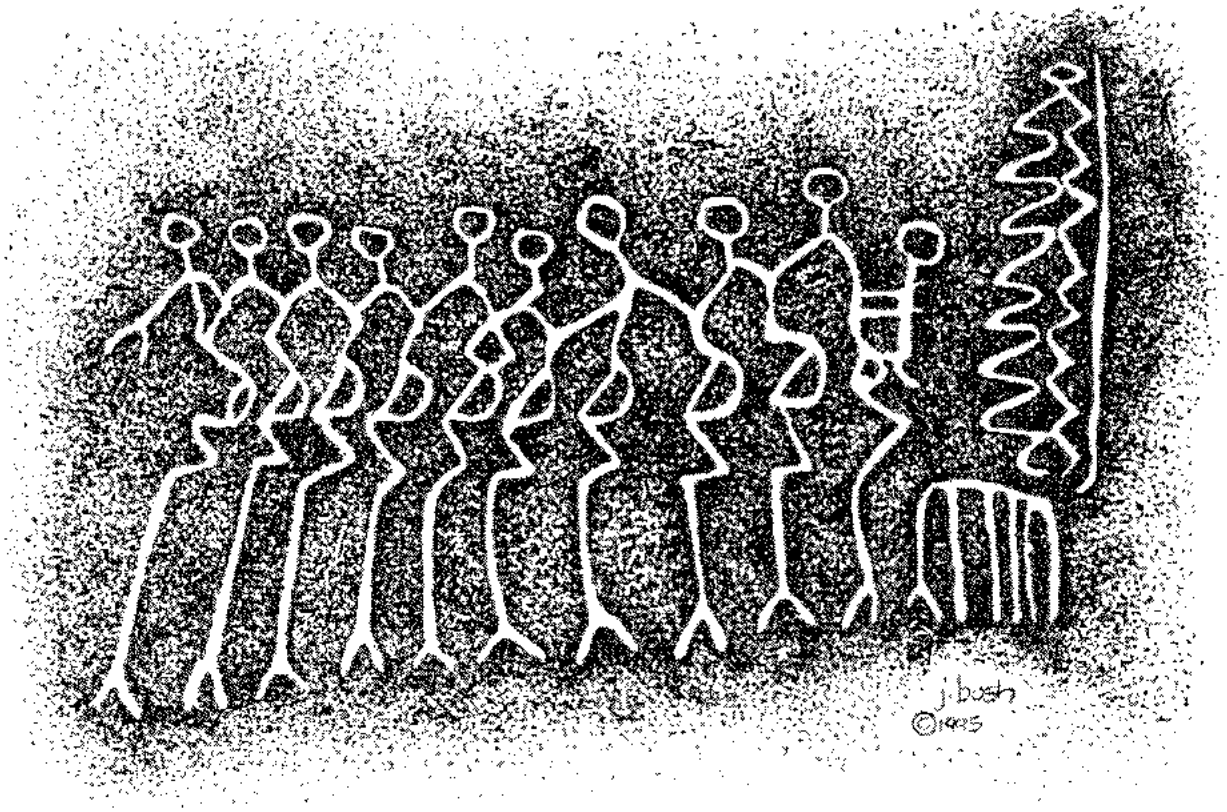

Figure 6. The pregnant lady panel at Quail Creek, Utah.

Figure 7, Top. Escalante Panel in Nine Mile Canyon, Utah. Figure 8, Bottom. Fremont Family in Nine Mile Canyon.

The Dancing Shaman and Dancing Ritual in Native American Rock Art

Rev. Galal Gough

In 1996 and 1997 I presented papers on the Shaman's Crook in Native American Rock Art at the annual Utah Rock Art Research Association Symposium. But it was not until 1998 that I visited the Dancing Man site a few miles south and east of Cane Man Hill in Esmeralda County, Nevada. Immediately to the right of the Dancing Man panel, there was a petroglyph depicting a dancing figure with a crook (Figure 1). If indeed the crook "was peculiarly the shaman's badge of office" (Laird 1976:31) and if the shaman is one who "carried the poro" or crook (Laird 1984:273), then the dancing figure with the upraised crook is "The Dancing Shaman."

Dancing figures are depicted in rock art in a number of ways, and the Dancing Shaman petroglyph has the bent knees that signify the act of dancing. Another bent-knee dancing figure with crook is found in the South Mountains in Arizona (Figure 2). These and other examples demonstrate that in Native American rock art:

1) Figures with bent knees in petroglyphs and pictographs are meant to portray the act of dancing.

Another classic way of picturing the dancing figure is illustrated in a famous panel near Sleeping Duck Ruin in Canyon De Chelly, where a human figure appearing to hold a snake in one hand and a crook in the other has "rubbery legs" (Figures 3 and 4). Commenting on this figure, located next to flute players, Campbell Grant (1978:203) referring to the site as CDC-34, notes, "The snake and rubbery legs show strong Chaco-Mesa Verde influence." Here again the context, about which more will be written later, suggests another way to depict dancing:

2) Rubbery or wavy legs are a familiar and standard means of portraying a dancing figure.

Moving from the individual dancer to groups of people dancing, circle dancers are most dramatically pictured in the pictograph panel in Main Canyon, Escalante, Utah (Figure 5). Carobeth Laird points out the relation of the Circle Dance to natural phenomena, "A ring either around the sun or the moon is designated as *nikatiah*, circle-dance such as is danced as part of a Mourning Ceremony...." (Laird 1976:91). Referring to a funeral ceremony, she commented: "Afterwards the mourners formed a circle and danced the Circle Dance" (Laird 1976:246). Of course, many different ceremonies feature a Circle Dance, so another category for depicting dancing in rock art can be advanced, that:

3) Figures arranged in a circle, with varying postures and gestures, can be assumed to be Circle Dancers.

Perhaps the most common means of portraying dancing figures in rock art is through the line dance format. Several examples are found along the Potash Road downriver from Moab, Utah (Figures 6 and 7). Here the figures are holding hands, as is also the case with the line of dancers at Behind the Rocks, also near Moab. Other lines of dancers in Utah are at Montezuma Creek

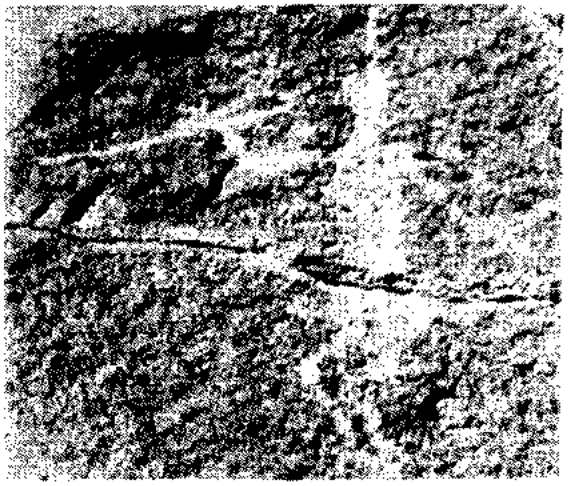

Fig. 1 Dancing Shaman, Nevada

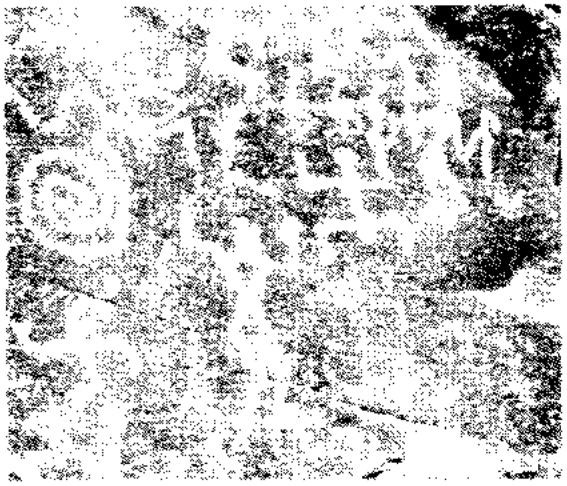

Fig. 2 Dancing Shaman, Arizona

Fig. 3 By Sleeping Rock Ruin

Fig. 4 Canyon de Chelly drawing

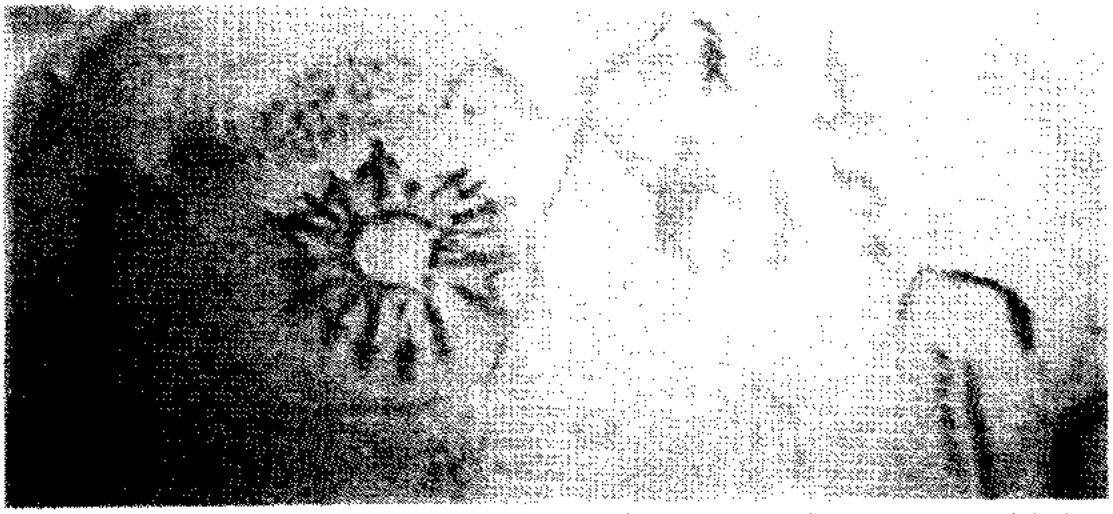

Fig. 5 Dancing Circle in the Main Escalante Canyon, Utah

(Figure 9); Irish Green Spring, Clay Hills (Figure 10); Quitchupah Creek, Emery County (Figure 11); and at Fremont Indian State Park (Figure 12). Among other line dancing sites are petroglyphs at Valley of Fire (Figure 13) and Crystal Wash (Figure 14) in Nevada, and South Mountain in Phoenix (Figure 15) and Picture Rocks near Tucson (Figure 16) in Arizona. So another dancing motif is clear:

4) Lines of figures, usually holding hands, are a common representation of ceremonial dancers.

The Dancing Procession is yet another, though less frequent, style. One of the best examples (Figure 17) is found in the great Ceremonial Cave in Canyon del Muerto, which branches northeast from the main channel of Canyon de Chelly in Arizona. Here the dancing figures in procession seem to be following a drummer, and so:

5) The procession of dancers, at times following drum, flute, or other instrumentalists, is another dancing motif in rock art.

Processionals to a plaza or place of ceremony often involved singing, flute players, rattles, whizzers, and the twirling of bullroarers (Payne 1993:41-42). The flute player by the dancing circle in Main Canyon, Escalante (Figure 18) and the flute player by what appears to be a dancer at Montezuma Creek (Figure 19) are further indications of another way dancing ritual can be assumed in stationary rock art:

6) The presence of flute players, drummers, or other instrumentalists by apparent dancing figures is a further confirmation of dancing ritual in rock art.

Rock art and dancing ritual were important practices of the shaman, who as a priest, healer, visionary, and interpreter of the meaning of life, was called upon to defend and protect the wellbeing of the tribal members. Complex rituals and ceremonial dances emerged to mark the seasons, rain, and the weather, and the rotations of the sun and moon, enabling the people to relate harmoniously to the forces of nature. Likewise, rituals and ceremonial dances were developed to mark the passages of life – birth, puberty, marriage, and death – and to enable the people to deal with illness or danger through healing rituals and priestly ceremonies of protection and fruitfulness.

Flute and Snake ceremonies are involved, I believe, in the panel near Sleeping Duck Ruin in Canyon de Chelly (see Figures 3 and 4). The germinating seed at the left of the panel would relate to the role of both Flute and Snake ceremonies, dedicated to supplication for rain to assure germination of seeds and a bountiful crop. Framed between ceremonial crooks on either side, from left to right, are a snake, two flute players, and a dancing shaman, holding a snake in one hand and what appears to be a crook in the other. Then beyond the crook on the right are two anthropomorphs, one upside down – a symbol of illness or death. While Carobeth Laird records numerous insights into the role of the crook in fertility and healing, regenerating actions (Laird 1976:179, 216), it is Richard W. Payne who describes the role of Flute and Snake ceremonies dedicated to the rains necessary to germinate seeds and raise crops, and to curative ritual and duration of life (Payne 1993: 4 and 24-25 especially).

At South Mountain in Arizona is a row of dancers, four with right hands upraised. A second group of dancers are holding hands, with the leftmost holding a crook. Above, below, and to the right of the dancers are zoomorphs more faintly depicted (see Figure 15). We are indebted to Alex Patterson, who in *A Field Guide to Rock Art Symbols of the Greater Southwest* (Patterson 1992:79), quotes from Cushing (1888:2-3) as regarding the panel to be "a representation of a sort of Pasture(?) dance...a shepherd's crook...identical...to the elaborate staffs of the 'Herders' of the Sacred Drama Dance in Zuni." I would suggest an alternative interpretation, that the various animals and other zoomorphs are spirit helpers, and the Shaman Dancers are invoking the wisdom and

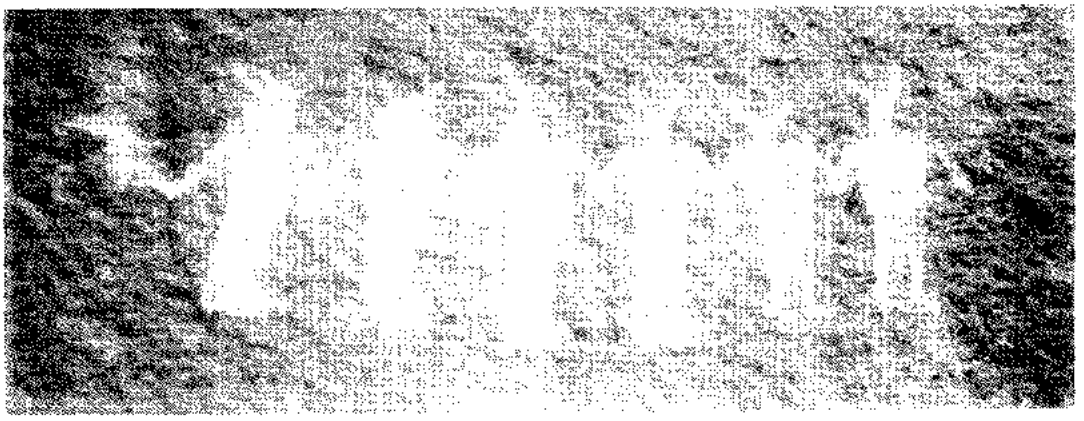

Fig. 6 Dancing Figures along Potash Road near Moab, Utah

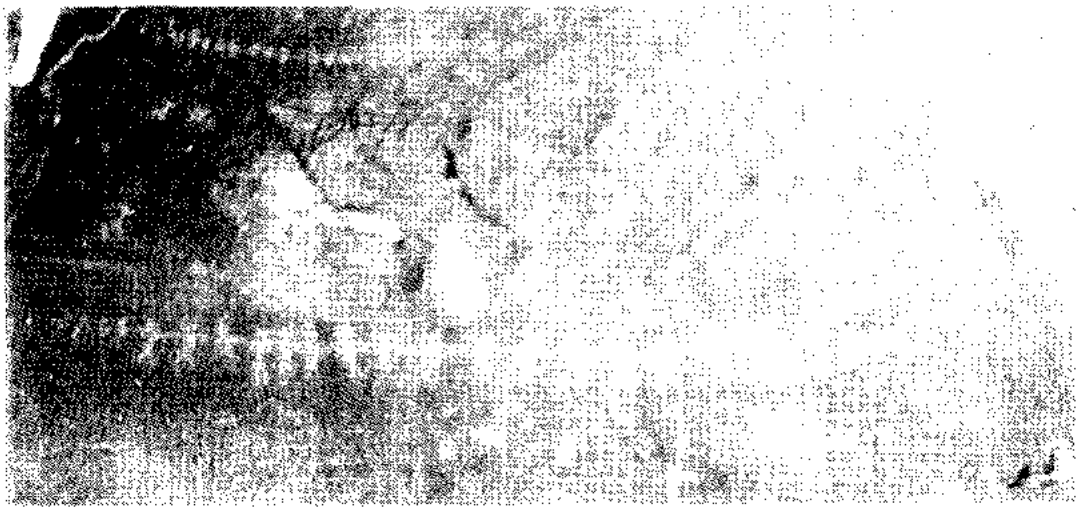

Fig. 7 More Dancing Figures along Potash Road across the River

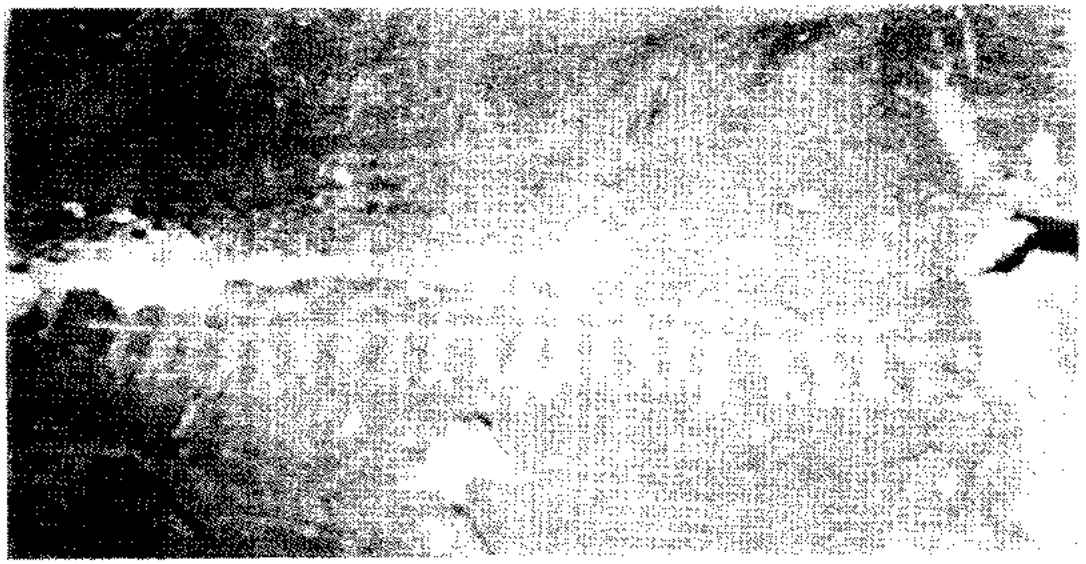

Fig. 8 "Behind the Rocks" Line of Dancers, also Near Moab

Fig. 9 Lines of Dancers at Montezuma Creek in Southeast Utah

Fig. 10 Dancing Figures at Irish Green Springs, Clay Hills, Utah

Fig. 11 Quichupah Creek, Emery Co.

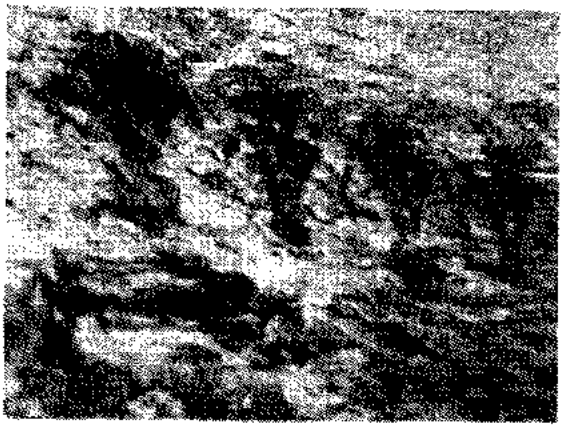

Fig. 12 Fremont State Park

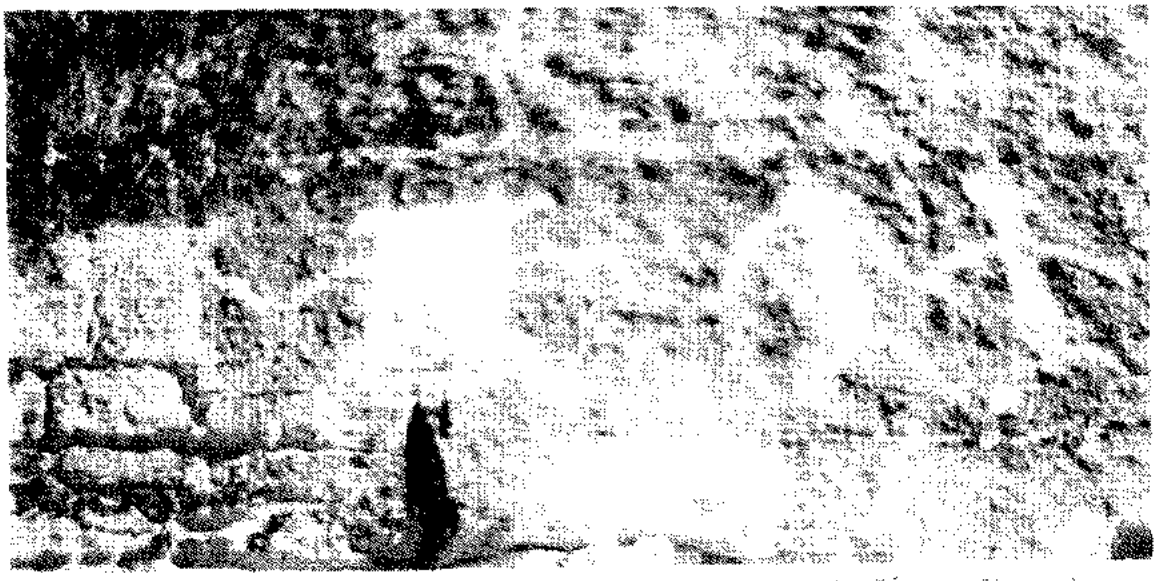

Fig. 13 Dancing Figures in the Valley of Fire, Nevada

Fig. 14 Apparent Dancing Figures at Crystal Wash, Nevada

Fig. 15 South Mountain, Phoenix

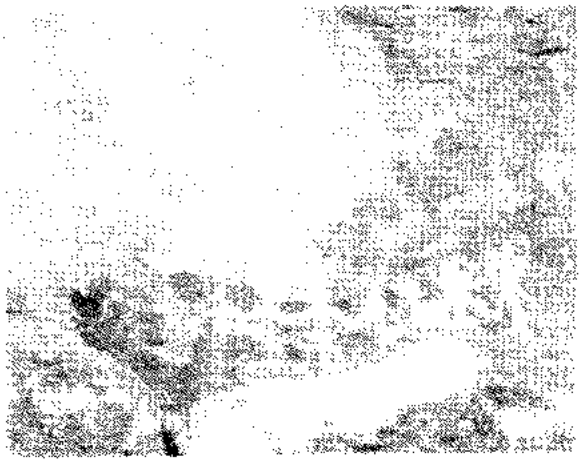

Fig. 16 Picture Rocks, Tucson

assistance of the spirit helpers, which are sources of shamanic power. James R. Cunkle and Markus A. Jacquemain observed regarding a Shaman's Dancing Ritual:

"Dancing in a ritualized manner for hours or days, the shaman could actively hold in mind the image of the animal spirit with which he wished to communicate. He emptied his mind of all but the target spirit until his body became an extension of the animal spirit identity.... From the trance state the shaman could effectively let the spirits fill him, become him, and pass their wisdom on to him" (Cunkle and Jacquemain 1995:20).

Coming back to the crook, my URARA paper on "The Shaman's Poro (Sacred Crook) in Native American Rock Art" (Gough 1996:1-2) provides numerous ethnographic references to the crook as a major instrument of shamanic power. Some have questioned the crook interpretation at the South Mountain site, because of a faint arm and leg they see extending from the crook, as lightly pecked as the animal spirits. For me the possibility of a "Dancing Crook" makes even stronger the possibility of the panel representing a Shaman's Dancing Ritual with Spirit Helpers.

Moving south to the Picture Rocks site northwest of Tucson, on a granite outcrop on a retreat center located in the mountain foothills, there is a group of dancing figures holding hands and wearing tall, impressive headdresses. On the same rock surface and above the dancers is a large spiral petroglyph (see Figure 16). When I went back to Picture Rocks to photograph this panel at new angles, a storm was blowing in, and swirling winds hit me as I was up on the cliff in a precarious position. Soon large drops of rain began to come down. Words quoted by Alex Patterson (1992:185, 211) seemed especially appropriate:

"The historic Puebloan peoples described spirals as representing wind, water, creatures associated with water such as serpents and snails, and the journey of the people in search of the Center" (Young 1988:136).

"The single spiral is the symbol of the Ho-bo-bo, the twister who manifests his power by the whirlwind" (Mallery 1893:604-5).

"Since a whirlwind may precede rain, always sought and prayed for in Hopi ceremonies, the design has a happy and cherished significance" (Viele 1980:6).

The relation of the dancers to the spiral would seem to lead to a conclusion that the dancing ritual involved had to do with the invocation of rain.

Dancing ritual related to puberty and fertility is apparent in the Apache pictographs in Comanche Cave at Hueco Tanks near El Paso (Figure 20). Among the dancers a male figure with a large phallus confronts a woman, and other phallic anthropomorphs provide further evidence of the fertility theme (Sutherland 1976:64). Likewise, the encircled cross with head and legs at Hueco Tanks (Figure 21) is a symbol of fructification in Hopi girl's puberty rites (Gough 1994:46). Taken together, the dancing figures "Most probably...were realistic depictions of actual fertility dances...." (Patterson 1992:79).

Along the Colorado River north of Bullhead City on the Arizona side is a dancing circle on top of a promontory, with many petroglyphs at a site called Inscription Point. When I first saw the dancing circle (Figure 22), the vulvaform outline led me to believe the site was related to a girl's puberty ceremony. Just below the top of the promontory beside the river is a bisected oval petroglyph, a typical vulva symbol. The largest panel, further down, includes a circle with many wavy lines (Figure 23). A local museum interpreted the lines to represent blood, and theorized that the site marked the locale of a bloody battle. While there were certainly conflicts farther south along the river, I am more inclined at this location to assume a symbolism of menstrual flow. When I wrote to Boma Johnson, who was at the time the Cultural Resources Specialist for the Bureau of Land

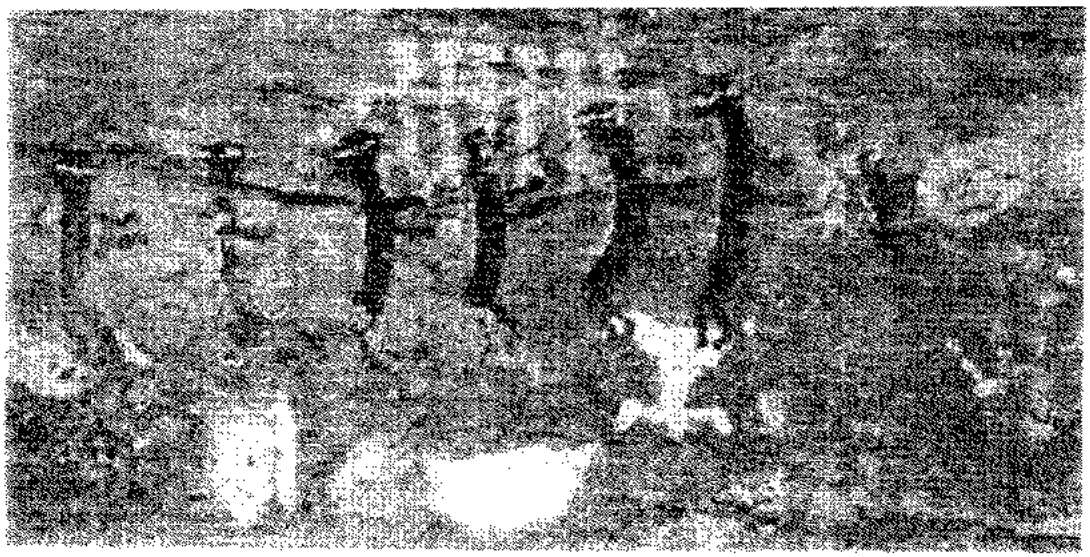

Fig. 17 Procession of Dancers in the Great Ceremonial Cave

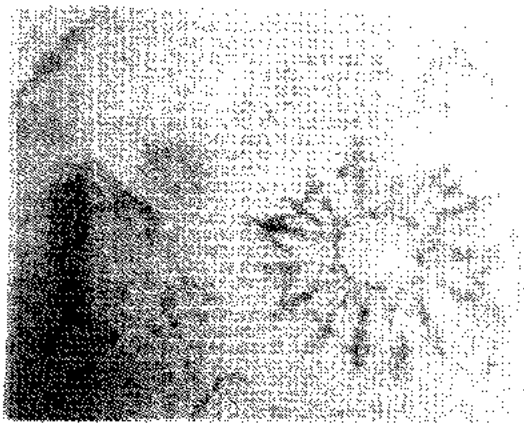

Fig. 18 Kachina Flute Player

Fig. 19 Montezuma Great Kiva

Fig. 20 Hopi Snake Dance

Fig. 21 "Comanche Cave," Texas

Management in Yuma, expressing my conviction that the dancing circle was the site for a girl's puberty ceremony, he noted two sand pits within the dance circle and wrote: "You're most likely right about girl's puberty ceremony at this site. A common feature at the girl's coming of age ceremony was a sand pit, where some of the ceremony took place. Two are inside the pathway."

