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PREFACE

The 1987 Utah Rock Art Symposium was held at Fremont Indian State Park on October 10, 11, 12, 1987. The Fremont Indian State Park was dedicated just two months earlier on August 22, 1987 with Gordon Topham as curator. This park is located twenty-four miles southwest of Richfield, Utah in Clear Creek Canyon. This site was proposed because of the building of the new Inter-State I-70 running through a Fremont Village known as Five Fingers Knoll.

Richard Morrey became the state wide coordinator for the Fremont Park Citizens Task Force Committee and facilitator for action toward getting the proposal for the museum in the canyon. The museum houses the artifacts found in the Fremont Village plus the museum serves as a interruptive center for archaeology in the field of Rock Art.

Since Asa Nielson, director of Brigham Young University Archaeology Department, was the coordinator in charge of all archaeological surveying and excavating work, and he spent such a large amount of his own personal time and energy in seeing that the rock art work was properly recorded and protected, the Utah Rock Art Association choose to dedicate the 1987 symposium to him.

The papers in this volume were presented in the auditorium at the museum on Saturday starting at 9:00 A.M. and going until 4:30 in the afternoon under the direction of the Utah Rock Art Association's President, Bill Hirt. Jesse Warner was the chairman of the symposium.

In the early evening, Francez Sorenson, who is an adopted Piute Indian and her family provided a wagon ride and car excursion to see some Indian sites. She told us about a few of their traditions and about some of their ceremonies. Afterwards they served us an outside Barbecue dinner. The evening finished off with native dances and music by the Sorenson family and friends of the Piute Tribe. Many members of the audience participated in some of the dances. The evening was most enjoyable.

Sunday morning the symposium group visited many interesting Indian sites in the Clear Creek area.
This is how to go there. The simple truth. It cannot be done in the
manner of a trip across town, or running a finger along a map. The map has
only two dimensions, the trip only four.

Become a student of all things. Learn to speak to beetles.
Acquaintances will fall by the way, and perhaps friends, lovers. Travel
always toward the edge. Get out of that glass and metal box. If you pass the
overhang which shelters the village of the Hobbits, all is well. Go past the
Barchan Dunes. Travel much by moonlight. One morning you will awaken on the
desert, in a place you do not know. Raven will be there. That morning you
must eat no more than cornmeal, drink no more than cold water mixed with
certain herbs. Walk toward the sun. After a time you will come to the
barrier at the edge of the world. Descend into a canyon. If your heart is
good and your spirit young, Raven will show you the way. Make no loud plans,
for Coyote will be nearby. In an alcove, you will see a supply of red soil, a
supply of purple soil. Another place will be a tiny seam of green soil.
Remember these things well. Raven is unrelieved black against the canyon
wall. Remember this. You may see tiny, fluttering shards of the red walls,
laced with raven black, falling among the rabbit brush, gathering the
sweetness of the morning. Massive walls, old before time, offer shade. A
scent of water listens. And something else. Barely hidden, a river of time
runs deep here, unbridged by man. It carries you to the paintings.

This I believe I know. The little people who created the paintings
emerged fully formed from the rock of the canyon floor. I saw this happen
once. They were part of the canyon, an extension of the canyon. The canyon
created them. They were the legs of the canyon, were the arms of the canyon.
They celebrated the canyon, sung the canyon, painted on the canyon's face the
half physical manifestation of the canyon's power. They gave the canyon eyes,
which slowed cold blue-white, shame the moon.

This I know I believe. The people never left the canyon. As the
paintings gained depth and life, the people faded, became translucent, were
swallowed as sound is swallowed here, returned to the rock.

This I saw at the place of paintings. Kokopelli still wanders
these canyons. The sly old rock musician may be disguised as a
tourist, but certain characteristics are diagnostic. The small
daypack. The tendency to lick his lips as he studies the women. Do
not trade with this man. Maintain a respectful silence, a discrete
distance. He will not stay long.

As I lingered there I felt the pull of the rock. The air seemed
thicker somehow. Before I could see the solid walls through the
flesh of my body, I came away.

This I feel. For thrice a thousand years the canyon has waited. For
thrice a hundred years it has watched something ugly growing, growing. But
the canyon's power remains. On certain nights eyes glowing cold blue-white
shame the moon. Soon, soon the planet will shake itself fully awake. Cleanse
itself. Then perhaps a few who have hearts still good and souls still young,
who can abandon the insane notion they are not part of the canyon, an
extension of the canyon, will gather again to celebrate, to sing, to watch as
radium eyes shame the moon.

-by CLAY JOHNSON 1989
Sand Island, San Juan County, Utah  ca. 90 cm. tall
Little Blue Table Mesa, Owyhee County, Idaho

H. 29 cm. x W. 28 cm.

VIII
Red Sands Cave apparently was discovered by Milton Holt of Gunlock, Utah. He introduced Dr. Castleton to the site on September 9, 1978. Dr. Castleton included the site in his book, "The Pictographs and Petroglyphs of Utah", Volume 2 page 149. Members of URARA attempted to locate the site during field trips on three different occasions. During a visit to St. George, I convinced Mary Allen Toner that she and I should try to locate Red Sands Cave. Having found almost all of Dr. Castleton's rock art sites using his generously given descriptions, I felt secure in being able to locate the site. Fortunately I had with me his written description of Red Sands Cave. Before going into the field it is always appropriate to obtain as much information as possible about the site to be located. Mary and I visited a Mr. Holt at his home early the next day. We found him to be a very interesting man. He has the largest personal collection of old tools anywhere in Utah and it seems, probably the world. He also owns the best specimen of a petrified tree trunk with roots that I have ever seen.

We asked him about Red Sands Cave. He told us that he had not been there in many years, and he was not certain that he could locate it again. He told us that he would like to help us try to find the cave, but he was leaving town for an antique collectors meeting that afternoon. He did however provide us with as much additional information about the location of the cave as he could remember and we left.

Within a few hours, and with only minor difficulties, we had found the site. The petroglyphs are located on the upper surface of the partially collapsed ceiling of a south facing shallow cave. The ceiling slab occupies more than half of the floor area of the cave. The smooth slab containing the petroglyphs slopes to the west. There appear to be two ages or cultural differences represented. One group of people pecked symbols carefully. The dint marks are quite uniform in size and depth. The area pecked was repeatedly gone over to produce a sharp definite edge. The other type of pecking was more random and crude. The figures do not have sharp outlines. The crudely produced figures are superimposed over the fine petroglyphs.

As we were photographing the site, and as I was looking at the petroglyphs through my camera, the images suddenly reversed. Instead of being cut into the rock, the figures had the appearance that they were cut out from a thin rock slab and placed on the flat surface. It appeared as if the rock had been stripped away leaving the figures in relief. It was a spectacular effect. I had never experienced anything like it before. The whole image had
the appearance of an electron microscope photograph of bacteria on a smooth flat background—like a glass plate. I excitedly told Mary about what I was experiencing. She could not see it at first, but after concentrating for a few moments she could duplicate what I was seeing. Soon we were both luxuriating in this unusual phenomenon. After almost a half hour of looking at the petroglyphs through our cameras and taking photographs, Mary suddenly discovered that she was able to produce the same effect without the aid of the camera. By looking directly at the center of the panel, and concentrating on blocking out the surroundings, the images would reserve. With a little practice I soon could do the same. The effect was so fascinating that we spent at least three hours at the site. What turned out to be a short trip soon became an all-day preoccupation.

What was responsible for this phenomenon? It was the direction of the source of light. Our senses are accustomed to viewing objects with the light coming from above. When we are outdoors sunlight coming from above illuminates the objects around us. When we are in our homes or offices the lights that we use are generally placed overhead. This light produces highlights on the top of objects that protrude from a background and shadows that point down away from the light on the bottom of the object. When an object (a hole for example) is cut into a flat surface the shadows are reversed. The shadow appears on the top of the hole and the highlights on the bottom. When a light source comes from below our senses are aware of the situation because of gravity and the physical presence of our surroundings. When this occurs our senses adjust the visual images accordingly and we see a hole. But when our senses are deprived of this surrounding information the images become uncertain. Our senses automatically, because of conditioning, view the images as if the light is coming from above. When this happens objects appear to be coming out from a flat surface when in reality they are going into it. This occurs because the shadows and the highlights are on the "wrong" side of the object. This effect is more pronounced the less cluttered the surface. This is because there is less possibility for overlapping objects to occur, which is a clue to our senses that helps us determine which direction the light is coming from.

Situations producing this effect can be easily duplicated. When slides that are being projected, which contain no clues to indicate light source direction, are put into the projector upside-down they can appear reversed. The effect can also be produced when an illustration in a book is turned upside down. For some people it is difficult to achieve this effect because they cannot ignore all the other sensory information that is coming from the surroundings. Sometimes, before an object will reverse, it is necessary to concentrate only on the object for a time, and block out all other sensory information.

The physical setting of Red Sands Cave, the position of the sun, and the position of the rock slab with the petroglyphs on it relative to the cave walls allowed this phenomenon to readily occur. The sunlight was coming from the east and was reflecting off of the west wall on to the petroglyphs which were perpendicular to the wall. Thus the light was coming from the bottom of the panel. The petroglyphs when viewed through the narrow field of view of a camera lens knows where the light is coming from. Our senses provide to us
the correct positioning of the images. It was not until I had looked at the images and "forgot" for an instant about the light direction that the images became reversed. It was not always easy to produce the effect. It required a conscious effort to block our the information that the light was coming from below.

There are many questions raised by the discovery by Mary and myself of this site and the observed phenomenon. Was this effect known to the Indians who constructed these petroglyphs? Is there a way to determine if it was known? What would it mean anthropologically if the Indians were aware of it? How would these petroglyphs or the phenomenon have functioned within the prehistoric society?

These are difficult questions to answer. If some of these petroglyphs are unique to Red Sands Cave then they might have been created just because of the optical phenomenon. If other cave sites could be found containing images that are unique to cave sites where light sources could come from below the images then this would provide evidence that the Indians knew about the phenomenon and were using it.

Caves have always been encompassed with an aura of mystery and awe. The setting of the cave with the abundance of petroglyphs suggests that it could have been used as a ceremonial sanctuary, but this is speculation. Many petroglyph sites probably functioned ceremonially. Just because this panel is in a cave would not make it unique to that function.

The panel contains abstract symbols which might indicate supernatural concepts. These could have been used to produce an altered state of consciousness.

To substantiate any of these suppositions requires additional research. Other researchers should be aware of these figures and the associated phenomenon and look for others and record them where found.

Acknowledgments: I would like to thank Jesse Warner for presenting this paper for me when I was unable to attend the symposium.
BLANKET-LIKE GEOMETRIC DESIGNS IN CLEAR CREEK CANYON

BY

JUDITH S. WARNER

The geometrical patterns often called "blanket" designs in Clear Creek Canyon, in actuality may not be "blanket" designs at all, or at least exclusive to loom productions. There are several possibilities for these graceful and delicate geometrical patterns. Some of these include 1)—the possibility that some of these graphic compositions originally did represent textile designs or were at least inspired by textile designs, some having evolved beyond what would be producable on a loom.

These may have even evolved to become a means of group identification on the rocks to identifying those who have similar designs in fabric. 2)—Some or part of these designs may have also been originally painted on pottery and also may have evolved to become a more complicated type of representation when depicted on the cliffs and similarly used as a means of identification. 3)—Some forms may not be specific representations of either textile or pottery designs but may be derived from other symbols, and thus may be distinctive to rock art alone, and yet retain certain similarities to pottery and textiles, all derived from a common source of inspiration.

After identifying several different types of geometrical representations of what could possibly fall into this category and examining them closely, it is obvious that there are at least four different categories of designs. These include those that are: 1)—Naturalistic or "realistic"—those that look like they could be actual pottery or blanket designs (Figs. 1-4); 2)—Abstracted, less repetitive and balanced geometrical patterning, those that do not particularly seem to be conducive to production on a loom or are typical of known pottery designs (Figs. 5-7); 3)—Scratched rectilinear designs, some of which are fringed (Fig. 9); and 4)—Paired zigzags. These forms reoccur in similar contexts to each other but are different than those mentioned above (Fig. 10) yet still maintain another concept in common—that of an "archaeoastronomical" possibility.

Since there is such an unusually large number of these kinds of representations within Clear Creek Canyon and also within sites outside the canyon, versus the greater "Fremont" areas, it is possible that various forms of these will become diagnostic traits of this variant of the Sevier Fremont Style. Some particular expressions within this vicinity are actually quite involved and complex. Similar types of designs do occur at slightly more distant sites but still within the general style area. Some of those seem to be influenced by or an extension of this centralized area. It is certain that in the near future more of these types of elements will be found in outlying areas. At the present, known examples occur at Richfield, Monroe, Joseph, Sevier, Fool Creek, Parowan Gap, Braffet Canyon and Lion's Mouth (Figs. 3, 11, 16, 17A, B). It is interesting that most of the geometrical
FIGURE 1.
Section 2 Page 3 "BLANKET-LIKE GEOMETRIC DESIGNS IN CLEAR CREEK CANYON"
FIGURE 3.
Clear Ck.

FIGURE 4.

Section 2 Page 5 "BLANKET-LIKE GEOMETRIC DESIGNS IN CLEAR CREEK CANYON"
Figure 5.
Section 2 Page 7 "BLANKET-LIKE GEOMETRIC DESIGNS IN CLEAR CREEK CANYON"
FIGURE 8.

Section 2 Page 9 "BLANKET-LIKE GEOMETRIC DESIGNS IN CLEAR CREEK CANYON"
Section 2 Page 10 "BLANKET-LIKE GEOMETRIC DESIGNS IN CLEAR CREEK CANYON"
FIGURE 10.

Section 2 Page 11 "BLANKET-LIKE GEOMETRIC DESIGNS IN CLEAR CREEK CANYON"
"blanket"-like examples outside of this area show up west of the mountains dividing the plateau from the eastern edge of the basin, while other different elements distinctive of Clear Creek Canyon symbolism associated with these forms in Clear Creek Canyon show up more to the east.

Even though the phenomena of concentrated geometrical decorations from Clear Creek is unique to Fremont territory, similar types of designs do occur in somewhat concentrated locations in Washington County around St. George, Utah (Figs. 11A,B). These lie about 120 miles to the south. Many of these do seem to fall into more blanket-like types of designs and they are typically less complex. It seems that there are roughly similar percentages in each area that have various types of border-like lines. As of yet, a relative dating is not certain.

The evidence from an examination of these designs alone and a tentative assessment of the authorship of these panels, with associated archaeological remains, seems to indicate an earlier existence of these designs to the south. In other words, the influence seems to be from the southern Anasazi to the more northern Fremont. At the moment, however, this still remains unsubstantiated.

The strength of these patterns with a heavy concentration in both areas strongly implies their importance within both cultures. The differences in the distinctive types and specific patterns reflected in their various concentrations and elaboration in both the Virgin River area and the Clear Creek area, however, seem to be evidence of a great importance within their extremely localized societies. There needs to be a considerable amount of research in both areas to provide comparative dates to analyze similarities and differences in types, associations and application. Until that is done, too many questions will remain unanswerable.

POSSIBLE CONCEPTUAL APPLICATIONS

No definite, identifiable, or concrete conceptual associations have been identified for the representations in Clear Creek or those near St. George. Because of the nature of many of the glyphs and their contexts and associations, in addition to their main intent, some seem to be expressions made in such a way that as a by-product they can be used as a means of group identity. It is possible that this local area specialized in either weaving or pottery making, more than any others in the region, or were simply known by such symbols. Similarly, there are many areas of the Navajo Reservation today, for instance, that are diagnostically known for their weaving, while others are known for their silverwork and their weaving is not as regionally diagnostic. Also there are marked differences in both technique and patterns that create many and vast stylistic differences in their weaving practices. Because of modern technology and ease of contact and movement on the Navajo Reservation they have created a more contiguous, continuously interacting and regionally less diversified culture than either the Fremont or Virgin-Kayenta Anasazi would have been. It seems important that there are several other traits that are associated with these Clear Creek representations that do not occur where these types of designs occur elsewhere. The most prominent of

Section 2 Page 12 "BLANKET-LIKE GEOMETRIC DESIGNS IN CLEAR CREEK CANYON"
FIGURE 11. A

Section 2 Page 13 "BLANKET-LIKE GEOMETRIC DESIGNS IN CLEAR CREEK CANYON"
FIGURE 11. B

Section 2 Page 14 "BLANKET-LIKE GEOMETRIC DESIGNS IN CLEAR CREEK CANYON"
these include hand-holding couples, expanded hip figures, "Badger Clan" symbols, etc.

At Waterflow, New Mexico, there is another extremely heavy concentration of "decorated blocks" which in many cases are felt to be blanket designs (Fig. 12). Nearly all of these occur within a border and some actually have corner tassels. Many, if not all are felt to be related to the concept of fertility rites or may be consummation scenes. Some occur in direct association with fertility representations (Judith Warner 1986:29). At Waterflow, it seems the elements that decorate the blocks are derived from a source that has direct conceptual affiliations with fertility. These distinctive club-or sprout-like designs have also been incorporated into many other elements that also seem to stress fertility.

The blanket-like designs at St. George do not obviously seem to have the same Waterflow suggestions of fertility. The Clear Creek and Washington County designs may be farther removed stylistically and are more distant in time from the expressions at Waterflow. In both Clear Creek Canyon and in Washington County the designs differ more within each of their own areas with a lack of differences within the Waterflow panels. Each area and time used similar ideas but regionally and temporally expressed them differently. The basic designs from Clear Creek and the areas around St. George have not been broken down and incorporated into other elements like those at Waterflow. This seems to give the latter southwestern Virgin-Kayenta Anasazi and a somewhat contemporaneous Fremont a closer relationship than there is between the Virgin-Kayenta Anasazi around St. George and the older San Juan Representational (Basketmaker) Style at Waterflow, New Mexico.

In studying these Clear Creek Canyon designs many questions have surfaced. Some of these include: 1)--Were these designs representative of something mythical, non-tangible, or conceptual? 2)--If they did not represent something in the conceptual realm, then what were their physical counterparts if any? 3)--Why was there such a heavy concentration in this area and not in other Fremont areas? 4)--Whatever the case, what was their social implications?

After a close examination it is felt that to varying degrees, the idea that the inspiration for these designs may come from textiles, pottery, fertility, and elements marking solar symbolism, as well as being distinctive to rock art alone could all be possible. At this point without sufficient archaeological evidence it is difficult to tell. There is also the probability that other, as of yet unidentified concepts were relevant. It is also felt that at least a few representations could be totally symbolic or mythological. In such a case they could simply be based on a non-tangible mental construct that could, in general, relate the designs on both textile and pottery, yet be specifically related to neither. Two examples are men within the design, that may represent ideas similar to a "man in a maze", a popular theme, with many variations to the south (Figs. 3C, 5A) vs (Fig. 13).

Since a few of the designs incorporate elements that are somewhat similar to the sprout-like designs near Waterflow, New Mexico, it is possible that fertility may be an integral or interrelated parts of some concepts. By using
the word "fertility" many areas of concern could be referred to. These include both human reproduction, an area that has been extended from possible plant growth and development, with at least the possible sprout-or plant-like designs (c.f. Warner 1986:29), to water resources that support all forms of life including human, animal and plant. Within this there is probably an interplay of symbolism extended from spirals which have different connotations associated with all such areas, water, fertility and solar symbolism.

Water aspects of this can be assumed because of the fact that many of the paired zigzags (especially the red painted forms) occur in cavities in "bubble rocks" in situations where approximately 90% are very close to small, natural water holes (Francez Sorenson, personal communication). In other words, the zigzag variety or other more rectilinear forms, may simply be indicators or locators of small sources of (sacred) water. The step-fret type of designs incorporated into several decorations may have reference to either the mountain formations or cloud-like symbolism expressed further south (Warner 1982:9), in which case water or water catchers could be an underlying associated concept. In some situations, however, some are now felt to be solar markers.

