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THE DISCOVERY OF KAYENTA BASKETMAKER ROCK ART IN THE VIRGIN ANASAZI AREA AND THE IMPLICATIONS OF THIS DISCOVERY: THE IDENTIFICATION OF A GEOGRAPHICALLY AND ENVIRONMENTALLY CONSTRAINED ROUTE IN SOUTHWESTERN UTAH

Many of you know Mary Allen, or know of Mary Allen. What you probably do not know, however, is that Mary and I had been carrying out a major research project in southern Utah and northern Arizona for many years. We had also been collaborating on a report that describes our research efforts. Our research is the subject of this paper.

Unfortunately, before this paper could be finalized Mary Allen passed away. She died in February 2006 after about a year and a half battle with cancer. It was only a few days after the URARA symposium in Kanab three years ago that Mary discovered she had cancer.

We had finished a rough draft of this paper and I have attempted to complete it. Certainly, it would be substantially improved if Mary were here to include her knowledge and insights. It is not my intent to make this a strictly scholarly paper. I also want it to be a tribute to Mary Allen and her many years of dedication to rock art research; therefore, there are several personal experiences and observations about Mary that would not normally be found in a scholarly paper.

My wife and I first met Mary Allen at the home of Diane Orr's parents in Salt Lake City in about 1985. (Note: Diane Orr was an organizer of this symposium.) At this time, URARA was in its infancy and we occasionally had monthly meetings in member's homes. We learned that Mary lived in St. George and we started discussing the rock art in the St. George area with her. Mary told us about sites that I had never heard of that

concerned my research interests and she invited us to come down and visit those rock art sites. We had been doing that periodically ever since. Our family enjoyed going with Mary to rock art sites. We could, and often did, spend hours at a single panel. We would discuss every image in the panel and its relationship to every other image, both in that panel and everywhere else that we had seen it. We would discuss when it was made, who made it, why it was made, what it might mean, why it might have been placed in this particular location, along with many other questions.

QUESTIONS ABOUT ROCK ART IN THE VIRGIN ANASAZI AREA

Some of the topics we discussed were a series of questions posed by Mary Allen and others who lived in the Virgin Anasazi area. Three of these principal questions were:

1. Is there a style or type of rock art that is unique to the Virgin Anasazi area?
2. If this style or type exists, what are its defining characteristics?
3. Does the Eastern Virgin Kayenta Anasazi Style and Western Virgin Kayenta Anasazi Style, as defined by Polly Schaafsma (1971:110–124) actually exist?

The Virgin Anasazi area is shown on the map in Figure 1 (after Gumerman and Dean 1989). On this map, the various divisions of the Anasazi are identified as branches. This system is based on the analogy of a tree, where the trunk represents

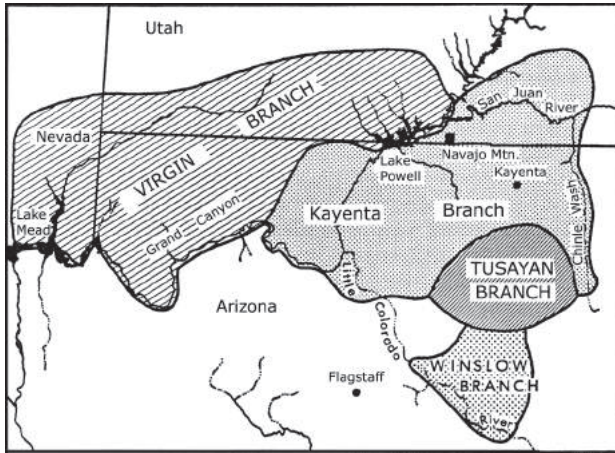


Figure 1. Divisions of the Anasazi in southern Utah and northern Arizona, after Gumerman and Dean 1989.

the common base of the Anasazi Culture and the branches represent regional variations. The Virgin Anasazi branch was distinguished from the Kayenta branch principally on differences in ceramics and architecture. Not all archaeologists agreed with this analogy and now it is not as popular as it once was, so the Virgin Branch of the Anasazi is more often referred to as the Virgin Anasazi, and the Kayenta branch as the Kayenta Anasazi. Of course, today there are people who no longer use the word Anasazi, so it is now commonly referred to as the Virgin area. Eventually there will be people who object to the name “virgin” and then it will not even have a name.

The questions listed above led Mary Allen and Steve Stoney, from Las Vegas, to host an invitational conference in St. George, Utah to address these questions. The conference was held on January 16, 1993. Individuals who had published papers or were currently doing rock art research in the Virgin Anasazi area were invited to present a paper answering these questions. Papers were followed by a group discussion. Field trips were held the following day to specifically study some of the panels that were discussed. I was invited to participate in the conference because of a paper I wrote titled, *A Reappraisal of the Cave Valley Style* (Manning 1990b).

At the conference, all the other presenters showed photographs and discussed images that they considered to be unique to the region. I took an entirely different approach, or perhaps more appropriately, looked at it from a different perspective. I showed about 280 photographs of rock art in all areas surrounding the Virgin Anasazi area to illustrate that the rock art in the Virgin area is *not found* in the surrounding areas and was therefore unique to the Virgin area.

A consensus was reached among the participants that there was a specific rock art style that was unique to the Virgin Anasazi area. It was agreed that the Cave Valley Style, defined by Schaafsma (1971), was unique to the Virgin Anasazi area. It was also concluded that the other Virgin Kayenta Anasazi styles defined by Schaafsma were problematical because of their similarity to images in Fremont rock art north and east of the area and with other styles or types of rock art that exist to the south and west, which were not defined by Schaafsma. It should be noted that Schaafsma in 1980 changed the name of the Western Virgin Anasazi Style to the Virgin Representational Style (Schaafsma 1980:153).

A consensus was also reached that there is a particular type (or style) of image that is unique to the Virgin Anasazi area. These images were subsequently discussed in a paper that I wrote titled, *Rock Art Symbolism Unique to the Virgin Anasazi Region: A Ritualistic Response to an Arid Environment* (Manning 1997).

For several years, we spent a significant amount of time in the Virgin Anasazi area looking for additional images or types of images that were unique to the Virgin area. It was the center of our focus, but unknown to us, this was about to change.

KAYENTA BASKETMAKER ROCK ART IN SOUTHWESTERN UTAH

The change had its beginning in October 1987, when I was invited by Al Schroedl and Betsy

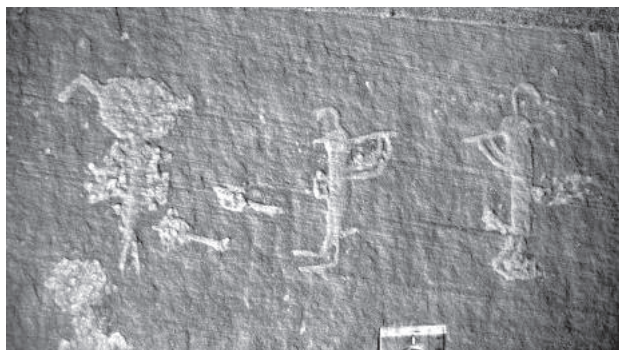


Figure 2. Part of a panel of petroglyphs in Cottonwood Canyon.