Across the river in California, south of the Von Schmidt monument marking an early calculation of the California-Nevada boundary, is the famous Bourke's Intaglio. In the 1880s Merryman, a Mojave informant, took Captain John Bourke down the river to the site, located on an alluvial fan. Above the river at the eastern tip of the fan, Merryman pointed out a large cairn with rocks large enough to have petroglyphs on them (though Bourke did not mention the petroglyphs in his report). About a hundred yards to the west there is a trail marker or trail shrine on the Xam Kwatcan Trail, at the juncture with a short trail to the northwest that leads to the intaglio. Also called today the Merryman Circular Pathway, this dancing circle (Figure 24), which was about fifty paces in width, top to bottom, was a creation site associated with the boy's puberty ceremony. Spirit Mountain, called Avikwaame by the Mojave and other peoples along the lower Colorado River, and regarded to be where creation took place, is clearly visible to the north from the dancing circle. In his report published in the July-September, 1889, issue of *The Journal of American Folk-Lore*, Bourke describes the site as follows:

> This was evidently the site chosen by the Mojaves for the celebration of their Creation Dance, or dramatic representation of their myth of creation. Here was an irregular, elliptical curve, marked with small heaps of rock (see diagram), at distances of from five to twelve paces, each designating the point where, according to Merryman, some animal (or rather a medicine-man dressed up to represent one), had broken down in the course which was run with the sun, from left to right. Where the big medicine-man representing the Judge was to stand was marked thus: D and near this on the ground was traced a heiroglyph, the meaning of which Merryman was unable to give, but which bore some slight resemblance to the figures of a man, a woman and a child, or of three grown persons tied together [Bourke 1889:173-174].

Unfortunately, highway construction destroyed the easternmost portion of the dancing circle, along with the "Judge's place" and the "heiroglyph" Bourke mentioned. To the enlargement of Bourke's drawing of the dancing circle (Figure 25), I have added a broken vertical line showing where Highway 95 construction obliterated everything to the east. But despite the highway construction and also some disturbance by off-road vehicle tracks, the site remains a significant example of a ceremonial dance intaglio, made all the more important because of the ethnographic information Bourke's Mojave informant Merryman provided.

Moving south to the Blythe Intaglios, the most northeasterly anthropomorph has a large dancing circle crossing the knees and encircling the entire upper torso (Figure 26). While the intaglio cluster features Ocean Woman, mountain lion, and spiral, aspects of creation mythology, the more important ceremonial site is at Black Point, a half-mile or so farther south. So the dance circle at the Blythe Intaglios is more likely related to spiritual preparation for the ongoing journey north to Spirit Mountain.

But the dancing circle at Black Point (Figure 27) is the major site near the midway point for peoples from the south on a spiritual journey to Spirit Mountain to the north. The Xam Kwatcan Trail, which leads to Spirit Mountain or Avikwaame where the creator Kumastamho brought the

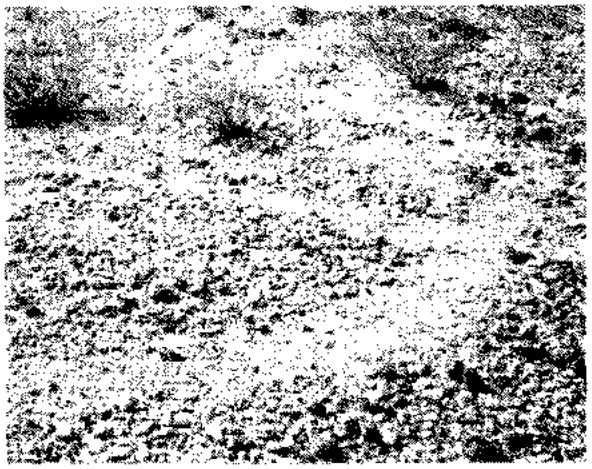

Fig. 22 Inscription Point, AZ

Fig. 23 Be Devis Camp, AZ

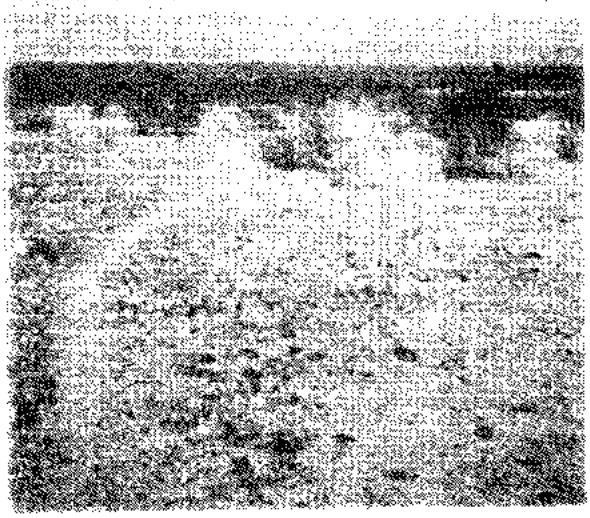

Fig. 24 Boundary Intaglio, CA

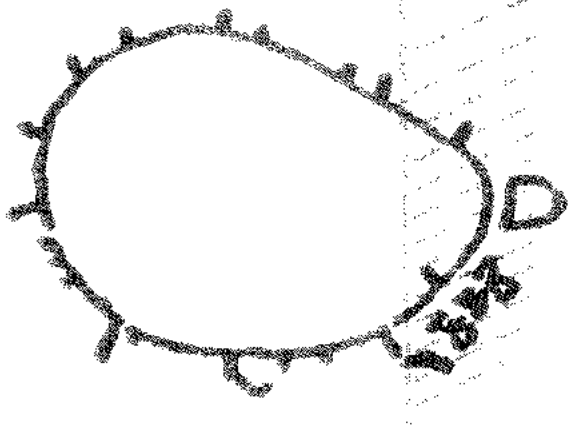

Fig. 25 Boundary Drawing

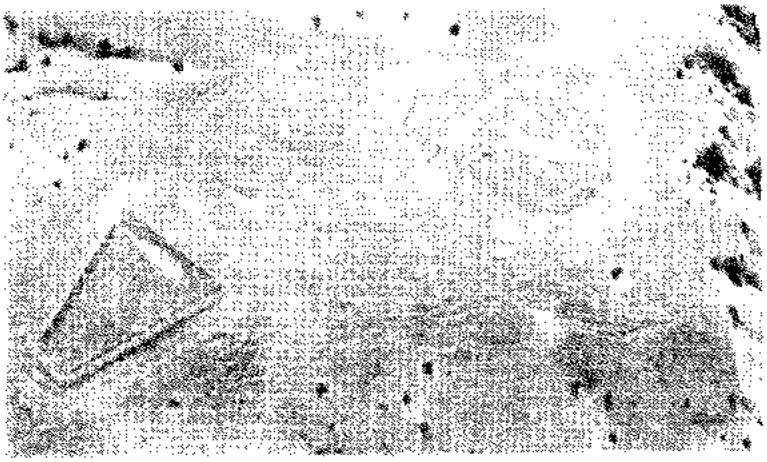

Fig. 26 Rivers Intaglio

Fig. 27 Black Point Intaglio

world and the first humans into being, passes through the dancing circle. Included in the intaglio are figures of Kumastamho (Figure 28) and the evil twin brother, who represent the duality of goodness and evil. There is a rectangular staging area (Figure 29), where the shaman apparently prepared to lead those on the journey in a ceremony illustrating their worldview and creation stories.

South of present-day Blythe, an east-west trail crosses the Colorado River at the Palo Verde Crossing, and continues west to the northern flank of the Mule Mountains toward the Pacific Coast. The Mule Mountain Intaglios, along what is called the southerly branch of the Coco-Maricopa Trail, feature two sets of parallel rows of ten cleared circles, and eight U-Brackets composed of ten cleared circles each (Figure 30). In my paper on "The Wicket-Shaped or Reversed-U Bracket in Native American Rock Art in Relation to the Naja of the Squash Blossom Necklace" (Gough 1998:12), I suggest the male and female symbolism of these designs. But a large dancing circle is also present (Figure 31), such as is often used for ritual preparation for the next stage in a desert journey going from spring to spring toward a distant goal.

However, returning to the Xam Kwatcan Trail and moving to the southern ending at Pilot Knob, there is situated a significant Intaglio Dancing Circle site (Figure 32). It is located at the south side of Pilot Knob, or Avikwalal, west of the Colorado River. Avikwalal was thought to be a smaller representation of Spirit Mountain. The site provided a ritual beginning for the pilgrimage from Avikwalal north almost two hundred miles to Spirit Mountain, or Avikwaame, where the Native American peoples along the lower stretches of the Colorado River thought creation took place. The site consists of the dancing circle, three cairns of river cobbles, two human figures, a lizard figure, a five-pointed star, and a cleared shaman's staging area in the circle (Figure 33).

The two human figures, one of sixteen sets of twin figures located along the Xam Kwatcan Trail, represent Kumastamho, the Creator, located north of the dancing circle, and his evil brother, south of the circle, and symbolize the forces of good and evil (Figure 34). The lizard figure to the east is symbolic of birth or emergence (Figure 35), and the five-pointed star is thought to be associated with this current epoch of life (Figure 36). The ceremony at the site was a preparation for the pilgrimage north almost two hundred miles to Spirit Mountain, the place of creation and human origin. Before beginning the journey, the shaman would sing or provide a drum cadence as the people danced around the circle, and an offering would be made at the cobble cairn or shrine (Johnson 1992:4).

The beginning journey, about a quarter of a mile farther north, passes a complex petroglyph panel that seems to interpret the meaning of Pilot Knob, or Avikwalal, for the native peoples of the area. The prone figure to the right, suggesting death, indicates that the mountain was viewed as a temporary spiritual home for the deceased. Several mythic stories of journey into the afterlife are symbolically told through the panel's glyphs (Figure 37). But the pilgrimage of the living peoples north on the Xam Kwatcan Trail was a spiritual journey, and to return to the place of origins at Spirit Mountain, or Avikwaame, was not only a way of honoring Kumastamho, the Creator, but also a means of renewing their essential harmony with creation. So over the centuries the people journeyed to their Mountain of Creation.

Fig. 28 Black Point Figure

Fig. 29 Black Point Staging Area

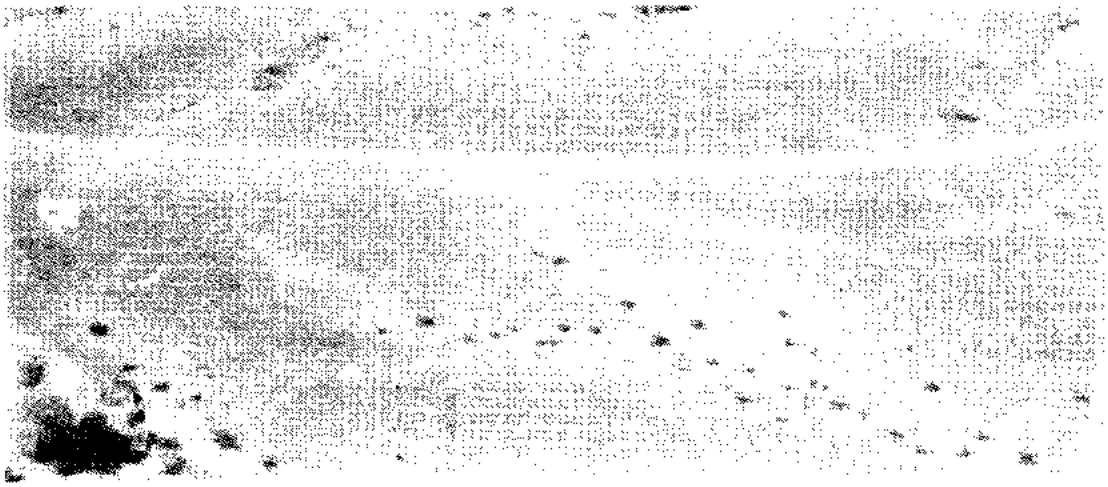

Fig. 30 Aerial Photo of the Mule Mountain Intaglios

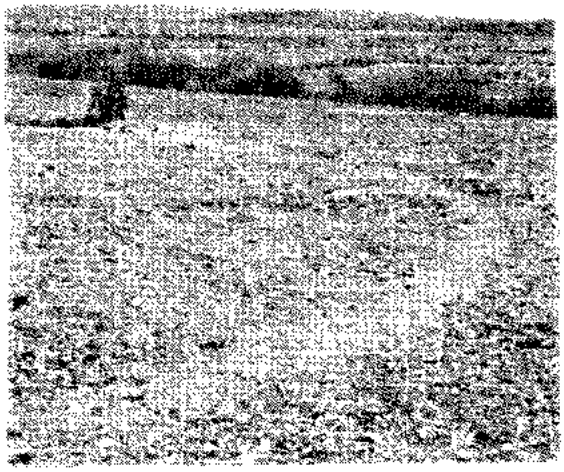

Fig. 31 Mule Mountain Circle

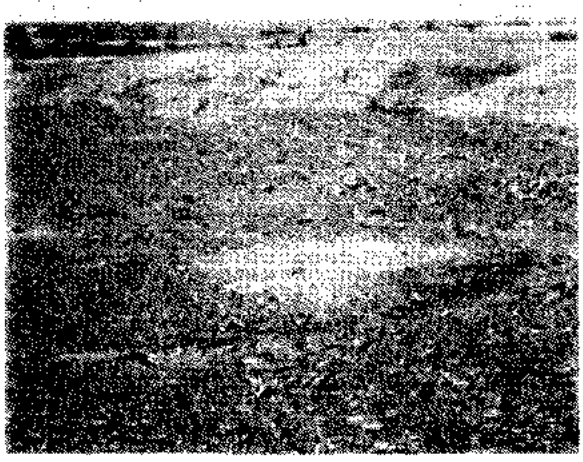

Fig. 32 Pilot Knob Dance Circle

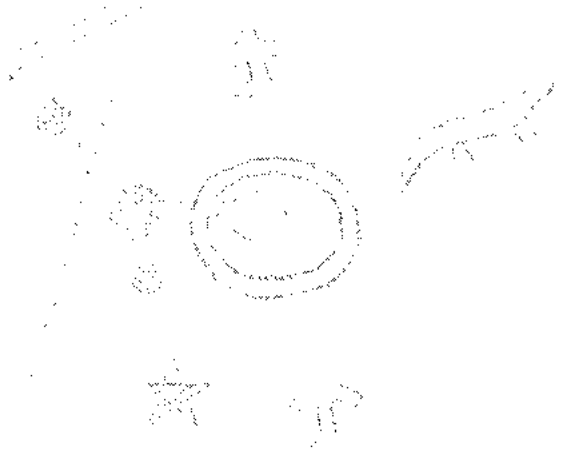

Fig. 33 Pilot Knob Drawing

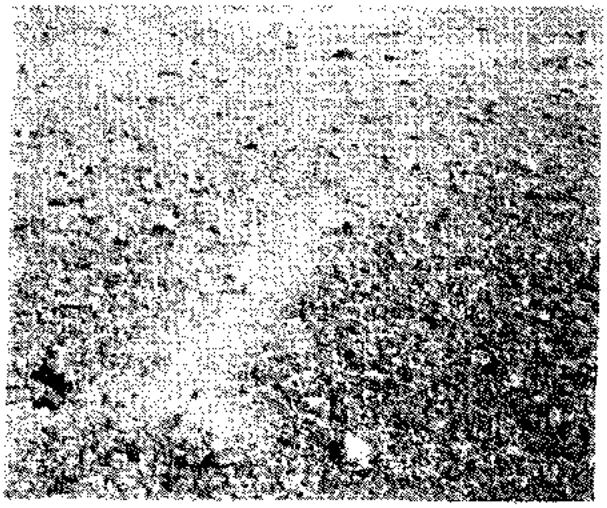

Fig. 34 Pilot Knob Figure

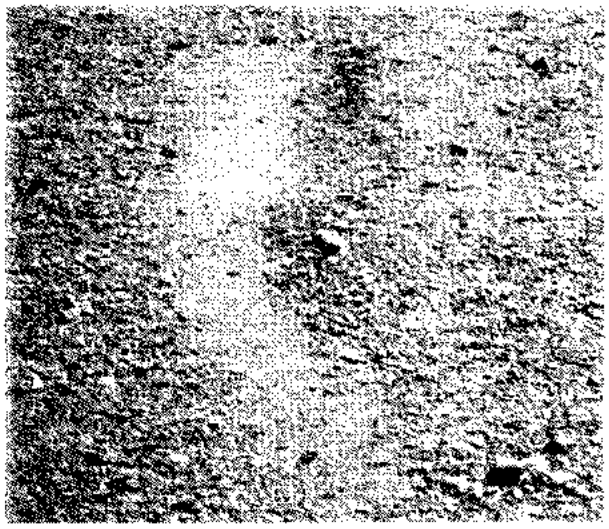

Fig. 35 Pilot Knob Lizard

Fig. 36 Pilot Knob Star

Fig. 37 Petroglyphs at Pilot Knob along the Xaw Kwatcan Trail

Acknowledgments: While I am indebted to many persons for insights and sites mentioned in this paper, several deserve special recognition and appreciation. Nancy R. Weir, President of the Southern Nevada Rock Art Enthusiasts, arranged for me to visit the Cane Man Hill and Dancing Man sites in Esmeralda County, Nevada, where I photographed the Dancing Shaman. Kirk Neilson, whom I regard to be a Utah National Treasure, sent me pictures of dancing figures in Utah, and was a major inspiration. Boma Johnson, who was Cultural Resources Specialist for the Yuma office of the Bureau of Land Management until his retirement to Ivins, Utah, took me to the Pilot Knob Intaglio and Dancing Circle Site, and three other intaglio sites north of Winterhaven, for which I am indeed grateful. Also I must thank Isaac C. Eastvold, who in recent years has been president of Friends of the Albuquerque Petroglyphs, but who in 1979, during an Adult Extension Course he taught at the University of California at Riverside, gave me a copy of the 1889 article in the *Journal of American Folk-Lore* by John Bourke, describing how his Mojave informant Merryman took him to the Creation Dance Circle known now as Bourke's Intaglio, or the Merryman Circular Pathway. Finding and photographing this site was one of the exciting adventures leading ultimately to the decision to prepare this paper.

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Katsinas Come to Kohta Circus

Eileen Green and Elaine Holmes

We will be known forever by the tracks we leave—Dakota proverb (Zona 1994).

Dawn's rays brighten the cliff face and then move downward to warm panels of etched shapes on patinated sandstone: strange shapes, shapes foreign yet familiar, some of which are unique in southern Nevada. These panels (Figure 1), discovered in June of 1998, are undoubtedly the most important assemblage of petroglyphs found in the southern part of the state since the panels were found nearby in Valley of Fire, now a state park.

Located in a natural, large depression reminiscent of an amphitheater, seven of the eight panels face due east. The Virgin peaks dominate the northern landscape of the Moapa Valley, adjoining the Muddy Mountains and Virgin piedmont archaeological area.

Named Kohta Circus by discoverer Bob Ashbaugh for the profusion of zoomorphs, the largest of the eight panels here is 22.5 m (75 ft.) long, and reflects mainly Puebloan influence. These panels, in particular the highest panel (approximately 10 m above ground level), are the subject of this paper.

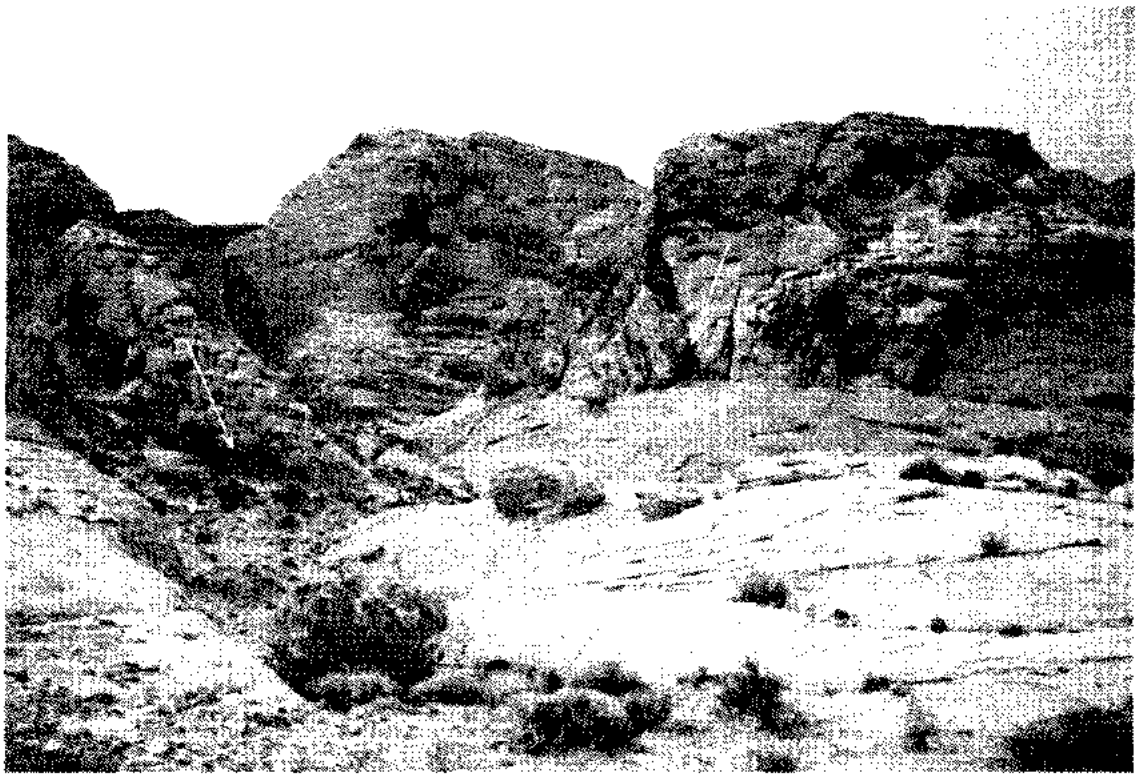
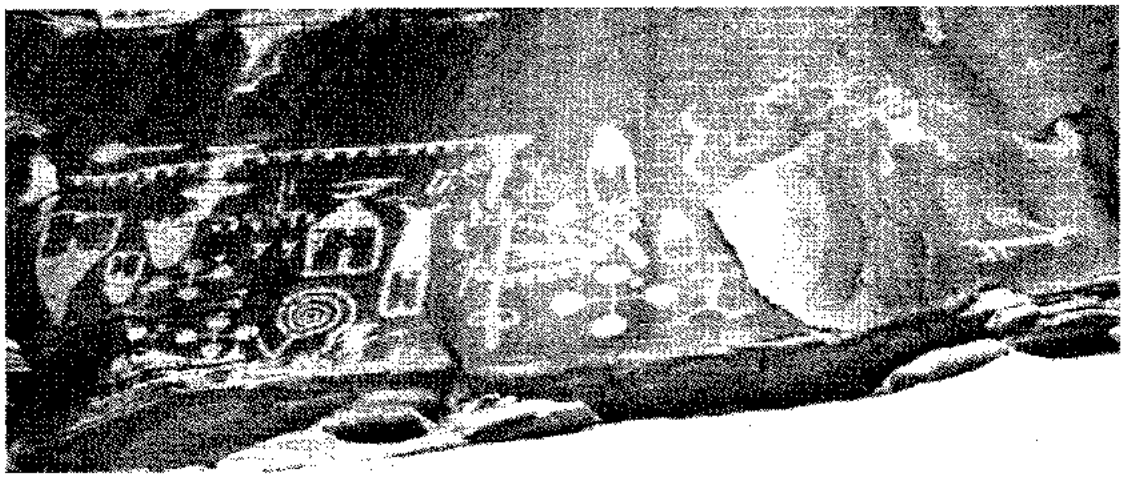


Figure 1. Overview of Kohta circus. Arrows indicate long and high panels.



The pristine quality of this high panel is what first attracts the eye (Figure 2, above). It's as if fine craftsmen selected the perfect surface and then carefully displayed their talents. Although there is light repatination, the elements have been kind; these glyphs appear as if they were chiseled yesterday. The puzzle of this high panel, indeed several of the panels, is that many of these glyphs are absolutely unique to this area.

The red sandstone, the high, signaling panels, the natural enclosed plaza with twisting, turning entrances, fill us with a sense of awe and drama. Ritual, ceremony, dances—something has been going on here.

When regarding the esoteric katsina ceremonies, one usually envisions the Pueblos of New Mexico or the Hopi of Arizona's mesas. What is the relationship of a rock art site in southern Nevada to such faraway places? There are parallels, the first being the archeological connection and the second the rock art links to the Four Corners area.

Archeological and Rock Art Connections

Prehistorically, as now, the southern Nevada area served as a locus for a melange of people. Located along a major trail (Brykit 1995:12; Hughes and Bennyhoff 1983:239) connecting the seacoast with the Arizona Strip, the Pueblo Grande de Nevada in Nevada's Moapa Valley offered more than respite to weary travelers. Inhabited from circa 300 BC to AD 1150, the Lost City was located at the confluence of the Virgin, Muddy, and Colorado Rivers and provided a natural trail stop. It was a large complex, and the westernmost Puebloan settlement with architecture (Amsden 1949:115; Harrington 1937:10; Shutler 1961; Soule 1975:8).

Archeological evidence (Harrington 1937:14, 15) shows extensive mining of large deposits of almost pure salt in hillside caverns. According to Harrington, turquoise and paints were also mined. Also available in the area were quantities of agave (as attested to by many large roasting pits), mesquite, yucca, piñon, gypsum, chert, quartzite, and feathers, all of which could have been easily added to traders' packs. According to Green (1987:180), "Implications for a route connecting this area to other Puebloan regions can be drawn from three types of data: 1) the rock art exhibits strong affiliations with image types distributed across the area between Lost City and the Four Corners; 2) pottery from the eastern Virgin Kayenta is present in the site area; 3) historic wagon

Figure 3. One of the recumbent flute players at Kohta circus.