Some solar aspects can be assumed because of both circular and rectilinear forms of spirals and concentric circles and square symbolism found in so many situations that are anticipated to not only be solar observation indicators, but solar interactors. Some of these are now being found to mark and tick off specific periods of time. It is obvious that these designs did not represent one idea or concept or were depicted to intend one purpose or to have just one function. Each category of different types of designs, probably have their own variations of intent and meaning just as different as their form and context. There is no reason why a symbol of personal identity could not also mark "numbers of migrations", a "specific solar period" and be oriented to identify the location of sacred water tank.

After a close examination of some of the painted designs on pottery from the canyon (Fig. 14), it is assumed that pottery could be just as logical a source or similar counterpart as textiles. If the body decorations in Figure 15 are realistic and not just an abstract means to fill space then these designs may have also been just as logically produced in textiles. This illustrates that the symbolism of several different areas of application can have a deep rooted similarity in several different but related concepts.

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Section 2 Page 18 "BLANKET-LIKE GEOMETRIC DESIGNS IN CLEAR CREEK CANYON"
FIGURE 15.
Section 2 Page 21 "BLANKET-LIKE GEOMETRIC DESIGNS IN CLEAR CREEK CANYON"
FIGURE 17.

Section 2 Page 22 "BLANKET-LIKE GEOMETRIC DESIGNS IN CLEAR CREEK CANYON"
Section 2 Page 23 "BLANKET-LIKE GEOMETRIC DESIGNS IN CLEAR CREEK CANYON"
When I completed analysis of the site at Muddy River and Rochester Creek (Morris 84) I asked the BLM archaeologist in Price, Utah, Blain Miller, if he knew of a related site that might support my findings. He said that the petroglyphic panel at Mussentuchit reminded him very much of the Rochester site. I had to ask him several times about the name of the site to make sure that I was hearing it correctly. When I had purchased the proper maps it was not too difficult to locate Mussentuchit Flat and Mussentuchit Wash. It was more difficult to locate the actual glyptic panel. We started where the wash crosses the road and hiked up stream until we noticed two large cairns on either side of the canyon. While examining the cairns we sighted the panel across the canyon from where we were standing (Figure 1).

The analysis of this site was at first patterned after the techniques used at Muddy River and Rochester Creek. But as time went on I found reasons to expand the methods by some degree. It turned out that the Mussentuchit rock art site is unique in Utah in one respect. It is the only site in the state,
that I know of, that has a possible geoglyph or geoform associated with it. The geoglyph is located in a series of black volcanic rocks arranged in curved lines across the white sandstone surface. It has a curious shape and is the subject of a second paper (Morris 87).

The panel and geoglyph at Mussentuchit provided me with a new puzzle to unravel, replete with mysteries and ripe for solution. The computer programs that I devised for Rochester Creek were now a ready resource for analysis of another site of a similar function. The first visit to Mussentuchit was like the opening scene of a new adventure.

The site is located in a place with vast and awesome but austere and quiet beauty that is becoming too rare throughout the West. I have the feeling that each site has its own accompanying spirit residing there as a function of the observer, the glyphic material and the environment. This spirit becomes somewhat of an old friend waiting for you on each visit. For me this spirit resides there as a protector of the site and whispers "mustn't touch it".

The geoglyph prompted me to do something that I had often wanted to do at Rochester Creek. This was to devise a means to take an aerial photograph of the site. At Mussentuchit this meant that we could also get a picture of the geoglyph from the perspective that it was intended to be viewed. This led to a great deal of expensive and high intensity fiddling around before my goal was accomplished.
THE SITE:

It interesting that on our first visit to Mussentuchit we found all the known significant features in the immediate area. It would be very easy to visit there and see only the petroglyphs and miss the other interesting details. The first related feature that should be mentioned is a large water hole that has always held water on every visit regardless of the time of year. This hole is a large depression in Mussentuchit Wash that is located just before the wash cuts through the high sandstone cliffs west of Mussentuchit Flat. Where the water cascades over a sandstone strata, it digs a deep hole or tank about 30 feet across. On opposite sides of this tank are rock structures which possibly were used by the Indians and/or pioneers as hunting blinds. These were placed such that a person sitting in either stone enclosure would be able to get a shot with bow or atlatl at any game that came there to water. At the location of the water hole, there is also a pioneer inscription dated 1888. With the exception of the petroglyphs themselves, this inscription throws some doubt of origin on all of the ancillary features at the site.

The two large cairns on either side of the canyon were placed at promenices which mark entrance to the site from down Mussentuchit Wash. These could be of Indian or pioneer origin. We have examined them at great length but find no evidence to answer this question. The cairns are built of large, heavy, black volcanic stone that is very prevalent in the area. These may have required two or three men to lift into place. If the Indians placed them there, the cairns would have functioned to mark entrance to their territory. If the pioneers placed them there, they would have functioned to signal the approach to the water hole.

At the site there is an extreme abundance of lithic materials with some partial and mostly complete projectile points and tools having been noticed among the debris. This could very definitely have been a hunting or winter camp site for whatever prehistoric peoples used the resources there: the lithic material, the water hole and the game that came to water.

A most fascinating feature of the site and one that makes it unique to this area is a geoglyph. The geoglyph covers an area about 100 feet in diameter and draws out a shape that is not easily identified. I speculate that it may be one of the figures from the panel.

THE PETROGLYPHIC PANEL: (Figure 3)

Every since the analysis of the panel at Rochester Creek I have been tracing occurrences of what I call the two-headed ram or big horn sheep. This is a zoomorphic glyph with a ram's head at both ends. There is at Rochester Creek a fine two-headed ram, well executed and in a position of prominence on the panel. The two-headed ram is found all over the Southwest in several variations. This will become the topic of future research. The two-headed ram at Mussentuchit also commands a position of prominence on the panel and was one of those glyphs that link this site to Rochester Creek panel.
Another figure that links the two panels is the copulating man. He lays on his back with one leg hanging down. This man is at Rochester Creek copulating with what a Pueblo Indian called "Sky Woman. At the Mussentuchit site copulating man is engaged with an enigmatic two headed "A" shaped figure.

An additional figure on the panel that relates to, but is depicted differently from, the "Sky Woman" figure at Rochester Creek is a female form in the birthing position. She is drawn from the side and there is a series of full and half figured rams preceding from her as though she had given birth to them.

The vertical line with circles is also in common with the Rochester Creek site. However in this case there are only two or three circles on the line. I have speculated a great deal on the meaning of this glyph and at this writing feel that it can best be interpreted as an indicator of a site to observe the rising or setting of the sun at seasonal transitions. It is my guess that only three or four seasonal transitions (eight seasons to a year) can be observed at Mussentuchit; thus, there are only two or three circles on the vertical line.

Also appearing on the panel are two very excellent flute players or Kokopellis. These are found on either side of a very prominent and large figure of the panel. The flute players seem to be in adoration of the larger figure. Additionally there is a possible pleiad indicator, a circular figure divided into seven parts. There are many more figures on the panel that are not necessarily related to any of the figures from Rochester Creek nor do we have any plausible interpretation.

There is one additional feature of the site that must be explained here. To the left-front or west side of the panel are two large pieces of the sandstone cap that are leaning against the panel face. One of the pieces has a pyramidal tip that projects a pointed shadow on the panel at sunset during the late fall and winter months. The other rock projects a hump back looking, rounded shadow on the panel at the time of Winter solstice and eclipsing the pointed shadow.

ANALYTICAL TECHNIQUES:

The analysis of the panel proceeded as that of Rochester Creek beginning with a site survey and computer models. A complete horizon profile was recorded and entered into the computer. A survey of the site dimensions was done entailing the angles between the significant glyphs, the point of the pyramidal rock and the sunset azimuths. This by itself would give enough data to complete the analysis but a technique to take overhead pictures of this site and other sites still remained high on my wish list. And when I considered the possibility that there may be a real geoglyph associated with this site I decided to seriously consider alternative methods of taking overhead pictures. Several methods were technically plausible but some were eliminated for economic reasons. Renting an airplane and pilot or building a radio controlled model airplane proved to be much too expensive for my resources. I then considered suspending a camera by helium balloons and decided that this was technically feasible and economically possible.
Design of the balloon suspended camera was reduced to a minimum (Figure 4). It consisted of 20 mm wide angle lens, a motor drive for the Cannon A1, a long 60 foot wire to the remote shutter trip contact points, and three nylon cords, one to the tripod screw socket and one each to the two camera strap brackets. The camera, wide angle lens, motor drive and 60 feet of wire were suspended from a strong key ring which became a pivotal point from which the camera could always hang straight down. (That is unless it was swinging which it did most of the time during flight.) To prevent uncontrolled swinging a small kite twine line was also attached to the camera.

Weighing the camera and rigging indicated that I needed two to three five-foot diameter balloons to lift it into flight. For the first flight I took one 130 cubic foot tank of helium, and two five-foot and two three-foot diameter balloons. I wished afterwards that I had done a test flight at home but to save money I did the maiden flight in the field.

THE FIRST FLIGHT:

It was mid-August 1987, when I started out early in the morning with two of my sons, George and Rick, to do the aerial survey of Mussentuchit (Figure 2). It was my intention to get pictures at both the rock art panel and the geoglyph. We arrived at Mussentuchit about noon. The weather was as expected, hot, dry and clear. There was what I considered a gentle breeze but not enough to call off the flight. I started to fill the balloons and as soon as they were full I gained a greater respect for the strength of the breeze. We filled each balloon and tied them securely to
the side view mirrors on the truck. The wind blew, violently bouncing the balloons together setting off a loud pinging sound unnatural to the normal quiet serenity of the desert. Never-the-less we continued to put the rigging together and attached the balloons and the camera to the pivot ring.

But alas, when the camera, rigging, and balloons were all connected, there was not enough lift. At this dilemma I had no other choice but to untie the two large balloons and add more gas. I filled them to the calculated requirement which turned out to be beyond the manufactures recommendation. (How did this dilemma come about? When I asked how large these balloons could be inflated I was told that they could be inflated to a five foot diameter. But in actuality what was meant was a five foot semi-circumference.) The additional gas was enough to achieve lift off. For reasons I don't recall I decided to take pictures of the panel first and then proceed to the geoglyph. This turned out to be a very fortunate decision for reasons which are soon to be evident. The three of us started for the panel with the wind wildly bouncing the balloons together as we walked through the sage brush. It was then that I realized that while I had achieved lighter than air flight, never-the-less the wind vector was a far greater force than the lift vector. Therefore the balloons tended to fly very close to the ground.

When we arrived, Rick placed himself on the rock overtop of the panel. George and I were down on the sandy slop at the panel level. With a lot of shouting and all three of us directing everything somehow we managed to take a significant fraction of the roll of film. One of the guide lines and shutter release cables became tangled in a small sage brush below the camera. I was trying to manage one of the three guide lines and the shutter release cable at the same time. Some of my consternation can be seen on the composite photograph (See Figure 5). Then it happened -- a sound much like a rifle shot echoed down the canyon, one of the large balloons had popped. I lunged forward to get under the camera but the sand slipped out from under my feet. The camera and rigging descended rapidly even though there were still three balloons attached. The camera and I lit just about where the small sage was. The lens hit something hard and badly dented its outer ring. I dusted off the Canon Al and finished off the rest of the roll of film.

I learned a lot about balloon lofted cameras on that first flight:

- A little wind is a lot of wind for balloons flying.
- Gas coming out of a bottle and filling a balloon is very cold and a hot August day will heat and expand it rapidly.
- Balloons should not be over inflated and semi-circumference is not diameter.
- Fly with more balloons than is needed for lift off, this is for two reasons:
  - To get the height you need, a lift vector must compete favorably with the wind force vector.
  - If one balloon pops for whatever reason the camera can be pulled down without damage.
- Always fly with a camera catcher under the camera.
- As this flight device was designed a crew of at least six people is needed.
Figure 5

Section 3 Page 8 "THE GREAT BALLOON FLY AT MUSSENUTCHIT, Part I"
If I had tried to take pictures of the geoglyph first, the camera would have landed on solid rock and damage may have been total. As it turns out a test flight at home in a park would have been a more practical first flight even if it cast me $35 in gas. The lens cost me $145.

SITE ANALYSIS:

A polar sighting was done to establish true north for the horizon and site survey. The computer model was run which gave us all of the sunset positions for any given year. The sunset shadow angles were calculated from the site survey for each of the significant glyphs (See Figure 6). (I say significant here but what I really mean is those glyphs for which we have some inkling of meaning.)

The dates of shadow passage are as follows:

<table>
<thead>
<tr>
<th>Winter</th>
<th>Fall</th>
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</thead>
<tbody>
<tr>
<td>2-12</td>
<td>10-29</td>
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<td>10-9</td>
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<td>2-21</td>
<td>10-20</td>
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<tr>
<td>2-23</td>
<td>10-18</td>
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</table>

* These dates are approximate pending survey improvements.
We would like to see these dates have some coincidence with yearly solar dates of seasonal passage. But these people did not necessarily hold these dates in great significance. This panel does not mark the equinoxes. The one date that we would expect it to mark (and it does fairly well) is the Winter solstice. The shadow of the humpback rock does fall on the sun-headed figure at the time of Winter solstice. It may also be significant that the pyramidal shadow does fall on the Pleiad indicator when the Pleiades are high in the November night time sky. This is a significant date observed by the Pueblos even now. The series of rams and half-rams proceeding from the birthing woman are the sun symbols indicating the sun's path to the south as spring and summer approaches. This site only functions during the winter months and this may have been for these people a winter time camp. The water hole would surely have water in it during these months. They could hunt the game of deer, antelope, and big horn sheep that would come there to water. They might spend the rest of their time making lithic tools and projectile points for trade. When the summer months came, the water hole may have dried up so the people moved higher up on Thousand Lake Mountain to where the game would move. There are pit houses in the upper valleys in the foothills of Thousand Lake Mountain. These people probably watched their calendar stone and returned to their upland dwellings at which ever date they had considered best for the seasons. Just like the shadow on the panel these peoples lived there in an ever repeating pattern of one season after another, one generation after another lost in the hazy twilight of prehistory. All we have of these souls, feelings and mentality is what remains on the panel at Mussentuchit. When that goes we will have nothing. Look, but touch not.

For pictures taken from above of the geoglyph and the story of a more successful flight see the next paper which was presented at the 1988 URARA Fall Symposium.
The rain pelted the top of the tent sounding like marbles hitting the surface of a base drum. Each drop was distinct when the rain was intermittent and during an on pour became thunderous on the tightly stretched canvas. We had returned to Mussentuchit to fly the balloons one more time and to get a picture of the geoglyph. The geoglyph had intrigued all who had seen it and now just maybe if the weather would settle down we may on the third attempt get to see what the geoglyph looks like from above, the aspect from which its creators intended it to be viewed.

We had come down the year before in September of '87 to make our second attempt at the balloon lofted camera and had once again failed because of high winds and dark skies. We shot a roll of film with blurred images and rotational spirals. The wind twirled the camera and the light was too dim for the auto exposure to set a shutter speed fast enough to stop the motion (See Figure 1). While our second trip was a great technical defeat, it turned out...
to be one of the funest camping trips on record. Our slides of the event reveal our intrepid team of would-be balloonists running over the slick rock while the balloons were allowed free flight to gain altitude in the high winds. Our team consisted of our good friends Ken and Elva Ogden, their friends the Lampings and several others. We learned a lot on how not to fly balloons and I also learned to listen to the spirits. At the precise moment that I decided to launch the flight there was a loud thunder roll portending an ominous outcome. We had noticed on other trips that the wind was usually calm in the morning and picked up more in the afternoon. This was the reason why we were here this night, to catch the calm air of the early morning for our third and possibly final attempt.

We pulled in after dark the night before and made camp on a piece of natural desert pavement which was flat and quite hard with a natural gravel and clay surface. Now in the middle of the night I was afraid that the rain was going to prevent us yet again from achieving our goal. The weather had turned wet and windy and we could have been getting up in the morning to a world of dark gray skies over an endless sea of mud.

After a night of uneasy sleep, I woke at first light thinking that I would have to be stoic about another failure. When I peered out of the tent much to my relief I viewed a spectacular sunrise with buttermilk skies bathed in the red, pink and orange light. My spirits immediately reversed and even though the sun was still below the horizon, I rousted the rest of the camp. It was by prior agreement that we would all get up at the crack of dawn because it had become apparent that the best time to fly balloons was in the early morning when the air is still and calm, cool and dense.

We ate a quick breakfast and then drove up the hill to the point of closest vehicular access to the site. We immediately set about filling balloons. I had bought a new set of five 4 foot diameter balloons prior to leaving Salt Lake. I filled these and because I had brought extra helium, I also filled three of the used balloons from the last flight. I filled the three additional ones to make sure that we would have enough lift. But for this flight all things came together optimally.

As was expected the air was calm, cool and dense. When all eight balloons were full, holding them required quite a tug on the arm. All the balloons were filled at the car and the camera was attached. Our crew on this trip was: Paul and Trina Enciso and two of their girls, Jesse Warner, myself and my wife Bonnie and our two children. I asked Paul's girl, April Morning Star, to be the camera catcher. She stayed under the camera at all times to prevent a sudden gust of wind from pushing the camera into the ground. Because we had so much lift and optimum condition, Bonnie complained about not feeling useful. We had a person on each of the three guide lines, a camera catcher and myself to trip the shutter by electric wire. We got a picture of the glyph from maximum height which was about fifty feet up (See Figure 2). We were also able to take a complete roll of film and took pictures of the long semicircular extension of the glyph (See Figure 3). We have never put the mosaic of different exposures together because of scale difficulties resulting from the varying altitude of the camera.

Section 4 Page 2 "THE GREAT BALLOON FLY AT MUSSENTUCHIT, PART II"
Figure 2 is our best exposure of the glyph taken on the third flight. The glyph is very hard to interpret. It is sufficiently difficult to identify such that we should consider its alternative explanations. It would have to be from one of three sources: 1) it could be a nature phenomenon or 2) it could have been put there by the pioneers or 3) it could have been put there by some American Indian peoples. Let's consider these three origins in that order. I would suspect that if this were a natural phenomenon then it would be repeated many times in this same area on the other exposed sand stone surfaces. We have not found this to be the case. This argument assumes that a natural process would repeat itself and proceed in like manner all over the local area. On the other hand, if this had been done by pioneers there would be some evident purpose for the rock alignments like tent circles, rocks placed on the lower canvas edge of a tent to hold it down. If pioneers did this there would also be camp debris. Closer to the wash there is a strew of tin cans and junk but there is no such evidence at the geoglyph. When we consider that there are many incidences of geoglyphs at other places in the southwest it seems most likely that this was of Indian origin. The vagueness of the figure is probably the result of the natural breakdown and displacement of the stones over the centuries. One of the chief causes of this breakdown and displacement is from the alternate freezing and thawing of water, ice or snow.

Where has this taken us? We have a geoform of some description as seen in the photograph in Figure 2. And we also can make some interesting observations. There is a bulbus headlike projection. There is a three sided square which could have been arms or feet and below this there is a possible phallus projection that points polar north. The form on the rocks could be a ceremonial pattern or layout. It could also be a zoomorphic or anthropomorphic figure from the panel below. I have, because of the phallic projection, thought that it might be a representation of the copulation scene in the sky. This scene appears on both the Rochester Creek panel and here at Mussentuchit. From this and other copulation glyphs at Rochester Creek this would certainly not be inconsistent. But because the geoglyph is all too vague and imprecise we are only able to suggest what it might have been.