Tipps of P-III Associates in Salt Lake City and by the Utah Bureau of Land Management to help excavate and stabilize a unit pueblo in Cottonwood Canyon west of Kanab. A unit pueblo is a group of contiguous rooms that were used for living and storage with a kiva in front. The structures at this site in Cottonwood canyon were still intact because they were built in the back of a very large alcove and were protected by the overhang. The unit pueblo was the home of what was likely an extended family; in other words, it was a family homestead. This was the first unit pueblo that I had ever seen that was intact and not just piles of rubble because it was built out in the open. To see the walls of the structure nearly exactly as they were when they were built was a unique opportunity. The site is well protected because, while the site is on BLM land, access is through private property with two or three locked gates.

When we arrived at the site we were on the mesa top above the alcove, so each day we had to hike down to it. While hiking down the first day, I saw several rows of cliffs below the site and supposing that there was rock art on the surfaces, I asked Betsy Tipps if I could go exploring one afternoon if I was not needed. A few days later, Betsy told me to take the afternoon off and see what I could find. She also asked me to take some site forms and record any sites that I might discover. As I had suspected, there were petroglyphs on some of the rock faces. Four sites were discovered and



Figure 3. Flute players near Canyonlands National Park, eastern Utah.

they were all interesting; however, one was especially interesting. A photograph of a portion of the panel is shown in Figure 2. A report on these sites was published in February 1989 as an appendix to the main excavation report (Tipps 1989).

Facing Flute Players

The images shown in Figures 2 and 3 are of Kayenta Basketmaker affiliation and are nearly identical to images in eastern Utah. This panel could easily be in Grand Gulch, for example, and no one would question its presence. The section of the panel shown in Figure 2 contains two flute players facing each other. They both have two arms holding the flute, bent legs, a headdress consisting of a single curving arc, pecked areas on their back and they are both phallic.

Facing flute players are not common in most of Utah, but there are several in eastern Utah. An example is shown in Figure 3, which is near Canyonlands National Park. These images are not as elaborate as those in Figure 2. In addition, flute players with bent knees (and other pairs of anthropomorphs with bent knees) are also relatively common in eastern Utah (Manning 1992a:172). The similarity of these unusual images suggests a common origin.

Birds and Bird-Headed Anthropomorphs

To the left of the facing flute players in the panel in Cottonwood Canyon (Figure 2) are two images apparently representing atlatls, along with an anthropomorph with a large bird on its head. The bird has the typical form found along and in drainages of the San Juan River in eastern Utah. Anasazi Basketmaker birds have a unique form that is different from other cultures. The presence of atlatls, if that interpretation is correct, may serve to confirm the panel as Basketmaker because the atlatl predated the bow and arrow.

The rest of the panel (Figure 4) contains a larger bird, footprints, apparently a depiction of a turkey(?), a couple involved in intimate contact, a pregnant female, and vulva symbols (not shown), etc. All of these images, especially the birds, are present and typical of Basketmaker panels in eastern Utah, especially in the drainages of the San Juan River.

Our knowledge of the presence of bird-headed anthropomorphs in the Virgin area was expanded some time later, when Owen Severance and I were exploring east of Kanab. We visited a site in Cat Stair Canyon, which was described by Kenneth Castleton in *Petroglyphs and Pictographs of Utah* (1979:180–181). Unfortunately, the creators of some of the images at this site chose to place them on a surface unprotected from the elements. In addition, the sandstone surface itself is soft and appears to be slowly disintegrating. Some of the images, as Castleton pointed out, are faint and worn. Castleton also noted that some of the figures were high up on the sheer cliff face and could not be reached. This makes photographing the images difficult. Apparently, at some point in time, a sand dune made it possible to access the upper cliff surface. The area below the panel is quite sandy today.

Figure 5 shows a white painted anthropomorph with a bird on its head. The bird was pecked into the sandstone and then it was painted. Traces of

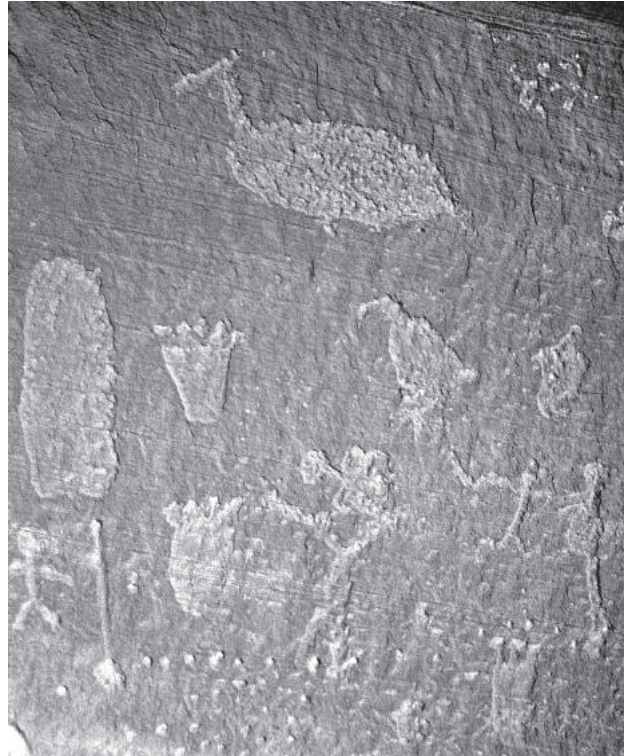


Figure 4. A section of the Basketmaker panel from Cottonwood Canyon.

white paint are still present. The head and neck of the bird were also painted. They were apparently painted with thicker coats or a different type of paint because they still contain thick white pigment. The anthropomorph was also painted with white pigment, and like the paint in the body of the bird, it is eroding away. The red painted outlined anthropomorph was added later, as its arm is superimposed over the beak of the bird.

Another section of the panel contains a bird painted with red pigment on top of the head of an anthropomorph painted with somewhat white pigment (Figure 6). Two other white painted anthropomorphs in the panel also had birds on or almost on their heads, but they were too faint to show up in photographs. Notice the presence of another pecked bird with a painted head and neck on the right side of this photograph. Beneath it are evidences of pecking, but the pecking is too eroded to determine what it represented—it could be an anthropomorph. There are also other small pecked anthropomorphs in the panel.



Figure 5. *A bird on the head of an anthropomorph in Cat Stair Canyon.*

The unique characteristics where the heads and necks of birds are painted a different color than the body occurs in rock art in southeastern Utah and northeastern Arizona. Compare the images shown above to those in Figure 7, which is a



Figure 6. *A red painted bird on top of the head of a white painted anthropomorph at Cat Stair Canyon.*

typical panel with painted birds on the heads of anthropomorphs in Grand Gulch. Note that there are birds painted with a white body and a red head and neck as well as birds painted with a red body and a white head and neck. Distinctive traits like these make it possible to accurately plot the distribution of specific rock art ideologies.

Following the discovery of the Cat Stair Canyon panel, I was interested in learning how images of birds like these were distributed in southeastern Utah and northeastern Arizona. I conducted an



Figure 7. *Painted birds on the heads of anthropomorphs in Grand Gulch.*



Figure 8. *Basketmaker face from the Johnson Canyon drainage near Kanab, Utah.*

analysis of the distribution of the number of bird headed and birds-on-the-heads of human figures in each drainage in this area. I found that the number of painted and pecked bird-headed and birds-on-the-heads is highest in the Grand Gulch drainage. In fact, the concentration is almost 10 times greater there than in any other drainage in southern Utah or northern Arizona. Campbell Grant in *Canyon de Chelly: Its People and Rock Art* (1978: 153–268) illustrates several panels of these images in Canyon de Chelly. Both Grand Gulch and Canyon de Chelly drain into the San Juan River.