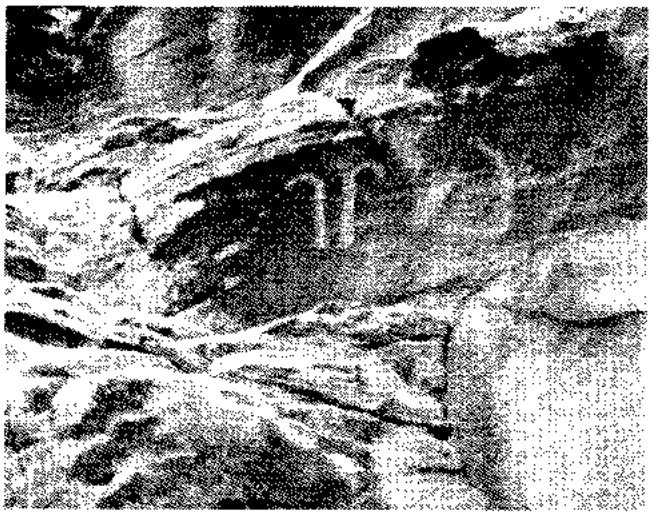
Figure 4. The birds of Kohta circus.

roads followed what was probably an aboriginal trail from the lower Moapa Valley to mines and ranches in the Arizona Strip via Mud Wash." In addition, marine shell has been recovered from many small sites, showing contact with coastal resources (Harrington 1937:16, 17).

The extensive rock art in sites occurring in the adjacent Valley of Fire State Park and on the Virgin piedmont is predominantly Puebloan in character. Petroglyphs and a few faded pictographs depict many of the images illustrated to define Puebloan affiliations with the Four Corners area. For instance, the recumbent flute players (Figure 3) on both the long and the high panel at Kohta Circus can be traced to northeastern Arizona by Turner (1971:Figure 94) and McCreery and Malotki (1994:172, 173). Wellmann (1979:89) states that recumbent, stick figure, non-phallic flute players are consistent with the those found in Tsegi Canyon, Arizona, which he credits Schaafsma as classifying in the Tsegi Phase—the last fifty years of PIII (AD 1100–1300). A number of small, well-executed figures, particularly birds (Figure 4), are also well illustrated in McCreery and Malotki (1994:77–80). A ladder (Figure 5) on one of the high panels is replicated in Turner (1971:Figure 93). Similar ladders also appear at Palatki Ruin, Arizona, and Sand Island, Utah. The petroglyphs of what are apparently crooks (Figure 6), found in three places at Kohta Circus,

Figure 5. Ladder at Kohta Circus.

Figure 6. Crooks at Kohta Circus.



may be representations of paraphernalia on ceremonial altars, as depicted by Fewkes (1986:274, 283). However, it is with the unique symbols on these panels that we mainly concern ourselves.

The Katsina Connection

The orientation of seven of the eight panels at Kohta Circus is due east. North is easily identified by a natural split in a fallen boulder and, on the long rock art panel, there is a V-wedge of small, bird-like figures seemingly migrating directly north. This was our first indicator of seasonal affiliation. According to Renaud (1948:18), the flute player which occurs on both long and high panels also heralds the spring rites of fertility. Repeated at least 14 times on several panels is the figure we labeled with the inelegant sobriquet of conehead (Figure 7, below). This figure, we theorize, is a representation of a katsina mask.

Green (1987:189) states that spiritual intentions may be implied by rock art because rock art can be a tool for expressing ideology. Schaafsma (1980:10) concurs that interpreting rock art ethnographically is acceptable because proof of katsinas is through the ethnographic record. Adams (1991:17) declares, "If the depiction [of a mask] is not portable, such as rock art or kiva murals, then the argument for presence of the [katsina] cult is considerably strengthened." Cole (1992:23) states, "It is the katsina masks that most obviously and specifically characterize and symbolize katsinas and the katsina cult; the masks and their pictorial representations are definitive examples of katsina iconography. An effective and conclusive method for distinguishing mask-katsina representations is to isolate examples that are identified as such in the ethnographic record and those that are in association with katsina cult ceremonial paraphernalia."

As will be documented in the following pages, the ethnographic record shows that cone-shaped headdresses are such unique ceremonial paraphernalia that the ancients who were acquainted with Puebloan cosmology would have had little trouble identifying the headdresses as part of the ceremonial costume of one of three deities or katsinas:

- one of the Twin War Gods;
- Sotuknang, creator of the fourth world of the Hopis; or
- Aholi, lieutenant of Eototo, chief of all the katsinas.

The Twin War Gods

Vivian (1994:88, 89) identifies the painted figure at Pottery Mound in kiva 8 as one of the Twin War Gods because of the conical cap. Smith (1952:302) also links the Jeddito mural figures and the Twin War Gods "mainly on the basis of the black faces and conical white caps that seem to be (plate 9) characteristic of the latter, at least at Walpi." He also states that a Hopi informant regarded "the cap as characteristic ...'for a War god'." Adams (1991:26) states, "... many of the masked figures and anthropomorphs in the Mimbres area also have pointed head-dresses or heads....

These generally resemble the major, and perhaps early, deities of the Pueblos and some priestly katsinas. Best known and pan-Pueblo are the war gods."

Sotuknang

The case for Sotuknang is harder to document, perhaps because of his close association with Quetzalcoatl. Or perhaps, because of his antiquity and accoutrements, the characteristics of other, later katsinas are often overlaid on him, even those of the Twin War Gods and Aholi.

Colton and Simpson make it clear that Sotuknang started, at least, as a deity not a katsina. Colton (1959:78) says he is "the god of the sky, the clouds, and the rain, is good, dignified and powerful... When masked the impersonator wears a white case mask with one horn or a high, peaked headdress or hat." Simpson (1953:16, 18) discloses, "There are seven principal deities in Hopi religion: (1) Co-tuk-inumg-wu was the all powerful one who created the earth.... Originally, only the gods or ancient beings were represented by kachinas, but now the term is applied more generally to all occupants of the great spirit world...." Waters (1977:20) refers to Sotuknang as the creator of the sequential four worlds of the Hopi and as the destroyer of three of those worlds. Patterson (1992:74) shows two masks and one kiva mural with a conical hat. He says, "Sotuqnang-u, a deity, not a kachina; horn on top of head, cloud symbols under eyes also high conical mask painted white."

Several ancient deities such as the War Gods, earth and sky deities, the horned serpent, and others are recognizable in the fifteenth and sixteenth century kiva murals "...and apparently are the oldest, and are often the simplest in appearance. Perhaps the simple round-headed or cone-headed figures in Mimbres iconography are these priestly katsinas...," Adams (1991:94) explains.

Most of these *mong*, or chief, katsinas have counterparts in Mesoamerica. One of the offshoots of Quetzalcoatl. "Ehecatl was a kingly fertility spirit who concerned himself with life-giving water, like the Hopi Sky God, Sotuqnang-u, who still wears the latter's high, cone-shaped Huastecan hat....", according to Di Peso (1974:553). Young (1994:114) states "Polly Schaafsma (1975) documented similar Quetzalcoatl-like figures with conical caps in Jornada style rock art at Hueco Tanks State Park, Texas.... These figures are associated with cloud and water symbolism as are the Hopi and Zuni Twin War Gods and the Hopi deity Sotuknangu." Young (1994:115) further elaborates, "Quetzalcoatl may also be linked to the Hopi deity Sotuknangu, 'god of the sky, the clouds, and the rain.'" She says he is personated only occasionally and his white mask is topped with one vertical horn.

Aholi

The katsina Aholi (Figure 8, right), principal lieutenant to Eototo, chief of all the katsinas, makes his appearance at Powamu, or the Bean Dance. Waters (1977:180) describes Aholi, who walks a step behind Eototo, as wearing "one of the most unusual of all kachina masks. It consists of a tall conical or funnel-shaped head mask with shoulder cape fastened in front

and hanging down to his knees behind. Both are made of buckskin splotched with variegated colors." Dockstader (1985:49) suggests a Jeddito figure may be the Ahola kachina, who wears a conical cap and painted skin robe. [Note that Ahola according to Colton (1959:20) is different from Aholi. Ahola is the "germ god kachina." However, the accompanying description matches the characteristics of Aholi.] Adams (1991:26) also says, "Ewototo's lieutenant, Ahooli, had a pointed head." Understanding of the association of Aholi and Eototo to the Powamu spring fertility ceremony is critical.

Figure 9, Eototo. Sekakuku 1995:9

Powamu

Breunig and Lomatuway'ma (1992:5, 7) state, "In the lunar month of Powamuya (February), a major ceremony emphasizing the concept of germination takes place before fields are cleared and readied for planting. The Powamuy Ceremony, also known as the Bean Dance, is a sixteen-day ceremony that features the forced growth of bean sprouts in the warm atmosphere of the kiva. These sprouts foretell the coming growth of the crops." According to Waters (1950:301), "The Powamu ceremonial is popularly called the Coming In of the Kachinas. Another common name for it is the Bean Planting Ceremony. Powamu means simply 'put in order,' and this is what it is—a ceremonial for exorcising the cold and wind of winter, for cleansing the fields for spring planting, obtaining crop omens from beans, initiating children (every four years), and curing the people of rheumatism. To put all these things in order the kachinas come back from their home...."

Besides the nurture of the ceremonially important bean plants, Vivian (1994:85, 86), describing this ceremony as a welcoming back of the katsinas, further states most of the katsinas appear at Powamu "including Eototo, the chief and his assistant Ahola."

A livelier, more philosophical description is added by Waters (1977:180, 181), "After finishing his call, Aholi turns completely around once to the left, stomping his right foot and the butt of his staff upon the ground seven times, once for each of the seven successive worlds in the universe.... To complete their rituals, Eototo and Aholi go to the Tipkyavi (Womb), the open plaza in front of the Snake Kiva, and stop in front of *sipápuni*, the small hole representing the place of Emergence from the underworld. Eototo with cornmeal successively marks lines from it to the west, south, east, and north. Both Eototo and Aholi then pour a little water into the *sipápuni* from the water jars on the *mongkos*, thus purifying as well man's routes of Emergence between all his successive stages of evolutionary existence. They then go to the Powamu Kiva, where the Powamu Chief blesses them by blowing smoke from his pipe over them, and return to the One Horn Kiva."

Conclusions

Our preference of the three choices (the Twin War Gods, Sotuknang, Aholi) for identification of the glyph we've called the conehead is the katsina Aholi. There are several reasons for this. The flute player and the wedge of birds flying north are indicators of spring. Powamu is a spring fertility

rite. The katsinas affiliated with that important ceremony are Aholi and Eototo. Aholi is the only one of the three linked with a spring katsina ceremony. There are other indications that these may be katsinas and not deities.

Looking at the configuration of the conehead itself gives us a clue to which being this is. Part of what makes this glyph so recognizable is the lower portion shaped like the letter "H." Fewkes (1990:295) states, "The one garment worn by the male Katchinas is the ceremonial kilt .... Every male Katchina, what ever his helmet, has one about his loins. It is made of coarse cotton, on the ends of which are embroidered symbolic figures of rain-clouds, falling rain, and lightning...the lower edge is black, with nine square blocks of the same color at regular intervals."

Roediger (1191:116) concurs, saying the kilt is the "most characteristic ceremonial garment." She describes it much the same, with "A band of black about an inch wide is often embroidered or crocheted around the bottom of the kilt with small black squares...breaking into the white body at intervals above the lower border." We postulate the H part of this key glyph may be the kilt, and the conehead part a mask, thereby making this a katsina ceremonial site.

Adams (1991:17) lends support to this hypothesis by stating, "(1) that the katsina cult is a recognizable entity in the archaeological record, and (2) that the katsina mask is an undeniable indicator of the existence of the cult." Cole (1992:20) has examined specific elements of katsina design and has concluded that the mask is the only reliable indicator of the presence of katsina ceremonials.

A meddlesome question intrudes: if Eototo (Figure 9) is so important to the Powamu ceremony, being called father of the katsinas, the one who knows all the ceremonies, controller of the seasons and husband of Hahai-I Wuhti, the mother of katsinas (Young 1994: 116, 117), why is he not represented with a glyph? There may be two reasons for this:

(1) some of the oldest, most venerated katsinas, even today, are not represented visually or kinesthetically (dolls) out of respect, and

(2) Eototo's mask is very nondescript, as befits an older, simpler deity. It is a white leather case-mask of the helmet type with circles for mouth and eyes (also according to Young). This mask would be difficult to make an outstanding feature of a petroglyph panel—not so Aholi's.

Besides, Eototo may be represented on the high panel, with a bearpaw glyph (see Figure 2). Eototo, according to Waters (1977:84, 85), is the deity of the Bear Clan.

Rock art can be interpreted as serving many different functions. Certain petroglyphs are reminiscent of maps, travel routes, celestial happenings, secret initiations, ceremonialism, and perhaps the old stand-by, hunting magic. How is it possible to differentiate one aspect of rock art from another?

One feasible answer is context. Krause (1995:11) makes the point that in modern society, art can be placed anywhere without changing the significance of the art, but "rock art is meaningfully related to its location and cannot be considered separate from its surroundings."

Incorporating panels within a site complex also implies different meaning than would a single panel, a single element. Krause (1995:19) maintains, "Redefining natural space by cultural means transforms it into social areas which becomes emotionally significant through repetitive use over time and adds a transcendent element to natural surroundings—the landscape becomes permeated with meaning and is not simply a source of provision."

The location and environment of the Kohta Circus site is a clue to which form of rock art these

petroglyphs represent. The highest panel, with a bear paw and six Aholi glyphs, stands out as the attractor to the area. Sloping downward from it are several other panels and shortly, across a maze-like aisle, we come to the Circus panel itself. All panels abut a natural amphitheater, or plaza, containing concealed passageways that could be utilized for dramatic entrances or exits.

We traveled a four-state area seeking petroglyphs that resemble the katsina figure. We have not yet been able to find any. The combination of archaeological and rock art connections, the ethnographic evidence, the seasonal glyphs of flute players and migrating birds, and the natural theatric setting lead us to conclude Powamu rites, attended by Eototo and Aholi, were conducted at Kohta Circus.

Acknowledgments. Many thanks to Society of Nevada Rock Art Enthusiasts (SNRAE) members Anne McConnell and Jack Holmes for their sharp eyes and editorial comments, Larry Benham for his great photography, and to Bob Ashbaugh for "rediscovering" Kohta Circus. All photos Larry Benham except Figure 3, Eileen Green, Figure 8, Museum of Northern Arizona Archives E688, and Figure 9, Northland Publishing; used with permission.

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Enigmatic Crescents in the Rock Art of Desert Mountain, Utah

Alex Patterson

Why should human-like figures be carrying or displaying crescents in the rock art of Desert Mountain, a small site north of Delta, Utah? We visited this site during the URARA symposium of September, 1998, and were intrigued.

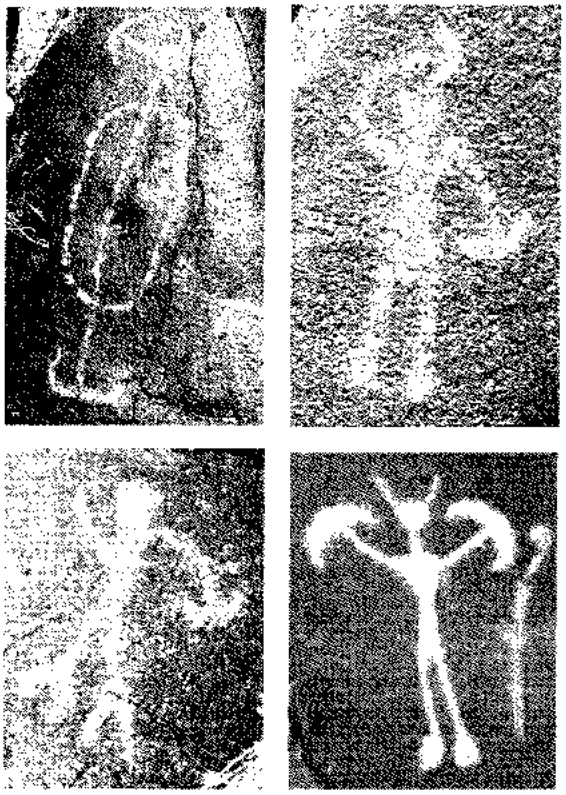
Objects carried in the hands of rock art figures often turn up in the archeological record. Here on the edge of the Great Basin was a mystery that may have a logical answer. We will propose one herein.

The main Desert Mountain site is east-facing. with about 50 glyphs scattered over an outcropping of rocks halfway up the slope of the moutnain.

Several anthropomorphs have one or two crescents in hand. A bisected ellipse (a vulva sign?) displays a small head with crescents attached left and right (see figures below).

Also found was a being with three-fingered hands and a small crescent head. A coyote and a mountain sheep were among other glyphs (see next page).

In previous research into Great Basin archeology we had come across the phrase "enigmatic crescents" used to describe crescentic stone artifacts.

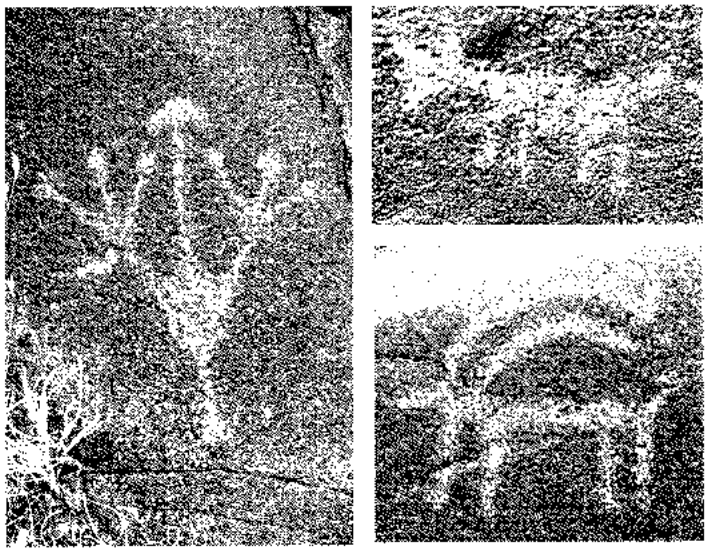


Left: Petroglyphs at Desert Mountain, Utah. Crescents are attached at left and right of head of vulva figure, other anthropomorphs have handheld crescents. Photos by the author.

For example, the Fowlers in *A History of Wetlands Anthropology in the Great Basin* stated in 1990:

"Systematic study of Great Basin Pluvial-age sites began in 1920 with Malcom Rogers' work on the lower Colorado River terraces (of southern California). ...Rogers found ancient appearing lithic assemblages. Among the tool types were...enigmatic crescents." (Fowler and Fowler 1990:7).

While the above-mentioned sites were in southern California and the Desert Mountain site is in western Utah, they are both in the Great Basin (see map on next page). Researchers seem to agree that a similar lifestyle prevailed throughout the Great Basin in ancient times.



Left: Figures at Desert Mountain. Three-fingered hands on a being with a crescent head; coyote; mountain sheep. Photos by the author.

These "enigmatic crescents" were small flaked tools, about an inch in length, often composed of obsidian.

Rogers described them as "crescentic stones which have been skillfully pressure-flaked on both faces. In several specimens there are two short, purposefully fashioned projections on the outer arc, spaced so as to break the arc in thirds." He originally described these crescents as "scarifiers." Later he decided they were representations of animals and were used as hunting amulets. (See opposite page for crescents from Rogers 1939:36.)

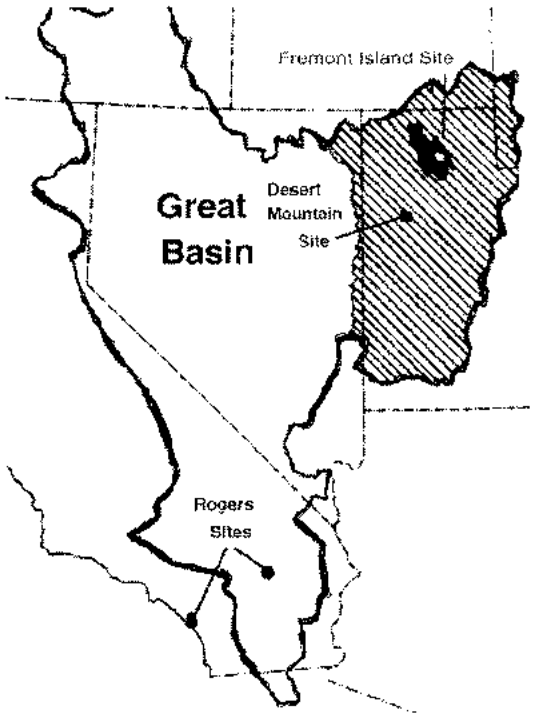
Our research turned up an obsidian tool of crescent shape found on Fremont Island in the Great Salt Lake, in Jennings' 1978 *Prehistory of Utah and the Eastern Great Basin*. Rudy and Stoddard found this obsidian crescent on the island. As there are no known sites of obsidian on Fremont Island this tool was therefore imported. (See illustration opposite.)

Since there are obsidian quarries south of Delta (Jesse Warner, personal communication), did this object travel north via Desert Mountain to Fremont Island in the Great Salt Lake?

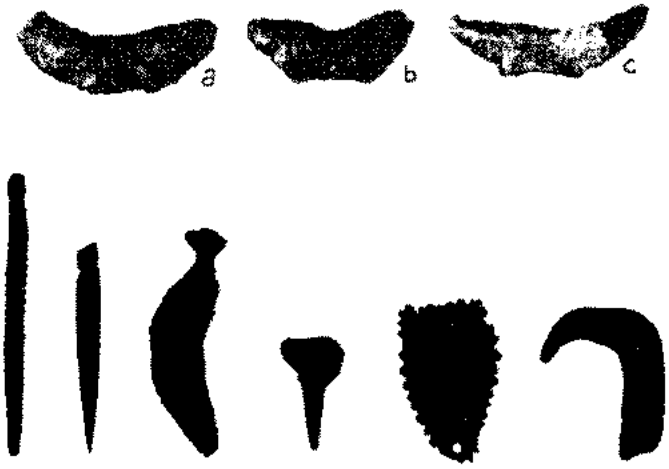
What could this crescent object be used for? Baskets were important to the Great Basin people, especially the Paiutes. The women were great basket weavers. They, not the men, carried the family's possessions in their baskets, moving from one food resource to another with the change of seasons. The Paiute woman (opposite) in the 1870s, girded with baskets from head to toe, typifies their lifeway (Jennings 1978:236).

We decided to research basket weaving in the Great Basin to see if the crescent might have played some role. (Also see Appendix 1.)

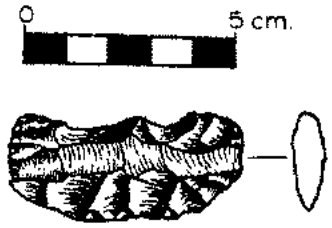
Our research located the book pictured on p. 44, *Survival Arts of the Primitive Paiutes.*



Left, Map of Great Basin. Fremont Island, Desert Mountain, and Rogers' sites shown. (After Currey 1982:28.) (Shaded area is the Bonneville Basin subdivision of the Great Basin.)



Above, flaked tools found on Fremont Island in the Great Salt Lake, Utah. The middle two items are obsidian, not found on the island. Note the crescent shape of tool with knob, for suspension? (After Rudy and Stoddard 1954).



Above left, three crescents found by Malcolm Rogers, early 1920s, in the northcentral part of San Bernardino County, California (Rogers 1939). Above, right: a crescent he found at the Harris site, San Diego County, Calif.\ornia (Warren 1966).

written by anthropologist Margaret Wheat of Fallon, Nevada. Wheat found a Paiute woman, Wuzzie George, shown on the cover of Wheat's book (overleaf). Wuzzie knew the ways of the "Old People", the ancestors of the Paiute, and decided to tell Wheat about these ways before they were forgotten and lost forever.

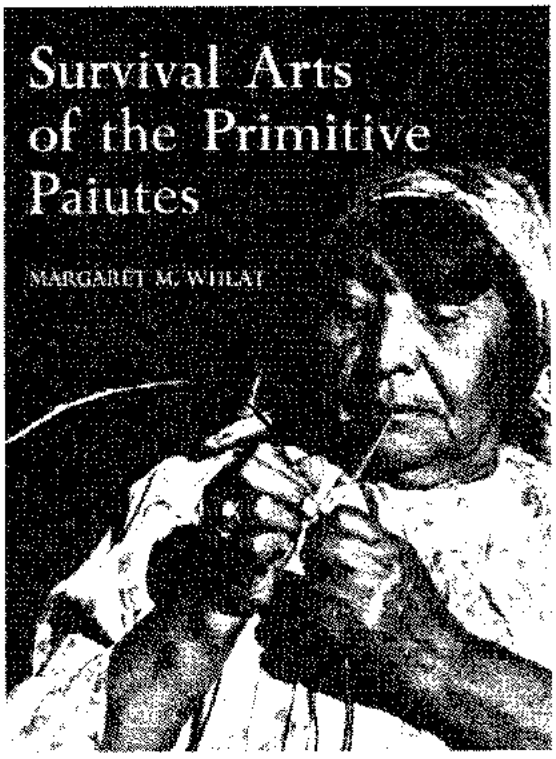
Wuzzie stressed that the willow basket was the Paiute woman's mainstay. Every woman carried bundles of long, slender willows that had been scraped white, and coils of willow sapwood. The former were the uprights (warp) and the latter were the cross-members (weft) of their baskets.

This sapwood had to be split in several strips as Wuzzie is doing (overleaf), so as to remove the useless pith within. Then the sapwood was coiled and dried.

The final step of preparing the weft (sapwood) was the removal of the bark and trimming. In the illustration on the next page Nina Dunn runs her index finger (wrapped in a bit of cloth) down the sapwood, to split away the bark. Then it had to be trimmed and loose fibers cut from its edges. It was in this final step before weaving that the crescents came into use.

"In the Old Days this (final trimming and removal of loose fibers) was done with little crescent-shaped bits of obsidian frequently seen in old campsites," according to Wuzzie George. She continues: "After the coming of the white man, the willows were...drawn through a hole in a tin can (for final trimming and removal of loose fibers)" (Wheat 1967:95).

There are probably several layers of significance to the crescents we see in the Desert Mountain rock art. Crescents as scrapers in weaving, a prime female activity, may be one. The crescent often symbolizes the moon and women in general, due to the similarity of the lunar month and the menstrual cycle. However, one cannot doubt the importance of women's work in the ancient lifeways of the Great Basin.



Above, Nina Dunn, using her finger wrapped in a piece of cloth, splits away the willow bark from the sapwood. Then the Old People of the Paiute used crescent-shaped bits of obsidian to make the weft ready for weaving into baskets. Left, Wuzzie George, Paiute main informant for Margaret Wheat in the Old Ways of her people, splits the willow sapwood into several pieces before coiling and drying.

Appendix 1: Sunshine Well sites, White Pine County, Nevada, 65 miles north of Ely, Nevada

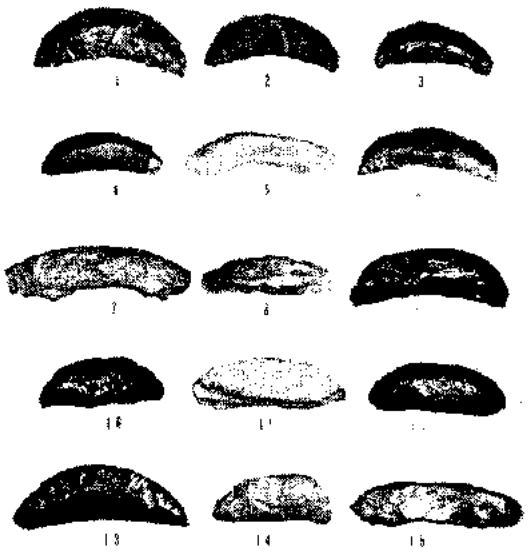
Subsequent research located an archeological area containing 120 crescents out of 1,500 artifacts recovered between 1972 and 1974 from sites near Sunshine Well, Long Valley, Nevada. Sunshine Well is about 150 miles to the west of the rock art site at Desert Mountain, Utah. These sites place artifacts called "crescents" nearer to the Desert Mountain rock art site with its figures holding what we claim are "crescents." The archeologist Hutchinson proposes that the "crescents" at Sunshine Well were part of a "woman's tool kit" used in making baskets.