We asked Paul Enciso what he thought it could be and he said that it could possibly be a clan symbol to mark of the site as belonging to a particular clan.

CONCLUSION

The discoveries from this exploration at Mussentuchit are twofold. The first, and most obvious, is that we have discovered to the best of my knowledge the first known geoglyph in Utah. And second we have developed a method for taking pictures of a site from above. The more I study rock art and associated manifestations the more I am convinced that peoples in the prehistory of the State of Utah were resourceful and complex in nature. That while they were not as technically advanced as their European counter parts they were culturally and religiously insightful. And the geoglyph at Mussentuchit demonstrates that these people had a perspective of themselves as seen from above and thus had a perspective of themselves in the light of the infinite and eternal.
Figure 3

Section 4 Page 5 "THE GREAT BALLOON FLY AT MUSSENDUCHIT, PART II"
In a previous study, the subject of Double Entities was introduced and groundwork for their analysis was proposed (Warner 1987). That treatise considered a few problems with interpretation and suggested that until more is known about these figures, guidelines or limits be set in the process of exploring their symbolism. That presentation also determined what may or may not express a Double Entity. At present those limits should be set at only identifying the concept or source of the motif. This presentation will explore some possibilities of how some of these interesting concepts may have been used.

Many Double Entities consist of the entity within being represented in the process of emerging. The reason the graphics freeze this expression in the process, is probably the difficulty in discriminating an already emerged entity from any other figure. Experimentation producing more divergent, atypical varieties seem to be a result of ways to express an already emerged entity. A few seem to have achieved that ability, which will be illustrated later.

The ability to determine what may or may not be a Double Entity was defined in an earlier presentation. By examining Figure 1 the process of stylization of more understandable expressions to more abstract, unidentifiable ones, illustrates the unlimited nature of these types of this concept. It also illustrates the precarious situation for interpretation. The term Double Entity refers to specific combinations of figures that have the potential to portray or imply several different concepts depending on their form and circumstances.

So far based on variations of form, these combinations have been divided into six categories. The first category consists of human forms with a double set of arms (Fig. 2A). The second contains humans with partial figures to almost complete images, emerging from the top of the head (Fig. 2B). Category number three consists of entities emerging out of other parts of the body. Some of these were created by superimpositions, double heads or shoulders out of one torso, extensions from the shoulder, arm, hand, waist, rib, leg, foot, or phallus (Fig. 2C). Each could intend an emergence or a specific and different concept based on where it is attached. Forms emerging from the foot or phallus probably have implications of progeny. Other examples may help in the determination of these applications. Some, however, may represent a situation of spiritual rebirth.
Conners Spg.

Stansbury Is.

Bocks Can.

Conners Spg.

Bocks Can.

Conners Spg.

Lions Mouth

Dry Fk.

9 mi.

Stansbury Is.
The fourth category includes figures which contain a human form within the body itself (Fig. 2D). These probably represent slightly different but related concepts. Some, undoubtedly may represent pregnancies (Figs. 2D, 6). The fifth category includes figures that have a head within the body, below another head. The arms of the lower figure forms an enclosed area which often creates the upper figure's chest (Fig. 2E). The sixth category contains figures reversed at the waist, mirroring the upper image. In other words, from the waist down the appendages probably don't represent legs and phallus, but another set of arms and head (Fig. 2F). When reversed these figures generally reflect the same image, with minimal differences in the basic form.

The construction of these variations seem to represent another entity within the body or the emergence of that entity. The reason for, or the meaning of these various categories if not identifiable by their form, may be found in their application. The reasons for the combination or extension at present seems to fall within two major areas of application. The first area is the general concept of death. The second, involves situations associated with supernatural activities.

APPLICATIONS ASSOCIATED WITH DEATH

Many examples seem to possibly represent either an actual or figurative separation of body and spirit (Figs. 2, 3). Many ethnographic accounts explain the emergence of the "spirit" at death, and other out of body experiences, during a trance, vision, dream, or during the use of drugs (Simmons 1963, Brown 1967). Because of the tremendous possibility for ambiguity, a simple figure in a specifically detailed context representing the vacation of the spirit on death to one, could possibly represent the emergence of ones power, spirit travel or dream to another. Thus initially the same symbol may express several different but similar concepts. The contexts, associations or applications may limit and illuminate possible alternatives. In the minds of different native cosmologies, there is only a minor difference between a near death and an out of body experience (Reichard 1983).

There are some very interesting specifics in the expression of death that have evolved. The Inverted Bucket Head styles have the greatest variation in this type of expression. They often broke the more traditional means of symbol expression and explored different alternatives. Because they experimented with themes of death to such a degree, it must have been as much a part of their cosmology as it was a part of their symbolism. This is highly contrasted with other Fremont and Basketmaker panels where these aspects are seldom present. While it is true that where these types of figures are more predominate they probably resulted from a greater concern and thus dominated the topic of discussion present in their panels.

This seems to have become such a dominate concern that it even seems to have become a means of personal decoration as well as group identification. In two studies of the Inverted Bucket Heads this was discussed in detail (Warner 1984 A,B). In the introduction to this subject the variety in the expression of this concept within that style was pursued (Warner 1987). Because of those detailed considerations those figures will not be discussed here. We will however, mention that their preoccupation led to many
Section 5 Page 5 "AN EXAMINATION OF DOUBLE ENTITIES—SYMBOLISM"
specialized variants of the concept that undoubtedly, mainly represents the
general concepts of death, with variations of specific applications. This is
assumed because of associations and inclusions with forms implying
decapitations or reversed figures (Figs. 3 A–E,G). Figures with reversed
faces (Fig. 3 B,G,H), double exposure faces (Fig. 3 J–O), or stacked faces
(Fig. 3 F,N,O).

There are, however, several areas of Basketmaker inscriptions that also
illustrates that they experimented with variations of this theme as well.
Along part of the San Juan and in Grand Gulch and places like Indian Creek
there are a great variety of examples which suggest that application. Some of
these also seem to represent decapitated heads (Fig. 4A). An examination of
both rock art and archaeology, seems to indicate that the Basketmaker predated
the Fremont in head hunting practices. Both, the forms of element expression
and themes within the panels seem to have been borrowed or inherited by the
Fremont in northeastern Utah. Many elements expressing these themes contain
characteristics common to the different categories of Double Entities.

Some of the possible Basketmaker decapitated heads float independently
within the composition, while others seem to emerge from other figures
(Fig. 4A). Figure 4B, from Buttress Canyon, Arizona, is a Basketmaker
rendition of what would be a good Fremont Inverted Head Bucket (Fig. 4C).
Near by is another figure with possible head in hand (Fig. 4D), very similar
to the motif used by the Fremont Inverted Bucket Head-Head hunters (Fig. 4C)
(Schaffsma 1971:139), and that found by Kidder and Guernsey (1919), and those
recently found near Moab. Figure 4D is more likely a bird-armed figure with
implications of shamanic transformation (Fig. 4E). Because of the similarity
to the two lines on another figure in this illustration it may carry
implications of both concepts.

The possible significance, intent or source of the "Sound Panel" figures
have always been a puzzle. Figures 4 F–G exemplifies the principles that we
have long proportioned in that an artist when depicting abstract concepts or
creating very abstract forms of a concept (Fig. 4 H) will some where represent
the concept in a more naturalistic, complete, or recognizable form. The
examples in Figure 4I–P are undoubtedly emerging figures coming out of the
heads. Because of the number of multiple extensions between the two heads,
they don't seem to represent four arms like Figures 1A, 2A, and 4I. The lines
between the two heads or extensions out from the vertical line emerging from
the heads of the lower figures are both straight and curved and are similar to
Figures 3A (negative, black figure) and 2C4 which undoubtedly represent
skeletal forms. If these lines represent ribs then the lines in Figures 4
K,L,N,O may also represent ribs and the death and or emerging concept. This
is only one step removed from the attachments to the heads of sound panel
figures (Fig. 4 F–H).

Notice the possible rib form of the bar lines in Figure 4F. The dot at
the top may represent the head. This motif is very similar to the diagnostic
Basketmaker "bar body" which also has a similar head and body (Fig. 4H). If
we have established a sequence for the stylization process or a more concrete
concept association of the source of the Sound Panel figures, then "bar body"
forms may represent another stylized skeletal form, or emerged spirit figure.
FIGURE 4.

San Juan River and Indian Ck.

Section 5 Page 7 "AN EXAMINATION OF DOUBLE ENTITIES—SYMBOLISM"
FIGURE 5.

Moab B.

Water Flow N.M.

St. George Utah

Lake Rildale San Rafael

FIGURE 6.

Section 5 Page 8 "AN EXAMINATION OF DOUBLE ENTITIES—SYMBOLISM"
This illustrates the extreme difficulties encountered when trying to interpret these inscriptions. Even at this point, where on the lower levels of interpretation, where we are only trying to identify the source or the concept, we enter areas that are very speculative. What these concept applications may be is difficult to tell. The possibility of a skeletal form representing an emerging entity as the source of the figures attached to the head of the Sound Panel figures has strong possibilities, but having the extensions come out of the top of the head as well as the left side of the head seems very odd. Schaffsma (1988) suggests this could represent the Shamans ability to communicate with the spirit world since that part of the body is associated with that world. The multiple blocks on the face of the head-like images may possibly include encrypted symbolism of a transformation or Double entity concept (as mentioned) (Fig. 4A, black figures as compared to Figs. 4 J-P).

APPLICATIONS OF SUPERNATURAL ACTIVITIES

For representation such activities literally include any experience other than return from death. This includes representations involved with the desired or conception, pregnancies, visions, dreams, trances, spirit travel, other manifestations, drugs, shamanic transformations, expressions of supernatural powers, speaking with light, and seeing into both the world symbolized by light and darkness, etc.

SHAMANIC TRANSFORMATIONS

Figures like those from the San Rafael and Dinwoody, Wyoming (Fig. 5 A-C), have a greater tendency to imply transformation from the human state to a different figure of greater power, yet there is the ability of some other examples to imply that possibility (Fig. 5 D-I). Some of these Double Entities have a dual nature, in that some also emerge from or are attached to a mystical looking animal (Fig. 5 D-E). They thus have a double symbolism of emergence. One may simply represent a Shaman, while the other may represent the context of the Shamanic transformation or shamanic flight. A more detailed analysis of transformations will be presented later.

SHAMANIC EMERGENCE, MANIFESTATIONS OF POWER, OR OUT OF BODY EXPERIENCES

These may not be actual transformations, but the emergence of the spirit or projection of power that does not change ones visible form. These figures seem to portray an extra symbolism that may imply the power associated with this ability. These additional aspects include possible power lines (Fig. 1 B,C, 6 A-C), extensions or emergences from horns rather than simple heads. (Fig. 6 D-G). These last two topics could overlap and occur in different contexts. Even though these later, more complex figures may have a greater tendency to imply this situation does not mean that any of the more simple forms could not intend this concept as well. That is one of the problems with determining intent and in depth interpretations. This is also illustrated by Double Entities that speak with light (Fig. 9 D), and those which can see into both worlds, the mortal normal world, possibly represented by the light and the realm the normal mortal man has been excluded from, the opposite side, symbolized by the darkness of the shadow (c.f. Sec. 8, Fig.6

Section 5 Page 9 "AN EXAMINATION OF DOUBLE ENTITIES—SYMBOLISM"
FIGURE 7.
Section 5 Page 11 "AN EXAMINATION OF DOUBLE ENTITIES--SYMBOLISM"
The last two categories seem to imply that there were two distinct concepts that expressed differences in shamanic practices. One was the practice of transformation from the human form, and the other a distinct and different belief illustrated in expressions of Double Entities that didn't transform. In the latter situation it was either an expression of power or spiritual emergence, a different type of belief and practice.

SPECIFIC APPLICATIONS OF SYMBOLISM

Many applications of these concepts will not be identifiable. There are, however, several themes that this idea has been incorporated into, that can be identified. These include death (previously discussed) (Figs. 3, 7), possible conceptions and pregnancies (Fig. 8), solar observations (Fig. 9), hunting scenarios (Fig. 10), situations expressing warriors or combatants (Fig. 11), extensions of thoughts or desires (Fig. 12), and use in additions or modifications (Fig. 13).

ASSOCIATIONS WITH POSSIBLE CONCEPTIONS, PREGNANCIES, BIRTH OR PROGENY—

This is one area where we just haven’t been able to find sufficient information to make very many definitive statements. The examples in Figure 2D, could be depictions of pregnancies. Some may occur without the expanded bellies like those in Figure 8A. With the strange types of figures within some bodies, there almost seems to be a symbolism of the Double Entity concept as well. Attachment of a figure to the phallus could have a progeny symbolism but since several contain other symbolisms of the Double Entity concept they may also represent “birth” in a spiritual sense as well. Judith Warner (nd) has treated these problems in a little more detail.

One thing these figures illustrate quite well is the problems encountered with this type of work. Several figures at Water Flow, New Mexico, that initially look like Double Entities are probably copulating couples, when compared with more identifiable couples (Fig. 8E vs 8C). There are many different types of fertility symbolism expressed at the site that suggests its use as a sacred area used to placate the holy ones for conception (Warner, Judith 1983). Figures 8C, definitely represent copulations, while Figure 8F, seems to represent a Double Entity. Figure A right, from Mckonkies ranch often described as a “captive bride” could possibly represent either situation.

ASSOCIATION WITH SOLAR OBSERVATIONS

Figure 9A contains a few “Sunheaded” figures. Figure 9B illustrates Sunheaded figures which have been combined with aspects of symbolism suggesting the concepts behind Double Entities. Figure 9C demonstrates that these Sunheaded Double Entities strongly suggest that there was an association between the activities and concepts involved with sun watching and the concepts depicted by Double Entities. The active involvement of both expressions supports and strengthens the potential that sun watchers at these special and sacred times may have experienced an emergence or out of body experience (Fig. 9A). Subsequent papers will consider the interactions of a

Section 5 Page 12 "AN EXAMINATION OF DOUBLE ENTITIES—SYMBOLISM"
FIGURE 9.
Section 5 Page 13 "AN EXAMINATION OF DOUBLE ENTITIES—SYMBOLISM"
Sunheaded Double Entity at Dry Wash and a figure at Pleasant Creek. These are the most complicated interacting Double Entities observed to date.

At Notch Canyon, a double armed figure attached to or emerging from a mystical animal was positioned to stand on the edge of light when that line bisects two circles, one on either side (Fig. 9 D). The fact that the concept of "emergence" is so closely associated with the concept of solar observation should not be surprising. At many known and suspected solar observation sites there are Double Entities or other forms suggesting transformation, which supports the association of solar observation with some of the concepts behind Double Entities.

ASSOCIATIONS WITH HUNTING SHAMEN

Several Double Entities have also been combined with elements defining possible hunting shamen. During a study of what hunting shamen would seem to be, one prominent characteristic was a figure holding a forked stick in association with what seem to be drive situations (Fig. 10A, Warner 1988). On several Double Entities the forked stick was included, combining the symbolism of two different concepts (Fig. 10 B-G). This will be dealt with in detail in another paper in this publication.

In these situations it would definitely seem to preclude a concept other than death. Ethnographic accounts imply that hunting shaman do have certain powers that would be in line with representation like these. It would also seem logical that to have the power to draw or entice game and complete a successful drive would take powerful mystic abilities. The expression of those abilities have evidently been represented here by a Double Entity.

Placing the "shaman's" forked stick in the hand of an emerging figure implies that the altered state or emerging ability was used in the hunting context, as well as with solar observation. In other words, both hunting shaman and sun watchers may at those moments of power have altered states, out-of-body experiences, or an emergence of power.

In the Molen Reef there is a double-armed figure. This figure does not have any graphic indications for solar involvement or hunting concepts. Because he seems to oversee a very unique performance that involves game entrapment, much like a hunting shaman, he was included within the study of those figures. Even though he does not hold a forked stick or obviously seem to entice game like other "hunting shaman", he was placed in a prominent position to be involved in the performance in such a way as to indicate that he may indeed be such a person.

Below and to the left there is a sheep within an enclosure-like form of dots, vaguely suggesting game entrapment (Fig. 10F,G). On Equinox a circle of light appears on this sheep and enlarges to fill the panel (Fig. 10G). This adds support to the corralling concept of the dots. On Winter Solstice a circular form of shadow appears to the left of the sheep to create a third corralling-like situation on this one figure. This form moves to the upper right like an open-mouthed creature swallowing that sheep as it closes its mouth on another sheep to the upper right. In other words, its form began on one sheep.
FIGURE 10.

FIGURE 11.

Section 5 Page 15 "AN EXAMINATION OF DOUBLE ENTITIES--SYMBOLISM"
and ended on another. During the continual movement of the zoomorphic form of light the double-armed "shaman" continues to stand on the very top edge of the light as it moves all the way across the cliff (Fig. 10F).

This relationship seems to demonstrate that he is not only overseeing the process but is literally "on top of things", in complete and constant control throughout the whole performance. This could only be done by one who has the ability and power to dominate the situation. No normal person could, in a sense, stand on the light or extend the power to bring the sheep within their reach. Thus, the simple emerging aspect is present in a panel with both graphic and solar implications creating a triple application, Double Entity, hunting concepts and solar interactions both calendrical and symbolic.

The identification of the emerging concept in the hunt-drive context is sound. From that point we leave solid ground in any explanations of how they viewed that application. We've imagined a likely possibility, but any interpretive situations beyond that are and will have to remain speculative.

ASSOCIATIONS WITH WARRIORS AND COMBATANTS.

At present only two examples of this scenario have been identified. The most simple is from Davis Creek (Fig. 11A). That "warrior" has what appears to be another two-horned head emerging from his head. Because of the simplicity of this context little symbolism beyond concept identification is possible—except to note that this individual is identified as having that ability or has had that happen.

In Nine Mile, two small warriors are in combat with what was originally thought to be a shield-bodied warrior (Fig. 11B). In light of the new evidence this can now be identified as representing the same type of construction as Figure 1E, a Category Number 4 Double Entity. The additional symbolism of the circular positioning of the arms of the lower figure, creates a shield-like form for the upper figure as well. The decoration on the shield would then represent the lower main figure's head, a "man of power" who has psychic powers or the ability to emerge. There are several possibilities of what this figure may represent. One possible interpretation is that it could represent the warrior's spirit emerging at his death. Another possible interpretation is that this individual is a mystical warrior with supernatural abilities, or it may be that the shield represents a supernatural type of protection or a mystical duplication of himself for another target, and thereby defeating his enemies. Even though this may be more likely it is very speculative. Again, we have firm ground on which to establish the association of these concepts. However, while the intent is intriguing to think about, specific interpretations will always remain speculative. Without ethnographic support they will have to remain speculation.

ASSOCIATIONS WITH MODIFICATIONS, ADDITIONS, THOUGHT AND DESIRE.

Whenever an element is added to an older composition, it also adds to or changes the original symbolism (Bill Dalton, 1966 personal communication). Figure 12A from Capitol Reef illustrates a flute player added to the horn of an earlier figure. In this area we can only speculate that the idea implies
FIGURE 12.
an emergence. This in essence conforms to the definition of a Category Number 3 Double Entity but may not have that same symbolism. In a previous study this was considered to be a possible situation indicative of modifications of two-horned, four-legged sheep and problems between two-and one-horned identity.