Basketmaker Painted Faces or Masks

Another painted figure that we discovered at the Cat Stair Canyon site is an image variously referred to as: a painted face, a mask, a whole face and hair scalp, or a trophy head (Cole 1990. Kidder and Guernsey 1919, Manning 1990a). These images are considered to be Basketmaker, first because of their comparison to a skinned head and scalp with a painted face which was found in a Basketmaker burial (Kidder and Guernsey 1919) and second because of the level of repatination of the petroglyphs. Some of the images in southeastern Utah and northeastern Arizona are



Figure 9. *Basketmaker face from Grand Gulch, Utah.*

definitely a depiction of a skinned head because they depict the loop attached to the top of the head that apparently served as a handle, which is an actual feature of a skinned head that was excavated by Kidder and Guernsey. These faces occur both as painted and pecked images. It is questionable whether the feature depicted in Cat Stair Canyon is a mask, a face, or a detached head, so for simplicity it is referred to here as a face. The image in this location was created in yellow pigment. It was high on the cliff and extremely difficult to see. On a second visit to the site several years later, and this time with a telephoto lens, the image could not be located. Apparently, it was obscured by the bright sun or it has eroded from the cliff face.

In addition to the painted face at Cat Stair Canyon, there are at least two other Basketmaker faces in drainages in the Vermillion cliffs. The most distinctive one is in the Johnson Canyon drainage (Figure 8). There are also other Basketmaker images at the site.

Basketmaker faces are also found along the San Juan River (Figure 9) and in its drainages

(Manning 1992b). Quite a few occur in and around Grand Gulch; sometimes they appear at the same site as bird-headed or birds-on-the-head images. One of the most notable is known as the green mask (Castleton 1979:245, Cole 1990: 119, Manning 1992b:16). The faces in the Virgin area, then, are analogous to those in Kayenta Basketmaker rock art.

THE SIGNIFICANCE OF IMAGES THAT ARE NOT UNIQUE TO THE VIRGIN AREA

One day while I was innocently looking through photographs of rock art from western Utah, I was suddenly struck by what I thought was an incredible awareness, an epiphany, and an intuitive grasp of reality. It dawned on me that we had been so engrossed, so preoccupied, and so intent on finding images that were unique to the Virgin area that we had failed to recognize the significance of images that were *not* unique to the Virgin area. Archaeologists have believed for many years and have published so much information on the existence of the Anasazi Basketmaker culture in eastern Utah that we were not surprised when we found Anasazi Basketmaker images from nearby areas in eastern Utah. Evidences of Basketmaker occupation have apparently been found throughout the Virgin area and archaeologists believe that the cultural traits that define Basketmaker came from the Kayenta area. In addition, we had identified rock art that we believed dated to the Basketmaker period because it was superimposed by distinctive Virgin Pueblo rock art and because the levels of repatination of these petroglyphs was greater. We were looking for Basketmaker rock art that was unique to the Virgin area, and we were finding it, and when we found Basketmaker images that were not unique, we dismissed them as unimportant—it was not what we were looking for. I finally realized that Basketmaker images, which are extremely common in the Kayenta area, are very uncommon in the Virgin area—like bird-headed anthropomorphs. Notice the absence of bird-headed images in Schaafsma's discussion of

the rock art in the Virgin/Kayenta area in *The Rock Art of Utah* (1971).

Why is the distinctive rock art from the Kayenta area so rare in the Virgin area? Our best possible explanation was that individuals from the Kayenta area were coming into the Virgin area in the Basketmaker period and bringing with them their rock art ideologies fully intact and unchanged. Archaeologists have for some time believed that the traits that define the Anasazi diffused outward from where they originated. Evidence for diffusion in rock art ideologies would be present in changes in the rock art from east to west. We found identical rock art in both areas; therefore, at least one of the characteristics that defines the Basketmaker culture for a brief period of time—the rock art—did not arrive in western Utah by the diffusion of ideas, it arrived there by the movement of individual people who created the same rock art in both areas. The rarity of the Kayenta images in the Virgin area suggested two additional possibilities: one, that there were not many people traveling in this period; and two, an analyses of the distribution of the images in the Virgin area should provide information on the route the Basketmaker people traveled from the Kayenta area to the Virgin area.

When we realized this, our focus was immediately modified. We became very interested in verifying this observation and determining if there was a route across southern Utah/northern Arizona delineated by the presence of distinctive Kayenta Basketmaker rock art. Therefore, in our explorations we began to search instead for images that were not unique to the Virgin area—a significant change.

These discoveries led us to question how the people from the Kayenta area, particularly the Cedar Mesa/San Juan River area, traveled to the Virgin area, specifically the Kanab/Vermillion Cliffs area, since that is where we were finding the Kayenta images. Since the highest concentration of bird-headed anthropomorphs,

birds-on-the-heads, birds with white painted heads, etc. is in Grand Gulch this became the focus for the starting point of our Kayenta immigrants.

We considered two possibilities: One, the Kayenta images came to be in the Virgin area because people moved directly west from all areas of southeastern Utah/northeastern Arizona that they inhabited. If this were true, the pattern would be many parallel east-west routes. Two, there was only one route or a very limited number of routes that people followed from the Kayenta area to the Virgin area. From our own experience and what has been reported in the literature, we ruled out many parallel routes because of the absence of Kayenta Basketmaker images in areas north of the Escalante River or south in the Grand Canyon. This analysis left only a few possible routes. Interestingly, we independently studied topographic maps and using our experience in the geography of the region, we each determined that there was only one possible route. The next time we went searching for rock art, we discovered that we both had picked the very same route. We agreed that the route would have to parallel the Vermillion cliffs.

The Vermillion Cliffs are the southern edge of an east-west trending line of high plateaus that mark the boundary between the Arizona strip—a flat arid landscape north of the Grand Canyon—and the extremely rugged semi-mountainous area south of Bryce Canyon. This is easy to visualize with a large-scale topographic map or with a sketch of the terrain such as the one by Brown (1980) that was shown at the symposium, which shows the Vermillion Cliffs from Hurricane to Glen Canyon.

We discovered in our analysis that the route along the base of the Vermillion Cliffs is both geographically and environmentally constrained. It is geographically constrained because north of the face of the cliffs the plateau is cut by numerous rugged deep canyons and gorges. Any east-west route would be torturous. The route is also

environmentally constrained. South of the Vermillion Cliffs an east-west route would be through the semiarid Arizona Strip. Water sources in the Arizona strip are few and there is little vegetation and wildlife. It is also extremely hot in the summer. On the other hand, water is readily available in drainages and canyons that penetrate the Vermillion cliffs.

There are many good springs. In fact, the very best spring I have ever seen anywhere is in one of these canyons. If I owned the land this spring is on, I would be in the bottled water business. Because the land along the base of the Vermillion Cliffs is such prime real estate, people homesteaded it and today much of it is privately owned. There are also large Anasazi habitation sites along the Vermillion Cliffs at sites such as Pipe Springs, Hildale, and Johnson Canyon, indicating that the prehistoric Indians utilized its resources (Berg, et al, 2003).