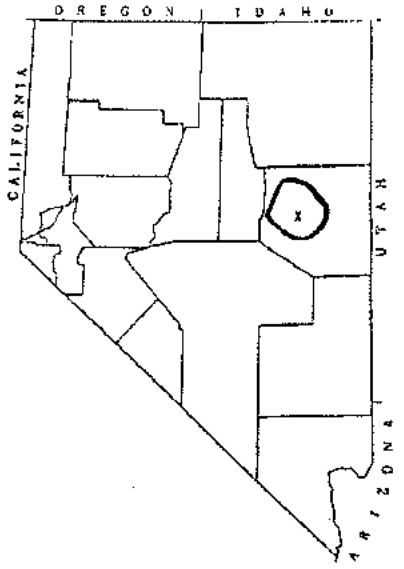
He describes the area:

> (The) area is located on the lowest strandline of Pleistocene Lake Hubbs, which was estimated to be 15 miles long and five miles wide to a depth of 30 feet between 5,000-9,000 years ago during its human occupation.
>
> It seems likely that (it) was often swamp-like, with miles of shallow ponds...The entire

valley was probably covered with grass. This would have provided a resource-rich environment which would have attracted early people to make repeated visits to the swamp and lake-like margins to procure mammals, fowl, fish, plant foods and fibers.

The location and concentration of crescents indicate that they were most likely water-connected tools...I believe that spurs, small gravers and crescents comprised a woman's tool kit for gathering grass, roots, and willows for twining and basketry.... The spurs ...would be ideal tools for stripping bark from willows and other similar woody plants. Some of these tools may have been made by the women to accomplish these tasks [Hutchinson 1988:316].





Above, left, types of 120 crescents recovered at Sunshine Well locality in surface finds, made of (in descending order of abundance) chert, jasper, chalcedony, obsidian, or crystal. Also found were projectile points, gravers, and miscellaneous artifacts (Hutchinson 1988: Figure 4).
Above, right, map of location of Sunshine Well in Long Valley, White Pine County, Nevada. It appears to be about 150 miles from the Desert Mountain rock art site in Utah (Hutchinson 1988: Figure 1).

Acknowledgments: Page 47, Paiute woman, H. K. Hillers, U. S. Geological Survey; Rogers photos courtesy of the San Diego Museum of Man. Page 48, permission granted by the University of Nevada Press, from *Survival Arts of the Primitive Paiutes* by Margaret M. Wheat, © 1967 by the University of Nevada Press. Page 49, Hutchinson photo and map courtesy of the Nevada State Museum.

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Ungainly Ghosts
Signs of a Northern Variant in the Barrier Canyon Style

David Sucec

In the northern reaches of the Barrier Canyon style area, more than a dozen Barrier Canyon style rock art sites contain one or two distinctive types of the spirit figure motif—here given the designation of Northern variant.

Uncharacteristic of the Barrier Canyon style, most of the Northern variant images are roughly-painted, inexact, and show a surprising variety of head and body forms. The most common spirit figure type is the figure indifferent to proportion, an "ungainly ghost", an image appearing to be "thrown" together from unscaled body parts. The other type, less common, is a banded figure with two or more alternating bands of red ochre and white paint, while the body-form is often closer to the classic Barrier Canyon style variants.

Some visual elements and motifs found in the Northern variant are seen occasionally in the imagery of the Fremont style in Utah and western Colorado. Mixed-style images are also found throughout the regions north and west of the Colorado River and may represent the cultural transition from the hunter-gatherer tradition to the agricultural lifeway (circa 100–600 CE in Utah)

Introduction

> Neither perception nor representation in a given medium is based on intellectual abstraction. Nothing but our particular one-sided tradition suggests that concepts are formed only by the intellect. All the cognitive instruments of the mind operate by grasping over-all features of a phenomenon or a group of phenomena through form patterns of a medium. The medium may consist of the stock of "perceptual categories" or the shape patterns of a means of representation or the abstractions of the intellect. The word "concept" refers to an operation that may occur in any kind of cognition: it does not reduce all cognition to intellectual processes. [Arnheim 1960:134]

On a pleasant autumn afternoon, returning to my car after a visit to the Great Gallery, I found myself with time to study the images at the Living Quarters site (Figures 2, 3) in Horseshoe Canyon. Thinking about the elegant and monumental Barrier Canyon style painted figures I had just seen at the Great Gallery (Figure 7), I wondered if the comparatively awkward and roughly-painted figures at the Living Quarters weren't the work of inexperienced artists, maybe teenagers or perhaps the last remnants of the general Barrier Canyon style where "quality control" was lacking (I was reminded of the clumsy images made during the last of the Roman empire and the early days of

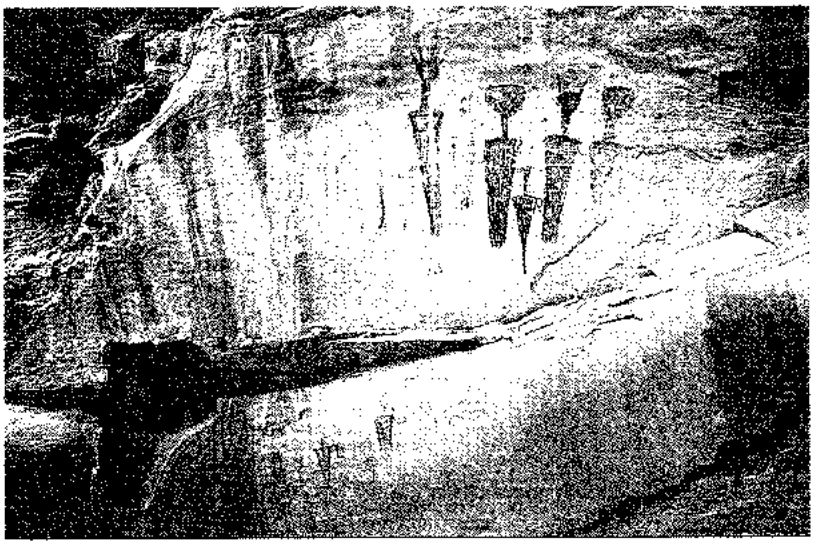


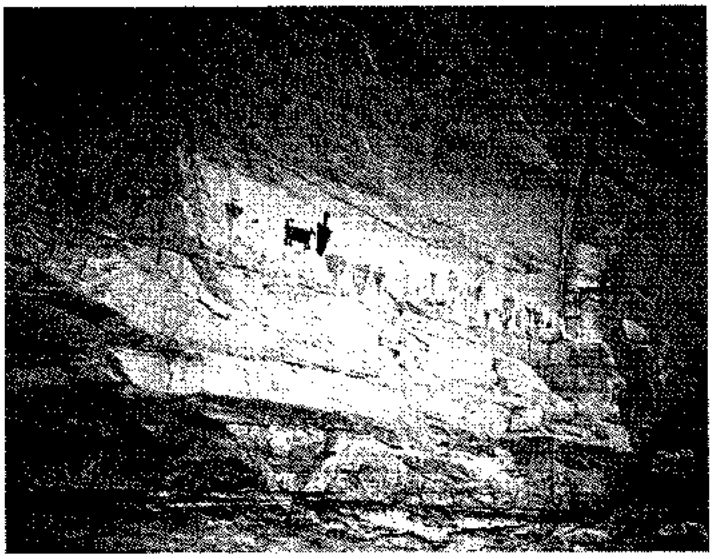
Figure 1. Carrot Man panel, Rangely area, northwestern Colorado. Northern variant spirit figures, probably late Barrier Canyon style, tallest figure about five feet high.

the Christian era).

Although I was unaware of it at the time, this was the first sign of the Northern variant of the Barrier Canyon style. And after several trips into the Book Cliffs, the Uintah Basin, and northwestern Colorado, I found that these image-types were more common in the northern region of the Barrier Canyon style.

About 50 miles south of the closest part of the Book Cliffs and 140 miles south and west of the northern clustering of Barrier Canyon style sites in Colorado (Fig. 17), the Living Quarters Panel represents one of the southernmost locations of the Northern variant type of images.

Figure 2. Northern variant images, Living Quarters, Horseshoe Canyon, Canyonlands National Park, Wayne County, Utah. BCS Project photograph by Craig Law.

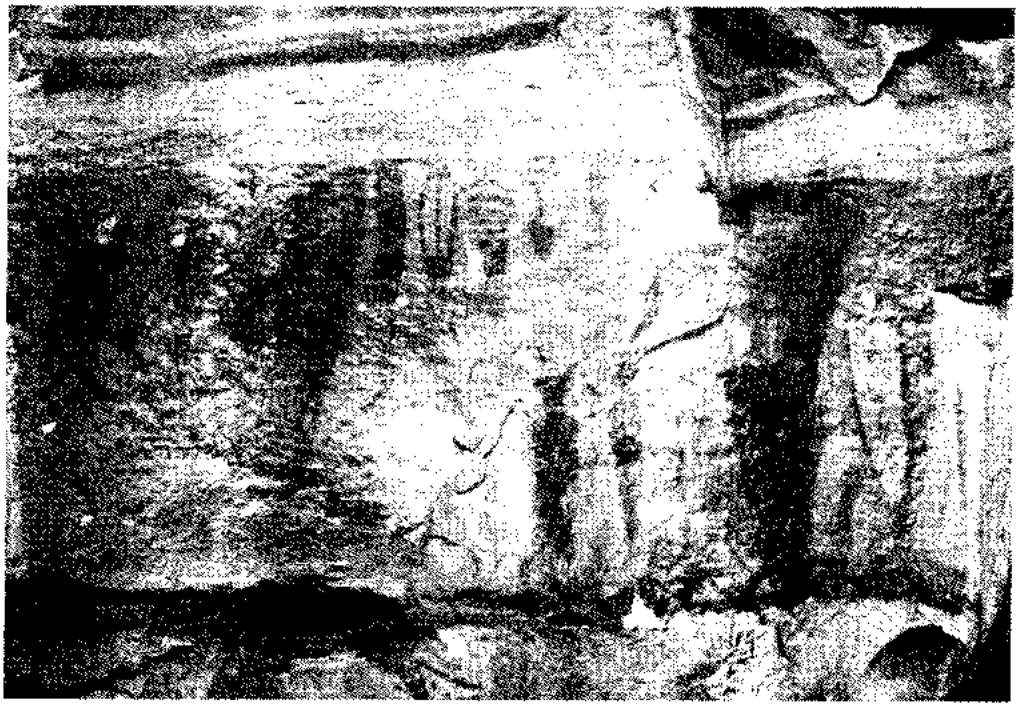


Northern Variant

More than anything else, what convinced me that these northern images could be a variant type was a visit to the Bitter Creek panels in the Uintah Basin—located just west of the Barrier Canyon style rock art sites in Colorado.

Right: Figure 3. Companion composition, Northern variant, Living Quarters, Canyonlands Naitonal Park. Tallest figure about three feet in height.

Below: Figure 4. Bitter Creek Main Panel, Uintah Basin, Uintah County, Utah. The most elegantly painted Northern variant rock art site. Tallest figure about four feet in height.



Of the 17 northern Barrier Canyon/Transitional style sites that I have viewed, the Bitter Creek Main Panel (Figure 4) is clearly the finest painted panel, and although much smaller in scale, it is the closest in quality to the important sites in the style's heartland (e.g., Great Gallery, Buckhorn Wash). At Bitter Creek I found both kinds of Northern variant images in the same panel, along with figures of the more classical (Great Gallery, Canyonlands) variants. And unpredictably, some of these "awkward" type figures were painted with an elegance and competency that I had not seen previously within the variant.

In an overview of the Main Panel images (Figure 4), some of the anthropomorphic figures at the bottom right half appear to be related to the banded figure type. The top line of figures has at least

one unscaled figure in the linear figures (top right and Figure 5), and the classical-form figures, of course, are found to the left of center. Most of the painted figures (both solid and linear images) across the top section of the Main Panel have, like the best of the classical-style variants, been painted with precision.

Apparently, the unscaled form-elements of the Northern type figures that I had seen elsewhere were not merely the results of the artists' indifference to form or proportion (while attempting to paint the classical variant forms) but rather represented, quite consistently, a distinctive set of iconographical forms—the Northern variant.

Unscaled Figures

In the Bitter Creek Main Panel, the three linear figures in Figure 5, the center figure with horizontal bars of dark (red) and light, the vertical-lined figure to its left, and the unscaled figure to its right, appear to have been painted by the same hand, perhaps even during the same episode of painting. All three of these images are very well made, but the horizontally barred figure, except for its modest size, is equal in design to most Barrier Canyon style images that I have seen, 214 sites at this writing.

The base or bottom forms of the linear figures are painted with similar exactness, but their forms suggest different functions. The tops of the two left, solidly colored, base shapes are flat or the center dips slightly downward to help shape and to fit the unpainted light forms above them, while in the right figure, the uppermost center of the lower shape curves upward to complete its shape (body) in front of the light field.

Seen in the indicated manner, the long vertical thick line can appear as a thin neck shape connecting the distant head and body forms. Unfortunately, a rifle shot has destroyed some vital visual information in the upper right side in the shoulder area of the base (body) shape, making it impossible to fully read the image.

The top of the unscaled figure's head form has also been lost through exfoliation of the rock surface, but this too-perfect, probably circular, head shape is certainly out of (classical) proportion with the image's other body parts.

The variant's greatest variety of shapes are found in its head/headress and neck motif-forms; there seems to be only slightly less variation in body forms, which are generally without appendages. And there is an indication that some Northern variant body forms may reflect, in particular areas, the local Barrier Canyon variant style of body forms.

Figure 5. Detail, Bitter Creek Panel, the long-necked figure is a Northern variant unscaled figure type. The top parts of some images are exfoliated; tallest linear figure is about two feet in height.

Carrot Man Panel

The major unscaled-figure panel, known locally as the Carrot Man Panel (Figures 1 and 6), is located in northwestern Colorado about 30 miles east of Bitter Creek. Unlike the Bitter Creek panel, at this site the Northern variant images appear more typically painted in imprecise arrangements of varied heads, headgear, neck shapes, and body forms. These elongated spirit figures are the tallest found at the Northern variant sites with a maximum of about five feet in height.

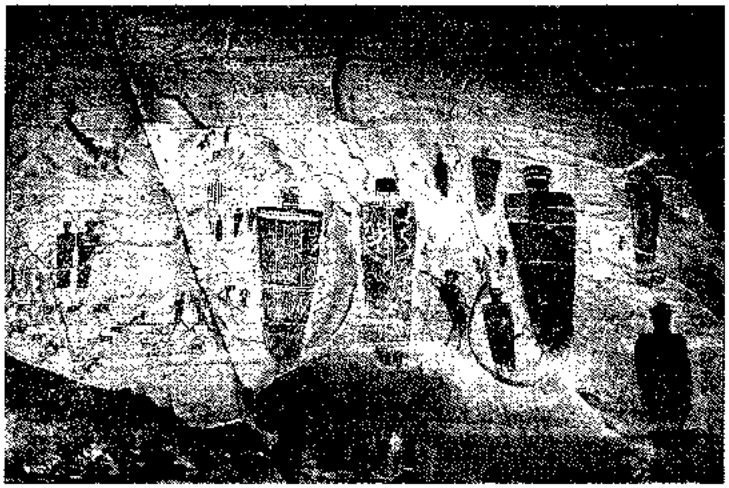
The forms of the bodies (Figure 6) are not new forms—they echo the shapes of figures identified with other variants. The tallest carrot-like figure, the second from the left with long lines extending from top of head, is similar to the type found at Courthouse Wash (Eastern variant). The two righthand figures appear to be two versions of the Great Gallery variant. Compare the left one with the large figures of Figure 7, and the right one with the two smaller spirit figures in the far left of Figure 7.

On the other hand, the smaller figure with the severely tapered torso at the bottom right center of Figure 6 is more similar to the San Rafael variant (e.g., Buckhorn Wash Panel).

Like the dark figure from the Living Quarters Panel (Figure 3), most of the Carrot Man figures have extended thin neck forms, and the connections of the necks to the bodies and heads are usually slightly off center. Although the forms are roughly bilaterally symmetrical, they lack the precision of shape and placement seen in the best of the classical variants, e.g., the large figure just left of the center in Figure 7, and those at Bitter Creek. And unlike what we see at the Great Gallery, the figures at the Carrot Man panel have some grossly oversized heads topped by a variety of headdress motifs.

The four tallest figures have orbicular heads. Two of the heads have exaggerated widths and white nubs, short perpendicular brush strokes, extending from their tops,

Above: Figure 6. Detail, Carrot Man Panel, northwestern Colorado. Unscaled figures, Northern variant. Tallest figure about five feet in height.



Below: Figure 7. Detail, Great Gallery, Canyonlands National Park. Classical Great Gallery variant figures. Monumental proportions, bilaterally symmetrical anthropomorphs of, apparently, different ages. Tallest figure more than five feet in height.

and the other two, at half their widths, have long lines extending from their tops. The two lines on the right figure's head appear to be the familiar antenna motif, but the large figure on the left has multiple lines extending, unlike any of the classical Barrier Canyon style variants. The faint smaller figure to the left of upper center has what appears to be large, banded ear forms, and the lower, sharply-tapered figure's head is barely wider than its neck form and has multiple extended brushed lines.

Figure 8. Detail, Bitter Creek Main Panel, Uintah Basin. Banded figure type, Northern variant. Tallest figure about 2.5 feet in height.

Banded Figure

The second, less common Northern variant form-type is the banded figure. The banded figure has alternating bands of red and white defining the body and head forms. At the Bitter Creek Main Panel (Figures 4 and 8), the white figure (far right) with an enclosing dark (red) contour line is one of the more elegantly executed banded figures. The two dark (red) figures on the left in Figure 8 have been partially contoured with a white line, but painted without the degree of skill exhibited in the far right figure. Commonly, the banded figure type is loosely painted and has a rough bilateral symmetry.

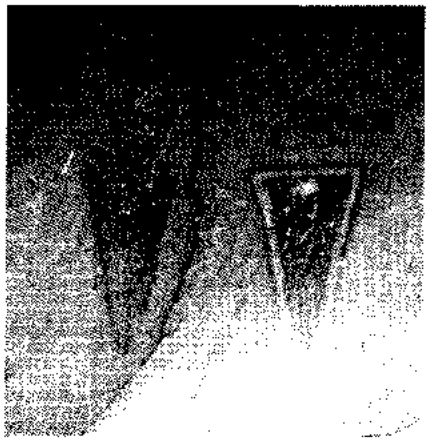
Although there is considerable variation of banding in the body and head forms, the head sizes tend to reflect the proportional (to body) ratios seen in the classical variants. The body forms are elongated and range to about four feet in height (Figures 8 and 9).

Painted Panel

A western Book Cliffs site, the Painted Panel (Figure 9) is the largest of the exclusively banded figure sites I have yet visited. Here the images were painted quickly, applying the two colors while they were still wet, resulting in some bleeding and blending of color.

The lower-center figure with interior vertical design in dark (red) and white paint has classical proportions, albeit inexact. One Painted Panel figure, at the far left top, even has a classical head/neck motif, complete with an arc painted over its head. The top right figure with red and white, nested V forms, has an undulating snake form attached to its right shoulder. This figure form-type is similar to the Carrot Man Panel's sharply tapered figure but without the multiple linear forms extending from its head. This V type of figure is common to both figure forms of the Northern variant and seems to be found throughout the Barrier Canyon style area, including a large figure at the Courthouse Wash Panel about 45 miles southeast near Moab (also two light-colored figures in Figures 2 and 3).

A finely painted figure with banded figure characteristics (Figure 10) is found much further south in the eastern Canyonlands area. Well designed and monumentally proportioned (small head and



Left: Figure 9. Banded figures, Book Cliffs, Western section. Northern variant, tallest figure about three feet in height.
Top center: Figure 10. Banded figure (?), Eastern Canyon-lands, figure is about two feet in height.
Top right: Figure 11. Banded figure (?) on right, Sego Canyon East Panel, figure on right about 2.5 feet in height.

large body), it reflects the body type of the local classical (Canyonlands) variant. Another interesting banded spirit figure is found at the Book Cliffs' Sego (Thompson) Canyon site. This image has been well designed, and painted with consideration and skill (compared to the Painted Panel, Figure 9, about 30 miles west). Although commonly identified as Fremont, the Sego banded figure has some obvious Barrier Canyon style characteristics.

Sego Canyon Site

Utah's most important multi-styled rock art site, the Sego site and area, contains painted and pecked images from the Barrier Canyon, Fremont, Ute, and early European-American styles. Each style (with the exception of the Euro-American) seems to have several episodes of image making, and there are a few superimpositions of images. However, as in many Utah rock art sites, some of the prehistoric images do not seem to fall neatly into any of the recognized style-types; rather, they appear to have form-elements of two or more styles (Barrier Canyon and Fremont in particular) as, apparently, does the Sego banded figure (Figure 11).

The body form of the Sego banded figure can certainly be found in many Barrier Canyon style sites. It is consistent with the San Rafael variant figure (concave sides) and though not as close a fit, with the Canyonlands variant (similar height but fuller convex body). Although the bucket-shaped head form has been generally identified as a diagnostic Fremont element, there are many (earlier) examples of this head form in the Barrier Canyon style as well (Figures 7 far right, 8 second from left, 15, 16 f and i).

Comparing the Sego banded figure in the East Panel (Figure 11) with the pecked and abraded Fremont images in the South Panel (Figure 12), we find the similar bucket form head, with extended banded (feather?) form-motif and a similar, although more severely tapered and concave, upper

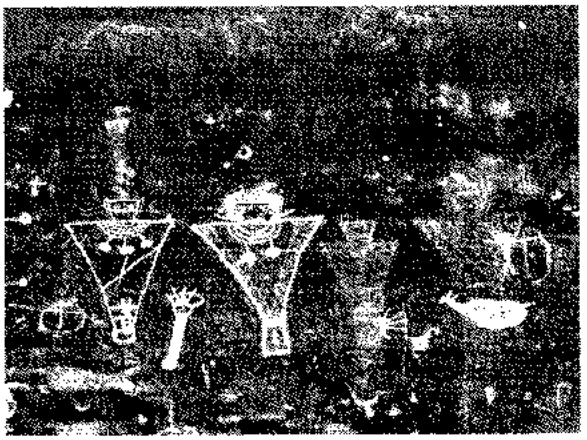
body form.

However, and typically for the Fremont style, the base forms of the pecked figures do not symmetrically taper to a point or truncated base, as seen in the Barrier Canyon style figures. The sides of the Fremont bases begin to parallel each other or flare out slightly (Figures 12, 13, 16-l). The pecked figures of the South Panel also have other distinctive Fremont style elements not seen in the banded figure or in the Barrier Canyon image inventory, including two figures with elaborate necklace and slit eye motifs, and two with diagonal lines that cross the body.

The Sego banded figure body form is clearly much closer to the Barrier Canyon body type. The tapered base form, banded design, bucket-shaped head form, horizontal head line, and the clavicle/shoulder line (Figures 10, 11 both figures, 14 first and third figures from left) are all found in the (earlier) Barrier Canyon style.

Evidently, the banded figure (Figure 11) at Sego is mostly Barrier Canyon—certainly well within the range of variation that is characteristic of the style. Yet because some Fremont visual elements (particularly the single, banded head-extension form) are also present, I began to think that the Sego banded figure (and some of the mixed style images) may well have been painted within the period of stylistic transition—between the making of the distinctive Sego Barrier Canyon style images and the subsequent pecking of the site's typical Fremont figures. Not unexpectedly, I suppose, I have come to use the designation of transitional style when referring to this type of mixed style image.

"Ethnographic research...suggests that ethnospecific material remains may be the result of culturally determined behavior at the level of basic motor habits in artifact fabrication or the basic component properties of form such as symmetry... Patterns that arise from enculturation (cultural traditions) have been dismissed as nonexplanations, yet they provide the raw material for ethnic differentiation and clearly serve to track the history of enculturation" (Geib 1996:109).



Above: Figure 12. Section of the South Panel, Sego Canyon, Book Cliffs. Pecked Fremont figures are superimposing faint Barrier Canyon style spirit figures at the top. Fremont figures are three feet in height.

Below: Figure 13. Hunt Shaman Panel, Nine Mile Canyon. Pecked San Rafael Fremont style.

Working Conclusion

Obviously, until all the Barrier Canyon/Transitional sites are visited, any paper on variants is a work in progress. Yet, at least some if not all visual elements that distinguish this particular variant have been identified. As

archeologist Phil Geib points out (above) "properties of form (can)...serve to track the history of enculturation." The perceived "pattern(s)", helpful as an aid for "ethnic differentiation" (style), can also be quite useful in drawing temporal and spatial distinctions (variants) within the style (especially in a style that was in use for thousands of years over such a vast territory).

Containing some stylistic elements that are also found in Fremont imagery, the Northern variant may represent the last phase of the hunter-gatherer tradition before the agricultural lifeway became prominent in the lives of the peoples of the north and west regions.

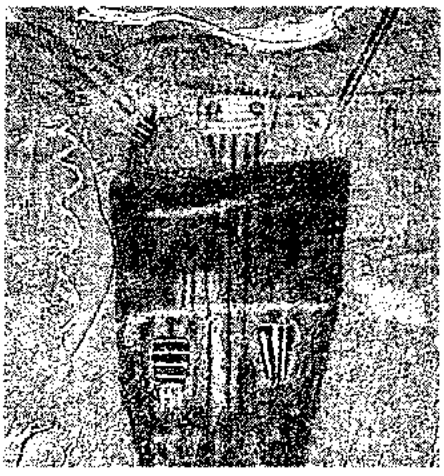
My sense at this time is that the Sego banded figure probably represents an early Fremont spirit figure (but still very much related to the Barrier Canyon figure tradition). On the other hand, the Northern variant panels of Carrot Man and Painted Panels (lacking any distinctive Fremont visual elements) appear to be late Barrier Canyon.

Discussion

The intention for this paper was to go no further than to point out the signs of a Northern variant of the Barrier Canyon style rock art—a report of an unusual sighting. However, since the Northern variant, more than any other Barrier Canyon variant, seems to share some stylistic elements with the Fremont style, it seems important to extend the paper and include a brief discussion of this interesting Barrier Canyon-to-Fremont relationship, in light of archaeologist Phil Geib's work in the Glen Canyon area.

Except for the possibility of the southern part of the eastern side of the Colorado River in Utah, Fremont images are found in all the same areas, if not always at the same sites, as we find Barrier Canyon style images. And the similarities between the two styles are apparent to most who study Utah rock art.

> (Polly) Schaafsma (1980)...conclude(d) that the artists of Fremont, Barrier Canyon, and San Juan Basketmaker styles had a shared anthropomorphic artistic tradition connected with



Left, Figure 14. Section, Great Gallery. Painted Great Gallery variant, tallest figure about five feet in height. Central figure has a representation of a white-tipped feather headdress. Right, Figure 15. Detail, Great Gallery, Canyonlands National Park. Great Gallery variant with "crewcut" motif. Spirit figure is five feet in height.