These different applications illustrate the diversity to which the various forms have been identified so far. Other areas of application will no doubt be found in the future. At present, however, with the repeated examples represented here and in other publications, we can see that there was an underlying uniformity with minor regional differences that existed across several different style areas. This broadens our perspective of the symbolizing process and strengthens our conviction that the study and analysis of rock art, delving into in depth interpretations has value. It also stresses the fact that any interpretive analysis without considering possible symbolic solar interactions is incomplete.
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Section 5 Page 19 "AN EXAMINATION OF DOUBLE ENTITIES—SYMBOLISM"
A NEW LOOK AT HUNTING SHAMEN

BY

JESSE E. WARNER

In the past, with the trend to push too many situations through the door of hunting magic, no one has really identified the Hunting Shaman in rock art. Recently there has been a more conservative tendency to back away from Hunting Magic and consider other possibilities, because the Hunting Shaman has still not been identified. Today, with considerations of repeated contexts that relate to this subject, I believe we are gaining the appropriate insights to place symbolism related to "Hunting Magic", or at least Hunting Shamen into a proper perspective for symbolic analysis.

From my motif files I have some very interesting contexts that have not had any previous consideration. The first examples came from Dry Fork, north of Vernal, Utah. One of these was found on a Glen Canyon Style 5 panel, in Peltier Canyon. This is also the most graphically complete context in depicting the intent of the characters in question. In Figure 1A, eight men with outstretched arms funnel two ungulates into a checker board representing what is assumed to be a box-like corral, canyon, or enclosed area. The point of interest for us is the figure that stands behind the animals. His forked headdress sets him apart from the other eight men. These eight men all look the same except for the two who have arcs over their heads. In the hand of the two-horned figure is an object that basically looks like a forked stick, which echoes the shape of his headdress.

This complex composition creates a hunting scenario demonstrating a hunting technique based on a structured social organization with recognized authority and cooperation of participating subordinates. Because of the construction of the composition, the role of the leader seems to fit the possibilities of representing what may be a Hunting Shaman. Before jumping to conclusions, it is my policy to first look for and then examine other similar occurrences before making a judgment (Warner 1984). With only this panel I could suggest a possibility that he is a Hunting Shaman, but that would not be sufficient evidence to support the existence of an established concept. It takes a consistency in the repetition of an idea to verify its validity. With the examples in my files of the Shaman concept I do not have the vast repetition that I have seen with other motifs, yet there is enough to entertain the concept.

Across the canyon from the Peltier site are three other panels (Figs. 1B, 2A and B). On these are four figures which appear to be Hunting Shamen, in slightly different situations. Figure 1B, is a complex composition. There are two figures, each holding a forked object, but this time they are in front of sheep. There are numerous other sheep in the panel,
FIGURE 1.

Section 6 Page 2 "A NEW LOOK AT HUNTING SHAMAN"
Dry Fk.

FIGURE 2.

Summit Can.

FIGURE 3.
but below the composition is a border formed by a row of what appears to be alternating adult and young sheep. This row is similar to a row in the "Hunting Panel" in Cottonwood Wash in Nine Mile Canyon. The row of sheep from Nine Mile have been suggested to represent the movement from lower valleys to high country in a possible spring migration associated with a Vernal Equinox observation panel below it (Norman 1985). That, or a similar concept, may be represented here. The two sheep above them seem to be in the act of being enticed by the two figures with the forked objects in front of them.

One of these has a two-horn headdress. The other is represented without headgear. Examples of these figures in the files show that the most common type of headdress consists of two horns. This, however, is also balanced by no headgear at all. Even with the predominance of two-horn headdresses, these alone can not be taken by themselves to distinguish what could possibly represent a Hunting Shaman, since so many other contexts and concept associations for that headdress exists.

In the vicinity of Figure 1B are two other figures (the 4th and 5th examples). These repeat the same context but only have one anthropomorph and one animal in each panel. In these situations, the concept of an offering as well as enticement seems to be a possibility, especially with Figure 2A. This individual holds an object that has vague possibilities of being a forked stick, but because of the massive random pecking its abstraction almost gives the impression of it representing a plant or Y shaped branch. These five examples from the same vicinity establish that this area must have been a prime hunting area used for the entrapment of migrating animals by organized groups of both Basketmaker and Fremont hunters.

In Santaquin Canyon a similar panel was recorded by Putnam (1876) possibly representing this shaman concept (Fig. 3). Because the original drawing does not have enough detail and the boulder is believed to have been used as road fill, it is difficult to tell. There are, however, two individuals with outstretched arms, one of which possibly holds a stick.

Figures 4 and 5 illustrate several other occurrences of similar characters. Figure 4A contains several symbols which seem to strengthen the hunting drive possibilities in contexts of individuals with forked objects. Besides the row of three sheep in front of an anthropomorph with outstretched arms and what could be a bow and arrow, but which looks as much or more like a forked stick, there are four other symbols present that probably intend to enhance or insure the hunt-drive interpretation. One is the conformation of the graphic elements to the form of a section of the cliff contour. The second is the linear grid-like lines forming a corral-like enclosure or entrapment symbol. Third, is the top and bottom border. The top of the panel consists of pecked lines all across the composition. The bottom boarder provides a funneling approach with the bottom of the outset block of stone. The left portion on the panel, the "corral" itself, consists of vertical diminishing bar-like lines.

This Nine Mile panel is similar to a hunting scene near Ferron, Utah and two at Roosevelt Park, Washington in two respects; the bar-like lines, and their conformation to the cliff face (Fig. 4B) (Warner, Warner 1985). These,
however, were done by different styles. The combination of top lines, bottom edge and vertical grid creates a funneling approach to a pole-like enclosure with the three sheep being enticed into the approach by the possible Hunting Shaman. Tracks like the one above the anthropomorph and in front of the procession of sheep is like a footnote to possibly represent a migration or movement symbol. If that is the case, it fits the composition. Movement in the composition is toward the anthropomorph in front of the enclosure.

In a Bock's Canyon panel (Fig. 4C), two different elements were combined which may provide a key to help an observer understand the concept of an unfamiliar glyph. In that situation a grid was placed within an enclosure, a typical hunting-drive symbol. Figures 4D,E illustrate two animals in association with other grids from the same area. A similar situation occurs in Figure 4A. The fourth and last point is that here, instead of a barred grid enclosed within a bubular enclosure, a bubular enclosure is formed by a horned snake in front of the grid enclosure, and within a natural stone enclosure. A variation of this enclosure is also represented in Figure 4F from Hog Springs. Notice the anthropomorph with the forked object within the enclosure, and the enclosed sheep. It is interesting to note the association of the enclosure with barred grids at the drive site in Bock's Canyon (Fig. 4C) (Warner 1985). While these have minimal entrapment symbolism, the composition in Figure 4A has multiple symbolism indicating the drive situation. At McKeen Spring an individual with a forked stick stands on a circle which may also represent the Hunting Shaman concept (Fig. 4G). Note the interesting types of repetitions in these compositions. Figure 5 contains an odd assortment of individuals, some of which may have similar forked objects that may relate to this idea.

The foregoing have been more or less regular types of representations. In addition to these we have identified several other very interesting contexts which add a great deal of insight. At Swelter Shelter in Dinosaur National Monument there is a figure holding a forked stick and emerging from the head, between the horns of the larger figure. There are similar glyphs to this in Dry Fork, Black Hills and Tusher Canyon (Fig. 6). Again if only one or two examples of this idea had been found this would probably not be as significant, but with all the examples, it stresses the importance of this unusual relationship and that it had some degree of convention. The attachment or emergence of the forked stick holder from a sheep's horn adds to the associations of the stick, shaman, and sheep.

In another study of similar motifs these were included as possibly representing a Double Entity or the emergence of a spirit-like figure (Warner 1987A and B). Since these hold the forked object and occur with implications of an altered state or the emergence of the Double Entity, they may also imply that this is a moment of power, a spiritual or out-of-body experience associated with the context of this character. Whether this implies the spiritual essence and power of the Hunting Shaman or an actual spiritual emergence during these periods of power isn't certain. The identity of these figures as possible Hunting Shamen is a very important step in gaining additional insight into what was visualized and represented as a Hunting Shaman. Figure 7A from Cub Creek, shows the simple combination of the forked stick in a possible emerging context which may imply an extension of the power
FIGURE 5.
symbolized by the fork or it may simply be a means of identification.

In the Molen Reef there is a double-armed figure in a panel that relates to this situation. Even though he does not hold a forked stick, he may still represent the shaman concept. On this panel a sheep is surrounded by a corral-like form of dots which initially suggested game entrapment. On equinox a circle of light appears on the sheep and expands to fill the panel (Fig. 8A). That interaction seems to reinforce the entrapment concept by providing a "corral-like" form of light on a sheep previously "corralled" by dots. The four-armed figure, conforming to one variation of the definition of a Double Entity or possible emerging figure also seems to oversee or supervise the animated corralling of the sheep within an open-mouthed triangle of light on Winter Solstice. After corralling the first sheep this form of light moves across the cliff to close its mouth on another sheep (Fig. 8B). The double-armed emerging figure, possibly representing the Hunting Shaman continues to stand on the top edge of the light as it moves all the way across the cliff making it appear that he is in total control and literally on top of things. The aspects of this figure as a Double Entity also suggest, like the Double Entities with the forked holders emerging from their heads, that the Hunting Shaman is not just an ordinary man fulfilling that office as needed, but a "real" Shaman, one who has mystical abilities and power. This possibility has been used to demonstrate an element of power, domination and control; factors so very important in game entrapment for a successful drive, and an interaction with light that is not very common in rock art.

On the Port Neuf River, south of Pocatello, Idaho a double-armed figure stands next to several enclosures and a grid, possibly representing the shaman concept (Fig. 9A). In Indian Creek the figure we call the "Swallowed Up One" was also placed in a dominant position. It also occurs next to an animal that is caught in another triangular corral of light (Fig. 9B). As this form of light moves it also transforms into a zoomorphic creature the moment it swallows up the anthropomorph with a shadow. At the side of this figure, in a position to be held if he had been represented with arms is a Y. If this figure also represents an aspect of the Hunting Shaman concept then it adds a whole new set of insights to those previously considered for the interactions on this panel (Warner 1983:53-55). Since this is a figurine form without arms or legs and doesn't hold the Y, we anticipate that this would represent a more divergent or different narrative than the other examples.

These last examples of figures with forked sticks (now an established motif) emerging from the head of another figure (another established motif) and a double-armed entity that occurs with the enclosure or actively participates with light movement in a corralling context, add information that not only reinforces the concept of Hunting Shaman but also suggests that such an individual includes one with the abilities of Shamanistic emergence or transformation. This can also be illustrated by combinations of humans and animals (Fig. 10A). These examples put a whole new light on the idea of Hunting Shaman. The position that these types of characters fill involves no ordinary person, but one that has supernatural powers and abilities to do feats that must have put awe and inspiration in the minds of those who relied on his services.

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There are many other examples more borderline that probably relate to these concepts (Fig. 10B, C). The evidence presented here has been based on the presence of the concept. As mentioned at the beginning, we do not have the quantity of occurrence that is desired yet, but the quality is very good. There is sufficient evidence to establish more than the mere fact that it is a motif. The Hunting Shaman concept has been interwoven with other motifs and in unusual situations with symbols other than anthropomorphs holding a forked object.

It is difficult to determine what the definition of Hunting Shaman could or should include. I feel that we may want to place too restrictive a limit on what it could encompass. I also feel the evidence confirms the existence of individuals who accepted this responsibility and officiated in behalf of others and that they possessed powers beyond the realm of the average individual.

The other side of the coin that also contains information is its absence. Most of the names of sites where this concept have been found occur in eastern Utah, especially in the northeast. There is an obvious lack from western Utah, except Black Hills and Summit Canyon. In western Utah, however, there are many sites that represent the drive situation in a different manner that are generally lacking in eastern Utah. In those compositions human figures of any kind are noticeably lacking. After careful consideration, the lack of individuals with forked sticks does not particularly indicate the absence of the Hunting Shaman concept, only that the concept was represented differently. This could tell us something about the differences in style between these two areas when compared with the presence and absence and differences in the forms of other motifs.

The existence of the Hunting Shaman with the forked object and sheep from California, Colorado and New Mexico demonstrates that it was probably not just a local phenomenon. Before this concept can be more fully defined and explored we need more examples, especially from wider areas. If anyone knows of occurrences not included in this paper we would appreciate a note about those situations. These can be addressed to Rock Art Research of Utah, 960 West 7th South, Salt Lake City, Utah, 84104.

Section 6 Page 10 "A NEW LOOK AT HUNTING SHAMAN"
Port Neuf River, Id.

FIGURE 9.

Indian Ck.

FIGURE 9.
FIGURE 10.

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During an investigation of figures that have sun symbols for heads (Fig. 1), it was discovered that several not only mark locations for horizontal observations but also interact with light and shadow on Equinox and Solstitial dates as well. Because of that it was decided that all possible candidates for interaction should be investigated. On a field trip after the 1986 Symposium of the Utah Rock Art Research Association where those concepts were presented, the authors visited the Dry Wash site in Emery Co, Utah. On one panel, there is a figure with a concentric circle incorporated into its body (Fig. 2). Initially, this figure seemed to be conceptually related to Sunheaded figures, but the fact that it was "Sunbodied" or "Sunbellied" was puzzling. It was also determined to be a prime candidate for marking Winter Solstice.

On Dec. 22, 1986, the authors, in the company of Mary Ellen Whelling and Clifford Rayl, observed some very interesting and precise interactions that began about 9:30 A.M.D.S.T. and continued until about 12:30 P.M.. Panels like this, that have continuous and sequential points of contact, some of which seem as symbolic as calendric, indicate that these ancient people did more than simply observe and mark sunrises and sunsets on the horizon. These individuals not only marked sequential points of interaction, but seemed to enjoy stretching the interactions out as long as possible. From many observations, those interactions do not always occur at first light or end with the last light. This panel has its initial interaction long after sunrise and first light on the panel and ends before the last light leaves the panel and sunset.

Before 9:30 A.M. a pointed shadow began to descend diagonally down toward the center of the concentric circle. At 10:00 A.M. the 90 degree angle of shadow touched the exact top center of the smallest inner ring of the concentric circle. This is a precise point of contact (Fig. 3 line 4).

At 10:05 (Fig. 3 line 5), the point of the shadow moved over to the outside edge of the concentric circle at the precise point where an angular line is attached (Fig. 3A). The upper angle of shadow also touches the other end of this line at the same time (Fig. 3B). The pecked line is a reversed, mirrored image of the edge of the shadow. The deliberateness of that conjunction is difficult to determine. It does, however, create a precise form and relationship that may help us understand that part of the element's form and position.
Myton  Clear Ck.  Vernal  Moab

FIGURE 1.

DRI WASH

FIGURE 2.

Section 7 Page 2 "SOLAR OBSERVATIONS AND SYMBOLISM AT DRY WASH, UTAH"
To the upper right is a sheep with an exaggerated tail, that is connected to one of six fingers of the upraised hand on the right. Polydactylism does have some shamic associations (Wellman 1972). The sheep's neck is slightly elongated, bowed and fits a corresponding bulge of the same size and shape in the shadow (Fig. 3C). That also seems intentional but its intent at present isn't understandable. This completes three points of contact at 10:05. At 10:49, the diagonal edge of the shadow lowers to cross the face of Figure D at the same time it bisects the center of the concentric circle. This seems to provide what may be a line of sight (Fig. 3 line 6). This situation occurs often enough, so it may be considered as an intentional interaction (Fig. 4).

At 11:12, another interesting occurrence takes place. As the point of shadow continues to move to the right, a notch in the shadow perfectly cups the central patented ring as a similar cup-like notch centers above Figure D (Fig. 3 line 7). With all the different types of conjunctions with this one figure at different times, it seems it had some special considerations prior to its placement on the panel. If that is the case, even though it is small, it must also represent a personage of some importance.

At 12:01 PM, an angle of light descends so that it centers over the head of Figure D, and aligns with the diagonal placement of feature F (Fig. 5 line 1). From there, it continues to move to the bottom edge of the central patented dot, making an extremely impressive reversed contact that mirrors the earlier interaction. First, an angle of shadow goes up from the inside ring, then an angle of light goes out of the bottom of the inside dot (Fig. 5 line 2). At 12:21, the shadow moves on to touch Figures E and F (Fig. 5 line 3). The final interaction occurs at 12:22 when the upper angle of light touches Figure 5F (Fig. 5 line 4).

Four months after those observations, at the 1987 ARARA Symposium, one of the authors presented an introduction to "Double Entities" or various forms of human figures that have been combined. In that presentation, it was demonstrated that there are several different categories of these figures (Figs. 6,7). After that presentation it was discovered that this Sunbodied figure was also a Double Entity. First of all, we believe this Sunheaded figure has a concentric circle face (Fig. 6A-E). This face is very similar to the Sunheaded anthropomorph in Figure 1A. In light of this new perspective, there are several possibilities for its construction. One is that this is an armless Sunheaded figure with another figure emerging from the top of its head like those in Figures 6G and 7.

The existence and precise placement of the small pecked lines breaking both the top and bottom of the outside patinated ring has always been perplexing (Fig. 6A). It is probable that the bottom one represents the neck of the smaller solar face within the outside pecked ring. The lower portion of the outside ring could then be the arms of the lower figure raised to encircle the head, like Figure 6F. This then would be a Category Nr.5 Double Entity, a figure whose arms encircle and incorporate the head of the lower figure within the body of an upper figure (Fig. 6D,F), (Warner 1987). If this is the case then it is also possible that the break in the upper ring (Fig. 6A) could be the phallus of the upper figure if the upper portion of the outside ring could be considered as its legs as well (Fig. 6E).
FIGURE 4.

Section 7 Page 5 "SOLAR OBSERVATIONS AND SYMBOLISM AT DRY WASH, UTAH"
FIGURE 6.

Section 7 Page 7 "SOLAR OBSERVATIONS AND SYMBOLISM AT DRY WASH, UTAH"
attachment of hands and feet to form a bisected circle that incorporates the body of the upper figure is similar to examples in Figures 6B and C from Waterflow, New Mexico. If these are possible then we have a very complicated and complex Double Entity. It has a figure emerging from the Sunhead (Fig. 6A), the Sunhead incorporated within the combined arms and legs of two individuals forming the body of the composite figure (Fig. 6A,E), and Sunheaded figure emerging from the phallus of the upper incorporated figure (Figs. 6A,E, 7A-D).

This motif and its interactions combine both calendrical markers and symbolic interactions. The position of the diagonal descent of the points of the shadow on Winter Solstice marks the place on the panel where the shadow descends at its absolute highest and furthest right position during the year. Before that time, as the sun moves south, the shadow descends on an angle below and to the left of the point of its highest limit. Also after Dec. 22nd the shadow lowers as the sun again begins to move higher in the sky, on its journey back north. This creates the situation that marks the calendrical period and proves that the symbolic interactions will occur only on Winter Solstice. These symbolic interactions, if understood correctly, consist of several facets: the Sunhead is touched by a triangle of shadow and light that interacts on an individual with an emerging figure (out of the head), it includes symbolism of possible shamanic rebirth (attachments to the phallus of the upper figure), and it also speaks with light.

As the sun moves farther north after Winter Solstice and is higher in the sky, it is obvious the shadow will descend down the cliff so that Figure D will be touched by the triangle of light that is above it at 12:01 PM on Winter Solstice (Fig. 5D dotted line). It could not only cross its face (out of mouth) on a period after Winter Solstice but equally before. This figure may then be a predeterminer of a specific period before the shortest day of the year.

It is also obvious there is far more symbolism in this panel than we will ever know. Without attempting any in depth interpretations we may simply deduce part of the intent. This combination of elements may be depicting a Sunheaded figure, a possible sunpriest-shaman, after a period of ceremonial preparation, having come here to have an ecstatic experience. Being under the influence of those circumstances and while observing these interactions, he could have reached that moment of power which triggered his possible out-of-body experience, emergence or vision. Then with the experiences he had, or the knowledge he gained, he was able to then speak with whatever the angle of light may have represented. In other words, after his return to an ordinary state of reality, what came from his mouth may have involved or symbolized his emergence and rebirth. This is a good illustration of the serious problems associated with interpretations. It may also be that at the moment the "words the light symbolize" were spoken he had his ecstatic release. There may also be other alternative possibilities just as likely. With the amount of repetition of similar situations (Fig. 7D for instance), we can infer that something is going on involving the symbolism related to Double Entities, rebirth, Sunheaded figures, solar observation and speaking with light.