One other observation influenced our thinking. Basketmaker sites have been found near the point where the Virgin River enters the Colorado River, which is southwest of the Grand Canyon and northeast of Las Vegas near Overton, Nevada. If Basketmaker people were following the Colorado River downstream from Grand Gulch to reach this point, their route would travel through the rugged Grand Canyon. To bypass this area, all travelers would have to do is follow the base of the Vermillion cliffs to the Virgin River and then follow the Virgin River south to the Colorado River. This is a far better route than trying to follow the Colorado River.

We therefore formulated a hypothesis that following the Vermillion Cliffs was the route that made it the easiest for the Kayenta Basketmaker people to travel into the Virgin area. We then discussed how we would test this hypothesis. Mary concluded that all we would have to do is survey the area 90 miles north and 90 miles south of the Vermillion Cliffs, record all of the rock art sites, and from this determine if the Kayenta

Basketmaker rock art was concentrated along this route. If it is, then we are correct in our deduction. We decided that this was an impossible task, even if we worked at it full time for the rest of our lives. Therefore, we decided to do a sample survey and explore the face of the Vermillion Cliffs and all of the drainages and canyons from the Colorado River to the Virgin River as well as areas north and south of the Vermillion Cliffs for at least 100 miles—to the best of our abilities.

Number of Rock Art Sites in the Study

To this date, we have examined at least 4,000 rock art sites. Their numbers in Utah by county are: Washington 250, Kane 391, Garfield 408, San Juan 2,904, for a total of 3,953 rock art sites. The number of rock art sites included in our study is substantial, and it serves to validate our results.

EXPLORATIONS

The following are some examples of what we have found in our explorations along the Vermillion Cliffs that show Kayenta Basketmaker rock art in the Virgin area that verifies the presence of an east-west route along the face of these cliffs. Independently and together, we have spent years, and more trips than I can remember, testing our hypothesis. Owen Severance and I also made trips to this region. There are only three hikes in my life that I thought I was not going to make it back to my vehicle. One, I actually did not make it back, and the other two were in the Virgin Anasazi area with Owen Severance.

Figure 10 illustrates the extremes that we went to discover and photograph the rock art along the Vermillion Cliffs. This is a picture that I did not show Mary's family. I want to relate two incidents that happened while we were exploring this canyon. We started early one morning to explore additional drainages into the Vermillion Cliffs and we chose this particular canyon. We had been searching all of the cliff faces on the left side of the drainage as we progressed upstream. The road

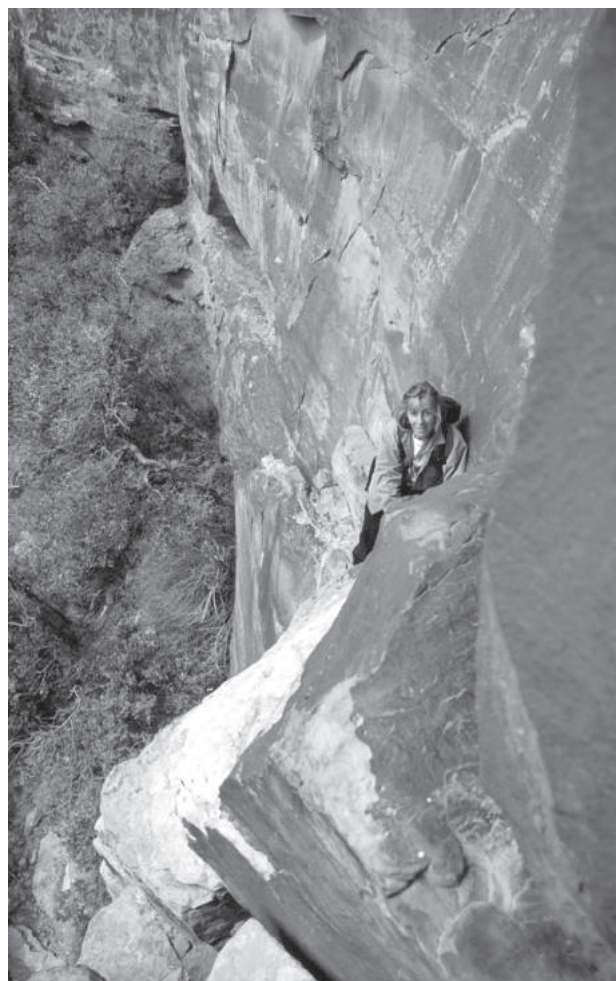


Figure 10. Mary Allen climbing a rock face to reach a petroglyph site in the Vermillion Cliffs.

ended at a large pour-off. Here we found rock art at the location where the photo in Figure 10 was taken. After climbing back down, we went back to my recently purchased Toyota four-wheel-drive truck, on which I had put new tires with an aggressive off-road tread design. I told Mary as we began the exploration in this canyon that my truck was so capable in off-road conditions that there was no need to put it into four-wheel-drive to travel up the dry sandy streambed. Although we were driving in deep sand, the truck performed flawlessly. Where the road ended at the large pour-off, the wash narrowed down to where it was about as wide as the truck was long.

After we finished climbing to the rock art, we got back in the truck and prepared to leave. I turned

the wheels sharply to the right and backed up to turn around. The rear wheels hit the low bank on the wash and the truck stopped, so I turned the wheels sharply to the left and pulled forward. The front wheels almost immediately hit the opposite bank. I repeated this maneuver again and I found the truck pinned in place between the two sandy banks of the dry streambed. Somewhat abashed, I told Mary that it looked like we would have to put the truck in four-wheel drive to get unstuck. The truck had manual engaging hubs, so we each got out and engaged the hub on our respective sides of the truck. Mary shut the truck door and stood a few feet from the passenger side of the truck and I got in to finish turning the truck around. I turned the wheels sharply to the left and then pushed much too aggressively on the gas pedal. The truck went forward into the bank and the right front tire dug into the sand. The new tires with the aggressive tread began to spin rapidly throwing literally buckets of sand right at Mary. She was covered from head to foot. So much sand hit Mary that before I could take my foot off the gas pedal, the sand, ricocheting off her, went through the open window and into my truck and spread sand all over inside of it, even getting sand in my face. I looked out at Mary—she was covered in sand—and I began to apologize profusely. I know some people who in this situation would have become angry, some might have even started to cry, but Mary began to laugh. I tried extremely hard not to laugh, but eventually I gave in. I think it took Mary several days to get the sand out of her long hair. This experience reveals a lot about Mary Allen's personality and how she handled difficult situations. I never saw Mary angry, nor did she ever make a disparaging comment about anyone.

After we got ourselves cleaned up the best we could and as we went back downstream, we continued our explorations on the opposite side of the canyon. It was getting dark and we had at least an hour's drive to get back to Mary and



Figure 11. Kayenta Basketmaker panel in the Vermillion Cliffs of western Utah.

John's house, but we saw one more cliff face. It appeared to be one of the best we had seen. It was large, smooth, and covered with dark desert varnish. We parked and hiked over to it. There was not a single mark on it. However, we discovered that it was the point of a ridge protruding toward the dry streambed, so we walked around to the other side, and what we saw made us stare in disbelief. We had discovered a panel that could have easily been created along the San Juan River. It contained the most comprehensive group of San Juan Basketmaker images yet discovered in the Virgin Anasazi area. The panel contains bird-headed images, atlatls, four sets of lobed-circle images, medicine bags, etc. Unfortunately, it was nearly dark, so our pictures were blurry. We intended to return to the site and fully document it, but it never happened. Mary, however, did return and found that the panel is on private land. Unfortunately, she was unable to complete a discussion of these images for this paper. A small section of the panel is shown in Figure 11 and a larger section in Figure 12.