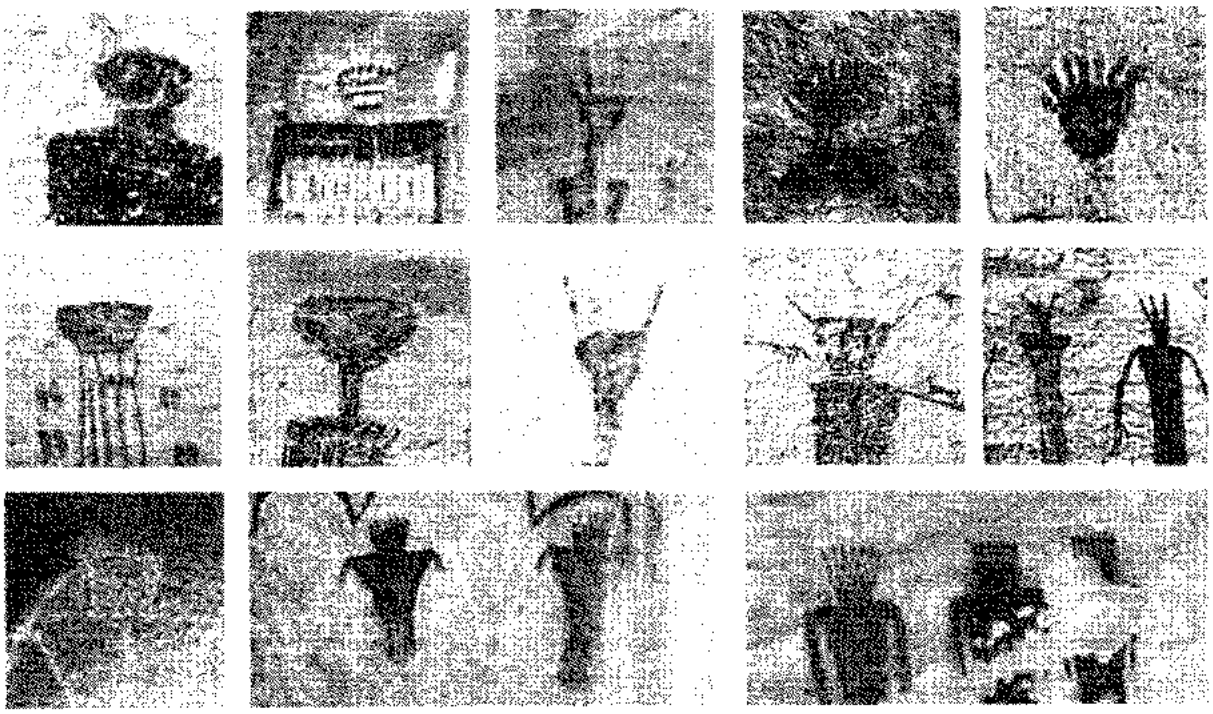


Figure 16. Top Row (from left to right): a) BCS, Great Gallery; b)BCS, Great Gallery; c) BCS, Carrot Man Panel, NW Colorado; d) BCS, Bear Panel, Western Canyonlands; e) BCS (?), NW Colorado.
Middle row: f) BCS, Harvest Panel; g) BCS, Carrot Man Panel; h) BCS, Carrot Man Panel; i) BCS, Western Canyonlands; j) BCS, San Rafael Swell.
Bottom Row: k)Transitional (?), Western Canyonlands; l) Fremont, Western Canyonlands; m) Fremont, Uintah Basin.

> historically related shamanistic practices...My main point of disagreement with this (statement) is that the term historically "related" in the sense of implying ancestry should only apply to the Barrier Canyon and Fremont styles and that the term historically "connected" applies to Barrier Canyon (perhaps also Fremont [*Geib's parentheses*]) and San Juan Basketmaker [Geib 1996:72].

In a bit of a surprise, Geib found no hiatus between the occupation of the Barrier Canyon Archaic and the early Fremont in his study area. Working in Glen Canyon both before and after Lake Powell, and adjacent uplands, he found enough evidence (footwear, stone points, basketry, maize, rock art, and carbon dates) to become convinced that the peoples ("artists"/ rock art "styles") we know as the Fremont descended from the Western Archaic peoples whose artists painted in the Barrier Canyon style. Geib also found that the peoples responsible for these two styles of rock art lived almost exclusively in the lands west and north of the Colorado River in Glen Canyon, well into the agricultural or Formative period when, in the southwestern area, Pueblo II and III materials show up in the archaeological record.

In contrast, the southern and southeastern Glen Canyon areas were the exclusive territories of the Western Archaic people, then the White Dog Basketmaker (San Juan Anthropomorphic style) followed by the Pueblo phases. Geib believes that the Colorado River corridor was a

boundary or buffer between the two groups, probably ethnically distinct—each living on their side of the river until about 1000 CE, when some of the Puebloans crossed to live and farm in the southern part of the Fremont lands (e.g., Boulder Valley).

Evidently the Fremont were to the Barrier Canyon people as the Pueblo were to the (White Dog) Basketmaker people in the Glen Canyon area. Preceding these groups, the land was occupied by a generalized Western Archaic people whose common traits (sandals, split twig figurines, dart/large points) are found throughout the Glen Canyon study area.

Geib, among others, thinks that the White Dog Basketmaker people migrated into the area from the south and east and brought the domesticates with them. However, the indigenous Barrier Canyon people apparently retained their hunter-gatherer tradition for many generations after the arrival of the domesticates—even though the distance between their territories was evidently quite small (20–40 miles), albeit in very difficult terrain.

"...for several hundred years after White Dog Basketmakers took up residency [circa 300/500 BCE] in the southern portion of the Glen Canyon region, populations to the north continued a hunting-gathering lifeway. The specifics of their subsistence-settlement practices and social life perhaps changed, but these terminal Archaic groups had not yet adopted farming" (Geib 1996:197).

The Glen Canyon archaeological record indicates that the White Dog Basketmakers were contemporaneous with the earliest phase of the Fremont as well as the last of the Barrier Canyon style, which dates back to 5600 BCE or earlier, Cowboy Cave figurines. Rejecting a generally-held estimate of its origin as contrary to the evidence, Geib thinks that the earliest phase of the Fremont style could date to about 100 CE. He refers to archeologist Betsy Tipp's AMS-based estimate for the last dates in the Canyonlands area for Barrier Canyon style paintings of about 300 CE. Geib's findings do more than close the supposed gap between the Barrier Canyon and the Fremont. And evidence from Cowboy Cave's Unit V may add support to the possibility of a period of about 100 to 550 years when signs of both cultures/styles may have coexisted—the dusk of one style and the dawn of the other.

"The evidence from Cowboy Cave... suggests the continual importance of plant gathering during the Early Agricultural.... What is not yet known is whether the Unit V [100–650 CE] occupancy of Cowboy Cave represents the foraging component of early agriculturists or the continuation of a true hunter-gatherer economy" (Geib 1996:61).

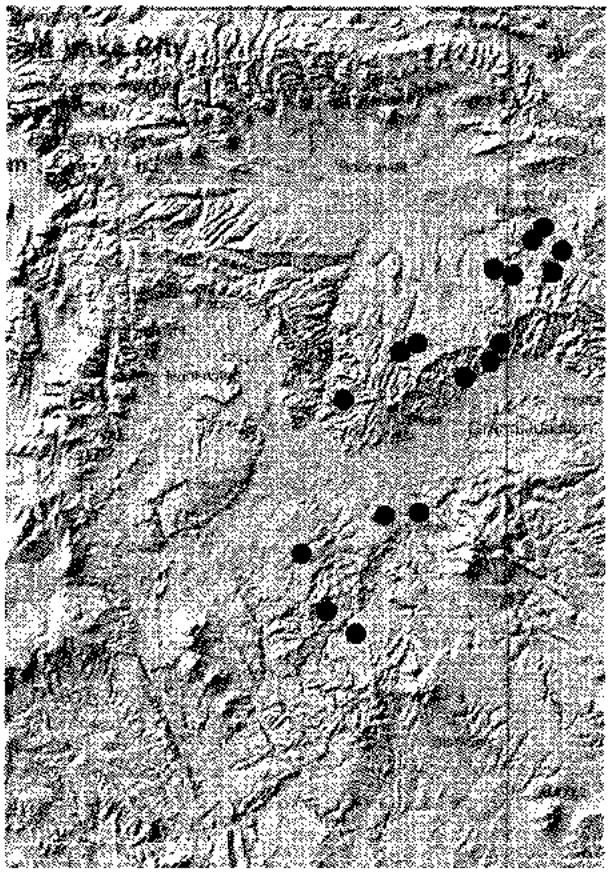


Figure 17. Distribution of sites with possible Northern variant Barrier Canyon/Transitional style images.

Representational Imagery

Geib's uncertainty about the affiliation of the materials from Cowboy Cave's Unit V reflects a similar quandary about the mixed-style rock art images: very likely some Transitional style images are early Fremont (early agriculturists) and some are late Barrier Canyon (hunter-gatherers), but is it possible to be more certain of their affiliation?

Geib's research may be able to shed some light on the mixed style question. In particular, the representations of two types of objects, plant imagery (wild plants/domesticates) and hunting implement imagery (atlatls/spears/bows and arrows), appear to be relevant.

The Glen Canyon record indicates that the earliest manifestation of the Fremont was pre-ceramic and pre-agricultural. Evidently, the "nascent" Fremont extended the hunter-gatherer tradition until about 200 CE. According to Geib, this is about 300–500 years after the White Dog Basketmaker people introduced domesticates into the Glen Canyon area (Rainbow Plateau, Red Rock Plateau, Cedar Mesa).

While images appearing to be representations of domesticates (e.g., maize) appear frequently in the Pueblo styles and occasionally in both the San Juan Anthropomorphic (White Dog Basketmaker) and the Fremont styles, they are not seen in the Barrier Canyon style where representations of wild plants (e.g., Indian rice grass) and composite figures, combining plant parts with anthropomorphic figures, are typical.

Geib estimates that the Fremont received bow and arrow technology by 300 CE (Cowboy Cave, arrow points in the pre-ceramic stratum Vb, circa 100–250 CE). He refers to research which indicates that among the Fremont the replacement of the atlatl by the bow and arrow was probably completed by 600 CE (Geib 1996:64-65).

From more than two hundred panels and many hundreds of images, I know of only one Barrier Canyon style figure with a bow and arrow motif—although there are many representations of spears or atlatls. There are also many representations of atlatls in the San Juan Anthropomorphic style, but few, if any, bow and arrow motifs. In contrast, the bow and arrow is a common Fremont (Figure 13) and Pueblo II/III style motif, while the spear/atlatl form is non-existent.

Apparently, the presence of representational images of plants and hunting implements may help us to distinguish the work of the Fremont-affiliated artists (bow and arrow/domesticates) from the Barrier Canyon artists (atlatl/spear/wild plant/composite figure) during the mixed-style period (circa 100–600 CE).

> The high degree of symbolism in rock art, coupled with its immobility, makes it of great significance for identifying the geographical expression of past social entities. Rock art, more than most artifact types, is likely to have played an active role in communicating social affiliations. If style is an expression or display of social identity at various levels, then styles of anthropomorph depiction in rock art seem particularly significant, in that they encode cultural views on dress and adornment, as well as culturally bound perceptions of the physical manifestations of supernatural beings [Geib 1996:71].

Uncommonly among working archeologists, Geib gives some consideration to the presence and meaning of rock art in his study area. His research provides an archaeological basis to support the perception of a close relationship between the imagery of the Barrier Canyon and Fremont styles at

many of the north/west rock art sites.

The Glen Canyon area archeological record reflects a period of time (circa 100–650 CE) of uninterrupted cultural transition from the ancient hunter-gather tradition to a more settled lifeway with the sequential incorporation of agriculture, the bow and arrow, and ceramics into the peoples' lives. The images that reflect these cultural changes promise to be useful clues, if only as part of an initial effort, in sorting out the cultural affiliation of the artists who created the representations of Transitional, late Barrier Canyon, and early Fremont style anthropormorphic figures.

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Looking at Versus Seeing Rock Art; Its Artists and Its Recorders

Jesse E. Warner

This paper combines principles drawn from art, medicine, philosophy, Eastern and Native American belief systems, and from Elanie Moore, Bill Strange, Clifford Rayl, and my grandmother who was blind. It is a synthesis of how they believe one can and should view the world around them. Understanding how these belief systems and persons *look* at something unfamiliar is to expand our own ability to *see*.

Try to describe something simple to a blind person. What they see is not what we describe. When the blind are given new eyes, what they see makes no sense to them because they have no visual memory of images for comparison and identification. That has to come with experience (Sacks 1995:108-152, also see the movie *Out of Sight*, based on Sacks).

When we describe the phenomena of rock art and its symbolism to the new rock art enthusiast, it is like describing something to the visually impaired. On the other hand, when first experiencing rock art the new rock art enthusiast is also much like the recently sighted, because it makes no visual sense to them. In both cases, this is what could be called *symbol agnosia* (Cytowic 1993:30; Sacks 1995:117, 136; Harris 1996:6; Warner 2002a). In both cases, with more experience and more stored images for comparison, the novice can see patterns emerging that begin to bring a comforting familiarity.

There is a difference between *looking at* and *seeing* something. To *look at* is no more than to accept an image into one's visual frame of reference, to exercise the visual sense. That takes no additional thought. To *see*, within this definition, is to place the image into a category of stored images, identified with forethought and memory, in a process of cognition. Outside the field of art and some sciences, very few have learned how to *look at* and then *see* what their mind is processing.

Many state that we see the world, and especially other cultures, through our visual paradigms (Classen 1993:5). The following are several quotes from a volume by Joseph C. Pierce (1974:5, 6, 34, 146, 178, 31, 85, 63, and 82) that questions our visual perception of reality:

"Any world view is arbitrary to an indeterminable extent. This arbitrariness is difficult to recognize since our world is determined by our world view."

"Langer referred to nature as a language-made affair, subject to 'collapse into chaos' should ideation fail. Threat of this chaos proves sufficient stimulus to insure a ready granting of validity to the current views."

'We impose our categories on what we see in order to see. We see through the prism of our categories."

"Langer points out, as did Jerome Bruner, that we live in a web of ideas, a fabric of our own making. 'The activity of imagining reality is the center of experience, she claims. The average man,

though, picks up his symbols and ideas for imagining from 'those that know.' He may never analytically understand the workings of the various disciplines that shape his time, but he senses the general frame of their references, and becomes very much aware of the drift of their conclusions."

"Any world view organizes a world to view."

"The given postulate can in turn change world views and worlds to view."

"Man's mind is a mirror of a universe that mirrors man's mind."

"Answers are shaped by the questions demanding them, just as the question is finally shaped by the nature of the answer desired.... A question is a seed of suggestion, which we plant into that continuum of synthesis I have called autistic thinking. The question's germination takes place in ways unbelievable to conscious thought, but only in a ground prepared and nourished by conscious thought."

"The technique determines the nature of what is found."

Claude Barnard admitted "facts" are necessary, but suggests it is the manipulation of "ideas given form by facts", by experimental reasoning, or theory, that establishes and builds science. It is the idea that moves scientific reasoning.

We look at a *realized fact* that is not a part of the former scheme of things, and insist that fact must have always been there; as *what*, we may ask. The atom did not exist for the ancient Greeks or Renaissance scientists as it exists for us today. Many individuals had to find correspondence, until the existence of the idea of the atom could be made. If not visible to the eye, it had to be at least possible, or even necessary, to create a framework based on the acceptance of the idea of an atom. The idea may be what brought about the facts to support it. This does not mean rabbits can be pulled from hats whether or not there is a rabbit in there. It means that we must question the nature of rabbits and hats (see Pierce 1974:91-92).

Sacks (1995:36) states that the perceptual-cognitive process is both physiological and personal. The world that we perceive or construct is part of our perceptual self, which may fall apart, creating chaos in orientation and self-identity.

These few quotes help unprogram our minds from what we were taught by our culture. Old paradigms are often a part of a comparative value system or moral judgment (Pierce 1974:28, 35, 40, 68, Gordon 1965:11). That is part of being human.

The visual sense was used by most religions to intensify the devotee's experience (Samuels and Samuels 1982:28, Campbell 1988:179, Classen 1973:55). There was little belief in the all-knowingness of the gods. The ancient inhabitants of the Near East understood that *looking at* or watching something was not necessarily *knowing*. They reported events to their gods, even though those gods were suppose to be all-seeing and all-knowing. Also, they had to be sure that the gods *heard*, as well as saw.

According to Gordon, it was also often the case that the gods, far from being omniscient, were constantly being duped because they were as ignorant as mortals (Gordon 1965:126, 232). Even the Prophet Isaiah took Sennacherib's letter to the Holy of Holies to read it to the Lord to tell him of the Assyrian king's intentions to capture Jerusalem. In Isaiah 37:17-20 he states, "Incline thine ear, O lord and hear, open thine eyes...." To the Inca, even though sight is given precedence over sound, they need to complement the world of sight by hearing. They do not see the world; they hear it (Classen 1993:55, 73, 79, 187).

After all, to see is supposed to mean to know. "Ah, I see," is to know, as in, "Yes, I understand," but is it to know that you know, with full metacognition (knowledge and regulation of perception), to see and understand everything? Of course not, that's too much to

expect.

The Renaissance reformer John Huss believed he knew the truth, but said he would drop any belief proven false, and asked to be taught. No one could provide him with a better answer, so for his convictions he burned at the stake, for the truth as he *saw* it.

Jerome, a contemporary of Huss, also believed he knew the truth but he recanted. His life was spared but he had to remain in prison. He was too confident in his own brilliance, confident of the gospel as he *saw* and interpreted it.

There are rock art researchers who see rock art as Huss saw it, and interpret the gospel of rock art accordingly. And there are others who see it as Jerome saw it. Later I'll explain more about how these two reformers relate to rock art researchers. Even though they ended up differently, in the beginning they both saw the gospel and its symbolism just the same.

That analogy is to illustrate a fact of rock art research. Though many researchers and enthusiasts don't take their knowledge about rock art seriously, many do. Rock art research is not just a matter of life and death, to some it transcends mortal concerns. Would you put your life on the line for your convictions or interpretations, or even the gospel of your rock art mentor? A better point of view would be to not believe anybody until one point of view or another could be substantiated.

These may sound like absurd questions. But there are those who are dead serious and very adamant in their beliefs. Is that good or bad? It might seem to depend on whether they are right or wrong.

Many who feel so adamant are believed by others to be wrong; most of the naysayers seem to be the ones that feel their beliefs threatened by these strongly-held beliefs. Remember that if we are dead serious, and can't laugh at ourselves, others will.

What one gains from the rest of this paper may enlighten one's view of how ancient glyph makers saw, and researchers see, and we can see. We would be better off understanding why people see things the way they do, whether they are right or wrong. The important thing is that we don't have to agree with them.

When looking at rock art as an early initiate to this mode of rendering symbolism, we really see nothing. But those who are more attuned to abstract thinking (or autistic or primary process thinking, see Pierce 1974:11) can understand some of what is depicted, with a little effort. For the rest, it takes a lot of exposure and experience before we notice the symbolism is beginning to look less strange. And for some, that never happens.

When and if one achieves the right state of mind, it will seem that the symbols are making some kind of contact. Then there is a connection with the faces that previously looked back at us in silence (Elkins 1996).

It is interesting to know that to the Inca, silence was death. "The land of the dead was the land of deaf-mutes" (Classen 1993:36). For a long time, rock art has been mute to us. Researchers, for the most part, have been deaf but not themselves so mute. That is how most of us are with rock art. Now, though, these ancient symbols are beginning to come alive again because they've found new ears willing to listen.

And we can be a willing one if we learn to see rock art with our ears or listen to rock art with our eyes (that will make more sense later). If you do not hear the glyphs look back at you, listen to them till they do. To the Incas, they must first hear before they are able to see (Classen 1993:38).

We believe that light is to sight as sound is to hearing. Many nonliterate societies seem, in a way,

to believe that *light* is from hearing and *sound* is from light. In most cases it is the preference of sound over sight (Scholem 1969:20).

Franck, a famous artist who wrote many books in the field of art, said that to the artist who *learns to see*, everything contains all the riddles of life and death. He said that *what we see* when we look at it is the most important thing in the universe (Franck 1973:xiv). Remember what the extended index finger meant in the movie *City Slickers*. When you reach that point you are no longer looking, you are seeing.

Bill Strange tells those who want to learn, "Don't think, just listen as you introduce yourself to a site and let it reveal itself to you." Clifford Rayl said, "Each time you revisit a site you see it with new eyes." That means to let it talk to you as you familiarize yourself with it. Let your eyes roam around from whatever grabs your attention to the next thing. See it with your ears and listen to it with your eyes. Let it teach you what it will now offer up to you.

Franck says, "Let your eyes caress it without thinking." Forget the rest of the world around you. Let your mind digest what your eyes are processing. Just be alone with your eyes. He continues, "You only succeed if you feel you've become that which your eyes process, regardless of what your mind tells you" (Franck 1973:17, 58-59, 92). Pierce (1974:121) tells us to cut off our brain chatter so our subconscious can concentrate on that process.

Franck cautions us not to be like the person who loved geraniums, grew them for 30 years, and still never knew what they looked like. We need to ponder that. How many times do we have to look at how many geraniums for 30 years, and still not know them well enough to give a detailed description, let alone draw one? How many times have we seen certain popular rock art figures, like our URARA cross-eyed owl logo, and still do not know what it looks like or what it really is (see Figure 1)?

After thinking about that and comparing thoughts with others on field trips, like myself you may wonder if we've been deceiving ourselves or have been deceived by others (see Franck 1973:xv-xvii). Are they, or we ourselves, leading us down the wrong path? If so, what is the value of our convictions?

We are out of touch with the truth. We are separated from the truth by our habitual use of labels. The desire to break through the labels that enclose us helps to rediscover the importance of visualization. (Samuels and Samuels 1982:23, 19). If we place labels on things, we recognize everything, but we really see nothing (Pierce 1971:51; Pierce 1974:135; Franck 1973:4, 18; Bord 1997:96-98).

Franck compares it to knowing the labels on the bottles but never tasting the wine. Society restricts our ability to see; that is part of our cultural programming.. It wants to see for us, to make us conformists with biased eyesight. Thus we never really learn to see (Pierce 1974:28, 35, 39, 40, 63; Franck 1973:3-5; Classen 1993:70, 146).

And those that do see, such as ascetics, often live at the outer limits, on the fringe of society (Campbell 1988:199, Williams 1992:162, 180). We want to learn to see, but do not want to be social outcasts. Some who teach others to see tell us we do not need to be a hermit in a cave on a mountain (Williams 1992:180-181).

When we learn to see, we understand that rock art elements define themselves by the way they look; we do not need to have someone tell us an element is this and not that. It may be neither or both at the same time, or at least one at one time, and the other at another time. If that doesn't make sense, there is more to learn.

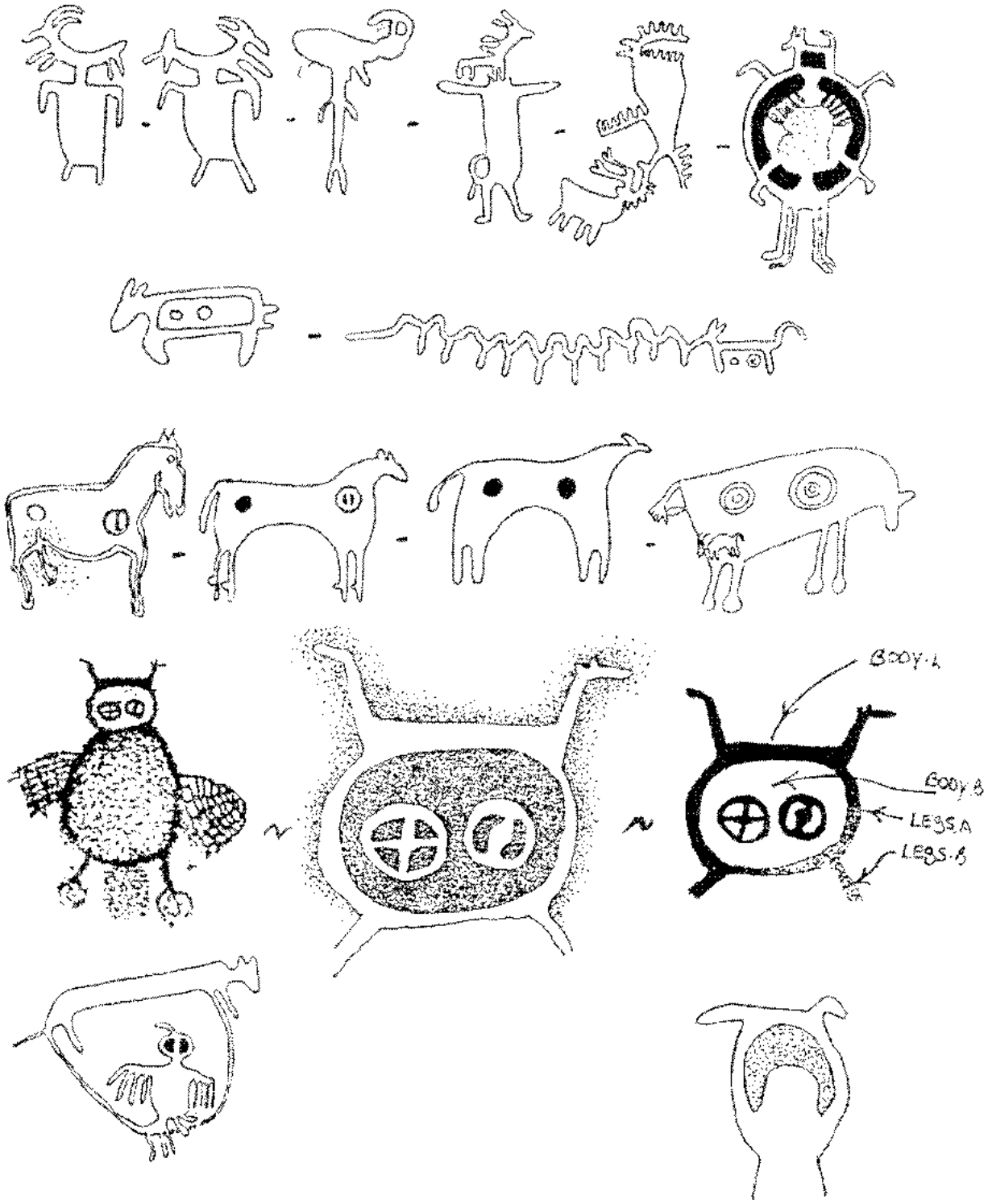

Figure 1

Both looking and seeing start with sense perception, but the similarity ends there (Franck 1973:5). When we look at what has been placed on the rocks and label the phenomenon that created it as part of the symboling process, we usually make immediate choices, instant appraisals. In doing so we say, "I like this," "I won't take a picture of that," "This is good," "That's crude," "This relates to that," "That's exciting," and "This is nothing." We see according to its usefulness, meaningfulness, and significance to us. Read the works of Bill Strange and notice how much he derives from the seemingly insignificant (Strange 1986, 1987, 1989, 1990A, 1990B, 1992A, 1992B, 1992C, 1993, 1994A, 1994B).

To really see, forget the ego and what it is that makes you yourself. Be all eyes. Lose yourself in the symbolism's reality or lack of it. Once you stop being yourself with it, labeling, categorizing, defining, and interpreting it, it is easier to become one with it. A Chinese sage said that, "Choosing is a sickness of the mind" (Franck 1973:6).

Participate with it, and then meaning seems less important (Williams 1992:22-23). Have an affair with the glyphs. Then a psychiatrist might justly ask you how the relationships are going with the rock art you have been seeing lately.

This is one advantage that the Zen practitioner, or the "authentic artist", has over other less astute artists or simple observers. Unless we have really drawn it, we have not really seen it. But the trick is that first we must really see it to draw it accurately.

Get intimate with the rock art. If we do not have a deeper experience with it, what we draw is just a cutesy, artsy, sketchy thing that does not accurately represent its real beingness. It is our non-seeingness of it. When we really see it, nothing is ordinary, because the ordinary becomes sacred and the sacred becomes sacrosanct.

Many rock art sketches out there are not all that accurate, but unless someone knows they aren't, they will take them as correct and misinterpret them in their own research; others will then propagate those errors. There is a clue there. If at all possible, we should verify the validity of any drawings by other persons we intend to use. This may not be possible, which points out the importance of accuracy in drawing.

Seeing is more than just a pastime, it is a discipline of awareness, of complete and undivided attention. It is a pursuit of understanding ourselves, and how we perceive the world around us. The eye is the lens we focus for the pictures our hearts take. Yes, that is subjective, but so is so-called objective research when it deals with rock art, unless all we do is quantify. But beware, once we label it or draw it, even with the simplest of terms, we are being subjective.

In this sense there is really no difference between our seeing, our being, our art, and our religion, because in finding one's place in the larger fabric of which one is a part, there is no difference between them. Whether of the spirit or the test tube, it is whatever is given the observer to see the world with (Williams 1992:13).

It is said that one who knows does not speak, and one who does not know, speaks. That means that those that speak, and thus do not know, lead others into ignorance and illusion. And if we do know, it's that we don't know that we do.

Such a statement is self-incriminating, and insulting to other researchers as well, but that belief exists beyond the philosophy of Zen. I came face to face with it long ago with a Navajo singer.