This site then may also be considered as a commemorative shrine, and one.
Section 7 Page 9 "SOLAR OBSERVATIONS AND SYMBOLISM AT DRY WASH, UTAH"
that would enable him to eternally re-enact those events, as long as the sun shines. It would also be a witness of his experience. As Steinbring and Granzeberg state (1986:209), some are "compelled...to commemorate the event by making a mark on the rocks. Among other things this identifies the permanence of the achievement... The act of commemorating it can only be understood from such an empathetic perspective. The act of producing the mark is...a supernatural experience. The marking is supernatural and the mark remains so, perhaps externally exuding power for those correctly treating it." This panel may also become an invitation to listen to him about his experience.

During the Winter Solstice observations it became obvious that the figures to the left would interact with the two prominent features of rock on Equinox. On September 23rd we returned to observe the point of shadow descend toward the reversed enclosure. At 8:58 AM it reached the outside edge of the enclosure (Fig. 8A line 1). Between 10:25 and 10:27 the point of the shadow centered on the central prongs that were originally thought to be the forked tongue of a snake-like figure (Fig. 8A line 2) vs (Fig. 9A), but the possibility that this is an abstracted figure with upraised arms like those in Figure 9B should not be overlooked. At 10:40 the point of shadow touched the outside edge of the circle or head of the snake at the same time it closed off the open mouth of the sheep to the right (Fig. 8A line 3). At 12:48 P.M. the triangle of light began its movement down onto the panel. At 1:01 it centered on top of the circle in an impressive, almost identical repetition of the interaction of the circle within the figure to the right at Winter Solstice (Fig. 8B).

This panel is a very effective and accurate marker for both Equinox and Winter Solstice. It was previously felt that these two sections of this panel were separate entities produced at different times. It has still not been determined if both figures were produced by the same group. Both sections do, however, mark different solar periods with both a distance and accurate calendrical marker and symbolic interaction. Because this interaction takes place within an enclosure that has several sheep inside, it is probable that this may have been time for a special or ritual hunt of a possible group of migrating animals through this canyon. This spot occurs in front of an alcove along the cliffs where it narrows before entering a narrow canyon. At this point it would be possible to block or corral the animals entering this area from either side of the canyon, in an effective drive situation. With the additional, possible symbolism of (shamanic) transformation placed with in an entrapment symbol with sheep may represent an association of the concept of hunting with shamanism or Double Entities. With out more evidence this is still somewhat conjectural.

Like Wiedler (1986:226), We believe that these ancient figures provide many visual clues to their meaning. It has only been by collecting many different examples of many repeated motifs that we have been able to determine the possibilities of what both these complex and complicated figures may represent.
FIGURE 8. A

FIGURE 8. B

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WELLMLAN, KLAUS F.

Section 7 Page 13 "SOLAR OBSERVATIONS AND SYMBOLISM AT DRY WASH, UTAH"
Because of Clear Creek Canyon's unique place in the local geography and the heavy archaeological remains, it is only feasible that this canyon would hold many sites where solar observations were made. Because of the nature of most solar observation shrines, I did not expect that the majority would occur so close to Five Fingers Knoll. Even though we have viewed interacting panels up and down the full length of the canyon, most of the interacting or active observation sites viewed so far are among the panels which are very close to Five Fingers Knoll.

I first began to watch for solar interacting panels in the canyon one week before Summer Solstice in 1984. At that time Richard Morrey, Asa Nielson and myself made a presentation to the Sevier Chamber of Commerce for The Clear Creek Canyon Archaeological Association. That presentation was to help promote the museum in which we are now meeting. On that weekend I located and partially observed about 12 panels that from my notes had the best potential for interaction. I did this so I might have some idea before our presentation of the amount of solar observation that occurred in the canyon. From the first beginning I realized this was another rock art treasure in that this area will be a great laboratory in which to investigate these and other problems for many years to come.

During the meeting in the Sevier County Court House in June 1984 it was my intent to stress the unusual importance the inscriptions in Clear Creek Canyon will play in helping us to understand what has transpired in this area. This information will undoubtedly add to what the archaeological record will or will not reveal. Clear Creek Canyon is in an unusual and even unique position in that it is a major passage between two north-south corridors which has a considerable amount of available rock surfaces suitable for rock art. As a passage it contains rock art left over an extremely long period of time by many different peoples. It also occurs at the boundary of several different styles of Fremont Rock Art as well as other different cultures. Given these circumstances there must have been a tremendous intercourse of goods and ideas from all directions. If such was the case, there should be a considerable record left in the rock art.

With the heavy population between here and Richfield we should be able to expect a higher localized development of both ceremonial activity and solar observations manifested in the inscriptive record. That is one of the major questions that will need to be answered by those who have an interest in this area. This museum will hopefully play a major part in that process, in part as a clearing house for information, center for coordinating research, and the impetus of organization.
FIGURE 1.

Section 8 Page 2 "SOLAR OBSERVATIONS IN CLEAR CREEK CANYON"
One of the problems that the rock art in this canyon creates is the many distinctive and uniform localized variants that evidently developed here and occur at so very few sites beyond this canyon. With just a cursory overview the stylistic indicators here have a distinctive style specifically divergent from other contemporaneous groups in the vicinity. These are different enough that this area may eventually be labeled as either a distinct or strong substyle of the Sevier Fremont, beyond Schaafsma's definitions. This pattern will probably predominate the stylistic profiles as they are compiled with more data from the local areas and across the state (Schaafsma 1971).

By the end of 1986 we estimate that there will be at least 160 panels that need to be observed to provide a more complete record of the types of observations that were made here. In 1985 and 1986 several local researchers helped observe some panels. We would like to open the invitation to others to join us in the thrill and excitement of discovery and also the moments of sheer boredom which are only some of the rewards of this type of research.

One of the best rewards is that this type of information can be incorporated within this museum as an educational tool to help those who have no idea what rock art is, to understand that these people were much more than ignorant savages, a bigoted image that still too often persists. By demonstrating the ethnographical background of such activities, it cracks the wall in the minds of the uneducated and begins to let a little light in. It also helps us to have a great deal more appreciation for the harmony and contact that we have lost with our environment. It helps remind us that we cannot be totally whole or complete unless we stop, pause and harmonize ourselves with these life-giving forces. By so doing, those who do receive far greater benefits in the physical world because of the peace and harmony they have achieved on the spiritual level.

At Mill Creek Junction, on a panel known as "Newspaper Rock" is a conspicuous looking folded spiral (Fig. 1A). This spiral has a tail that bends at an angle and points up into open space on the cliff above. The interior of the spiral folds and returns back out, ending on the right with a line that simply points down. Above the end is another line that points up to the right. It just so happens that there are two obvious notches up to the right on the skyline in the vicinity of these pointers. It is not an exact alignment between the two notches and the attached lines but it is close enough to have given me the impression that this marked the spot of sunrise on Summer Solstice and Equinox. While in the canyon a week before solstice 1984, I stood on top of the large pedestal below and placed my head on the spiral to see the sun rise just short of the upper notch (Fig. 1B,X). This was enough to convince me of the fact that this was a significant sun shrine.

At that time I was not aware of any other similar type of glyph marking a sunrise location with such a pointer. Not long after that I viewed the sun setting into a notch in Seven Mile Canyon which was marked by a tailed spiral on Summer Solstice, 1985 (Fig. 1C, D). Because of a tight observation schedule, it was not until June 22 of 1986 that I was able to return to watch the sunrise, centered in the upper notch. However, on Fall Equinox 1985 I watched the sun rise out of the lower notch from the same location. This was again observed on Spring Equinox, March, 1986.

Section 8 Page 3 "SOLAR OBSERVATIONS IN CLEAR CREEK CANYON"
Point X is two different illustrations of the same boulder

A. Probable position 2 wks before Fall Eq. and 2 wks after Sp. Eq.
B. Sp. and Fall Eq. Lines 1-6 Fig 2.2
C. 2 wks after Fall Eq. and 2 wks before Sp Eq. Line 2 Fig. 2.2

FIGURE 2-1

Position of sun at point B on Eq. Fig. 2.1

FIGURE 2-2

Section 8 Page 4 "SOLAR OBSERVATIONS IN CLEAR CREEK CANYON"
There is a third, much fainter line that extends from the spiral just under the Equinox marker that probably marks the position for sunrise on Winter Solstice where the far canyon meets the edge of the cliff. I haven't returned for that observation.

Down the cliff just a short distance and on an upper ledge is another spiral with an odd form. This was first watched on Oct. 6, two weeks after Equinox. At that time the point of the rock to the right cast a triangular shadow that was above the center of the spiral (Fig. 2.1 line C, 2.2 line Z). On the next Equinox, the sun was still below the point of the boulder from the spiral, but the interaction with the spiral was interesting. Notice the form of line 1 (Fig. 2.2), as it moves across the zig zag folded extension. Making adjustments between the movement of the shadow two weeks after Equinox (Fig. 2.2 dotted line C, solid line Z), and on Equinox (Fig. 2.2 dotted line B, solid line 4), would probably place the point of the shadow in the vicinity of the top of the upper zig zag extension Fig. 2.2 dotted line X), about one week after Fall Equinox or one week before Spring Equinox. It is obvious this spiral needs to be observed at several periods between Equinox and Summer Solstice before its total significance is understood.

By examining the difference in the sun's positions on the point of rock two weeks after as well as on Equinox, it seems that the period of time that the sun would be visible on the exact point from the center of the spiral would be approximately two weeks before Fall Equinox. At that period the point of shadow should touch the center of the spiral (Fig. 2.1 line A, 2.2 dotted line A). Because not knowing if that was an important period or if that was the interaction for which the design was created, no subsequent trips have been taken to observe that possibility, when possible it will be. At a later date I will make some observations on the probability of their dividing the year into 16ths as well as 8ths.

This demonstrates very well the movement of the sun into an alignment and then out again. On many panels we are beginning to notice elements that seem to mark periods other than one of the prime solar or cross-quarter dates (Preparatory or Conformation).

The large panels around the cliffs to the right of Newspaper Rock raises some interesting questions. It was first observed two weeks after Fall Equinox. At that time there was an exact center-to-center bisection of the large intersected spiral and the spiral on the large sheep's back (Fig. 3 line 3). On Equinox, this alignment does not occur (Fig. 3 line C). On Equinox, however, a line does bisect the centers of the left concentric circle and spiral (Fig. 3 line A). On the date two weeks after Equinox, however, that alignment is still about the same. On complex panels like this one, it is almost impossible to immediately identify all the calendrical periods that a panel was used for to mark throughout the year.

Figure 4 illustrates that at two different periods throughout the year the sun will be at the same position in the sky as were the shadows on the cliffs. Thus a period two weeks after Spring Equinox will have the same shadow configuration as two weeks before Fall Equinox. Also, two weeks before either Summer or Winter Solstice would be the same as two weeks after, but
Fig. 3. Observations in Con.

- Oct. 6
- On Equinox

1 Two wks after Fall Eq.
A- Summer Solstice limit
B- E Equal pds before and after
Sum Sol

Front View

A- Sum Sol limit
B- C Equal pds before and after
Sum Sol

Summer Solstice
May- Aug.
6-7

Equinox

C- Equinox
@ Mar-Sep 21
D- Cross Quarter Dates
@ Nov-Feb 6-7
E- Winter Sol limit

Top View

A- Position 1st light
hits panel on Eq.
4.5 in from
1 day to the next
B- Evidence the sun slows down
C- As far right as the 1st light ever
appears, Wint Sol.

Equinox

May-Aug.
6-7

Summer Solstice

FIGURE 4.

Section 8 Page 7 "SOLAR OBSERVATIONS IN CLEAR CREEK CANYON"
West Vulva as viewed from Fig. 5.1 B

Summer Solstice sun set as viewed from the other side of Fig. 5.1 B

FIGURE 5-1

Section 8 Page 8 "SOLAR OBSERVATIONS IN CLEAR CREEK CANYON"
each would be different than that visible on either Equinox or Solstice. This makes it possible that some of these interactions may be predeterminers of solar events for possible ceremonial preparation. Among modern Pueblos these dates were also important to observe.

Figure 5.1B suggested a possible location to observe Summer Solstice sun set since a very distinctive notch can be viewed from it (Fig. 5.1A,a,c). On Summer Solstice, however, the sun set just short of reaching the notch (Fig. 5.1A,b). To get the sun in the notch I had to move around to the other side of the rock with the possible sun watcher (Fig. 5.1D). On that side the rock is unsuitable for inscriptions, but this is the only position where the sun can be viewed to set in the notch from those cliffs. That observation is not as definitive as would be hoped for, but it is usable. To test the validity of that observation it was felt that if the sun could be viewed to rise out of the east notch (Fig. 5.2B), from a marked location it would support the intentionality of the sun set observation. Surveying the other side of the canyon where one would have to be on Summer Solstice for a sun rise position located Figure 5.2C.

This panel consists of four circles in a box-like pattern to the left. Across a small blank space to the right is a sun-like symbol with rays at the top and one line at the bottom enclosed in a box. Above it is a square U-bracket above some vertical random hack marks. To the upper right of these is a circle. The composition does seem to have some possibilities implying sun rise observations. On Summer Solstice the sun rises directly above the east notch from this location (Fig. 5.2A). On Equinox the sun rises far to the right (Fig. 5.2A). The Summer Solstice position marks the left (northmost) limit of the suns movement from the March Equinox position, where it will return back to in September. Martineau, in his Clear Creek Canyon interpretive work prepared under the auspices of the Piute Tribe, refers to these two notches as the east and west vulvas. He interprets a near by panel to relate a story of the sun represented by two personages fertilizing the two oceans. He also interprets another nearby panel to imply the sun rising out of a notch (Martineau 1985). During our last conversations he stated that he did not particularly believe in the validity of solar interactions and that he had not attempted to make any solar observations.

It is obvious that there is a great deal of mythical lore associated with these notches. The east notch does look very much like a vulva. It is very graphic in its natural depiction of a female lying on her back, thighs spread in the receptive position and a natural cavity representing the vulva exposed (Fig. 5.2B). These panels, it seems, could also just as well relate to the conception of the Hero Twins as when the sun entered the daughter of Spider Woman. Natural pits have been considered as vulvas (Tse josh in Navajo) (Magowen 1977, Judy Warner 1984). The natural cavity in Figure 5.2A is probably just as much a vulva as the natural pit in the groin of Figure 5.3A near by. This natural feature is surrounded by a patinated ring and pecked circle. A similar ring occurs on several others (Fig. 5.3C). Since some of these are exaggerated they probably stress the significance or meaning behind their representation (Dalton, Tuchins 1967 personal communications). Since a patinated ring, or a simple circle can represent the sun and many do interact, it brings up the question could this graphically represent the same thing that
Equinox sunrise from Fig. 5.2 C

East Vulva

View of East Vulva from valley floor

C. Sunrise panel

FIGURE 5-2

SECTION 8 Page 10 "SOLAR OBSERVATIONS IN CLEAR CREEK CANYON"
Possible "Sun Wombed" Figures

A Clear Ck.

C

Possible "Sun Wombed" Figures

D Quitchupah

Out of Groin

Figure 5-3

Section 8 Page 11 "Solar Observations in Clear Creek Canyon"
is also represented visually (symbolically) not much more than a couple hundred yards away in "Vulva Canyon".

The possibility of it being a sun symbol in the place of the vulva would be highly symbolic and also highly speculative. It was then felt that if it would be possible to find some of these interact, where a shaft of light would come out of that circle like it does the groin of other figures (Fig. 5.3D), that may strengthen the possibility of that concept.

Not all of the observations on these figures have been completed. So far four have been observed. Two performed and it is anticipated that several have a strong possibility to have that interaction. On Equinox an angle of light moves across the face of Figure 5.3A and on the cross quarter date of May 6th that same angle of light moves up into position to penetrate the "Sun vulva". From the fourth figure in the row, the sun was observed to come out of a notch on Equinox. Those specific symbolic applications will be the subject of a subsequent presentation.

After this research began, it was discovered that the copulating couple in the Cave of Life, in the Petrified National Forest, Arizona, had an interaction that relates to this concept. The solid lines were positions of the shadow, but the dotted line was neither illustrated or mentioned, but maintains the same trajectory.

At Kimberly Junction, on Equinox, a Sunheaded Double Entity has a very special interaction. The figure consists of a head with a dot centered circle face with another head, neck and arms extending out of it's head, a Category 2 Double Entity (Fig. 6A). Just before sunset on Fall Equinox, the shadow that comes through what appears to be a man made notch casts a notch of light that brackets the emerged portion of the figure. This is similar, but different to an interaction at Quitchupah where the emerged portion of a Double Entity is also highlighted by bracketing it with light (Fig. 6B). The repatination in the man-made notch is lighter than any of the other surrounding surfaces and the angle of percussion to create this feature was horizontal, in two opposed directions.

The important part of this interaction is that the shadow also simultaneously brackets the dot centered circle Sunheaded face on the lower figure. This type of symbolic interaction was also observed on a figure from Quitchupah during Spring Equinox (Fig. 6C). Later that year on Nov. 6th a similar interaction was discovered on another figure in Emery County (Fig. 6D,E).

The concept of this special context has been labeled "Figures with Double Vision", because one eye, or head, is in the light and the other is in the dark. This seems to symbolically represent the ability of shamen to see and function in both the world of light, the natural, mortal world and the world of darkness, of the supernatural and unknown. So far, there are only three examples of this concept that have been located, all found in the same year. Like all the other important symbols, if they were significant they will repeat again and again.
Figure 7.1 contains several figures that are interesting, one of which is a multiple Double Entity. On Equinox as the sun begins to appear out of a notch in the cliff to the right, it casts a corresponding notch of light on the panel (Fig. 7.1X, on line 1). As the sun moves across the small figure with arms and the larger figure without arms the sun appears and then rises out of the notch. That process is registered from line 1 to line 3. Notice the shadows edge touches the left side of an upper dot at the time it crossed the lower figures face, providing a line of sight. That type of situation is being found to occur quite often. Also notice the bulge in the shadow that curves around the two horned figurine's shoulder. As the sun moves farther south and lower the point of light (X) will rise at first light. Observe how on Equinox it moves horizontally to the right. At a later date, probably half way to Winter Solstice, it may cross the small figures face and move to the right to penetrate the center of the spiral.

On Figure 7.1, lines 2 to 4 have a small notch in the shadows edge that approach and curve down onto the two upper curved claw-like lines of the spiral below it. Notice how they curve right around the angle of the arched lines. When line 3 bisects the lower spiral it cuts across the right eye-like dot in the center of the upper spiral.

The Double Entity beneath line 6 is a complicated figured. Notice the small partial figure-like form attached to the phallus of the long body. The top of the figure is constructed much like the Double Entities in Figure 7.2. Some of these characters have their arms raised up over their heads. In the Clear Creek example, another head with two horns rises up out of the bisected circle formed by the main figures head and upraised arms. Like the enclosed face at Dry Wash that speaks with light, there is an angle of light that comes from Figure 7.1 line 6. As the edge of the shadow moves to the right notice another angle of light that is similar in shape to the angle of light that crossed the lower face of the main figure, crosses the upper emerging figures face (Fig. 7.3 lines 6, 8).