Figure 11 shows a bird-headed anthropomorph with a single bird above it, two lobed circles (with bird heads) and two skin bags—one large and one small (note the carrying handle), two atlatls and other images. There are at least three ages represented in this panel.



Figure 12. Another section of the Basketmaker panel in the Vermillion Cliffs.



Figure 13. Lobed circles and other images along the San Juan River in the in the Kayenta area.

Figure 12 shows a larger section of the panel. In this photograph are two more sets of lobed circles, one of which is the head of an anthropomorph.

Lobed Circles in Pairs

Manning (1992a) has shown that lobed circles are a graphic representation of a uterus, and are present in panels with images associated with fertility, which is the theme of the panel in Cottonwood Canyon (Figures 2 and 4). Pairs of

lobed circles are common and almost exclusive to drainages of the San Juan River in eastern Utah (Manning 1992a). The photograph in Figure 13 shows lobed circles in the Kayenta area for comparison. Lobed circles also exist in a variety of contexts, even as the heads of anthropomorphs (Manning 1992a), which apparently is similar in context to birds being the heads of anthropomorphs. Some of the lobed circles in the Kayenta area have a pecked-out dot in the center (Manning 1992a). Notice that the images in the

Virgin area also have pecked out centers (Figure 11).

Details like this are significant because they illustrate the importance of fine details in the images. They show that the people who were creating the images in the Virgin area were creating them based on an intimate knowledge of the meaning and function of the images that had not changed over time or space. They were not made by someone who saw the images along the San Juan River and then attempted to make copies of them in the Virgin area. It would be impossible for someone who was not familiar with the meaning and function of the images to replicate all of the fine details, and the context and associations, many months after seeing them in the San Juan River area.

Skin Bags

In the panel shown in Figure 11 are what appear to be two skin bags. Skin bags appearing exactly as this shape have been found in southeastern Utah by pothunters and identical images are illustrated in petroglyph panels in the drainages of the San Juan River in eastern Utah. Figure 14 is a photograph of a skin bag along the San Juan River for comparison.

Skin bags were apparently used to carry water, which is particularly important if a person is walking long distances between water sources. This is exactly the situation encountered by a person traveling along the face of the Vermillion Cliffs where water is scarce. Water sources are usually found only in the canyons. The two wavy lines below the skin bag in Figure 11 may indicate that it contains water, or that water is flowing from it into the mouth of the four-legged animal beneath it. The skin bag in Figure 14 is upside-down. Perhaps this signifies that it is empty. This may relate to the two anthropomorphs that have feet that hang vertically instead of horizontally. Feet are positioned vertically only when a person is dead and they are left hanging, as is suggested by

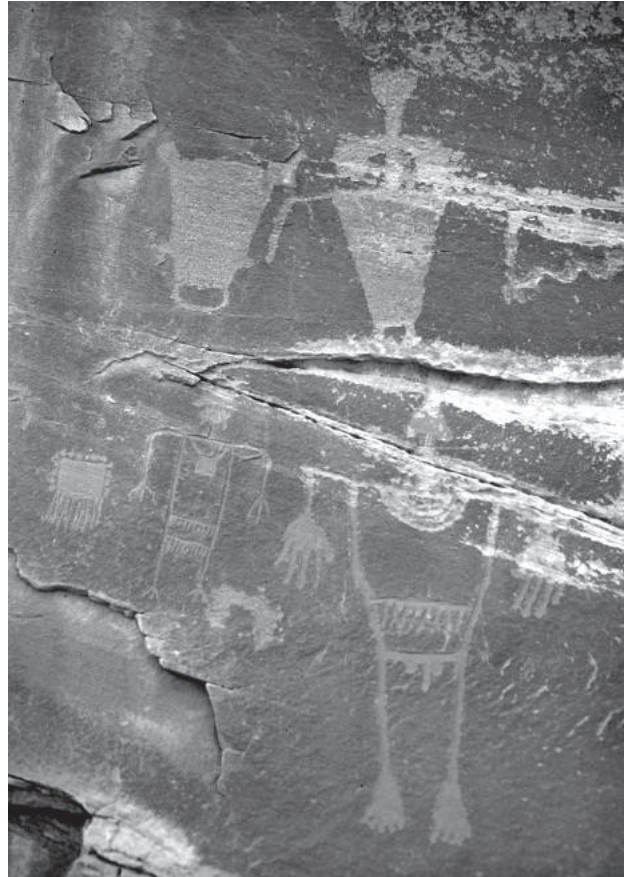


Figure 14. A skin bag from the San Juan River area in southeastern Utah for comparison.

the position of the arms, which might be lashed to a horizontal fixture to support the body. This conclusion is a personal observation. Perhaps these images indicate death caused by the absence of water. (Note: straps holding the arms of a dead person appear to be illustrated in a panel in Canyon Del Muerto [Canyon of Death], a tributary of the San Juan River, see Schaafsma [1980:Figure 73] and/or Cole [1990:Figure 43], who has a close-up photograph.)

Rows of Dancers

One final group or type of panel in the Virgin area is important to discuss. There are other examples of Kayenta images in the Virgin area, but those discussed here should provide sufficient examples to demonstrate the validity of our conclusions. These panels contain rows of anthropomorphs that appear to be dancing.



Figure 15. Pictograph panel along the Vermillion Cliffs showing two rows of dancing figures facing each other. Actual dinosaur footprints are nearby in sandstone.

Figure 15 shows a panel in which two groups of small human figures face each other. This panel is from a site located along the face of the Vermillion Cliffs in Kane County. This photograph was featured on the Utah Prehistory Week poster in 2005. There appear to be ten figures on the left side and nine on the right side; however, there may be ten figures on the right side as well because the dinosaur track appears to have been painted over the image. Notice that there is a small circular ground hole in the head of the right most person in the row on the left side. There is also a ground hole at the top of the dinosaur track. If there was a matching hole in the head of the left most person in the row on the right then there are ten figures in each row. All of the people in each row have both of their arms stretched out in front of them and their legs are bent at the knees. This suggests a motion like dancing. See Appendix A for some thoughts about this panel.

Panels featuring rows of dancers are also found along the San Juan River and in the drainages and side canyons in southeastern Utah and northeastern Arizona. For comparison, Figure 16 shows a drawing of a panel along the San Juan River in San Juan County, Utah. In this panel, the legs and arms of the anthropomorphs are very

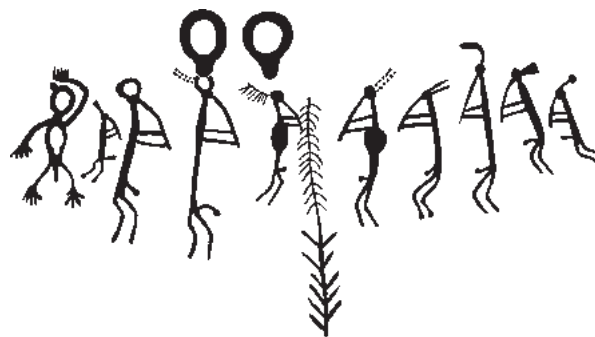


Figure 16. A panel near the San Juan River in southeastern Utah with facing dancers/flute players and lobed circles.

similarly positioned to those in the Virgin area, suggesting that both groups are dancing. The obvious difference between the two is that the figures in the San Juan River panel are apparently playing flutes while they are dancing, which is the same thing that the figures in Cottonwood Canyon near Kanab are doing; compare the position of the arms and legs of the images in Figure 16 with those in Figure 2. In both the Kayenta and Virgin areas, there are rows of dancers that have flutes and those that do not have flutes. Notice that the panel in the drawing also contains a pair of lobed circles and that three of the flute players/dancing figures have a lobed circle for a head.