The following may help you understand. "Hopi songs are not easy to understand. They are stylized and often defy simplistic logic. They often consist of several layers of meaning

which produce mood, or an understanding, as only a complex system of symbols can provide" (Geertz and Lomatuway'ma 1987:9). Trying to put into words an understanding of Hopi songs is impractical. They need to be sung, lived, and experienced, to be understood. Poetry, like songs and rock art, is like the secret place in one's heart where there are no words to describe whatever the "it" is, even though one senses an understanding.

Carnegie stated, "If you are going to prove anything, don't let anybody know it. Do it subtly, so adroitly, that no one will feel that you are doing it." He quoted several famous people from throughout history to exemplify that (Carnegie 1982: xxii, 124):

"Men must be taught as if you taught them not. And things unknown propose as things forgot," Alexander Pope.

"You cannot teach a man anything; you can only help him find it within himself," Galileo.

"Be wiser than other people if you can, but do not tell them so," Lord Chesterfield.

"One thing only I know, and that is that I know nothing," Socrates.

"If you teach a man anything he will not learn," Bernard Shaw.

These quotes show that the ideas being discussed exist beyond Zen. Notice how these ideas are rephrased throughout this presentation.

If one is ever to learn what can be learned, one must overcome the misconception that he or she is "the valid center of observation of the universe," that is egocentrism. "It is a radical turn-about, A DIRECT PERCEPTION OF AND INSIGHT INTO THE PRESENCE, INTO THE TRANSIENCY, THE FINITUDE THAT I SHARE WITH ALL BEINGS" (Franck 1973:14; capital letters in original). Relate that to calling the game we kill *Thou,* thanking it for its sacrifice, and thinking it superior (Campbell 1988:72-78, 112).

It is a radical experience to realize that neither I nor anyone else will fully understand this ancient symbolism. It is transient, and like its authors we, too, are finite. They left themselves on the rocks, we leave ourselves on these pages, but still, that is not infinitely lasting. And what we understand, say, and write about it is even more transient.

A person once asked a master, "I call that a cat. What do you call it?" On field trips people ask, "What is that?" Any answer is whatever our egos have us say. But is that the truth of it? What was the master's answer? "You call that a cat." Why such a seemingly-absurd answer?

In labeling a cat or a rock art element, one has not answered the question, let alone understood all there is to know about it. So what is in our answer? It is simply a reflection of our ignorance.

Once we are able to detach ourselves from our egos and our cultural paradigms, our eyes are able to see without labels and without interpreting the symbolism in terms of labels. It allows us to see things as they are. Nothing is a symbol of anything but itself. A rose is not a symbol of love, nor a rock of strength, nor a U-bracket a vulva, nor a spread-winged bird, nor thunder. When a symbol is not a symbol it is a sign, and that sign says it is not a symbol. Often we interpret elements in a myth or a panel with too much symbolism when none exists (Boylan 1999:13).

To the authentic artist, a rose is a rose experienced in its suchness. When it is observed or drawn it is to say, "Yes," to its existence there, and to our existence here. But in rock art, when is a rose, or anything else, any more or any less than the product of a person's programmed point of view? What it meant to that person is only part of what it meant to other people in his

culture, or in a different time or space. That is only part of why we will never be able to accurately interpret much of rock art, and never all of it. When one really understands that, one can see that there is no universal symbolism. Some symbols may be more or less universal, but how they were perceived by their authors and used can be vastly different than the norm.

Campbell said, "I try not to guess...we have a tremendous amount of information about this subject, but there is a place where the information stops. And without writing [so-called *rock writing* isn't being referred to here - jw], you don't know what the people were thinking. All you have are significant remains.... You can extrapolate backward, but that is dangerous" (Campbell 1988:71).

But if we let our eyes be the windows of our understanding, rather than a picture like the ones we compose as we look through the lens of our camera, then we will understand that seeing is the art of unlearning about things. It is the undoing of our selves.

To really see, as in the, "Ah yes, I understand, you-ness" of seeing an element, you really learn nothing about the element. But if you can really say, "Ah yes," you have unlearned a lot about it. Part of that is knowing what it is not, in its there-ness. If we let that element reveal its "elementness" to us, we will know it deep down inside without being able to put words to that knowing. That knowing is the not-knowing that we know. Remember he who talks about it does not know, but he who does not talk or cannot, knows. To see it in its thereness is to understand it, but only in its thereness there. Did that make sense (Franck 1993:25)?

It is best if you can be a little synesthetic and see with all of your senses. I believe most of this symbolism was revealed to a mind in a ritually synesthetic state, a mind in an altered state of consciousness, or in an out-of-body-experience (Franck 1993:25; Classen 1993:79-80, 152, 185; Cytowic 1993:78, 121-125).

Franck adds that, "When there is revelation, explanation is superfluous, and curiosity is dissolved in wonder." If you can see, you can see with your nose, and smell with your ears, and Gregorian chants have the scent of incense, or apple blossoms (Franck 1973:28, 29). I might add that rock art sounds and smells just as sweet.

I believe that many, if not most, rock art panels have their own melody, but that is another paper. But note that what was said about Hopi songs pertains equally as well to rock art. While out rock arting with Bill Strange once, he gave me a set of tapes by the Irish Chieftains. We share a Celtic heritage. He told me to listen to them. He smiled, and said they would help me better understand rock art, which I believe they have.

To fully understand the nature of the symbolism or its music, one has to let it become self-aware within. That does sound a bit strange at first. But so did Bill; however, what he said now seems perfectly logical. Remember what Galileo said, that one could only help another find it within himself. That is the art and task of the Zen master or spiritual leader. If truth hurts, you have found yourself. If it makes you cry you know the truth of it. For a man to cry is not un-macho if one understands. The more he can grasp the more he can cry. Helping someone to find the *it* within is to teach without teaching, to let a person be a self-teacher. In Navajo, that is one who answers his own questions. Hopefully the following will explain this a little better.

Do you understand what is called Buddha-nature? A ninth-century sage was asked, "What is the Buddha-nature?" He responded, "The cypress tree in the courtyard!" Was that a riddle? Franck continues to explain that Jesus said, "Split the tree and you will find me and lift the rock and I am there" (Franck 1973:30). Shiva said that everywhere an erect lingam is,

he would be there (Danielou 1995:14). The degree of how a tree or rock becomes self-aware within us is also the degree to which any symbolism will be self-aware within us, as well.

Romans VII:22 says, "The eye accepts it fully and is delighted in the law of God after the inward man." Our thought is of the symbol, of being the symbol, one with it – but being it *there* versus somewhere else. That is important, because the same symbol somewhere else is not necessarily the same symbol as we have learned. And to understand it *here* is not to understand it *there* ... but when you understand it *there* you will be more apt to fully understand it *here*.

This is a principle that will always confuse the unaware. A symbol can be extended from its form and source where it means one thing, and be applied to mean something else in another context, either with little or no change in its form, or changed sufficiently that we might not recognize it.

Upon viewing the symbol of a cornstalk, do you feel your toes as roots digging deep into the soil, gripping the bosom of Mother Earth? Do you feel the struggle against all the threatening forces the cornstalk endures? Do you feel yourself reaching up to the sun, your leaves rustling in a slight breeze? Do your fingers like cobs probe the sky?

When you do, the nature of the symbol may be revealed to you. Roots not only penetrate Mother Earth, they reach up into the sky of the underworld. The corn plant becomes man, mancorn, mankind, God's offspring, and sacred (for the importance of corn read Florescano 1999).

We come to understand the corn plant in what a man is, what man is made of, from the creation to "we are what we eat". It does not matter if you agree with the necessity of believing that or not, unless you want to understand the Native American point of view and the peoples' symbolism. It is that simple. And is not that really why we are all here, after all?

A grain of pollen drifts down to a tassel, another finds itself on a leaf; an insect eats; a leaf withers, dies, and falls to the earth. Man eats, lives, and dies in what has become the great circle of life and the tree of life itself, the *axis mundi*. We are part of that cycle, eat of it, and become that tree. The answer to the riddle is that there are ears in our seed and seed in our ears, and they are numerous. Now give me the question. How many seeds are in an apple, and apples in a seed, if we are that tree?

Try to interpret the Navajo cornstalk by Ganaskidi in Largo Canyon (Figure 2, see next page). I doubt Martineau's concept of conflict or war will help much with the opposed triangles if it can also be a vulvaform and a butterfly (compare Warner 2000). Is another concept more applicable? Consider what they all have in common; all are an act of penetration, an action of passing through, of becoming more than they were before.

We thus become a part of the sacred landscape of every composition we understand, because we have become "one with it." When we've done that, we have earned it, it is ours, and it becomes a part of us. Maimonides stated, "the three words ro'oh – *to see*, habbit – *to look at*, and hozoh – *to vision*, are applied to the sight of the eye, and he said that all three of them are also used figuratively to denote the grasp of the intellect" (Schwartz 1994:68).

It is said also that to see it is to take possession of it. If to see is to know, and to know it is to have an intimate relationship with it, did Ham in seeing Noah's nakedness take possession of his vitality as some have interpreted the Biblical symbols to mean? There are interpretations of that incident other than a homoerotic one (Schwartz 1994: 254).

Are our Biblical stories any different from what we call the myths of others? In one sense rock art is their myths on the rocks. So how can we interpret rock art as its makers did?

Standing there in that harmony, in our mind we draw the composition with all its ele-

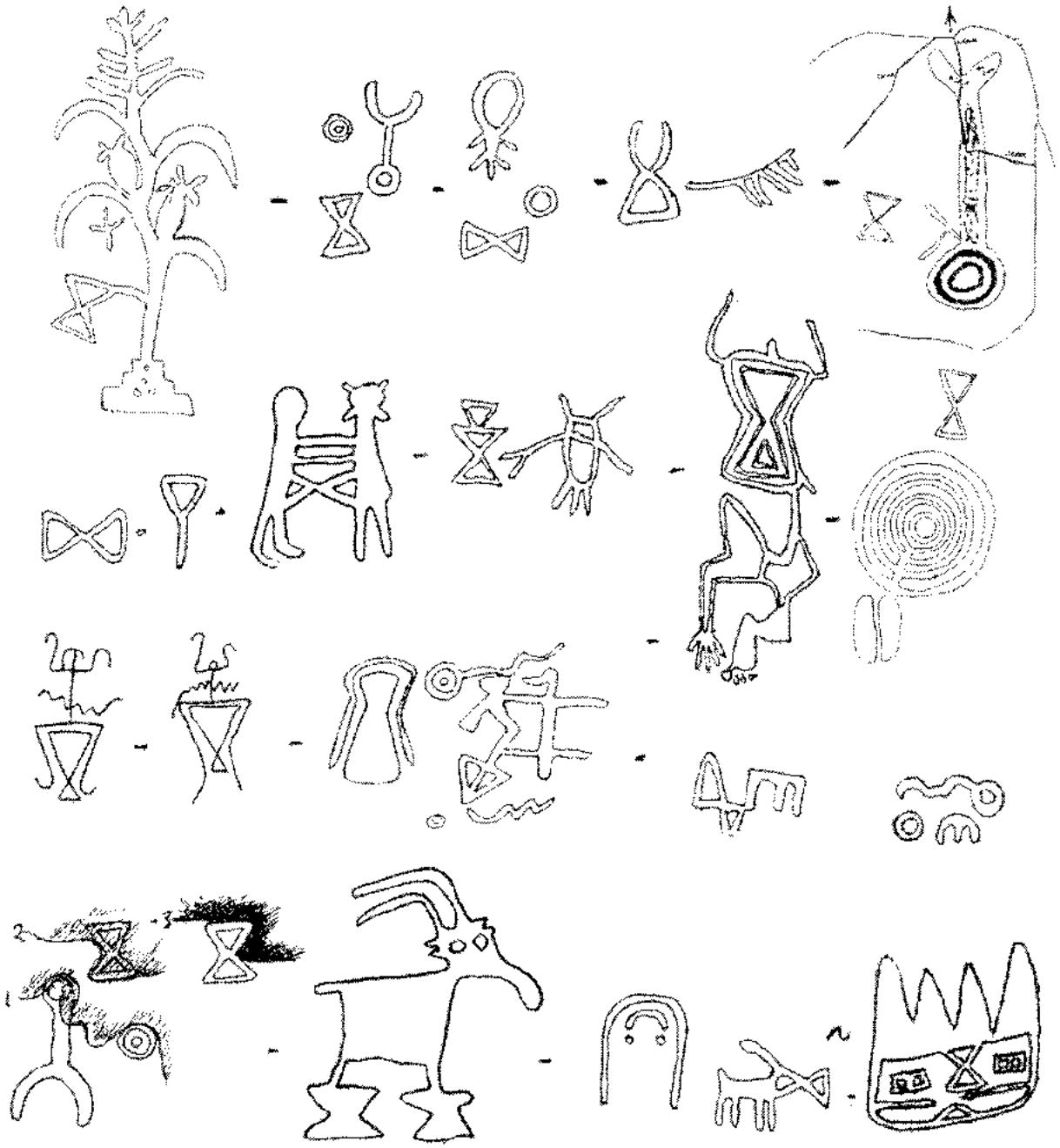

Figure 2

ments as the process of leaving out things – like importance, the presence or absence of significance, or those things not significant now (Franck 1973:30, 37).

Atmospheres are created out of the countless, imperceptible, micro-details from within the composition, the incorporated and interrelated details of the rock's surface, the placement of the panel in the site, the setting of the site in the terrain, the terrain in the larger landscape, and the larger landscape's place in the mind of the ancient artist as part of the total composition. All of the details beyond the image itself are what are out Beyond the Edge of the Rock (a paper to be submitted to the next *Patina* volume) that few record, and site reports do not ask for that kind of information. Most of these aspects are important for grasping meaning, and they are seldom, if ever, looked at.

All too often, they are fleeting details that the conscious mind finds imperceptible. But the eye and the heart pick them up, feel them, and become part of them through experiencing them. Having done that, we can tell the psychiatrist we have got a good relationship with our rock art. And then we will walk through the landscapes of those compositions in our minds forever, knowing what geraniums really look like, and wince at their awful smell.

Each symbol, hiding its own secret, was placed into context, with clues to reveal itself. Is a deer just another meal, a symbol of fleetness, our brother, a messenger from God, or God himself? There are clues there to tell, if we do not ask too many questions. To find out the answer to that and any other questions, we need to ignore our cultural biases, standards, scales, rules, or dictionaries of symbol meanings, as to what this or that is or what it means. Otherwise it will only be a deer, we click our shutter again and go on down the trail never knowing we missed the Panorama Point or Kodachrome Flat of meaning. The spirits at that place weep with sorrow for such persons, that they never saw or understood.

Each element has its relationship to the whole. Each is beautiful, and there is even beauty in those that may seem ugly (Freidel, Schele, and Parker 1993:377; Fluorescein 1999:88). Each is significant to the structure that supports the being of the element's meaning and intent, just as each nuance of tone of voice, facial expression, hand gesture, or other body language can contribute to what a person is saying, otherwise a glyph is totally meaningless.

How does one see all of these jumbled parts? One has to give the eye time to become accustomed to unfamiliar presentations of ideas, and overcome the panic. Let the eye calm down and move through the seeming haphazardness from relationship to relationship (see Frank 1973:44). By doing that, alien forms do not stay alien for long. Each element and its part in context: the composition, its relationship to the irregularities of its canvas, the rock face to the site, the site to the immediate terrain, and the terrain to the larger landscape, as mentioned, is all part of the whole in the mind of the author-artist, but not necessarily to us.

The whole of that is his creation, not just the simple element alone. But we do not see it all unless we take time to become one with it and let it speak to us. Only then do we have moments of enlightenment in which we really see, but how much beyond *looking at* do we really see? If it were enlightenment to us, that degree of enlightenment would have to be in direct proportion to how much of its light we reflect. The more we become attuned to what is there, the more we really see and the more we reflect. In thinking deeply about that, or long enough, one will eventually understand the reason why the whole truth or story never comes out of one mouth on the Navajo Reservation or other reservations (Warner 1997), or from other ascetics (Franck 1973:13; Scholem 1996:95; Campbell 1949:381; Campbell 1988:63, 67).

The Navajo believe if one sees and hears something and fails to reflect it in his actions, that one

is out of *hozho* (harmony) and will not only bring himself, but also the teacher into harm's way. That is part of becoming socialized through cultural programming.

One learns through seeing principle-by-principle, precept upon precept, one glimpse at a time. One cannot understand the division of symbolism unless the addition and subtraction of it are learned first. But there are some out there who will see much more than that. There will be someone who will see the Combinatorics, the Boolean algebra, the Automa theory, the Loydes Fifteen puzzle, the Petersburg Paradox Box, the Monty Python problem, the Chaos game, or even the Fermat's Last Theorem of it. Will it be you? Do you believe that it can be? What you see is what you say, what you say is what you get. You know, *GIGO*, garbage in, garbage out. Or is it good in, good out? It's up to you. What do you see?

Then if one can say one knows that one really knows, is it to say one sees that one really sees, in the sense of understanding that which one really understands? I wish I could understand all I know, but how much do I know, like Socrates, really know? That will always be highly subjective and unscientific.

At a symposium, if a person criticizes another on not being scientific, he may be right. But, in defense, many papers are pretty darn good. In some cases, like those of Nal Morris and Clay Johnson, they are close to being as scientific as possible. Read Curtis, 1995:19-44. But we all go off the deep end somewhere, sometime. That is just human nature. Even the most objective person becomes subjective when it comes to rock art , sometime, somewhere (see Cytowic 1993:58, 73-74, 121, 128, 167, 173, 220). There is no one out there who can cast the first stone.

That is why we need to go to rock art like Harold Tuchins the Navajo singer, who told his grandchildren how to go to learning. He said, "Go as a warrior goes to war, or a hunter goes to the hunt, as if one's life depended on the outcome." If we take it that seriously, like Huss we will catch the atmosphere of each element and all of the little nuances, up to the largest aspect of the physical or metaphysical landscape. We will see all the different aspects, the relationships each has to the rest, and their part in the greater fabric of truth in the universe.

As Franck put it, one will realize that Rome cannot be mistaken for Paris. That will be no more than understanding that a hunting scene can be taken for an ecstatic experience. But after all, both Rome and Paris are just cities, are they not? And, hunting is just hunting, is it not? But what is hunting? Those who never experience a first kill will not know that it is an altered state of consciousness, aside from the quest for light and knowledge one gains about his relationship to his fellow creatures.

Knowing that we have made a rift in cosmic reality by suddenly snuffing out the life of another living thing is the penultimate lesson. *Seeing* blood pumping out onto the body, guts spilling out onto the ground, and butchering of the body, is a shock to any inexperienced and unprepared system. The novice needs to be ceremoniously prepared for it, and then taken through the experience in an appropriate manner for it to be fully appreciated, especially for that *seeing* and that *experiencing* of it to then be the *understanding* and then the *knowing* of it.

The truth of it, on the other hand, is the young gang initiate just after his first kill. He has not been ritually taught in the same manner as the young hunter, who is ceremonially prepared to know that the animal his victim, "The least of these," is God, you, and he himself (Campbell 1988:174). The initiate gang member does not understand that. His victim is nothing more than just a victim. He is not an equivalent to anything, least to the animal, to God, or to himself.

Animals as hunter's quarry and God, coming here to give themselves to us, are all part of the

plan. Without the gutting, butchering, and eating of the quarry, and ritual preparation, respectfully eating of it as a sacrament, and ritual deposition of what remains, that the gang member does not get, he does not learn his sacred responsibility to life and his victim. His (the animals, the *Thou* of the hunter's beseechments) life is to be taken reverently, and the body treated and disposed of with devotion and respect (Campbell 1988:67, 102; Bingham 1984:41-45; see Geertz and Lomatuway'ma 1987:79 and V, 41, 91). The gang member is empty and void of devotion and respect.

To eat without praying is slaughter. "Killing is not simply slaughter, it's a ritual act, as eating is when you say grace" (Campbell 1988:73). And you must know all of this, which is to say to know that you know what your beingness is, in relation to its existence, before you can then go out to stalk the stag that is God for spiritual enlightenment. An altered state of consciousness is just one key to an out-of-body experience, the *ultimate* in enlightenment.

Are we really that different? Or that much alike? Do we not eat and drink the emblems of the body and the blood of our God as a sacrament (Campbell 1988:74, 173; Fluorescein 1999:78)?

Do you see, feel, and experience all that, which is to understand it, when you see an archer and an animal on the rocks? In other words, bows do not mean hunting any more than vulvaforms mean sex. Attitudes are created out of innumerable, imperceptible little details from within the composition and the rock, features of light and shadow they incorporate, and celestial bodies acting out the roles of long-forgotten plays, around the edge of the rock that the composition points to or interacts with, whether it receives a solar flare or not (Warner 1999). These are little details, often too fleeting for the conscious mind to pick up, but the eye and the heart feel and experience, and then the body knows that it knows. The eye makes the observation and the body makes note of it, if the mind does not get in the way.

Enlightenment is relative to how much one already knows, and how much any moment takes him beyond that. Enlightenment only comes in the doing and in the becoming. This could be applied to learning a language, swimming, or playing the piano, as well as to understanding rock art. You can't really say you know till you get wet. And even then it takes a person sufficient time to become proficient. Remember that practice does not make perfect, only better. There comes a point where things begin to fall into place. That is the moment you know that you know.

But how much enlightenment can one stand at any certain time? The spirit burning the untruth out of you is hard to endure. At times one might feel one might not even survive the ordeal.

If we are told to look at an element till we *become that element*, not what that element is in general, but the exact element that we are looking at, from the context in which it looks back at us, then we will become part of that element. We may think, "Sure, that makes sense." If we look at anything long enough, and do not move, eat, or drink, we will see whatever we are programmed to see and believe just about anything.

It may be easier to think about becoming one *with something* from the following examples. When we become experienced at driving a car, we've become part of the steering wheel and even the car itself. When we can shoot without aiming, the weapon is an extension of our mind and body. Once we understand that, we can see we can become part of things, and they become part of us. The process takes no more thought than breathing.

Then we may see an element apart from all the other elements, yet see its relationship

within the whole. We may feel within ourselves the stresses, the emotions, the pain, the crying for rain, for knowledge, and for food. Feel the ecstasies in which the figure in the panel is immersed. In a Comanche horse feel the muscles ripple in the neck, and its power exaggerated. Feel its strength between the legs of the warrior astride. Then we will better understand (Freeman and Warner 1995:97).

Be the sheep, or the deer flashing its tail in fright and warning. Turn your head to look for an escape route. Is a horse just a horse, a sheep a sheep, or a deer a deer? Know the character of the animals, their egos, their epithets and euphemisms. "Birds are all ego," Franck says. How many birds sit in bushes of paper in your bird file, sketchbook, or mind? When you have been each bird you see on the rocks, labels seem less important. With some, you will have been a psychopomp (a leader or guide of souls), too.

But to be sure, someone will come along and label them all for you. This is a duck. That is an eagle, but now it is a thunderbird, or maybe it is an owl because it looks forward and not to the side. And is an owl ever Spider Woman, or if so, when? And what is each to being a psychopomp? And first of all, know that simply asking for identification is to label. It would be easier to identify it and its meaning if you had been it once, or maybe killed and eaten it, or even had sex with it, but not if you had not offered it salt (see Simmons 1942:235-7), or even drawn it. If you had, on the one hand, or hadn't, on the other, you'd never forget.

Ever had to eat a magpie just because you killed it? If you had, you'd never forget a magpie. These experiences are the ones that become the real teachers (Franck 1973:58), the kind of lesson where talking isn't necessary to teach. To teach without teaching, or the teaching of not teaching.

We see naked men and women on the rocks, yet the native artist never drew from the nude. Isn't nudeness just the nakedness inside our clothes? Does the absence of clothes make us nude? Not in rock art.

Each paper at a symposium or in one of these volumes is the revelation of the nakedness of the author against the mirror of reality, the reflection of his or her enlightenment, where getting naked means baring one's soul. When one gets naked, it is the face that is the most naked of all. On the rocks not only is the face most often absent, but also the body language holding the meaning for the nudeness of the figure. It's your face, its mask of facelessness that you have to come face to face with. The nakedness of the face and its body is part of the symbolism hiding the persona. It is this you must come to terms with, and identify this being on the rock as its own author, who or what it is, and who or what you are to it.

The real nude is the personality we hide in our naked flesh. Look at the human-beingness of the anthropomorph. It is its spirit that gives movement to the pose, and meaning to the form and stance of the appendages, and whatever the anthropomorph has a relationship with on the rock. Ever get nude and dance with a crack?

Just like the nudes that today's artists draw, their rock art counterparts are not only a body, an abstract symbol. No doubt many are often actual people, if they are not just ideas in the mind of the artist, either of time or *illio tempo*. An abstract characterization not even recognizable to some researchers as humanoid is an anthropomorph just the same, and very representational no matter how many call it part of a nonrepresentational style (Buckholder 1992, Warner 2002a).

That is no different than, "When an artist draws a mandala-like shape it is as objective a portrayal of an inner experience as a bird picture is of a bird" (Samuels and Samuels

1982:248). This person *was*, and because he was pecked on the rock, he becomes an *it* in our language. To the Native American, he is still very much a part of their reality. Not just because, in Navajo for instance, he, she, and *it* all have the same pronoun, *bi*. Does that mean that the *it* that is really a *he* is alive? Yes, both the it/he to them and the he/it to us live.

Is it enough to know that the person pecked on the rock *is*? No. We need to take that person into our perception and understanding. By doing that the artist can express what and who they are through us. That is part of its becoming self-aware within us. Do you understand the ramifications of that thought? In a way, that thought terrifies both the Navajo and the Hopi. Because if they do that, they make contact with the dead, ergo many of the kill marks (ritual defacement) we see on rock art. Science makes a moral judgment of that act, making the perpetrator inferior, superstitious, and primitive. We have to understand more than we do to understand why the dead need to become dead again and then again (see Ewing and Warner 1995). They that were, then-and-there, are now here in our minds and in our hearts.

The Native Americans believe that a person is in the here-and-now, just as much as they were once in the then-and-there. Yes, they are bound to time, yet because they are on the rocks, they are timeless. With every sunrise and sunset they witness, they are timeless; they are beyond their death in the flesh, and in their birth on the stone (see Warner 1997:19, 2002c, 2002d).

Like many others, the Native Americans say that, once created by the hand of a person, a drawing has a life of its own (Geertz and Lomatuway'ma 1987:V, 32, 41, 63, 65, 86, 91; Herrigel 1997:86, 87, 92; Freidel, Schele, and Parker 1993:177, 179, 214; Fisher 1995:9, 143; Scholem 1969:137, 158). How do they define life? Differently than most of us do.

There is a saying that drawing the naked body shows up every incompetence, sloppiness, imperfection, vulgarity, infantismalism, lovelessness, and callousness; not of the model, but of the one who draws it (Franck 1973:68-72). The same principle is true with our research and our sketches of rock art. All our ego, conceit, arrogance, peeping, all our looking and non-seeing are caught red- handed. "Show me your nudes," says Franck, "and I know who you are." Show one who *sees* your rock art sketches or your research, and that one will just as easily know who you are. And in doing that will also know what you are not. A man, like an element, is better defined by what he is, rather than what he is not. The one that knows will know what controls your mind, and what you haven't yet learned to see.

Rembrandt saw the human dewdrop evaporating before his own conscious, mortal eyes. Because of that, to him life was so transitory and so precious. That was his greatness (Franck 1973:73). What do we see?

I wonder at something a Hopi friend of ours once told Judy and me, trying to dissuade us from pursuing rock art research because she thought our lives were in danger due to the violation of a witchcraft site. She said that, in a way, drawing these elements is a re-enactment of the makers' prayers, or if they were witches, curses. According to her, our photos and reproductions provide bodies for them to inhabit, just like the rock art does, with eyes through which to look back at us after they died, as they watch us (Warner 2002c; Geertz and Lomatuway'ma 1987:63, 79). Ergo, more kill marks.