Thus this Double Entity has two faces, each sequentially speaks with light on Equinox. This is a rare and unusual situation among figures with those types of contexts. Figure 7.3A is another odd form. Whether it is a Double Entity isn't certain. An angle in the shadow cups a dot on line 2, then moves across the "eyes", and an area that may be in the vicinity of the mouth on Winter Solstice. Figure 7.3B shows the position of Winter Solstice sun rise on the horizon across the canyon from this panel, and the one next to it to the east (Fig. 8A). From Figure 7 Winter Solstice sun rises exactly on top of the mountain peak.

In Figure 8A there is an odd, crudely produced element that seems to have a head and an amorphous body. From that mass of abrasion is an extension with two parallel grooved lines in an extended arm-like position. Because of previous research with figures we refer to as Supplicaters, this looks suspiciously familiar. Most Supplicaters consist of diminutive characters that reach out toward another more dominate element or toward the horizon and an Equinox or solstitial sun rise or set, like occurs in Black Dragon Canyon (Warner and Warner 1985A).
Eq. Sun rise at line 1-3

FIGURE 7-1

Section 8 Page 15 "SOLAR OBSERVATIONS IN CLEAR CREEK CANYON"
Dry Fork  Hildale  Santa Clara  9 mi.  Indian Ck

Dry wash  Black Hills  Kane Ck.

FIGURE 7-2
A - Winter Solstice from Fig. 7
B - Winter Solstice sunrise from Fig. 8

FIGURE 7-3

Section 8 Page 17 "SOLAR OBSERVATIONS IN CLEAR CREEK CANYON"
On Equinox standing with one's body up against the cliff and looking in the direction that the arms are reaching the edge of the cliff splits a small pinnacle in half. If one's head is next to the figure, on Equinox the sun rises exactly on that pinnacle. So far the anticipated interactions have not been observed on the two spirals. On Nov. 6th another small Supplicater-like creature reaches out toward the position where the sun disappears into a position on a rather flat cliff (Fig. 8C). In the area where this occurs several more dramatic locations could have been selected, but this is where it occurs. It does reach for the sun, but it is not at its limit so it will pass through the area within the reach of that figure.

Figure 9A is a U-Bracket faced figure (a variant of a Double Entity) almost identical to the one in Pleasant Creek (Fig. 9C). Both figures have an angle of light cross their faces on Summer Solstice as they look up out of a notch in the cliff (Fig. 9B). Both notches mark the northern limit of the sun's movement. Figure 9D is a four armed, Category 1 Double Entity, that has a triangle of light cross its face on Equinox. These add to the ever growing list of interacting Double Entities, which helps us better understand the connection between the concepts behind their forms and solar observations.

There are two other odd figures that could also relate to interacting Double Entities. One occurs as a simple bisected spiral (Fig. 10A) and the other forms a set of intersected, connected and stacked spirals. Figure 10B, the Bowen panel, has several obvious solar symbols. This panel has been observed to interact on both Equinox and Summer Solstice.

The manner in which it was constructed provides us with the possibility that the vertical shaft that completely penetrates the lower spiral and only enters the upper spiral half way could represent the body of a very abstract figure. Visualizing that at the junction of the shaft and the center of the upper spiral there is a bubular expansion that could possibly represent the head of the shaft-like body. Notice how the first inside revolution from the center of the spiral crosses the "neck" area just below the "head" and forms two arm-like lines which are composed to raise upward and encircle the "head" like those in figure 7.2. Each subsequent revolution crosses the body line to form rings that encircle the head creating both a spiral variant Sunheaded effect, as well as create a rib-like structure and encircling arms for the body in a Double Entity emerging type of situation (Fig. 10C). The lower spiral could be another body duplicating this construction. This would allow the upper spiral-like entity to represent a "Sunheaded" figure emerging from the lower "Sunheaded" figure. Thus repeating some of the symbolism in figures 7.2. This could also duplicate the possibility of the lower figure emerging from the phalus of the upper one.

The fact that the body line of the lower spiral entity extends all the way through and below the last revolution in the same manner as the upper one and to the appropriate distance to provide the legless body terminous effect, supports that possibility. Additional support comes from the fact that the line representing the body stops at the bubular head within the exact center of the upper spiral and does not continue any farther (i.e. through the top). Figure 10A would duplicate the same form.

Section 8 Page 18 "SOLAR OBSERVATIONS IN CLEAR CREEK CANYON"
Section 8 Page 19 "SOLAR OBSERVATIONS IN CLEAR CREEK CANYON"
Section 8 Page 20 "SOLAR OBSERVATIONS IN CLEAR CREEK CANYON"
FIGURE 10. A.

SUMMER SOLSTICE

FIGURE 10. B.

Equinox

Section 8 Page 21 "SOLAR OBSERVATIONS IN CLEAR CREEK CANYON"
The interactions for this panel occur in figure 10B. On Summer Solstice note the angle of light that raised to touch the head of the stick-like body of a figure that we could say is also speaking with light. This could then provide another example of a figure that possibly used solar observations to possibly trigger his altered state or out of body experience, represented by the doubleness of intersected spirals. The shaft of light that conjuncts with the center of the lower spiral may also mark this concept. Whether or not this complex figure could also be a spiral variant of a Sunheaded Double Entity hasn't been fully determined as yet. Like another possible Sunheaded figure in the canyon that is probably bisected at sunset on Winter Solstice (Fig. 10G, Row 3,A), the head figuratively goes off into a spiral, an accepted solar symbol. The problem is that there could be several different interpretations, and which one is most likely? These spiral headed figures are reminiscent of Figure 10C, Row 3, E), which have the arms of a small legless figure, once leaves the body, encircle itself then become the mouth, nose, and then in spiral form ends in the eye of a figure that has a negative U-bracketed next to its head. That type of U-bracket has been previously discussed as a symbol possibly representing shamanic transformation or ecstatic vision (i.e. one that having seen the light can then speak with it). Compare that with the spiral-like outlines around the cross in Figure 5.3B.

That probably isn't sufficient information to satisfy the questionability of this double spiral figure as being a Double Entity, even though both "speak with light". With that in mind consider the following. Notice in Figure 10B line one, how there is an edge of light and shadow that defines the two figurative worlds, one of light and one of darkness (a familiar symbolism by now). This is the line that these special shamen or men of knowledge walk on. It is only by their commitments that they are able to transverse the balance between these two worlds.

Notice how line 1 on Summer Solstice prior to coming out of the "mouth" of the upper emerging spiral has its edge come out of the center of a U-bracket at the exact moment that it's point touches the exact center of another spiral. This provides a kind of line of sight, from a symbol possibly representing shamanic sight to the center of a sun symbol (C.F. Sec.7 Fig. 4 Dry Wash). Could that represent another symbolic expression of what all these figures have been trying to say. Remember that this marks the limits of the shadows progression, equated with the suns northern limit at that time of the year, causing that alignment to only occur on Summer Solstice.

This is an excellent example of the numbers and types of repetitions that are needed to retrieve any reasonable degree of reliability in the interpretive process. Even at this point, the accuracy of the conclusions concerning these concepts on this panel are not certain, but are felt to be fairly accurate. The likelihood that there are other interpretations are possible (Martineau 1985, 81). However, identifying the concept of the double spirals as a variant of a Double Entity is as logical as any other, since it repeats similar forms, in similar contexts, with similar "out of mouth" interactions and the presence of the U-bracket. Even with this greater understanding there are still to many unanswered questions.

Figures 11 and 12 are fairly self explanatory. There are many other
FIGURE 11.

Section 8 Page 24 "SOLAR OBSERVATIONS IN CLEAR CREEK CANYON"
FIGURE 12

Notch in stone

Corner of rock

shadow

Oct. 11th 1987

Equinox

A

B

Section 8 Page 25 "SOLAR OBSERVATIONS IN CLEAR CREEK CANYON"
panels that have been observed to interact but were not included because more observations are needed to make their total significance understandable. These few illustrations demonstrate the highly developed symbol system present in these inscriptions, where many categories of symbolic solar interaction occur. It will take many years of similar observations to fully understand the total picture, but we are building a fairly good foundation for gaining a greater insight, which is exciting.

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WARNER, JUDITH S.
In Pleasant Creek there are many beautiful panels of rock art that have been produced by at least four different cultures. The panel to be considered here contains remains of at least two styles. One of these is composed of Barrier Canyon Style anthropomorphs that have been suspiciously placed, so as to form two diagonally descending rows of figures, instead of more typical linear placements. These figures were later (but still prehistorically) vandalized. The upper panel has seven typical Barrier Canyon figures and quadrupeds that have been severely pecked at in an attempt to obliterate them, a characteristic found in many Barrier Canyon panels. This was probably done to void out or nullify their intent, influence or steal their power (Fig. 1). This practice is not uncommon and even occurs today (Castleton 1979:229, Garn 1985). Below this panel there is what is assumed to be a section of Basketmaker petroglyphs. In this part of the panel there are several glyphs that were felt to be solar indicators. The main figures consist of two circles, one of which has been quartered, with a pecked dot within each quarter of the circle containing smudges of red pigment (Fig. 2A).

Next to this circle, there are some other figures that are very simple, yet very strong in the impact that they have. Two of these figures echo a symbolism and a basic familiarity to other panels that share both their form and associations. Figure 2B is a stick figure seeming to represent an incomplete personage with its arms outstretched, almost bird-like and similar to the small scratched bird under one arm (Fig. 2C). This context at first leaves the impression of shamanistic transformation. The bird and the partial figure in the same bird-like pose gives the feeling that it represents the attitude of flight. It was suggested that its incompleteness may represent the idea that he is no longer grounded. What makes that possibility a little more convincing is the two unusual figures to their right (Fig. 2D,E). These have a head composed of a unique form of a reversed, patinated "U" bracket, similar to ones that were analyzed in an earlier paper as having bird associations, especially with the face or eye (Fig. 3) (Warner 1984:16). If similar symbols, repeated in many different contexts as a bird eye occurs next to a figure that we suspect to represent the act of transformation of man to bird, then this may represent the sight that the transformed bird eyed figure has, once he has been transformed -- a seemingly good possibility. This was the reason for observing solar interactions on this panel to hopefully discover any additional symbolism that would help in supporting that hypothesis.

On the morning of Summer Solstice a little after 7:00 A.M. MDT, the sun rises across the canyon to the northeast of this panel. If the quartered
FIGURE 1.

FIGURE 2.

Section 9 Page 2 "SUMMER SOLSTICE IN PLEASANT CREEK"
Utah Lake / Stansbury Is. / Salt Flats / Utah Lake / Vernal / Blalock Rapids, Wash. / 4:00 clock rapids, Petroglyph Canyon, Wash. / Wash. / Moab / Rio San Jose, N.M. / Grand Mesa, Colo. / Blalock Rapids, Wash. / Spedis Ck, Wash. / Petrified Nat. Forest, Ariz.

FIGURE 3.
circle indicates the place to stand to see the sunrise, it was placed so one could observe one of the most precise points on the skyline. Before the actual sunrise, an angle of shadow began to descend to the right as the sun rose. When the location of sunrise was identifiable, it appeared centered on a high, flat ridge of a little platform (Fig. 4). What actually made this spot so definitive and exciting were two very small eye-like windows that appeared below and slightly to the right of where the sun rose. As the sun rose, these became brighter. They looked as though we were seeing eyes of sunlight looking back at us. When the sun's disk appeared they were lost, engulfed in the sun's blaze. Were the two eye-like holes filled with light at the position of sunrise important or symbolic? We have a very strong feeling that they were. From that point on the horizon, this is the best view, with the best location with a suitable surface to mark it. The subsequent interactions on both the Barrier Canyon and Basketmaker style panels seem to support that belief. With the symbolism previously described, of shamanistic transformation at a solar observation site, with symbolism seeming to emphasize bird eyes and possible esoteric or ecstatic vision would also seem to indicate that the sun-like form of eyes would be very symbolic.

By 7:50 A.M., (Fig. 4 Line 1) a point of shadow had moved across the face of the first, far left Barrier Canyon figure as the light forms on the cliff. At 7:55 A.M., another point of light had moved across the quadraped. By 8:00 A.M. that angle of light had centered on the face of the second Barrier Canyon figure which seemed to again represent the context where an angle of light comes out of its mouth to portray a much more complex and deeper symbolism (Fig. 5, Line 3). Again notice the angular and linear placement of the sets of both rows of figures corresponding to the movement of the shadow. From the face of the second figure the angle of light moved to the center of the face of the third figure at 8:06 A.M. It then simply moved down through the rest of the painted figures without further interaction.

Because of the northern most position of the sun causing it to rise at its highest arc, the angle of light above the biggest figure (Point Y, Fig. 5 Line 4). Point Y, will never move any further to the left. Prior to Summer Solstice it moved up to this position and afterward it will return back down and away. Point X (Fig. 5 Line 2) was at that time estimated to possibly descend over the faces of the second row of figures. That was observed on Equinox (dotted lines).

As the shadows continued to lower, the angle of light at point Z (Fig. 5, Line 6), descends down to move across the face of the partial, spread armed figure (Fig. 5, Line 7). At that point we were ecstatic. To date we have seen this context on many panels with just one figure interacting and on several panels with multiple such interactions at different times of the year and day (Fig. 6) (Warner and Warner 1985). At present, multiple interactions on one panel like this are rare (Fig. 6B). This panel, however, has five interactions on Summer Solstice as the angle of light moves over to the mouth of figure 2D by 9:00 A.M. (Fig. 5 Line 8), it then has two more interactions (totaling six) on Equinox.

The foregoing completes the symbolism described earlier. These last U-bracket faced figures, with a possible symbolic association of sight, may now
Edge of cliff to the left of panel.

Two windows that fill with light to create sun-like eyes.

FIGURE 4.

7:55 AM MST
7:50 AM MST
X
8:00 AM MST
8:06 AM
8:15 AM
1st light Equinox
8:26 AM MST

FIGURE 5.

Section 9 Page 5 "SUMMER SOLSTICE IN PLEASANT CREEK"
Equinox Winter Solstice

May-Aug. 6-7
Molen Reef
Nov.-Feb. 6-7

Before Nov. after Feb.

Indian Ck.

Molen Reef

FIGURE 6.
either "see the light" as transformed beings and or "speak with light" after their ecstatic experience. At the Molen Reef site there is a Barrier Canyon Style figure with similar outstretched arms with a small bird rising from each palm and a line of small stacked animals under each arm, one of which is a bird (Fig. 7). Within the shaft of light that comes from his mouth there is a pecked line with a series of odd separated ball-like forms. At Pleasant Creek, perfectly centered within the shaft when it comes from the mouth of the partial figure is a ticked line or "one pole ladder" which may be a corn stalk, reed or notational marker. Because of the context of these two examples, they are almost cartoon-like in that they seem to possibly represent an object that symbolizes what is seen or spoken.

What is important about the ticked line in Fig. 8 is that it could mark a sequential period of time. On Summer Solstice, when the sun is at its highest point and farthest north, the shadow brackets the top and bottom of the pole. From the point it crosses the mouth of the partial figure, to where it pinches out on the bottom rung after coming out of the mouth of the U-bracket faced figure. It effectively marks the limit of the shadows progression. This is as far down and to the left as it will reach and then it will pinch out and thus it also marks the limit of the suns movement. Again, at various equal periods, both before and after, the shadow will continue to lower from the top of this element rung to rung as the shaft continually descends diagonally down and across the cliff. These interactions need to be observed.

This panel says essentially the same thing, but with a different form and context as the panel observed at Dry Wash (Fig. 9). That panel has a sun headed figure of a solar observer, which is also a multiple-Double Entity with implications of transformation and then speaks with light. Even though Figure 8C is not the most impressive figure that speaks with light, it is one of the most distinctive forms. By their forms all the other figures that speak with light are not distinguishable enough to identify them from any other Barrier Canyon or Basketmaker figures, like those on the upper portion of this panel. Figure 8C, however, has a diagnostic face that occurs on several other figures. As I felt when I saw the first figure speak with light, if a figure with a U-bracket face speaking with light was important, to be a good test of its validity and intention, we should be able to find it repeated again and again.

It just so happens that in Clear Creek Canyon another figure with the same reversed, patinated U-bracket face had a triangle of light move across its face on Summer Solstice as well (Fig. 10). This establishes a greater significance to the fact that the form is associated with the concept of solar observation and the symbolism of the U-bracket. This also strengthens the ideas presented earlier that it is associated with both bird and eye, and is possibly another method to depict shamanistic transformation, esoteric vision and esoteric knowledge. Rather than duplicate statements that further illustrate the symbolism of bird eyes here refer to sunbirds: a possible symbol of transformation (Warner 1988).

Even though these are accurately observed intersections, whether the intent has been accurately defined is uncertain. There is no way to tell all the esoteric symbolism of such a complex situation. We have tried to limit
FIGURE 8

Section 9 Page 9 "SUMMER SOLSTICE IN PLEASANT CREEK"
Section 9 Page 10 "SUMMER SOLSTICE IN PLEASANT CREEK"
Section 9 Page 9 "SUMMER SOLSTICE IN PLEASANT CREEK"
the process of interpretation to a reasonable and acceptable limit by simply identifying the concept or source of the symbol. Rather than delve deeper into unsubstantifiable interpretations (with statements like: "the reed-like form within the shafts of light represent aspects of an origin myth") we limit ourselves to a source or concept with only figures whose form, association, context and interactions repeat. By doing such, we have identified that something, which is both important as well as an established part of their cosmology and which is being represented and is being repeated. We have no doubt that other forms will be found that will support and add further to the concepts of these beliefs and practices.

After careful comparisons and considerations we feel that it was probably the Basketmakers who produced the petroglyph portion of this panel and that they may have been the ones who vandalized the Barrier Canyon Style figures. If they observed (and no doubt they did because of their similar interactions) the interactions on the Barrier Canyon Style figures and had a different view of the situation, they may have attempted to erase the earlier "differences" and reorder, edit or recreate the facts to fit their view. Those may have involved the differences between simply seeing and speaking with light and seeing, speaking and transformation. Additional evidence that points toward other similar situations is being collected for further research.

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Section 9 Page 11 "SUMMER SOLSTICE IN PLEASANT CREEK"
PLEASANT CREEK SOLAR OBSERVATIONS

BY

JESSE E. WARNER and CLIFFORD L. RAYL

The first panel observed to interact at these sites was on a Barrier Canyon style panel south of the main site. That panel was a sunrise station and had interactions described in a previous paper. When those interactions were concluded we moved over to the main site before sunrise from that position.

Along the main panel there are many symbols that look as though they have potential for interaction or for marking horizontal observations. The most impressive is two large polychrome concentric circles high on the cliff. The most distinctive of these is slightly superimposed by the head of a pecked Fremont figure. Since there are Basketmaker, Fremont and Ute inscriptions on this wall and because of its height, it is difficult to determine if they were contemporaneous or not. There is a consensus that they are not. Whatever the case, the combination of what is felt to be the earlier circle and the later Fremont figure were carefully composed and combined to create a motif that probably relates to what has been defined as a "Sunheaded" figure (Warner 1989) (Fig. 1). By placing the sun symbol directly on top of the head or by placing the figure directly under the circle, so that the circle sits on the head, it was assumed that it was intended to relate to concepts associated with the sun and probably identifies solar observation if not interaction. Many different examples of thought or desire have been expressed with such arrangements (c.f. Warner, Judith 1986:16) (Fig. 2). With such a large and imposing figure, and the difficulty of its placement, it is believed that there should be some impressive observations possible at this site.

The first observation occurred at the east end of what is erroneous referred to as the "milling stone" where there is a smaller detached block of stone. Here there is a concentric circle pecked on the inner, north sloping face. This glyph was placed to mark the position to stand to see the sun emerge from the exact conjunction of two converging angles in the upper cliff where it meets the horizon (Fig. 3A).