It is not only the similarity in form that links these similar panels from the Kayenta and Virgin areas together; it is also the context of the panels. It is obvious from the phallic dancers that the context of both panels (Figures 2 and 16) centers on the theme of fertility.

Summary

All of the Kayenta images found in the Virgin Area discussed above provide support for our hypothesis for a route along the southern face of the Vermillion Cliffs. This support is in the form of physical evidence. Physical evidence that is not present also supports our hypothesis, and this missing evidence is that Kayenta Basketmaker panels are absent or nearly absent in all areas north and south of the Vermillion Cliffs in the Virgin area. Combined, the evidence is substantial that Basketmaker people from the Kayenta area, particularly from the San Juan River area of southeastern Utah, traveled along the face of the Vermillion Cliffs in an east-west route.

THE SIGNIFICANCE OF ARCHITECTURE

This is, however, not the entire story. It was stated above that one of the principal defining

characteristics of the Virgin Anasazi culture is architecture. What part does architecture play in this hypothesis? It plays a very significant part.

Figure 17 is a prehistoric structure in Natural Bridges National Monument, which borders Grand Gulch on the north. The structure is located at site 42Sa6801 in the White Canyon drainage that flows into Lake Powell. I first saw this structure many years ago. The first time I saw it, I thought it was an Anasazi structure, not a Fremont structure as some archaeologists believed, (Coulam 2001, Hobler and Hobler 1978). I had spent many years exploring the Fremont areas of Utah and I had never seen anything like this structure in the Fremont area. I had also spent considerable time in and around Canyonlands National Park, which area was heavily occupied during the P-II through P-III period, and there are no structures like it there, so I concluded that it was not from that period either. The only place I had seen these structures is in the Cedar Mesa area, which includes Grand Gulch and Natural Bridges. Figure 18 shows a structure in Grand Gulch. For a discussion of these structures, see Hobler and Hobler (1978). Many years ago, Owen Severance, who lives in southeastern Utah, reasoned from the evidences that he had found throughout Cedar Mesa that these were Basketmaker structures.

Owen's conclusion was verified when the structure was dated by Nancy Coulam, National Park Service Archaeologist, in 2001. The radiocarbon dates were obtained from materials encased in the wall fragments found at the site (Coulam 2001). A juniper berry from a broken off section of the wall that was lying between the structure and the cliff yielded a date of A.D. 600–655. A second date of A.D. 390–530 was obtained from grass stems embedded in the adobe of a second fallen wall segment. Another similar nearby structure with low walls yielded a date of A.D. 600–650 from an artiodactyl hoof fragment in a newly fallen wall segment. The A.D. 390–530 date is from the Basketmaker II period and



Figure 17. Prehistoric structure in Natural Bridges National Monument, southeastern Utah.



Figure 18. Jeremy Manning inspecting a prehistoric ruin beneath a large overhang in Grand Gulch.



Figure 19. A prehistoric structure in a canyon near the Paria River.

the A.D. 600–650 date is from the Basketmaker III period. A possible explanation for the two different dates from the same structure (Figure 17) is the existence of a dismantled structure shown by remnants of adobe clinging to the cliff wall. It is likely that a remnant from an old structure was incorporated in the building of the new structure.

The significance of these structures, which date from the Basketmaker period, is that they also occur in the Virgin Anasazi area. Owen Severance found one site near the Paria River (Figure 19) and then we found another site near Kanab (Figure 20). The structure near Kanab is nearly 200 miles from the structure in Natural Bridges, and that is in a straight line, and arguably across the most



Figure 21. Ruin in Canyon near Kanab.

rugged desert terrain in Utah. Amazingly, all three sites have structures that appear identical in form and method of manufacture, although we did not examine them in minute detail. Notice that all three have rocks embedded in the clay that forms the walls and that they are the same color. The structures are so identical that they appear to be made from the same clay. It does not seem possible or reasonable that they would be made from the same clay source. It would be interesting to obtain a chemical analysis of the clay from the three structures and determine its source. The similarity of the structures and their rareness suggests that they were all created by the same people at about the same time or in the same period. If these structures were all made in the same period, then they would also have been made in the same period as the associated rock art that exists in both the Kayenta and Virgin areas. This is a good hypothesis since all three sites have Basketmaker rock art next to the structures.

CONCLUSION—ALMOST

The presence of the Kayenta Basketmaker images and structures found only along the Vermillion Cliffs and, equally as significant, the absence of these images and structures in adjacent areas (both north and south) substantiates the existence of a major travel corridor in the Basketmaker period between the Kayenta and the Virgin areas. The route these Basketmaker people traveled goes all the way to the Virgin River, as indicated by

Kayenta rock art along the Virgin River near Zion National Park (Connor and Vetter 1986:48–61; Steward 1929:150, plate 86d). In fact, Connor and Vetter (1986:60) note that “Other Rock art in Zion National Park resembles art from Anasazi regions, particularly the Kayenta region just east of the Virgin Anasazi region.”

But this is not all of the story. This only traces the route in the Virgin area. How did the Basketmaker people from Cedar Mesa travel to the Vermillion Cliffs where the cliffs meet the Colorado River? This route might be a little difficult to determine, since possible routes now lie beneath Lake Powell. It is possible to follow the San Juan River to the Colorado River and then follow it downstream to the Vermillion cliffs, or a person could follow White Canyon to the Colorado River; however, this would be a longer journey since White Canyon flows northwest. Prehistoric routes in southeastern Utah that would connect Grand Gulch to the Vermillion Cliffs route have not been seriously investigated.

Pre-Anasazi Inhabitants

We also discovered the presence of an Archaic Period type rock art in the eastern Virgin area that is different from that characterized by Turner (1963, 1971). This is important because it suggests that the Vermillion Cliffs corridor in eastern Utah may have been initially used, or pioneered, in the Archaic period. The presence of this Archaic Period type rock art suggests that the Anasazi Basketmakers from the Kayenta area may have been following an Archaic route. This relatively easy route may have enabled the Kayenta Basketmaker people, along with their ideas and technology, to travel into the Virgin area, where they influenced and interacted with the Archaic Period people already living there. This may help explain why the rock art is so different in the Virgin area than it is elsewhere and why unmodified Kayenta rock art in the Virgin area is so uncommon and unique. This, of course, needs further study to be a viable hypothesis.