Franck (1973:78) stated something similar in a little different way. He said that to an artist drawing the right subject (as in rock art) is a pleading, a prayer, and an adoration. If that is so, then isn't studying it, talking about it, and understanding the pleading, the adoration, the prayer of that ancient artist, let alone redrawing it (as in our Hopi friend's point of view), bringing it back to life and giving it more power, as the Native Americans believe (Warner 2002c)? Do you believe it

could be a reenactment, or a re-empowerment, another offering of the original emotion and intent of that ancient evocation, good or bad (Franck 1973:78, 90)? Most traditional Native Americans don't agree with those of you who answered no to this question; if you said no, you don't understand rock art.

Mary Dennison believed this, and as a result refused for a long time to weave a rock art figure (see Warner 2002d) for Ody Chapmann at the Escrito trading post.

As your head turns and your eyes move across a panel, each element on which you focus seems to come to life for a moment. Several Navajo people I've taken to rock art sites refused to look at a panel any more after they identified an element as witchcraft-related, because that would reactivate the intent of the image, bring the image back to life, giving the curse its validity. You may think it a primitive point of view, but compare it with the Biblical expression of getting what you speak (Capps 1976; Gordon 1965:166, 192). In that sense, our tongues hang us. As much as our focus attaches to an element, it comes to life for us.

Some believe that as we imbue the figure with our attention and emotions, it not only lives on through us but also thrives on the power given it. Witchcraft is likewise based, in part, on the empowering of symbols. It is spoken into existence. When our attention leaves one element to look at another, the last one fades back into the rock as the next one awakens.

Each element is likened to ourselves; both are awakened in the eye of the creator, the sun as it passes over sees us or the glyphs, shines on us (evidence of mental awareness), and then we are shrouded in darkness again till the glyphs or ourselves are seen, and then "we again see the light."

On the other hand, choosing one element on which to focus in a permanent sense, as in drawing it, takes it out of its animated setting to become a static entity. We capture its fleeting movements and actions into a static, less meaningful, picture of the power and life it manifested in its context. The panel and its images in our mind are full of anima. But in our illustrations or photos they seem relatively lifeless, though that is deceiving. In reproductions we seldom catch the drama of it.

Some artists like Elanie Moore are able to catch the manyness, and at the same time, the oneness of a panel, no matter how complex. That kind of work is almost as much an ecstatic experience to her as it was to the original artist (Moore, personal communication; Warner 2002e).

To the master artist, once a picture is finished, it is forgotten. It is a memory, an experience. It's not a thing, it's an act. It's their witness to the reality of the moment. It's not meant to be interpreted. For Dali, like other artists, the books that describe their art don't interpret the symbolism that weaves throughout all their works. The plasticity of form, ants, wheelbarrows, crutches, repetitions of shapes, landscape faces, disappearing or transforming apparitions, sailors, exploding heads, x-ray scenes, exaggerated and deformed appendages, and the blood and gore of Dali are vivid examples. Or how about the color orange, African features, young girls with older women, cats, wild hair, of Fini, and the fact that she almost always paints women? By flipping through page after page of their work, one can grasp the obsession they had with certain symbols as masks hiding their inner nakedness.

In that respect, when Dali, Fini, O'Keefe, or any other artist ancient or modern painted a picture or pecked a glyph on a rock, it is as if there are different layers of masks hiding what the artist really was, felt, and meant to portray, or exactly what he or she was thinking when doing what he or she did. As we look at those works, gain more exposure to their symbolism, and understand more about their lives, we begin to see a little better through their eyes, and

then finally feel a part of the work. Then, and only then, curtain after curtain or mask after mask begins to fall away.

Sometimes it's only after a few masks vanish that blocks appear to any further enlightenment or understanding. Usually it's one final mask that remains, that can't be removed. The closer we come to the artists, the more we become one with them, see through their eyes, and see what they were seeing (though the oneness never actually happens, it only seems to). The better we are at removing the masks or at least seeing through the veil, the easier it becomes to understand them and their works, and thus the harder it is for symbolism to hide all of their beingness. Notice I didn't say meaning, or that we would really understand, it's just their beingness.

And anything we say or write creates another mask. Sooner or later we will find ourselves there, staring back at us from out of their work. That is no less than saying if we read scriptures or self-help books we will find ourselves in there somewhere. Can you do that from off of a panel? Yes, but a better question may be, "Will you ever try?"

Many artists themselves cannot interpret their own works into words that relate meaning, so that we can understand without experiencing what they experienced. Is rock art any different? Some believe they can "read" what it has to say. Many who claim to read rock art read it differently than others do who also claim to read it. All some can see is hunting magic. All others see is shamanism. And all that still others see is sign language. Others can't see anything, and all it is to them is nonrepresentational scribbling. In reality, how can we read rock art? We can feel of it, but never all of it.

Some may feel that a certain site is sacred and holy as any temple or synagogue, while another may think that the same site is evil, feel threatened and sickened inside, and can hardly get out of there fast enough. These are two reactions to the Great Gallery in Barrier Canyon. What makes the difference? With our present-day mentalities we want to know, right now, "What does this mean?" But the way we come to it gives us very different meanings. No matter how hard we try, how much we believe in ourselves, how good we think our scientific techniques are, there still remains that last mask. No matter how hard we try, there is no removing it, no knowing it all.

If the mind judges, there's only frustration. If the mind is not allowed to judge, moralize, criticize, and yes, interpret, the eye accepts that last mask in gratitude as representing its being. We accept our relationship to the rock art with peace of mind knowing what we know of it, of what it is, and of what we are with or to it (see Franck 1973:91-3). Beneath the last mask is the expanse of the universe. And if we were allowed to see beneath it, there would be more than the mind of man can comprehend. Remove the final mask and one falls into the Otherworld. That is the moment that we discover our own true nature and then devour ourselves.

Knowing what we know is like the persona of an actor in a play. Seldom is the full character of the role immediately acted, or the plot immediately revealed. Plots change and thicken as their actions come to a boil, and new aspects show themselves. Each element is an actor or an ingredient in that stew. As each different mask is removed, the plot joins other seemingly-unrelated plots in quite surprising ways, as just another mask. All the masks, their roles, their stories within the story like dreams within the dream, make up the entire person, the real personality, the persona, the character of the play. All are various layers of the reality and meaning of that life or element. That is the artist's role in expressing his or her nakedness, the real truth they do not want to reveal in their panels (or be interpreted), but are forced to express.

If that isn't bad enough, just as the critics and the professors who teach theater arts read

between the lines and put words into the mouths of the authors, so do we with rock art. Thus not only the playwrights and glyphmakers create the masks, but also the critics and rock art researchers. Some researchers have been asked to re-teach some Native American groups about what rock art means, but are hesitant because of the horrendous responsibility that creates. Others take advantage of some Native Americans who seem to believe everything they are told.

The masks we create are the reflections of the I/me, the ego, which we see in the panel and its play. What we say about it tells others more about us than it does about what we talk about. That's why when we talk about rock art we stand there butt-naked for the entire world to see. I should have said buck-naked, but that is one of the symbols that died a long time ago and refuses to be buried, even if it is still the appropriate term. There is a lesson for our research, if people can really *see*, rather than just sense the nakedness they're *looking at*.

We, like the original artist, expose ourselves in our work, and hope there isn't any one that can really see our nakedness; but we wait to see who it is that can. Instead of being our greatest enemy, one that can really see us can be our best teacher, if they really can see rather than just think they can. If we can tell the difference, and if we are willing to lose our ego and listen to them, our nakedness can become beautiful. If we go against the naturalness of our human nature, then we will learn. Our pride and embarrassment often prevents us from learning because we will not admit that we cannot read it all, or might be wrong.

There are those who stand before a panel of rock art and feel confirmed in their most intimate intuitions about the symbolism. At first we think it is like going to a strange country. Later on it doesn't seem all that strange after all, if we realize we know what's around the next bend, and we know the people in the road. But if not, how do we know if what we think we really see is the real reality (the real truth), or just another mask (or our truth for that moment, the pseudo-reality), hiding the ultimate or highest level of truth from us?

Some artists are trickier than others. Some make the real point the least obvious. And many of us take the more obvious symbolism hook, line, and sinker down a false trail away from the highest level of truth. That's when it becomes an allegory.

Ordinary observers have ordinary thoughts and thus make ordinary researchers. Enlightened thoughts come from enlightened observations, learning the real lessons from our experiences, listening to the right voices that talk to us, doing our homework. And then those of us who are willing to stick our intellectual necks out and wait for the sword to fall will make enlightened researchers. And those who know the difference are the masters. They are the ones who know that to some, an ordinary thought is enlightenment, and know that the other side of that is that not all enlightened thoughts are enlightenment. It's relative to how one stands in front of a panel, or whether one has ever stood in front of the panel. That is part of the Buddha Nature.

How do we know if our remarks, or those of another, are enlightened or not? In reality, it isn't important. But for those who believe it is, ask yourself, "To whom is it enlightenment, and to whom isn't it?" To one, it is one who knows more; to the other, it is the one who knows less, but often doesn't know others know more.

This illustrates our pride in a pre-conceived level of achievement that is like a different view of the elephant, the tail or the trunk, rather than more exposure to it. The tail isn't more important or on a higher level of understanding to the concept of elephant than any other piece. Only in gathering as many pieces of the puzzle as possible will we approximate a more complete picture, allowing us to see and thus understand more.

There is one problem, though: we will never find all of the pieces of the puzzle. There are several

reasons for that. One is we will never find all of the repetitions having better clues. Another is that symbols change, and over time cultures forget the way the old stories used to be told (Freidel, Schele, and Parker 1993:208). But we must realize that we don't know how to read exactly what the elephant really is and what it represents. Is it just an elephant, or does it represent something beyond an elephant? It could represent the circus, or is it the Hindu god Ganesha? Or is it really just a tapir and God B? The elephant can be the finger the master points to the moon, or it can be the moon the master's finger points to.

We are all on the same road to understanding, or increasing our awareness of reality. The Navajo would say that one is higher up or lower down on the ladder of education. Where one is now, another once was, or others will be later on. What the first one may yet learn, the second may learn sooner or later, or even pass him up. Then can he rightly say, "Now I am a Master"? Not really, if his ego is under control.

Once before, I stated it is not so much who is right or who is wrong or if there is such a thing, versus *better* or *not as good as* (Warner 1993:15; Hopke 1997:167). If it's your truth, and I have a different truth, is that like Huss and Jerome? If we both think each other wrong, what are the chances we are both right to differing degrees, which is also wrong to differing degrees? If you learned anything said previously, the only answer is that both are right and both are wrong, no matter how much. *The rightness or wrongness is not the case here and we should not make it the case.* Within each symbol, there is a hierarchy of different and more complex symbolisms and truths.

An analogy of understanding is passing through life as if moving up through an X. At the bottom, the widest level of the X, is the lowest level of understanding. That is also where those whose reactions to, or compliance with, what they know is the most lax. There the understanding of spiritual laws (like rock art interpretations) doesn't apply like it does higher up in the more restrictive, more enlightened area below the junction. The place of enlightenment is at the apex of the lower triangle, the junction of the X that few reach. That's why I dare say no one is ever totally right. Through that portal we enter another area of laws that is the reverse of what we traveled through below, as we continue to unlearn more and relate new levels of understanding to everything we have previously experienced. Don't ever learn anything that you will eventually have to unlearn. And it is only the master that knows the difference.

To a Zen Master, those who don't come as close to the higher levels of truth as others haven't worked as hard as those who have a greater understanding of it, and thus don't deserve to have the same truth (the differences in their interpretations), until they have *earned* it. Does that relate to those who go out and ask, "What does this mean?"

That's why we can't ask that of a Native American, when he had to earn his understanding of it. And especially if he swore a vow of secrecy about what it really means. Asking him the meaning is in a sense an expression of our arrogance, a slap in his face. Some societies swear by their lives never to reveal their level of truth to the noninitiated (see Lefkowitz (1996: 94-5). Does that mean there are mystical schools or systems with a secret curriculum of initiation? Yes, it does.

Therefore, what anyone knows for that moment is their truth, their level of understanding, until they have *earned* a better, greater, more advanced level of truth. Each has their own truth because for each, like Huss and Jerome, there is a truth, and it is their truth that their interpretations reflect (Warner 1997:11-22).

How can we tell if our remark is enlightenment? Only if we know that we know we don't

know the answer. Then at least we know our statement isn't all of the answer, but only a small part of the great mystery. And what about the degree of enlightenment in the statement of another? Did you learn anything, become a little more enlightened? "I call it a cat. What do you call it?" "You call it a cat!" That should need no further explanation, but because I am not a Zen Master and you are not Zen apprentices, if you'll be patient a moment longer, I'll explain so there will be no misunderstandings.

What one says about it, thinks it is, or calls it, is their truth about it, based on their labels. For that reason, we don't have the right to argue about it; there is really nothing to argue about if I should not call it a cat. We are both on the same road, but the labels at the bottom of the X, way back down the road, don't exist on more advanced levels closer to the top or farther up the road. But to come to the real truth of it, we need to be open to the thoughts of others. On their behalf we need to accept their level of understanding and acknowledge their truth (their level or degree of advancement) without conceit.

Why do it that way? Because we may think we know more than we really do. And if we now know more, we once knew less. On the other hand, we may have the same amount of knowledge as the other, except each has different pieces of the puzzle. First find out what part of the elephant you have, the trunk or the tail. Once you know that you have the trunk, you know that he then must have the tail, or maybe it could be a leg. The next logical thing is that each can share with the other, if that sharing is warranted, or if they are open to each other.

The next problem is that the types of questions one can ask depends on what one believes. Some questions must be answered before other questions are even imaginable (Schwartz 1994:73). Some are afraid to ask if God has a big toe, others ask if God has a phallus. Some are advanced enough to realize that, in one sense, that is the same question (Warner 2002b). Some are even bold enough to ask if God has a belly button (Schwartz 1994:72, 78-80). On a particular topic, the lesser, lower level in which one person believes makes the seemingly-higher or more advanced level in which another person believes all the more significant (and more true). Is that logical? Rephrase that and ask yourself, "Does understanding what some call the 'wrongness' of a lesser level of understanding about something I know more about still help me understand more about what I know?" Yes, because it may be more than simply a comparative example. That's another aspect of the principle of knowing what something is by knowing what it isn't, only a part of the unlearning of what we thought about it.

When a Navajo talks to someone in Navajo, in a way they bounce him off of the ceiling, language-wise, so they know his level of competence within that X, and can then talk to him on his level. The more skilled Navajo speaker cannot talk to someone who knows less Navajo at his own level of experience, because the novice would not understand. That is us, trying to understand their rock art. Here is a large part of the arguments about differing interpretations. Knowing more and testing someone doesn't make a person better or smarter. Native Americans appreciate our struggles and endeavors to learn what they know. They are like rock art researchers who appreciate the struggles that one who knows less made to get to where he or she is, and then they help groom the novice to a higher level of understanding, through Galileo's principle of letting him find it within himself.

Wherever anyone is, is one's level of truth at the moment, all that one can understand at that moment about the Navajo language, or rock art. It is not anyone's fault that he knows more, or the novice's fault that he knows less. What one knows is what one has earned, all

that he possesses and thus reflects at the moment. Without establishing the common ground of the novice's level of understanding, there can be no real discussion or communication. This is part of the etiquette of learning. A researcher who is at a more advanced level has to come down to the level of the less advanced for a common level of communication. Apply that to understanding a person who knows more about rock art. Even though you may disagree with someone, what is there to argue about? Maybe it is because the less learned one is simply on a lower level, rather than not on any level of reality at all, just plain wrong or totally missed the boat.

An example from my experience as a radio operator in the Special Forces will explain this a little better. Let's say we have five sticks (squads) behind enemy lines. The minimum level of proficiency with Morse code for a radio operator is 13 words per minute (wpm). Nearly everyone else in those sticks is also cross-trained in code in case something happens to the radio operator, so the mission won't fail. The minimum acceptable speed is five wpm.

Proficiencies may range from group one with a proficiency of five wpm, group two with 10, group three with 15, group four with 20, and group five with 25 wpm. To send a message so all can receive it, I would have to send it at five wpm. If I only wanted group three to receive it I could send it at 15 wpm.

Here a person's proficiency with code is analogous to one's proficiency at understanding rock art. Very few know 25 wpm in either code or rock art. That means that you may know the code or the rock art, but not that fast, or in rock art within a particular situation. What level are you on? Do you want to increase your proficiency? You can if you want. Remember that a person with a five wpm proficiency in rock art will not understand a 25 wpm concept.

That also goes for the level of gospel they teach from the pulpit in a church. Many faithful will go to that church all of their lives and learn no more than the five wpm level of the gospel that was being taught. That principle allows the least of the flock to learn something. It's sad because God wants us all to pass the 25 wpm level. Only a very small percent ever does. Another sad thing is that too many ministers don't themselves know more than that five wpm level.

It's difficult to talk to a person who knows less but thinks he knows more than the person who really does. If possible, talk to him on his level, agree with him if he doesn't want to learn, congratulate him on his understanding, and some day he may find that you really do know more. If not, it doesn't matter because if he didn't believe you in the first place, why should he in the second? In trying to teach me that it's not right to take any one down if they are "wrong," Clifford Rayl would say, "Others can tell who is where" (Warner 1993). That's a hard lesson to learn, but we need to learn it.

Bill Strange is a person that can bounce someone off the ceiling, so to speak. I've observed him determine several persons' level of competence in symbolism, and will never forget his doing that with me. Then he knows what analogies to use to best help one grow, like Navajo singer Harold Tuchins did, by giving the student a piece of information to think about, rather than answering his questions. I've also seen Bill blow off someone obviously arrogant, who had no interest in learning what Bill knew. He only wanted to tell Bill what his own lesser knowing was, thinking that would be profound or enlightening.

When one finds someone he can talk to on his own level, there is a free flow of information. To participate in that is almost an ecstatic experience, one when silence is as much a medium of communication as any other, when the absence of words, like a picture, says

more, as he points to an element that illustrates what was or wasn't said.

A layperson *sees* a technical schematic of a cube as a see-through solid. This is his truth, his reality, based on his sensory input. It's analogous to his reading of a rock art panel. It's the "I call it a cat", and in rock art it is often "you'd better call it a cat, too, because I know how to read it." That is as far as he has become one with it. But a physicist sees a cube in a different way. The physicist *sees* it made up of mostly empty space between all its atoms. That is analogous to an experienced person's reading of the same rock art as the novice who thought he had the only right reading. In actuality, both models are valid. There is no one, single, isolated reality that to one person may be a sure reality, because it is multifaceted; each has his own truths whether or not those truths really are truths (Samuels and Samuels 1982:8).

No one master knows it all, and there is always someone to learn from. In Matthew 25 we learn that when we have clothed the naked, we have taught Christ. Not taught *to* Christ, but taught *of* Christ. In that manner, when we enrich the understanding of one who understands less, we taught those who made the symbols. Remember what Shaw said, if you teach a man anything he will not learn it. It is as Galileo said, we enhance their knowing by helping them find it within themselves.

The goal of the Utah Rock Art Research Association is that, "We all know something. No one knows everything. So let's get together and share what we know, right or wrong, we'll all be better off." Teaching is done for those who deserve to learn, those who empty their cups and open their minds. That means everyone is a pupil, even teachers when they're not teaching. Both teacher and pupil can look at the moon towards which the current teacher points their eyes, rather than looking at his finger and missing the real mystery, wondering why it is sticking out there. And it is surprising how often even those who teach or write miss the point, analyzing by comparing the pointing finger to other pointing fingers. Those who missed the point end up making much to-do about nothing. Those who missed the point argue against what they do not understand. To maintain a spirit of comradeship and help each of us to grow, remember what Clifford Rayl would always say, "Remember that in URARA we all need to agree to disagree."

Trying to explain an out-of-body experience to someone who not only hasn't had one but also doesn't believe in spirits, is worse than trying to describe something unknown to a blind person. The former are just as blind to the symbolism. The latter use hearing to see, and often see more. When we become enlightened, we know the ordinary becomes sacred, not only in rock art elements, but in any researcher as well. And through that the sacrimonious becomes ordinary as well.

"Freud wrote, '...it is possible for thought processes to become conscious through a reversion to visual residues.... Thinking in pictures... approximates more closely to unconscious processes than does thinking in words'" (Samuels and Samuels 1982:183).

The medium of rock art imagery is closer to Zen philosophy and its teachings than words. In Zen, things cannot be explained by words. Words can't define the realities that confront us, let alone the worlds beyond those realities (Williams 1992:86, 129, 131, 153, 163, 166, 167, 184). They have to be earned through hard work, practice, and then experience, though experience doesn't make perfect, only better. The well-known saying is that a picture is worth a thousand words (a referent for an infinite number), but the rest of it is that a thousand words still can't explain the picture (Cytowic 1993:63, 119, 131, 229). A combination of any and all words cannot explain what the picture means, but another picture can. Life, just as rock art, can only be glimpsed and experienced. It has to be pondered, not in the mind but in the heart. In that respect rock art will always be subjective. It can only be revealed, not explained (Franck 1973:118).

Samuels and Samuels (1982:152) explain it like this: visualization tends to get in touch with pure images. To visualize, one needs to lose his ego. The ego separates us and elevates the "me-mine" from what one sees, rather than being allowed to become one with the thing to be experienced. "Images," the Samuels say, "are closer to the voice of the inner center, whereas words are closer to the voice of the ego."

That isn't the viewpoint of traditional science, therefore science in the form of archaeology, using rock art as a tool, by that very fact will never really help us in its primary goal of fully understanding and explaining past ways of life. Rock art or rock writing is beyond words and beyond science (Samuels and Samuels 1982:152; Cytowic 1993:29-31, 36, 38-9, 58, 70, 72-3, 132, 179, 203, 220, and especially 225). It is the artist's response to his environment and to being alive. Insofar as it has anything to transmit, it transmits a quality of awareness. The Pleistocene cave paintings are the product of those who could see directly into the life center of each animal and grasp it with full humanity, giving their answer to the Zen Master's question, "What do you see?" (Franck 1973:128)

Yet that is different from what the Fremont of Utah, or the San of Africa, saw and pecked or painted, and their work was their answer. Neither was right nor wrong, nor better, or not as good as. All of these types of paintings worked for each just as well, for their times and places.

Take hold of an element, and once you are filled with it, you possess it, it is yours, you have earned it. Once you are filled to total capacity from the experience, if it is let go, it will be there forever.

Franck believes that many of the truly great artists use life as their medium, as well as paint. They are mystics who express the inexpressible without the aid of a brush, knife, chisel, flute, or computer. They not only paint and dance, their medium is whatever they do. With whomever they touch, they increase life and understanding. They see, and are artists of being alive. Are enlightened researchers or our ancient friends who talk to us through what we so inadequately call rock art, from either just a moment ago or the distant past, still reflecting their light to us, doing any less so?

To all those, both ancient and now here, who are windows through which we look and learn, may we be mirrors reflecting their illumination, like those enlightened panels, they who taught us so little which is really then so much, or taught us so much which is really so little, who in their spiritual nakedness remain beautiful people, I dedicate these remarks.

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Land and People: Conserving the Surroundings of Rock Art

Dorde W. Woodruff

We're concerned about conserving rock art, but not so aware of the land around it. The white man with technology and increased numbers brought vast changes to the Southwest. Places not affected or little affected by domestic grazing, or exceptionally wet spring flowering seasons, show us how the desert used to be. Botany and ecology show us cause and effect. We need to be knowledgeable and thoughtful about the impact to the land as we visit rock art, in order to best save what is left, for the Earth, for ourselves and other people, and for our descendants.

Judging from the frequent use of the adjective *pristine* to describe Western lands, laymen don't have an accurate frame of reference for changes to the landscape since settlers of European descent arrived. No place remains pristine, that is, characteristic of the earliest, or an earlier, period or condition; original, still pure or untouched; uncorrupted; unspoiled (Friend and Gusalnik, 1957).

The late linguist Wick Miller interviewed Shoshoni people for their stories (Miller 1972). Rosie Pabwena of Wells, Nevada, said, "Nowadays the white men have fenced in this land. They took away the Indians' land and made it look sad" (Translated, Wick Miller).

We respect the Native Americans' sacred sites; shouldn't we do what we can to keep these places from looking even sadder?

We often hear the myth of making the desert "blossom as a rose." Certainly with irrigation and our culture's farming methods, cultivated land in the West is more productive. But the desert in its own way did blossom, and now even the West's uncultivated land is changed forever.

Utah was not originally the desert that myth would have it. BYU professor Richard Jackson presented a significant study as a lecture in the Charles Redd Western History Series (Jackson 1975). For a description of the Salt Lake Valley when the main body of the pioneers arrived on the 24th of July, 1847, he selected diaries written on that day only, as the most accurate.

Wilford Woodruff, later to be president of the LDS church, wrote, "We gazed with wonder and admiration upon the most fertile valley spread out before us for about twenty-five miles in length and sixteen miles in width, clothed with a heavy garment of vegetation, and in the midst of which glistened the waters of the Great Salt Lake, with mountains all around towering to the skies, and streams, rivulets and creeks of pure water running through the beautiful valley."

William Clayton wrote, "...There is an extensive, beautiful, level looking valley from here to the lake which I should judge from the numerous deep green patches must be fertile and

rich...."

Others wrote, "...the Wheat grass grows 6 or 7 feet high, many different kinds of grass appear, some being 10 or 12 feet high." "After wading thro' thick grass for some distance...[found] a place bare enough for a camping ground the grass being only knee deep, but very thick."

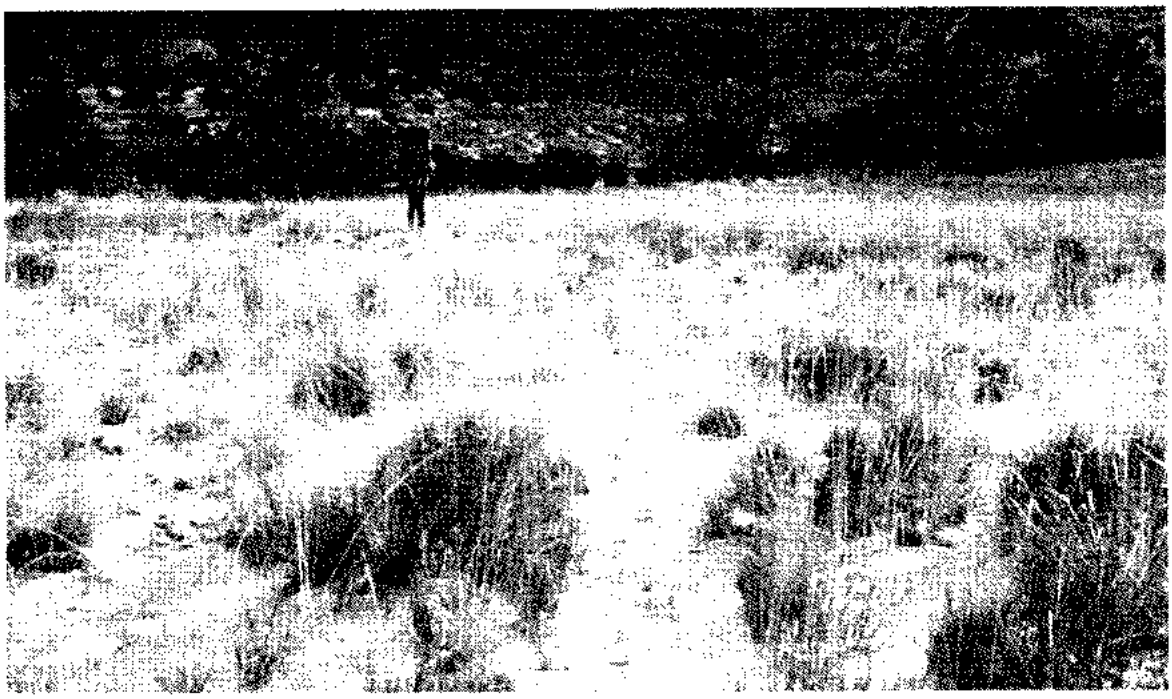
Where they camped the soil was "black" and "looked rich" and "was sandy enough to make it good to work." Grass "grew high and thick on the ground".