This does not seem that impressive, but if one understands that the sun works its way along the top of the cliff to that point on Summer Solstice and goes no farther to the left before it returns to the south along the cliff, it becomes much more impressive. The shadow passes over the concentric circles as a simple straight line (Fig. 3B). This is the type of observation (horizontal) that is more difficult to work with (Hedges 1985:36, Krupp 1985). Even though it does satisfactorily mark the position of the sun's appearance and marks the limits of its northern trek, did it really have that function and that intent? We believe it did but how can it be proven?
Once that was observed, we moved back under the Sunheaded figure to see where the sun would appear on the skyline from that position. From there it appeared at the center bulging, protrusion (Fig. 3C). This observation was much less precise as a calendrical marker than the previous one, but it seems that they must have been aware of that occurrence. Because of many spectacular geological features in the canyon other horizional observations from that position are very likely.

During Summer Solstice there was a very precise interaction associated with the shadow's movement over the larger painted circle (Fig. 4A, B). The differences in the shadow's movement one week after Equinox are illustrated in Figure 4C. Because of its significant size and high placement the large concentric circle was expected to take advantage of an alignment.

On Summer Solstice the shadow interaction on the circle itself was not that dramatic. The shadows movement across a row of dots may be significant but until other observations have been completed it will be difficult to tell. This presentation in a sense is only a preliminary report. These observations are not complete till they have included the other dates that will place the shadows across this feature. Till then we will reserve those discussions for a later time. The main reason for this presentation is another special and complicated interaction that needs special consideration. One of the things that seems so significant is that at the same time as the interaction with the large circle, another interaction lower on the cliff joins that interaction at the same time (Fig. 4B).

As the edge of the shadow approached the upper large concentric circle it also approached three pecked and painted Classic Vernal-like Fremont figures. As that happened a bulge in the cliff above and to the right created an upward pointing triangular form of light over the left figure. This form of light expanded and changed its shape as it centered over the left figure. This happened in such a way that the upper portion of the angle of light perfectly conformed to the exact shape of the interior portion of the painted headdress. This headdress is composed of two sets of three painted, red, white and red curving lines. This forms two inward curving arcs that support alternating red and white feather-like attachments. The form of the sunlight had bowed out to fill in the space in between the inward curving arcs. Even though we were observing the light conform to the painted lines it was obvious that the painted lines were placed to align with the form of light when it reached that specific place and had obtained that form. They then created a special symbolic relationship.

We were so intent in determining if this could be identified as an iconic congruence (where the placement or form of an element that was placed on the rock was influenced by a natural feature, in this case by the form of the light), (Stienbring 1987), that we didn't notice what was evidently the main intent of this unusual and symbolic composition. Lert and Alice Knee, owners of the property, were with us. Alice, very impressed with the events asked "If the sun is doing all these kinds of things, why shouldn't the solar disk inside of the headdress represent the sun itself and the painted feather-like protrusions be the sun's rays?". After standing back and looking at the whole picture we believe she is right (Fig. 5A).
SUMMER SOLSTICE

FIGURE 4.

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FIGURE 5. A

Section 10 Page 6 "PLEASANT CREEK SOLAR OBSERVATIONS"
What is so very important about this configuration is that it probably creates the most impressive and imaginative Sunheaded figure discovered to date. In other words this otherwise typical headdress, similar to those of many other figures in the area, for those few moments is mysterically transformed into a representation of the sun in both a calendrical and symbolical interaction. This unobvious Sunheaded figure then duplicates, a little differently the symbolism composed higher up on the cliff and what can be created by standing under the left spiral which is head high (Fig. 1, 5b).

The question that is now raised is an intriguing one. Does the extension of this symbol, from feathered headdress to solar symbolism, now include other similar examples of this type of headdress? We may never find another interaction like this on a similar headdress (Fig. 5c), but does the underlying symbolism of that type of headdress involve other similar forms with a symbolism of the sun (i.e. is this a subliminal, unobvious symbol of a Sunheaded figure)? Also does this type of headdress identify or represent a specific group of sunwatchers? If so, it seems to be a very "gnostic"-like, stylized encrypted and symbolic form. In which case many of the Classic Vernal figures with that type of headdress may carry additional symbolism of a group who may be encryptly identifying themselves in a specific, special or secretive manner as a group of sun watchers, sun worshipers or sun priests. The fact that there are so many other types of solar symbolism with these types of figures, on their heads, chests, shields, or in their hands is not surprising. Kelly (1950: 11-12), theorized their identity as the mythical "sun shield bearers".

We now feel that there needs to be an intense investigation to determine the possibility of how many of these otherwise unobvious headdresses or possible "Sunheaded" figures may interact, vs just identify members of this group.

After the transformation of the headdress, the upper portion of light moved into the center of the large concentric circle. From the headdress the point of light reduced its size, narrowed and moved to the right toward the center of a spiral on the chest of a similar headdressed figure to the right. The graphic symbolism of this figure would seem to echo the previous figure and its interactions. As the downward point of shadow moved upward, the upward point of light moved downward to interact with that figure. The point of shadow touched the exact center of the spiral at the exact moment that the point of light came out of the figures mouth and then pinched out. The edge of the light and shadow again transformed from a complex multi-angled line to a perfectly straight, diagonal line that perfectly bisected the center of the spiral just seconds after both mouth and the center of the spiral were in a unique conjunction (Fig. 6).

The simple spiral and its interaction provides an impressive calendrical marker that identifies the downward limit of the shadows movement, marking the limit of the sun on Summer Solstice, but like the headdress does it suggest that other spiral chested figures be observed as well? Is this another means of identifying members of this fraternity? The third figure in this row didn't interact on that date, but because of the others it may on another day. By that time the sun had also just concluded its interaction with the larger
FIGURE 5. B

FIGURE 5. C.

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higher concentric circle.

Again, realize that the sun rising at its most northern and vertical position created this specific conjunction. Prior to and after this exact interaction the shadow form, position and angle of movement will change slightly each day as it moves into this Summer Solstice position then back out again. The interactions on these figures one week after Equinox are illustrated in Figure 7. Equinox will move into its position and then move on through changing both from what it was before to what it will be after, reversing its order of performance, depending on whether it is moving into or out of Spring or Fall Equinox. That is the importance of both the Solstitial interactions, because they mark the corresponding positions of the light and shadow on the cliff as either as high (Wint. Sol.), or as low (Sum. Sol.), or as far to the right or to the left that a point of light will ever get. Thus these periods mark two points of definitions, one horizontal and the other vertical, with the limits and divisions in between.

During Summer Solstice Alice Knee said that the moon rose at the exact same place on the horizon that the sun did, as visible from their home. Their home is located on a point which at one time had evidence of habitation. Throughout the day the moon preceded the sun on their path across the sky as they followed the upper edge of the cliff at the main panel. She was impressed with this phenomenon in light of the panel Wellman (1976), believed to be a representation of the supernova of 1054 AD. The possibility of that panel as a representation of the supernova is questionable because of the fact that the three figures, one of which Wellman suggests is shielding his eyes is probably Ute, and the large moon has a porfile face with "man in the moon" implications (Fig. 8).

That afternoon we missed the movement of the shadows at sun set on that panel because we watched an interaction on the top of the talus slope to the east, with a two ringed, dot centered concentric circle. A small protrusion in the cliff above and to the left creates a shadow that had a point that touched the center dot. This is another very precise interaction. With the sun at its highest position when it sets, the angle of the shadow at point X (Fig. 9) is on the exact center dot. That is the lowest point it will ever reach at sunset. One week after Equinox the position of the shadow at sunset was at the outside edge of the outside ring, the position intended to mark Equinox. As the sun moves from Spring Equinox through the May Cross Quarter date half way between Spring Equinox and Summer Solstice to its Summer Solstice limit and then back through the next Cross Quarter date (about Aug. 6th) half way in between Summer Solstice and Fall Equinox to the position for Autumnal Equinox, the point of shadow will correspondingly move from the outside ring at the Vernal Equinox sunset past the inside ring (possibly marking both Cross Quarter sunsets) to the center dot then back out passed the inside ring to end up on the outside ring at the Fall Equinox again.

With the conclusion of that contact the whole cliff went into total darkness at once. The effect of this was like someone turned out the lights. This same effect occurred at the conclusion of the Barrier Canyon style panel that morning. This has been noticed enough that it seems to be a special or significant type of interaction in and of itself. As a part of the total observations.

Section 10 Page 10 "PLEASANT CREEK SOLAR OBSERVATIONS"
FIGURE 8.

FIGURE 9.

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performance its symbolism would be apart, inseparable from the total effect that they took advantage of and would best be treated as a possible specific type of interaction when enough data is compiled.

These very preliminary yet impressive observations at Pleasant Creek have added a tremendous volume of information to direct future research and add additional insights into other investigations. These types of intellectual acrobatics on such unusual interactions seem to somehow reveal a part of their character and personality that, for us, has been missing in the other archaeological records. It seems to make them more human and intensely and eternally alive than simply looking at their pottery, ruins or arrowheads.

The interactions here as presented in these two papers seem to stress the significance of problematical observations and interactions that seem highly symbolic and very obvious to some and not to others. We do not make these observations for the prime purpose of proving intention (Warner 1985:112). Our intent is to describe what was discovered, determine what will allow us to explore the limits of symbolic application and to make a comparative study of those applications. In that way we are building a sufficient data base which will be necessary before we can make more relevant and accurate future decisions about a specific groups symbol system, a reflection of who they really were.

We feel like Hedges (1985) and Krupp (1985) that there needs to be a set of criteria set up, that will allow more accurate decisions to be made in relation to observations. But with out a broad enough data base and a first hand knowledge of what was actually done these criteria may not be sufficient. These sites will help greatly in adding to a list of what types of interactions repeat and which don't. What types of contexts they occur in, with what kinds of figure and under what circumstances. Most of all these point in new directions that future research can be done. At least we feel that we are making significant break throughs and that we are on the right track.
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While looking at examples of birds to get information for the series on "Problems in Concept Identification and Interpretation", several interesting concepts were found to be associated with birds. Many contexts showed concepts that included hunting, subsistence, fertility, and shamanic transformation. Incorporated with some of these bird concepts was another association that stood out. These examples had an extremely wide range of diversity in both form and context. For a general category we have referred to them as "Sunbirds".

The term Sunbird is based on the fact that solar-related symbols were incorporated into the form of the bird, attached to them, or bird-like aspects were used to form part of several solar symbols. The form of these symbols and the way they were incorporated helps to create different categories for consideration. Because of the diversity not all the examples in Figure 1.1 and 1.2 may be solar related. The examples that were included had to meet two criteria: they had to have a solar symbolism and bird-like attributes.

In Figure 1.1, 1.2, some of the solar symbols occur as the head, or a part of it. Other solar symbols occur as the body itself, within the body, or attached to it. Some figures have a solar symbol as the tail. Some of the feathers on some of these birds are very suggestive of sun rays. There are several solar symbols with only a partially rayed circumference. Figure 1.1 N does not have an obvious solar relationship. There is no dot or circle within the circular body or sunray-like feathers, yet it is also felt to be related to a solar philosophy. That possibility was identified by discovering the fact that it interacts with light and shadow on both Summer Solstice and Equinox (Fig. 2).

At Summer Solstice a block of stone creates a shadow that cups the body in a very precise manner. On Equinox, however, a notch below that block creates a notch of light that also cups the body, forming an exact opposite interaction (Fig. 2.1 A,B). This relationship is unique. The interaction here is calendrical, but the glyph itself is not. It is not that of an obvious sun or identifiable solar symbol, but what is felt to be an abstract bird. The identification of Figure 1.1 N as a bird was considered in a previous paper (Warner 1988A). Because of the solar interaction it can probably be considered as a solar related bird. Figure 1.1 O is not far from Figure 1.1 N on Stansbury Island and has a similarly constructed body.
FIGURE 1.2

Section 11 Page 3 "SUNBIRDS: A POSSIBLE SYMBOL OF TRANSFORMATION"
Section 11 Page 4 "SUNBIRDS: A POSSIBLE SYMBOL OF TRANSFORMATION"
Figure 1.1 O provides a more naturalistic form that may help establish the possibility for Figure 1.1 N as a stylized bird. Other more stylized to abstract birds on Stansbury Island also help establish a pattern for this type of stylization (Fig. 2.2 A-C). Because of their similarity and the fact that Figure 1.1 N is an interactor, are we to take it as also representing a similar solar related concept? There are four other birds at that site (totaling five) that have solar associated symbolism.

There are many different symbols that can be used to portray the sun. Some of these include spirals, circles, concentric or dot-centered circles, quartered or rayed circles or spirals. One of the reasons we find some problems with some interpretations and thus try to restrict ourselves to just identifying concepts is that each of these symbols themselves have many different meanings. Each of these elements will change their meaning, function or intent with each different application. In other words, no two examples of the same symbol will always have the exact same meaning, depending on its use.

Thus, some "Sunbirds" may have very different meanings from each other, because they are so different in form, context, time and space. Yet one aspect they all share is a possible solar related philosophy. Let me illustrate a problem with interpretation. As an example, the spiral, a well accepted symbol in some instances, with or without being represented in a context depending on the consultant, the researcher's relationship with him, the researcher's need to know and the intent of the artist, the time of the day and year, and where the consultant was asked, each example could mean several different things. Some of these spirals, for instance, may indicate a shrine, represent a pond, spring, whirlpool, dust devil, represent a vulva, male reproduction and virility, fertility in general, a maze, emergence, the number of a specific migration or a migrational sequence, a directional indicator, the sun itself, a sequence of time, cyclical repetitions, infinity, eternity, innumerability, etc. (Warner 1988B). Many of these have a relationship to a solar philosophy. Some also have other, different symbolisms with additional meanings besides. These add to the complexity of the problems of proper specific concept identification. Thus not all bird-like spirals will have a solar symbolism.

Likewise, a circle or a dot-centered circle can have among its many meanings, a solar identity. Thus birds with a dot-centered circle head or body, among the other things they may represent, may be a bird associated with a solar related concept. These "Sunbirds" range from very naturalistic to totally abstract.

The possibility of associated solar symbolism does not end with figures that express an identifiable solar combination, or figures like the interacting Stansbury bird. There is another symbol that has a different relationship to both birds and a solar philosophy. At one point in our research we learned that U-Brackets were used for several different concepts. The most understandable was probably fertility (McGowen 1977, Warner 1984a). The next was probably an extension of the fertility concept with an application to hunting (Thomas 1976, Warner 1982). There was one unique association, however, that did not seem to have either of these concept
applications (Warner 1984b). Several of these solar birds also have an association with a U-Bracket. The conclusion of the third presentation of the U-Bracketed contexts was based on the fact that U-Brackets occur next to several heads, or as the eyes or face of several anthropomorphs and bird-like figures, on shields, or totally isolated etc. (Warner 1984b). This context seems to establish an association with the concept of "eye" or "head" (Fig. 3). Because associations of the eye context occurred with bird as well as man, there was a dual nature which at that time, we could not determine, except that the U-Bracket feature was shared. This was mainly because of insufficient data. Only a few of these at that time had any obvious solar associations.

There were two different but likely reasons for this association. First, these U-Bracket faced or eyed figures could represent the identity of a specific group of individuals. Secondly, since both humans and birds "saw" with the "bird eye" or whatever that symbol could represent, the concept of the U-Bracket and sight must be related. That is, there must be a tie with both men and birds with U-Bracket eyes or what both saw with what the U-Bracket represented. A fertility or hunting concept just didn't seem to apply to those contexts. Thus there must also be another meaning for the U-Bracket, which may also be a further extension of the original meaning.

The bird-like figures with patented U-Bracket bodies seem to encrypt a form shown in black (Fig. 3). This form is being considered as a variant of a Double Entity as well as a variant of U-bracket faced figures associated with the symbolism in Figure 3, 5, 6. After watching two panels in Pleasant Creek several very important facts were noted. This increased the understanding of these problems because of the way certain elements were formed and composed with different symbols that interact with light in a way to portray a similar but more complete context. On a Barrier Canyon Style panel figure A had an angle of light appear on its face, then several diagonally descending figures had an angle of light move from the mouth of one figure to the mouth of another (Fig. 4 B-C). Those figures were subsequently vandalized in what seems to be an attempt to obliterate them and the philosophy of that symbolism. Below these, there is a later Basketmaker panel with what I was first impressed with as a representation of shamanic transformation like Figure 3 P (Fig. 5A,B). This consists of a spread-armed partial human-like figure with a miniature scratched, spread-winged bird under its arm. On the other side are two U-Bracket-faced partial human figures, formerly associated with the concept of bird eye and possibly sight (Fig. 5C,D) (C.F. Fig. 8). The spread, wing-like arms of Figure 5A are similar to the scratched bird, and the fact that without legs it does not seem to be grounded suggests a possible transformation situation. The form of the larger "transforming" figure and the small bird fit the transformation concept but on initial inspection, the form and context of the U-Bracket-faced figures only had vague relationships to that figure. Those relationships were based on form. But how can one tell the exact intent or function of form for certain?

After watching the solar actions over the two Barrier Canyon figures, across the mouth of the "transforming" figure, and then across the face of the left U-Bracket faced figure, one is left with the distinct impression that these later Basketmakers must have had a conflict with the type of
Section 11 Page 8 "SUNBIRDS: A POSSIBLE SYMBOL OF TRANSFORMATION"
representations or interactions on the Barrier Canyon part of the panel. It was probably these later Basketmakers that attempted to obliterate the Barrier Canyon figures. It seems that because of a different point of view, they attempted to edit the situation to a more acceptable application of their belief.

The situation with the Barrier Canyon figures may simply represent seeing or speaking with light. The Basketmaker portion seems to include the concepts of Shamanistic Transformation into or from the form of a bird and then seeing or speaking with light. We now have a more complete, and understandable context for the U-Bracket-faced figures. The previously established bird related U-Bracket in the eye position of bird or man seems to have a specific concept of some type of gnostic, esoteric sight. This panel may then portray the idea that once the individual is transformed, as suggested by the small bird, the incompleteness and spread arms of the central figure, he may be represented by the reversed U-Bracket figures on the other side. By possibly using Summer Solstice sunrise along with ceremonial preparation to trigger that experience one is then able to see "the light" in his possible "vision quest" with the eye of the bird. The bird-eyed figure would then be able to speak with that light (or the concepts that the light represents) in describing what he experienced or learned.

The context where a shaft of light moves across the mouth of these U-Bracket faced figures and their association with other different symbols of transformation added a great deal to the understanding of the symbolism of why the bird was associated with a solar philosophy. Like I felt when I observed the very first anthropomorph to "speak" with light, if that interaction was important it should repeat again. The repetition of the Pleasant Creek U-Bracket faced figure was found on a U-Bracket-faced figure from Clear Creek Canyon that also speaks with light on Summer Solstice (Fig. 6B).

In regressing back to the other examples of U-Brackets previously considered, we can now see a larger perspective for the possible concepts these figures may have. At this point it is felt safe to add the concepts of gnostic or esoteric knowledge or Shamanistic Transformation to the possible concepts to some of the examples in Figures 1-3.

But what is the exact relationship of bird eye, transformation, and speaking with light to the symbol of a "Sunbird"? In Figures 7 and 8 there are examples of what may be described as shamanic transformations. Figure 7-1A-D illustrates a process of stylization among the Ojibwa that evolved into a positive abstract bird (Steinbring 1987). The birds in Figures 7, 2 and 3 also create man and birds, negatively produced patented U-Brackets and bisected circles now suggesting esoteric sight obtained after transformation. Figures 7, 2 and 3 also illustrates the transformation of stylized human faces into a combination of birds with human facial features, and more total bird-like forms from the Colombia River area. Some of these have possible solar symbols for eyes, which in essence illustrates a U-Bracket faced individual like those figures from Pleasant Creek and Clear Creek, with the additional attributes of the bird pecked along of side the figures at Pleasant Creek.
FIGURE 5.