Dating Kayenta Rock Art

One day when I was working on the draft of the paper we were writing, I was suddenly struck, again, by what I thought was an incredible awareness, an epiphany, and an intuitive grasp of reality. It dawned on me that we had been so engrossed, so preoccupied, and so intent on finding Basketmaker images that were not unique to the Virgin Anasazi area that we had failed to realize that we were not seeing in the Virgin area examples of all types of the Kayenta Basketmaker rock art. We were only seeing part of them. An enormously significant type of figure was entirely missing. In all of the panels we had examined, we had never seen even one of Schaafsma's San Juan Anthropomorphic Style images. Examples of the San Juan Anthropomorphic Style images from the Kayenta area are shown in Figures 13 and 14. Of course, we have not searched every square meter of southwestern Utah, so there may be some somewhere. We kept looking for them, but we have never found any—so far.

Why are there no San Juan Anthropomorphic Style images in the Virgin area when they are so abundant in the Kayenta area? There are actually many hundreds of these images along the San Juan River and in its drainages in the Four Corners area. There are so many of these images and they are so impressive that Schaafsma (1980) gave them a specific name—the San Juan Anthropomorphic Style. They were also discussed as early as 1921 by Guernsey and Kidder (1921). We decided that the most likely possibility that would explain the absence of San Juan Anthropomorphic Style images in the Virgin area was that they were created at a different time than the other Kayenta Basketmaker images in the Virgin area.

If it could be determined when the San Juan Anthropomorphic Style images were created in the Kayenta area it would also determine when the other Kayenta Basketmaker images were created in the Virgin area, because they would have been created during different periods. Thus,

specific types of Basketmaker rock art in both the Kayenta and Virgin areas would be unambiguously assignable to different periods—BM-II or BM-III; that is, if Basketmaker rock art follows the same pattern as the characteristics that differentiate BM-II from BM-III.

Basketmaker rock art, however, has not been indisputably separated into these two periods and the San Juan Anthropomorphic Style images have not been directly dated, and thus not clearly assigned to a particular phase of the Basketmaker culture, despite what others believe. Kidder and Guernsey (1919) are often quoted as noting that they were associated with BM-II cultural evidences in northeastern Arizona. Schaafsma (1980:110) and Cole (1990:111, 1994:289) discussed the distribution of these images and both, citing Guernsey and Kidder (1921), expressed the opinion that they were also of Basketmaker II cultural affiliation. Robins and Hays-Gilpin (2000) building on the work of Robins (1997), who also quoted all previous researchers including Kidder and Guernsey, have also suggested that the San Juan Anthropomorphic Style images date to the BM-II period. More specifically, they relate them to the White Dog phase of the BM-II period that, in northern Arizona, may date from about 1500 B.C. to A.D. 50. This conclusion derives from an alleged association of the images with locations possessing high-quality agricultural lands that might have yielded surpluses, resulting in macro-social venues (food sharing feasts, fall festivals, etc.) that have nearby BM-II sites (Robins and Hays-Gilpin 2000).

All of these associations are tenuous at best. From our experience, the San Juan Anthropomorphic Style images in southeastern Utah and northeastern Arizona are associated with every Formative culture that has inhabited the area. After all, the Anasazi Culture existed throughout the Four Corners region for two thousand years. So that the entire area where high-quality agricultural lands exist, which are the lands along the many

drainages of the San Juan River, all contain numerous Basketmaker II, III, Pueblo I, II, III, and even Navajo sites. To consider a particular association unique when the site density is so profuse is not well supported.

I would also suggest that these authors may have misread Kidder and Guernsey's statement regarding the cultural affiliation of Schaafsma's San Juan Anthropomorphic Style images. Kidder and Guernsey's text is:

These large and very peculiar anthropomorph representations we believe to be of Basket Maker origin, because we found them on the walls of the strictly Basket Maker Cave II and because at Ruin 4, where they are very abundant, they and their attendant hand prints are obviously older than the Cliff-house structure. [Kidder and Guernsey 1919:198].

Notice that it is not "Basket Maker II Cave;" it is "Basket Maker Cave II." In other words, the images were found in Basket Maker Cave 2, as opposed to Basket Maker Cave 1. Kidder and Guernsey's discussion of Basket Maker Cave I begins on page 74 and their discussion of Basket Maker Cave II begins on page 84. Thus, Kidder and Guernsey did not state that the images were Basketmaker II but only that they were Basketmaker. Furthermore, the Pecos Conference where the Pecos classification originated was convened in 1927, so Kidder and Guernsey would not have used the term Basketmaker II in 1919.

Rock art indicative of the BM-III period comes principally from Grant (1978) who defined a Modified Basketmaker-Developmental Pueblo rock art to designate images in Canyon de Chelly that he believed followed the Basketmaker II period. Schaafsma (1980:122) redefined this style and named it the Chinle Representation Style. Schaafsma places images that she describes as stick figures, which are the images described above as rows of dancers, in the Chinle Representation Style (1980:Figure 85). Some of these images hold flutes and some do not.

Schaafsma (1980:122) states, "The earliest flute players are believed to be Basketmaker III in date and are stick-figure depictions." She also includes birds and bird-headed images in the Kayenta area in this style. Thus, Schaafsma, quoting Grant, is of the opinion that all of these images date to the Basketmaker III period. Without substantive indirect or direct dating, however, these beliefs are just opinions.

Another reason why the cultural sequences or phases for Basketmaker rock art are insecure is that in the Kayenta area many of the Basketmaker images are mixed in panels in a confusing and disordered arrangement, as illustrated in Figure 13. Furthermore, since much of the Basketmaker rock art was created within several hundred years, repatination levels on petroglyphs are nearly the same on all of the images. This is not to say that every Basketmaker panel of varying ages has the same level of repatination. Basketmaker rock art occurs in a variety of environments and exposures, and in each of these different environments and exposures, different rates of repatination have resulted, which further complicates the determination of relative ages.

The problem of dating Basketmaker images needs to be examined from a different perspective than those discussed above. If the date when the Kayenta Basketmaker people followed the Vermillion Cliffs route into the Virgin area could be determined, the dates when the particular Kayenta Basketmaker images were being made in the Virgin area would also be known. This can be done. The structures that the people lived in when they created the rock art can be dated. This is the importance of architecture. When the structures in the Virgin area are dated, the Basketmaker rock art in the Virgin area will also be dated. This will also determine when the images were created in the Kayenta area. Furthermore, it will also determine when the San Juan Anthropomorphic Style was *not* created, thus providing a possible date for when it *was* created. We will then know which types of rock art in the

Virgin area and in the Kayenta area, are BM-II or BM-III, which no one has been able to conclusively determine.

Funding Requested

All that is needed is funding for the radiocarbon dates and permission from landowners to collect samples. This dating will not be done without some financial assistance. Today each radiocarbon date costs about \$560.00. A minimum of four dates is needed. If you are able to contribute toward this project, please donate to URARA and indicate that your contribution is specifically for radiocarbon dating for the Virgin-Kayenta rock art project. Your contributions are tax deductible. Any amount is welcome.