As early as 1865, the prominent Mormon Orson Hyde noted, "I find the longer we live in these valleys that the range is becoming more and more destitute of grass; the grass is not only eaten up by the great amount of stock that feed upon it, but they tramp it out by the very roots; and where grass once grew luxuriantly, there is now nothing but the desert weed, and hardly a spear of grass is to be seen."

A man stood up at the lecture and recounted how his family had cut wild hay in Cedar Valley west of Provo into the 1870s. Shrubs and weeds grow there now (see left, 1970s).

Much of Utah and the West was originally grassland, such as the Palouse Prairie region of the northwestern part of the state including Salt Lake City. Researchers agree it's the once-luxuriant grass that has suffered the most over the West. And because of this great degradation of grasslands, land managers struggle to improve grazing practices.

When the fall and winter precipitation is especially bountiful, maybe every 25 years or so. in the spring the desert will approximate the original condition of the West. The spring of 1973 was a spring to behold. The grass in Utah's West Desert was so high and thick that it was almost impossible to follow the two-track four-wheel-drive trails. Ralph Holmgren, for many years manager of



the Forest Service's Desert Experimental Range west of Delta, commented that May, "I didn't know there was so much *Stipa comata* [needle and thread grass] in the whole world."

The East Desert of Utah, the Colorado Plateau, was equally beautiful that year. Masses of flowers bloomed near the Miller Canyon road about five miles south of the Rochester Creek rock art site.

Another way to see approximately what the desert should look like is to observe ungrazed areas, those rare places too inaccessible for domestic grazers, or exclosures, study areas fenced from use for various lengths of time, or reserves such as national parks or wildlife refuges where grazing was stopped. See photo at the bottom of page 88 opposite, the lower part of Bullet Canyon in Grand Gulch, Thanksgiving, 1975. Cattle cannot enter from the cliffs above, and evidently in the warm season it's too far from water.

But exclosures by definition are not *pristine*, and even never-grazed areas are no longer *pristine*. Air pollution from cities, from the burning of coal for electricity and from vehicles, has spread all over the area beginning in the 1960s, with the escalating population explosion in the West, and more leisure and tourism. Gone are the hundred-mile views from the tops of mountains or the edges of high mesas, such as could be seen from places like the Virgin Mountains southwest of St. George, towering over the Nevada Desert; Frisco Peak looking out over the West Desert; or the edge of the Wasatch Plateau towards the San Rafael Swell and beyond (Dahms and Geils 1997).

As more coal-fired power plants came online, and so forth, air pollution in the West increased.

In the photo above, the camera couldn't see a hundred miles through the slight haze on this May day in 1970, but the eye could, from the four-wheel-drive road on the summit ridge in the Virgin Mountains on the Utah-Nevada border southwest of St. George.

Weeds can spread even to remote places such as these. For instance, Lincoln Ellison (1954) observed in his study of the Wasatch Plateau that dandelion seeds on their parachutes were floating over the Plateau from the Sanpete valley 500 feet below.

And who knows what global warming will do to the already irregular Western climate, bringing more stress to this fragile desert environment?

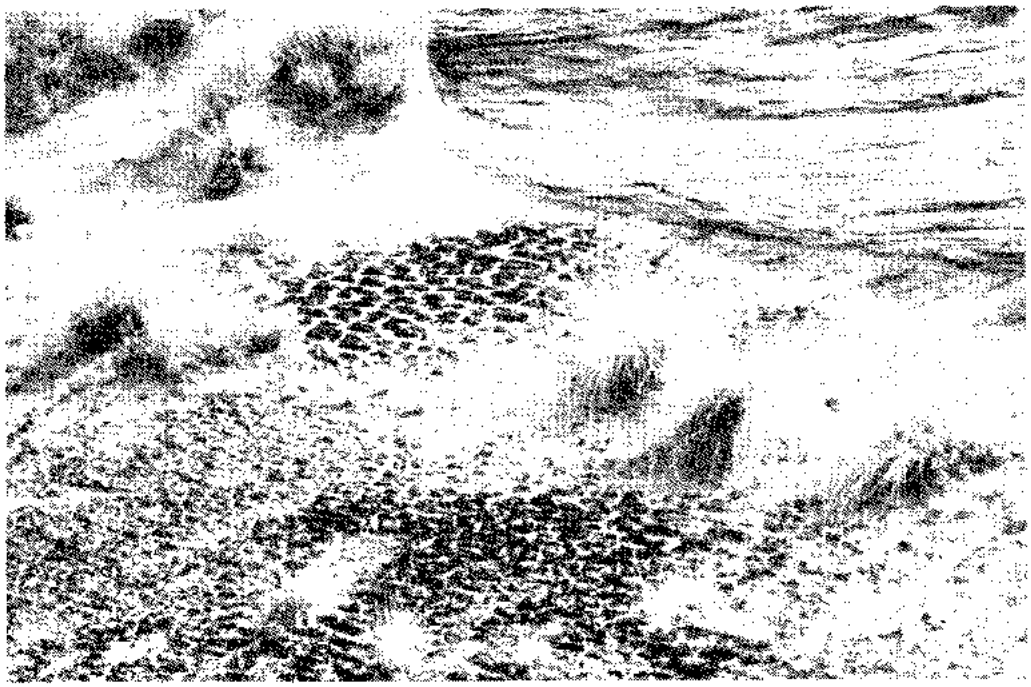
Cryptobiotic Soil

Now to look at arid and semi-arid lands in more detail. A peculiar characteristic of all the world's deserts is cryptobiotic (meaning "hidden life") soil, a crust on top of the ground composed of a mixture of cyanobacteria (formerly called blue-green algae), several different types of algae (Flechtner et al.1998:296), fungi, lichens (which are themselves symbiotic organisms composed of algae and fungi), mosses, and sometimes liverworts or diatoms.

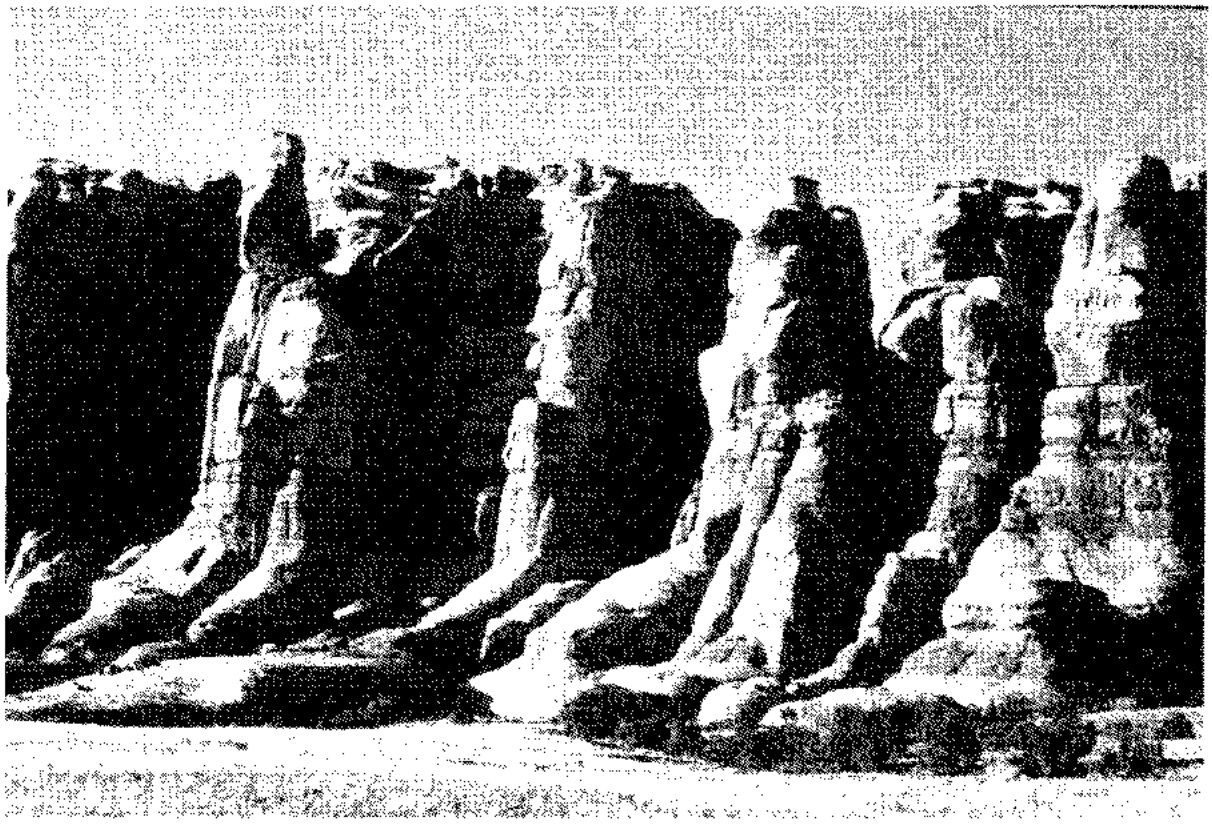
The original name for this mixture of organisms, cryptogamic soil, is from an old botanical term for primitive plants without flowers, cryptogam, meaning "hidden marriage" or "hidden gametes", gametes being the reproductive parts; before microscopes the reproductive phase of these plants was hidden from human view. Other terms used are microphytic, "small plant", and microbiotic, "small life". There is no referee or dictator, so researchers use their favorite term.

Cryptobiotic soil is quite important to desert ecology, yet easily damaged. It's not easy anymore to find a complete cover of cryptobiotic soil between the scattered shrubs, herbs, and grasses of the desert. A good place to see this dark crust is on the steep river terraces of the Colorado and its tributaries, or in rock pockets in slickrock, such as in Seven Mile Canyon, a tributary to Glen Canyon near Bullfrog, below, with a good cover of cryptogams, and ungrazed grasses.

For a long time cryptobiotic soil was overlooked; study of its ecology is fairly recent. The



landmark fieldwork of Ed Kleiner and Kimball Harper in Canyonlands in 1967 and 1968 (Kleiner and Harper 1972) demonstrated basic differences between grazed and ungrazed areas. They compared Virginia Park, a grassy place surrounded by rock walls and accessible only through a unique, steep, rocky tunnel through the sandstone wall, to adjacent Chesler Park which had been grazed for many years in winter by horses, while only deer and no domesticates could get into Virginia Park.



Cryptobiotic cover was about seven times greater in Virginia Park (above), and it was much richer floristically than Chesler, with more grasses and fewer shrubs. Without pressure from domestic grazers, cacti were less spiny. The soil had more nutrients. There was no drainage channel erosion. The vegetation formed a pattern, indicative of diversity and therefore productivity (Siegel 1999). The soil texture was finer. They concluded that the intact cover of cryptobiotic soil contributed to soil nutrients, and stabilized the soil to resist water and wind erosion.

In another landmark study Evans and Ehleringer (1993), using a new and more effective method of measurement, found that cryptobiotic soil was the primary source of nitrogen for desert soil. Some of the organisms of this crust, especially cyanobacteria, can change gaseous nitrogen from the air to a form usable by plants. In deserts water is the most limiting factor to plant growth, but nitrogen is second. Cryptobiotic crusts also increase water infiltration and retention, holding it for use, limiting runoff and its concomitant erosion. They enhance the establishment of seedling plants, and warm the soil (Utah Bureau of Land Management, Monticello, 1999).

These small organisms may look insignificant. They are not.

All this is helpful and even essential to the health of deserts. But cryptobiotic crusts are fragile, and all the more so when it is hot and dry and they are dormant and brittle. When Kleiner and Harper returned to Virginia Park in the second year of their study, they were surprised their footsteps were still so visible. After that they walked in the same paths. People, domestic or wild animals, vehicles, bicycles, and wildfires all impact the crust (Buttars et al., 1998).

Recovery rates are slow. The organisms grow only when wet; summer heat and drought inhibit them. Estimates vary, but ecologist Jayne Belnap thinks that ground left bare is vulnerable for at least

20 years after disturbance (Belnap 1997). If soil is then lost it may take up to 10,000 years to form again. Time for recovery of the different species varies. Cyanobacteria may begin to recover in as little as six months and may be healthy in five years (Allen 1999). But Belnap notes that it may take at least 50 years for nitrogen fixation to completely return. Furthermore, "assuming adjoining soils are stable and rainfall is average, recovery rates for lichen cover in southern Utah have been most recently estimated at a minimum of 45 years, while recovery of moss cover was estimated at 250 years."

Of course, trampling of any kind disrupts or kills other organisms large and small besides the cryptobiotic ones (National Park Service, Arches 1996) but these small crust organisms are less likely to be noticed.

In the photo at left, sand from distrubance blew over these cryptogams and will kill them. Note the micro-topography; the uneven surface helps water absorption into the ground, helping to prevent runoff.

Soil disturbance and compaction

Cryptobiotic crust won't form in soil that is too sandy and thus unstable, or too rocky. In some of the latter, desert pavement develops, which can be quite beautiful, retard erosion, and serve as mulch for plants. This too can be disrupted by traffic. It's well known that motorcycle ruts went through the giant figure near Blythe before the BLM fenced it (left, note track through legs at far end of figure).

In addition to disturbance on or above the surface, traffic of any kind compacts the soil. "Any surface loading creates stresses in the soil which affect soil properties to a finite depth...the greatest increases...occur at a shallow depth instead of at the soil surface." Because of the fact that "soil loosening processes operate most quickly at the surface", this is important.

"Soil infiltration rates...decrease...because of total porosity decreases and changes in the distribution of soil pores...rainfall intensity required to initiate runoff is less in compacted than in undisturbed soils" so less intense rain is required to initiate runoff with more compaction. Also "traffic leads to raindrop crusting",

decreasing infiltration again. "...soils most susceptible to density increases are loamy sand or very coarse, gravely soils with a wide range of particle sizes.... Least affected are sand or clays with evenly-sized particles, though clays will compact when wet. In addition to disturbing stable surface crust with good water-receiving characteristics, traffic can change the ground surface to make runoff more effective. "Ruts running directly upslope greatly reduce the surface's resistance to erosion" (Web and Wilshire 1983).

It's surprisingly easy to create erosion. During the gas crisis of 1973 when I was doing an ecological survey for the Huntington power plant, I bought a small motorcycle. I usually camped at Huntington in the pinyon-juniper on an old, obscure, wood-cutting trail. Once, not yet having any frame of reference for off-highway motorcycle use, I took the bike instead of my four-wheel-drive, and noticed the bike's narrow tires made a deeper rut on the last, steeper pitch.

Now, twenty-six years later, trees have grown up in the trail, a dead tree has fallen into it, and there is no indication vehicles drove here except for the short, rocky erosion gully and adjoining soil deflation I caused with no more than ten passes with my motorcycle (right).

Observing over a Period of Time

Considering how places have changed over the years leads to understanding of *what* can happen, if not always exactly *how*. Repeat photography establishes the facts without the vagaries of memory. "[It] is a simple, inexpensive, and elegant tool for reconstructing past environmental changes and monitoring futures ones; it is particularly well suited for the relatively open landscapes of the western U.S." (Allen et al. 1997.)

If you've been interested in rock art for a few years, you may have noticed change and have the "before" photos to prove it. For instance, in 1982 the road to Rochester Creek just stopped. There wasn't much degradation around it. It was a rough two-track, difficult to find, threatening to erode off into the canyon in places. Now it is a tourist destination, the road signed, wide, graveled, and stable. There is a large bare area at the end of the road, and a rock fireplace full of ashes.

In 1984 there was one road to the delicate Barrier Canyon style panels at Little Wild Horse Canyon. The ranger at Goblin Valley began to tell people about the site. A few months later someone had pioneered another road in an attempt to walk less, from which it was actually more difficult to find the panels.

Also in 1982, the road south from the Cleveland-Lloyd Dinosaur Quarry road to the many panels in Dry Wash was easy to follow. The meadow there was a pleasant place. This year there were so many new roads that though I stayed overnight, I never did find the right one to the

Left: at the end of the road at the Rochester Creek rock art site in 1983, with much less visitation than today. Cryptogams were missing but plant cover remained. Below, the same area in 1999. Note the same juniper tree on the left. Plants are gone in a wide swath around the end of the road. Sand is packed and tracked, and there are some leftover rock fireplaces and trash. More camping now will make it even worse.

panels. The meadow was scarred with tracks, fire rings, and broken glass; it had evidently become a favorite party place. Repeat photography at such places would be good documentation for land managers.

Weeds

Nature can cope with a certain level of disturbance. There have always been floods, windstorms, volcanic eruptions, and the like. Buffalo roamed and Native Americans prospered. But our culture is doing it harder and faster. Land is left bare. Soil is lost. Arroyos are cut. Wetlands dry up. And the big danger which land managers are worried about now is weeds.

Usually (though not always) weeds move into areas of disturbance. Native weeds are relatively benign, even useful or pretty. Globe mallow, *Spheralcea* species, now beginning to be used as an ornamental, can act as a fireweed, a plant that comes in first to cover a burned area, or in red-orange flowery masses on other disturbed sites. The plant called fireweed, *Epilobium angustifolium*, is now most often seen on road cuts. Far from being toxic, these two are valuable medicinal herbs. Common sunflower, *Helianthus annuus*, the same species as cultivated sunflowers with their valuable seed crop, is so hardy that it was one of the pioneer plants around the huge crater from the Sedan thermonuclear test at the Nevada test site. It's tolerant to the dangerous

cesium and strontium isotopes produced (Goetz 1997).

Competition and native diseases and insects that prey on them keep indigenous weeds from getting out of hand. As a group our older imported weeds are relatively benign, because many if not most of them were brought deliberately as food, medicine, or forage. But with increased population and easy travel, the most noxious, aggressive weeds of the whole world have an unprecedented opportunity to stake out new territory, free from natural enemies, unasked and unwanted.

For years cheat grass, *Bromus tectorum*, from Eurasia, has been the scourge of the West. Animals can eat it in the spring, but it soon turns dry and inedible. The ripe awns can injure animals, and are the despair of sock-washing mothers. To control it botanists are working on a parasitic smut related to corn smut, the *toloache* the Aztecs ate. But it's tricky; the kind of smut has to match the particular genotype of the local cheat grass.

The task is urgent because worse scourges are waiting to move into bare spots or take over from cheat grass before it is eradicated and land replanted. One of the most vicious is the Eurasian perennial leafy spurge, *Euphorbia esula*, which shoots its seeds for 15 feet around it, and is so deep-rooted it's very difficult to get rid of. It can kill cattle that eat it, and has sap that can cause permanent blindness. It's carcinogenic; before they learned to wear gloves, weed controllers in Idaho where it has caused millions of dollars worth of land degradation lost finger joints from pulling it barehanded.

Or jointed goatgrass, *Aegilops cylindrica*, a Mediterranean winter annual, another type of plant which does well in our climate. It breaks up into many little fertile pieces, and is so close to wheat genetically that it can't be eradicated from wheat fields by weedkillers. (Susan Meyer, personal communication 1999.) And there are many others.

Again, observation over time is a good teacher. I've owned my land in Salt Lake County for 44 years. Once grazed and part of it cultivated, it had the traditional weeds of the area: red root pigweed, edible; sunflower, cheery; ragweed, useless but not vicious; cheat grass, not nice, but in a limited area you could stop it by mowing before it set seeds. And so forth. The native grasses were gone but there were wildflowers and sage.

With population growth and more weeds coming into the Salt Lake Valley, or moving around in it, I've seen weeds disperse onto my property year after year. Weeds came with my topsoil, with neighbors' topsoil; seeds blown from the old neighbor's pasture reseeding; seeds blown from the freeway property bulldozed then neglected for years; from bird excrement; from squirrel burial; from a gift of sod; in baled

Right, the weedy native milkweed, *Aesclepias latifolia*, is not only fairly benign but pretty and useful. It attracts butterflies, is edible and is medicinal.

cesium and strontium isotopes produced (Goetz 1997).

Competition and native diseases and insects that prey on them keep indigenous weeds from getting out of hand. As a group our older imported weeds are relatively benign, because many if not most of them were brought deliberately as food, medicine, or forage. But with increased population and easy travel, the most noxious, aggressive weeds of the whole world have an unprecedented opportunity to stake out new territory, free from natural enemies, unasked and unwanted.

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hay; from the neighbor's manure used as mulch; stuck on bicycle tires or soft shoe soles; in mud on tires or feet; by underground roots from neighbors; in play sand. Weeds will come if they can.

What We Can Do: Tread Lightly

By now you're probably thinking, what does this mean for us, the rock art community? Consider what you can do to keep from making the Indians' land look more sad than it does from the damage already done to it.

There's a retired highway patrolman who lives at Moroni and likes to camp. Every year he would get mad because all the camp spots in the forest were so trashy, never enjoying his stay. Now he spends some time in the spring going around to a few sites and cleaning them. Then he cleans each site he camps at, spends a little time and is happy for the rest of his stay.

We shouldn't camp at over-visited sites like Rochester Creek any more, making it more bare and degraded. A better practice is to camp at a maintained public site, or one like the areas near, not at, the Swasey's War Camp rock art site near Price, Utah, areas that are already bare, packed sand (left: denuded area around tents and cars) and will not deteriorate further. Both field trip leaders and participants need to think about conservation of the surroundings of rock art.

Record keeping is important. Not only for your own use, but if it's possible that you would ever take friends to a site or lead a trip, take note of exactly where it is, what roads to take, and where cars could turn around without excessive damage. Would the road rut if wet? How many people should go?

On the other hand, in the case of a last short stretch that you don't want to take a herd of vehicles into, could you take one car with disabled people without causing too much damage? Let people know about how far it is to walk, so they can be prepared.

Something as simple as a 3x5" card file that lives in your SUV, or a notebook with a page copied from the 7½-minute map and marked for each site is handy. With the USGS maps finally completed, notebook computers, GPS instruments, and CDs of maps, locating a site is easier than ever before.

Things happen, leaders get sick, the weather turns bad. But with increased visitation, it becomes ever more important to respect the land. If you're taking people in, scout out your trip beforehand if it's been awhile. Don't try to find one last site with your group hot on your heels, since this could lead to errors in judgment. Maybe we can't see so many sites in a day.

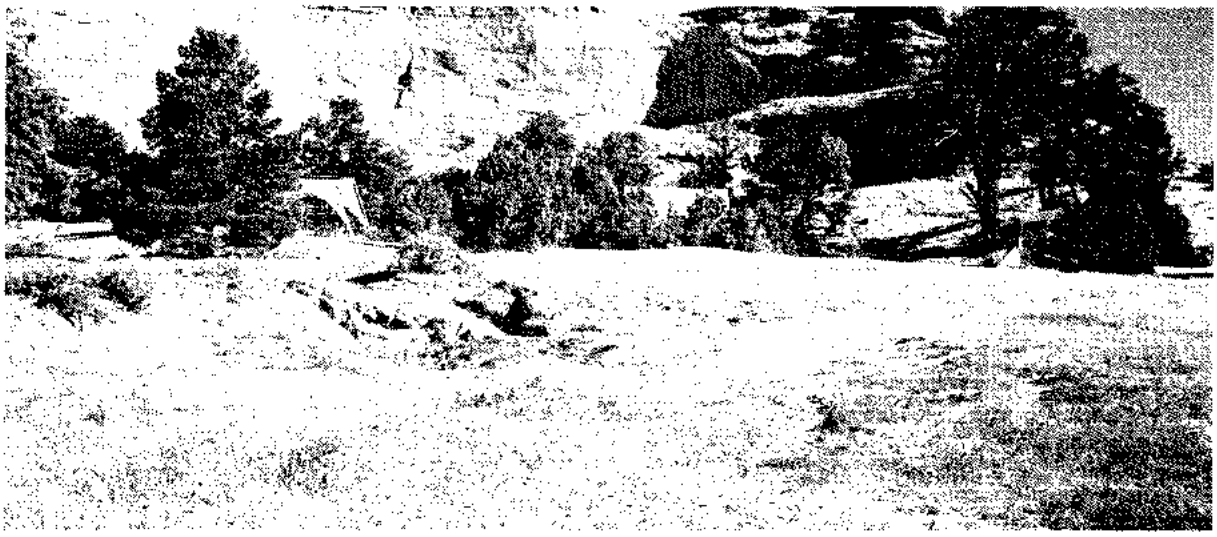
Be sure you're familiar with URARA's guidelines. Give our URARA Rock Art Site Etiquette handout to members of the public and to new members. Let people know you expect them to stay on the trail and not walk on cryptobiotic soil.

Most of all, rather than follow a lot of hard and fast rules, consider the situation. Does it make sense when camped near a wash with plentiful driftwood, or where there's been woodcutting with

abundant trimmings remaining, to use fossil fuel? Or you could bring wood from home, and haul out at least as much ash as you produce. I enjoy using a well-built fire-ring left for me, but I carry garbage bags or a plastic pail and clean it up. Like the retired patrolman, I'm happier with a clean camp. Though there may not be any studies on the subject, the consensus is that most people will respect a clean area.

The National Outdoor Leadership School in partnership with the Forest Service, the BLM, the National Park Service, and the U.S. Fish and Wildlife Service, have thoughtful suggestions on their *Leave No Trace* website. Though, as we have seen above, *leave no trace*, like *pristine*, is not accurate, leaving very little trace is good.

I hope this paper has given you the beginning of an idea what the Indians' land was like, more beautiful than today and closer to its natural condition. It can only touch lightly the study of Western landscapes and their conservation, which comes from many disciplines. Even on the single subject of cryptobiotic soil, papers are found in many different journals. Should you wish to study further, the Internet is a good place to begin, and websites will get you into the literature.



Outfitter's camp at the Head of Sinbad area in the fall. This popular camp spot near the Red Warrior pictograph was trashy and had several firepits and a big hole. The outfitter cleaned it up and left one big firepit for people to use. Every fall thereafter, when the outfitter was there for a month, it was cleaner than the year before, never returning to the former state though visitation may be assumed to increase rather than decrease. Removal of cryptogamic cover and grama grass by grazing and human use led to the erosion gully in the center, from runoff from the cliff during thunderstorms. Patches of grama grass remaining were tall and healthy due to good rain that year in summer and early fall.

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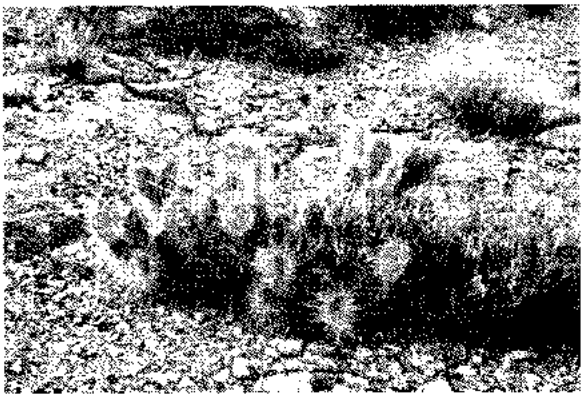

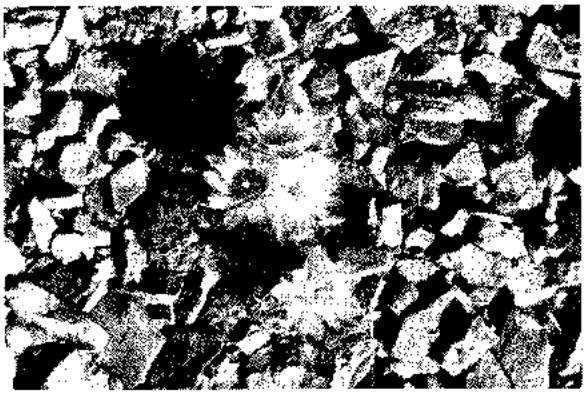

Above left, the east end of Nine Mile Canyon. Runoff from an intense summer thunderstorm makes a yellowish ephemeral waterfall full of silt from the disturbed mesa above. Right, different kinds of desert pavement. Top: unevenly-sized granite gravel, Beaver Dam Wash in the southwest corner of Utah. Bottom: small chunks of limestone surround a rare miniature cactus above Marble Canyon of the Colorado.

Below, four-wheel-drive tracks in desert pavement above Three Canyon in Labyrinth Canyon of the Green in 1972. Once remote and seldon seen, now you can get GPS coordinates on the Internet to this route across the mesa to June's Bottom. What would a present-day comparison show has happened to this scene?