Section 11 Page 10 "SUNBIRDS: A POSSIBLE SYMBOL OF TRANSFORMATION"
FIGURE 6.

Section 11 Page 11 "SUNBIRDS: A POSSIBLE SYMBOL OF TRANSFORMATION"
FIGURE 7.

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The relationship of bird, U-Bracket, or Sunbird symbolism to solar interaction and transformation seems to illustrate that the sun played a large part in the process of transformation or the obtaining of esoteric knowledge. The fact that solar observation was an extremely important part of that symbolism is based on the fact that two U-Bracket figures occur together in Pleasant Creek, one which speaks with light (when the sun enters a notch as viewed from the panel). This is also supported by a similar interaction in Clear Creek Canyon where the second U-Bracket faced figure also speaks with light and where the edge of the light and shadow (the symbolic world of the shaman) cuts through the center of another U-Bracket and a spiral simultaneously, providing a line of sight or symbolic vision of solar observation just previous to a Double Entity in that panel speaking with a shaft of light (Warner nd) (Fig. 6D).

Bird, transformation and solar observation are also closely associated in another panel at Pleasant Creek. While closely watching the sunlight expand and fill the interior space between two red and white painted arched and rayed lines representing what seems to be a feathered headdress (Fig. 9), Alice Knee, long time owner and custodian of the site, suggested that that solar interacting phenomena actually transformed the feathered headdress into a figure to represent the sun with its colored rays. At that point we were so closely scrutinizing the exact points of contact within the headdress that we didn't notice the symbolic possibility. After standing back to see the whole picture, we believe that Mrs. Knee is probably right (Fig. 9A). That would make this another form of a sun-headed figure much like the painted one higher on the cliff (Warner and Rayl 1987). After looking at other sun-headed figures that are solar interacters, it raises the question of whether sun-eyed or sun-headed birds represent similar situations where esoteric knowledge is gained through transformation, an out-of-body experience, or simple solar observation. Figure 9B to the right with an identical headdress has a spiral on its chest. The center of the spiral is touched by a point of shadow and a triangle of light comes from its face after the previous interaction.

What is the source for this type of headdress? Is it antlers, or is it a form of bird wings or feathers? After considering other panels (Fig. 10) it was hypothesized that these could also represent feathers or wings in many other situations as well (Warner 1983). At Cara Pintada, Mexico, the antlers of the hunter are identical to the deer, but the wings of a bird man are also very similar (Fig. 10 lower right). On a panel at Moab there are many winged figures interspersed with figures with what is commonly called a "rake headdress." Some of these figures are expressed with "Double Entities", a concept that has many applications. One of these is shamanic transformation or an out-of-body experience. The more bird-like representations, seem to have combined aspects of birds and the partial emergence of another more human-like entity from their bodies (Fig. 10, figures marked with an asterisk). The context and concepts seem to portray in part, the symbolism at the first site observed at Pleasant Creek. At the Moab site, next to what is assumed to be possible transforming figures, is the same negative U-Bracket "eye form" that occurs in Figures 2, 3. This provides a similar connection of the eye and sight which is associated with a transforming figure partnered with birds like the one at Pleasant Creek.

Section 11 Page 13 "SUNBIRDS: A POSSIBLE SYMBOL OF TRANSFORMATION"
FIGURE 8.

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FIGURE 9.
Near the Moab panels is a figure with a U-Bracket on its shield that may possibly identify him as one of these figures with that ability of sight (Fig. 8D). Several other Double Entities with the head of the main figure on the chest of the emerging figure have a form somewhat similar to a U-Bracket (Fig. 8). Thus the reversed U-Bracket face may also be a symbol of emergence or transformation representing the arms joined over the head like the figure from Nine Mile and others (Figs. 8C,D, 10A-E).

These examples, like the concepts and applications of the spirals previously mentioned, illustrate the tenuous grounds on which some conclusions and interpretations are usually based. By trying to gain an in depth interpretation of what each of these panels may depict we are likely to falter. To play it as safe as possible, we have simply tried to locate more concrete concept associations and identify what those associated concepts relate to. It is then possible to compare those applications to similar situations.

This presentation has considered several different situations including U-Brackets associated with both men and birds, "Sun-Birds", birds associated with transformations and those associated with solar observation, and bird-like transformation figures associated with identical U-Bracket.

This sequence brings one around full circle. The conclusion after considering all of this information is that the evidence points to the fact that these different types of expression all represent similar situations but are different aspects of what "Sunbirds" themselves may represent. Without ethnographic evidence that much isn't verifiable. The solar-tailed, inverted bird with the U-Bracket face (Fig. 1.1B,3C), and the Moab transformation figure with identical U-Bracket (Fig. 10, middle) definitely tie these forms and their associated concepts together.
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Section 11 Page 18 "SUNBIRDS: A POSSIBLE SYMBOL OF TRANSFORMATION"
INTRODUCTION

The existence of representations of large, two-stranded pendants in prehistoric rock art, both as necklaces and as apparent abstract elements, was first discussed by Manning (1983:61-65). It was stated that large, two-stranded pendant symbols were found on the chest of both Fremont and Basketmaker anthropomorphs. The objective of this report is to present additional evidence for cultural affiliation of these elements and to provide additional examples of their distribution.

BASKETMAKER AFFILIATION

The Basketmaker affiliation of the large, two-stranded, pendant symbol is most readily demonstrated by the presence of the symbol in panels of petroglyphs along the drainages of the San Juan River in southeastern Utah. Examples from two site locations are discussed below. The first is at Sand Island and the second is in Butler Wash. At both locations pendants are shown below pecked images that appear to be representations of painted faces.

The classic example that demonstrates that people of the Basketmaker Culture painted their faces, and which associates the petroglyphs with the Basketmaker Culture, is the "scalp" or entire head skin that was excavated from a basketmaker site in northern Arizona (Kidder and Guernsey 1919) (see Figure 1). This artifact was excavated from a cave in Marsh Pass. It was found in a burial cist underneath the left shoulder of a young woman about 18 years of age. The body had been wrapped in a fir-string robe. At the side of the women's body, and partly under her right arm, were the remains of a cradle board. On and around the cradle were the bones of a baby (Kidder and Guernsey 1919:80-81). The skin and hair of the human head was found beneath the woman under the left shoulder. The "head" lay face upward. There were faint traces of a woven fabric between it and the woman. Fastened to it were the remnants of two strings, the ends of which extended toward the women's neck. Because of the importance of this artifact as it relates to the cultural affiliation of the rock art discussed here, and the difficulty in obtaining this out of print reference, it is appropriate to quote the entire descriptive text.
Figure 1 Marsh Pass Head/face Skin From Bureau of American Ethnon Ethnology Bulletin 65

Figure 2 Sand Island Petroglyphs

Figure 3 Green Mask from Grand Gulch

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"It is the entire head skin of an adult, with
the hair carefully dressed. In its preparation
the scalp proper, including the ears, was removed
from the skull in one piece; the face to the mouth
in another; and the chin with the lower cheeks a
third. After drying or curing, the three sections
were sewed together again, one seam running across
the forehead and one down each side in front of
the ears; the horizontal seam which joins the
upper and lower face piece crosses at the region
of the mouth, but the skin along this sewing has
been so trimmed, probably in order to assure a
straight seam, that no sign of the lips remains.
The eyes and nose, though shrunken, are plainly
recognizable; the eyebrow and eyelash hairs are
still in position. Although thorough examination
under the brittle ±side-bobs' of hair is
impossible, one can make out the shrunken ears;
through the lobe of each there runs a bit of yucca
string, the attachment cords presumably for
pendants which now have disappeared. The hair is
arranged as follows: a ±part' 1 inch wide, from
which the hair has been clipped, runs up to a
large semilunar tonsure at the crown. The brow
tresses on either side are gathered together in
±bobs' that fall in front of or over the ears and
are tied up with wrappings of apocynum(?) string.
The long hair from just behind the tonsure is
braided into a thin plat, whose lower end is
doubled back on itself and bound with hair string.
The remainder of the back hair is made into short
fat ±bob,' string-wrapped, that falls to the nape
of the neck. The face has been colored rather
elaborately: the ±part' and tonsure are painted
with a pasty, greenish-white pigment: up the
center of the ±part' and across the tonsure runs a
narrow streak of yellow. Just under the forehead
seam there is a thin, horizontal band of red.
From this to a line drawn across the face half an
inch below the eyes is a zone of white. A band
left in the natural color of the skin extends from
here to just below the nostrils, whence to the
bottom the white paint is continuous, except for a
broad median band of red running downward from the
mouth seam.

Rove through two small holes in the tonsure is
a narrow thong for suspension. In this part of
the scalp there is a small rent carefully sewed
up, probably a wound or cut made in skinning.

This interesting specimen seems to have been

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prepared and used as a trophy. The dressing of the hair was probably done after the skin had been cured; its arrangement is peculiar and, so far as we know, is not similar to any known style used in recent times in the plateau. Partial head shaving and the long, braided scalp lock are suggestive of Plains coiffures. The head was presumably that of an enemy, though there is no way of telling it was an enemy of the same or of a different stock. It may be mentioned, however, that in what are apparently Basket Maker pictographs in the 'Monument' (fig.100) and in Grand Gulch, some of the figures are represented as wearing 'side-bobs' very much like those of the present specimen. As to the clipping or tonsuring of the hair nothing definite can be said. It may have been done post-mortem in the preparation of the trophy. The forehead of the 'mummy' with which it was found, however, shows distinct signs of clipping, the hair having been removed forward of a line drawn over the crown of the head from ear to ear.

Montgomery also states (1894:230) that a 'mummy' from the Grand Gulch district (which, from the description of its grave and the nature of the objects found with it, we take to be Basket Maker) had 'the hair closely cut from the front half of the head, thus leaving the back hair only.' If hair cutting was a common practice, it may account for the extraordinary abundant use of human hair in the various arts of the Basket Makers [Kidder and Guernsey 1919:190-192]."

The petroglyphs at Sand Island, shown in Figure 2, appear to be representations of detached heads. No body is shown, only a head is depicted. The broad blocked out areas on the face appear to be representations of painted areas. The hair depicted in the petroglyphs appear to be nearly the same form as on the detached head i.e., the long hair hangs down on both sides of the head. Finally, small loops above the center of the hair or scalp are depicted in the petroglyphs. Since all these characteristics parallel the human head skin excavated by Kidder and Guernsey, they provide evidence that these rock art figures date from the Basketmaker time period.

In addition to petroglyphs, painted representations of what appear to be detached human heads also occur in rock art. One of the best examples of a painted head, which correlates with the Marsh Pass Basketmaker "head" is found in Grand Gulch (see Figure 3). This pictograph is found at Green Mask Spring. It is analogous in appearance to the "head" excavated by Kidder and Guernsey. Across the face there are two broad green bands. One is in the area of the eyes, and the other is across the chin. Like the Marsh Pass "head" there is an unpainted area between the two broad green lines. In the center of the chin, there is an unpainted area which corresponds to the red painted area in the Basketmaker "head". Across the top of the face there is a narrow line of

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green paint - apparently corresponding to the narrow red line in the Basketmaker "head". At the sides of the face in the paint representing the hair there appears to be a band of missing pigment. There may have been some paint in this location that represented the ties on the hair of the Marsh Pass "head". There is a loop on top of the head.

Grand Gulch also contains several other examples of isolated painted faces. The most prominent of these, located to date, is at Lion Tracks Spring. Here a line of nine heads with white painted faces and gray/green long hair are situated under a cliff projection.

These examples indicate that both painted and pecked heads exist in rock art that correlate with the Basketmaker scalp from Marsh Pass. This correlation thus provides evidence that these rock art figures are associated with the Basketmaker Culture of southeastern Utah.

ASSOCIATION OF BASKETMAKER "HEAD" WITH LARGE, TWO-STRANDED PENDANTS

The isolated head petroglyphs at Sand Island exhibit slightly different facial painting characteristics than the Marsh Pass head skin. Not all isolated heads have broad painted lines across them, and not all anthropomorphic figures lack broad painted lines. There are several examples where anthropomorphs have broad painted lines across the faces. Apparently then there are some variations in the painting characteristics. These anthropomorphic figures appear also to be of Basketmaker affiliation.

A petroglyph panel in Butler Wash accords an excellent example of Basketmaker face painting associated with the large, two-stranded pendant. The pendant occurs in the center chest area of an anthropomorph (see Figure 4). In addition to providing definitive archaeological evidence for an association of Basketmaker painted faces and the pendant, this figure also provides evidence for cultural affiliation for the illustrated anthropomorphic form.

Throughout the San Juan River drainage many other examples of the two-stranded pendant occur (Figure 5). These examples appear to occur consistently with Basketmaker style anthropomorphs.

FREMONT AFFILIATION

Throughout the Uintah Basin of northeastern Utah large, two-stranded pendant necklaces occur abundantly. In this region they are found in petroglyphs (Figure 6). Here the large, two-stranded pendants are associated with anthropomorphic forms of what has been defined as an entirely different style than along the San Juan River. They occur in petroglyphs of the Classic Vernal Style, which is attributed to the Fremont Culture (Schaafsma 1971). If a correlation is made between anthropomorphic types of the Classic Vernal Style and the anthropomorphs of the Basketmaker Culture along the San Juan River Drainage it will be seen that there are many similarities. A discussion

Section 12 Page 5 "PENDANT NECKLACES IN ROCK ART-COLORADO PLATEAU"
Figure 4 Butler Wash Petroglyphs

Figure 5 Petroglyphs from San Juan River Drainage
Figure 6 Fremont Anthropomorphs

Figure 7 Kane Creek Anthropomorph

Section 12 Page 7 "PENDANT NECKLACES IN ROCK ART—COLORADO PLATEAU"
of similarities and differences between these different cultures and what these similarities and differences may mean is undergoing preparation.

POSSIBLE PRE-BASKETMAKER AFFILIATION

About midway between the Uintah Basin of northern Utah and the San Juan River of southeastern Utah the large, two-stranded pendants occur on the chests of yet another anthropomorphic style. The body of these anthropomorphs are formed with an outline, generally oval in shape. Figure 7 shows the pendant in the chest area of one of these anthropomorphs. This panel is found along the Colorado River near Moab, Utah. Also depicted in the same panel is an atlatal. It is protruding from the side of a Mountain Sheep or goat. The presence of the atlatal further substantiates a Basketmaker affiliation for the large, two-stranded pendant. However, there are problems with using this panel, based solely on the presence of the atlatal, to demonstrate basketmaker designation for the pendant and the anthropomorphic style. While it is true that atlats were used in Paleoindian times, the use of the atlatal persisted even after the introduction of the bow and arrow. Therefore, it would appear that the use of large, two-stranded pendants could have existed long before the Basketmaker period. However, this is inclusive. There are however additional observations that can be used, besides the presence of the atlatal, to provide some indication of a date for the panel. The anthropomorph has an outlined body that is similar to Turner's Glen Canyon Style 5 (which may be as old as 5,000 years, but this has yet to be substantiated) regardless, the style is unquestionably Archaic in origin. However, the levels of patination on the figures in this panel are not the same as on the many Glen Canyon Style 5 panels that I have seen. It is less patinated, and therefore may not be archaic. However, patination is not a reliable indicator of age. Patination forms at different rates depending upon variation in environmental location. All things considered then, the evidence is inconclusive concerning the date of the panel and the possible Archaic presence of the large, two-stranded pendant.

The style of this anthropomorph, and others in the Moab, Utah area, appear to be a style that has not been defined. Therefore I propose to call these figures, for ease of identification, the Kane Creek Style. This name was chosen because of their occurrence around Kane Creek. This designation is offered as tentative, pending additional information and research.

DISTRIBUTION

The preceding examples are all from the Colorado and Green Rivers and their tributaries (The San Juan River is a major east bank tributary of the Colorado River). The utilization of the large, two-stranded pendant in prehistoric rock art appears to be distributed along a corridor formed by the upper Colorado River and lower Green River drainages. This may have implications for sharing of cultural traits between the two areas. The distribution of the large, two-stranded pendant outside of this area, which is the survey area, is unknown.

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The presence of the large, two-stranded pendant in both the Basketmaker and the Fremont cultures suggests a previously undefined relationship between these cultures. Both groups portrayed the symbol in the same way i.e., as a pendant around the neck of anthropomorphic figures. Both cultures then apparently shared a common use of the large, two-stranded pendant. Thus they may have shared the same meaning for whatever it is that the symbol represents. Methodologies for determining common meanings of these pendants are limited. About the only option is to compare parallels of utilization in the rock art. Several ideas are presented below which suggest meanings for the pendants.

The presence of the large, two-stranded pendant, as an apparent object of adornment, appears to indicate that it was a physical object that was being portrayed. However, there may be an alternative explanation for its meaning. These pendants also apparently occur as an abstract and isolated figure in Indian Creek (Manning 1983). (By isolated I mean, not apparently joined to an object – for example an anthropomorph's chest). The pendants were placed on opposite sides of a steep walled canyon drainage at two different locations. The appearance of isolated pendants and their placement would suggest that the pendant had other meanings in addition to, or entirely separate from, that of adornment. Their specific placement in the canyon indicates that the pendant symbol itself had a definitive meaning to the individual(s) who placed them there. They were not placed at random. Also, the placement itself had a specific meaning. The pendant symbol appears to divide the canyon up into sections, thereby suggesting some form of division. In this context the symbols could represent boundaries, or boundary markers. Boundaries would likely be marked with some symbol unmistakably associated with, or representative of, a particular person, group (i.e., clan, cult, tribe), religion, etc. In this instance, and because of the pendant's distribution throughout a large region, the symbol most likely would not represent an individual. The above line of reasoning suggests the pendants characterize a type of affiliation symbol.

Another possibility suggested by the distribution and occurrence of the large, two-stranded pendants (and one that is allied to the above) is that they represent an ideological concept. The symbol might represent a position of status, or power, such as is associated with shamans or medicine-men. Substantiating the view that the symbol represents an ideological concept, rather than a physical object, is the observance that apparently physical pendants of this form are almost non-existent. To this date I have been unable to locate any recovered from Fremont or Basketmaker sites.

Finally, if the pendants did represent an actual object, it must have been something that was perishable. Given the numbers of pendants portrayed in rock art (and I am continually finding additional figures) there should have been discovered many physical evidences of their existence. An alternative to the pendant being made of stone or shell is the possibility that it was constructed of perishable materials, such as leather, plant materials, or textiles. For example it could have represented a medicine bag. If this is the circumstance then it could have functioned both as a physical object and a symbol of religious or shamanistic affiliation or power. Perhaps the
symbol of religious or shamanistic affiliation or power. Perhaps the
anthropomorphic figures wearing these pendants represent individuals with
religious power. Superstitions have a tendency to spread if successful
outcomes are attributed to specific actions. This would explain the
uniformity of use in various cultures over the Colorado River drainage.
Certainly there are a number of possibilities for meaning associated with the
large, two-stranded pendants.

CONCLUSION

This paper presented information that only answered several questions.
Certainly there are many questions yet to be answered. For example: in what
time period did the large, two-stranded pendant necklace initially come into
use? The presence of the pendant in association with an atlatal and an
anthropomorph similar to Glen Canyon Style 5 raises the question of how far
back in time in time the use of the pendant existed. Is the pendant only
associated with the Basketmaker and Fremont Culture?

The Fremont Culture flourished between roughly A.D 500 to 1250. The
Anasazi Basketmaker culture flourished between roughly A.D. 1 to 750. Does
this imply that the use of the large, two-stranded pendant originated among
the Basketmaker people of the San Juan area and spread to the Fremont people?
Clearly more research needs to be conducted before any of these research
questions can be addressed.

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