APPENDIX A

Notes from State History's Internet Site about the Photograph Featured on the Utah Prehistory Week Poster for 2005 (Figure 15)

If you look closely at the dancing figures, you will notice that someone scratched over them. These deep scratches go nearly all the way across all of the dancers. The scratching could have been done with a sharp stone tool like an arrowhead or a knife. It is also evident that some of the dancers near the right side of the panel seem to be missing most of their bodies. This is because someone rubbed a smooth, nearly flat stone across the dancers, apparently in an effort to remove them. Fortunately for us, this did not work very well. It appears that the stone used to do this was a mano, which was about the size of someone's hand. The abrasion is flat and smooth in the center and it curves up at both edges. Notice also that there are pecked marks on the dancers on the left side of the dinosaur track. It looks like someone pounded on the images of the dancers with the sharp point of a rock. The footprints or tracks above the row of dancers and the humanlike figure on the left side of the panel with its arms hanging down also

have been pecked. There are also six small round holes drilled into the panel. The purpose for these holes is unknown.

After all this abrading, scratching, and hammering, the dinosaur track was painted in the center of the dancers. The paint covers some of the dancers and most of the damaged area. The other large figures with their arms hanging down were also apparently painted on the panel at the same time.

Why were the dancing figures scratched, abraded, and hammered? What does this tell us about the different Indians that passed by the panel? (Also the panel is on a route to the top of the Vermillion Cliffs from the Arizona Strip. There is other rock art along the route. Some of it is Fremont.) Did they have respect for the images that were created by other people, or were they displeased with them? Why would someone be displeased by some simple drawings of people dancing? Obviously, the images had meanings that someone liked and someone else disliked. This indicates that the images were important, or they would have just been ignored. Furthermore, the damage to the dancing figures implies that they had a specific meaning and a special significance and that the meaning and significance was known both to the person who created them and to the person who tried to harm them. They were not just doodles made to pass the time while cooling off in the shade of the overhang after a long hard climb on a hot afternoon.

REFERENCES CITED

Berg, Adam M., Stewart Deats, Doug Drake, Joshua S. Edwards, Dennis Gilpin, Jim Hasbargen, Michael O' Hara, and Gordon F. M. Rakita.

2003 *Prehistoric Occupation of the Confluence Valley between the Vermillion Cliffs and Short Creek: Archaeological Investigations of 16 Sites for the Hildale Wastewater Treatment Facility Hildale, Utah and Colorado City, Arizona.* SWCA Environmental Resources Report No. 2003-09. Report prepared by SWCA Environmental Consultants, Flagstaff, Arizona.

- Brown, Bill C.
1980 Sketch of Bryce Canyon Natural Park region. The Bryce Canyon Natural History Association, Bryce Canyon, Utah.
- Castleton, Kenneth B.
1979 *Petroglyphs and Pictographs of Utah*. Volume II. Utah Museum of Natural History, Salt Lake City.
- Cole, Sally J.
1990 *Legacy on Stone*, Johnson Books, Boulder, Colorado.
1994 Roots of Anasazi and Pueblo Imagery in Basketmaker II Rock Art and Material Culture. *Kiva* 60(2):289–311.
- Connor, Melissa A., and Susan M. Vetter
1986 *Archaeological Investigations at Zion National Park*. Midwest Archeological Center Occasional Studies in Anthropology No. 19. United States Department of the Interior, National Park Service, Midwest Archeological Center, Lincoln, Nebraska.
- Coulam, Nancy J.
2001 Cultural Affiliation of Kachina Bridge Ruin. *Utah Archeology* 2001, 14(1), pp. 27–38.
- Grant, Campbell
1978 *Canyon de Chelly: Its People and Rock Art*, University of Arizona Press, Tucson.
- Guernsey, Samuel J., and Alfred V. Kidder
1921 Basketmaker Caves in Northeastern Arizona. *Papers of the Peabody Museum of American Archaeology and Ethnology*, volume 3(2), Harvard University, Cambridge.
- Gumerman, George J., and Jeffery S. Dean.
1989 Prehistoric Cooperation and Competition in the Western Anasazi Area. In *Dynamics of Southwest Prehistory*, pp. 99–148, edited by Linda S. Cordell and George J. Gumerman. Smithsonian Institution Press, Washington, D.C.
- Hobler, M. Phillip, and Audrey E. Hobler
1978 *An Archaeological Survey of the Upper White Canyon Area Southeastern Utah*. Antiquities Section Selected Papers, volume 15 number 13. Utah Division of State History.
- Kidder Alfred V., and Samuel J. Guernsey
1919 *Archaeological Explorations in Northeast Arizona*. Bureau of American Ethnology, Bulletin 65, U.S. Government Printing Office, Washington, D.C.
- Manning, Steven J.
1990a Distribution and Cultural Affiliation of Large Two-Stranded, Pendant Necklaces in the Rock Art of the Colorado Plateau: A Preliminary Report. In *Utah Rock Art* Vol. 7, section 12:1–10. Utah Rock Art Research Association, Salt Lake City.
1990b A Reappraisal of the Cave Valley Style. In *Utah Rock Art* Vol. 9, pp. 57–62. Utah Rock Art Research Association, Salt Lake City.
1992a The Lobed-Circle Image in the Basketmaker Petroglyphs of Southeastern Utah. In *Utah Rock Art*, Vol. 10, pp. 149–208. Utah Rock Art Research Association, Salt Lake City.
1992b *Colorado—Green River: Prehistoric Pathway*. Canyon Legacy: Journal of the Dan O’Laurie Museum, 16:12–19, Moab, Utah.
1997 Rock Art Symbolism Unique to the Virgin Anasazi Region: A Ritualistic Response to an Arid Environment. In *Utah Rock Art*, Vol. 16, Section 16, pp. 1–34. Utah Rock Art Research Association, Salt Lake City.
- Robins, Michael R.
1997 Modeling socio-economic organization of the San Juan Basketmakers: A Preliminary Study in Rock Art Social Dynamics. In *Early Farmers of the Northern Southwest: Papers on the Chronometry, Social Dynamics, and Ecology*, edited by F. E. Smiley and Michael R. Robins, pp. 73–120. Animas-La Plata Archeological Project Research Paper number 7. Northern Arizona University, Flagstaff.

Robins, Michael and Kelley Hays-Gilpin

2000 The Bird in the Basket. In *Foundations of Anasazi Culture: The Basketmaker-Pueblo Transition*, pages 231–247, edited by Paul F. Reed, University of Utah Press, Salt Lake City.

Schaafsma, Polly

1971 The Rock Art of Utah, from the Donald Scott Collection. *Papers of the Peabody Museum of Archaeology and Ethnology*, Volume 65. Cambridge, Massachusetts.

1980 *Indian Rock Art of the Southwest*. School of America Research, Santa Fe, New Mexico.

Steward, Julian H.

1929 Petroglyphs of California and Adjoining States. *University of California Publications in American Archaeology and Ethnology*, Volume 24. Berkeley, California.

Tipps, Betsy L. with contributions by Nancy J. Coulam, Richard E. Hughes, Steven J. Manning, Janet L. McVicker, Ernest G. Walker, and Dean Wilson.

1989 *Cultural Resource Investigations near Kanab, Utah: Excavation and Structural Stabilization at Cottonwood Canyon Cliff Dwelling*. Submitted in partial fulfillment of contract UT910-CT7-036 to Bureau of Land Management, Kanab Resource Area Office, Kanab, Utah, by P-III Associates, Salt Lake City, Utah.

Turner, Christy G. III

1963 *Petrographs of the Glen Canyon Region*. Museum of Northern Arizona Bulletin 38, Northern Arizona Society of Science and Art, Flagstaff.

1971 Revised dating for Early Rock Art of the Glen Canyon Region. *American Antiquity* 36(4):469–471.



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