

Significance of Rock Art In the Southwest

by Stephen Anderson

Native American rock art can be found in many of the canyons of the southwestern states of Utah, Arizona, New Mexico, Colorado and southwest Texas. The oldest sites in the United States are dated back to approximately 4,000 B.P. [before present]. However, ancient people around the world have used rock art as a means of communication for many thousands of years. Although there are similarities across rock art, most is unique in its style and substance. The two primary forms of rock art are petroglyphs and pictographs. Petroglyphs are either scratched or pecked into a rock wall or boulder, while pictographs are painted on using various dyes. For many years now people have attempted to decipher the rock art in an attempt to better understand how the indigenous people of North America lived. Ancient people left little evidence for their purpose of rock art, but speculation and research indicates that there may be historical, functional or religious significance.

The style of petroglyphs and pictographs is dependent upon the techniques and materials used to create them. Petroglyphs, the most common rock art found in the southwest, are found on hundreds of patinated sandstone cliffs and boulders. These figures were created directly onto the rock using a pecking method with a hammer stone. A chisel was also used for more precise and accurate depiction on the rock. Another common method of creating petroglyphs was by incising or scratching designs onto soft sandstone. In some cases, both the pecking method and incision method was utilized. On the other hand, pictographs are usually found on light-colored, protected rock surfaces such as alcoves and rock shelters. These areas are usually moisture-free and lack patinated surfaces. Pictographs were often created using a yucca brush and a mixture of clay-style paints. The most common colors for this style of rock art were white, black, orange and the most widely used color of red. Yellow, pink, green and blue have also been used but are much more rare. The three components of paint are the coloring agent, the pigment, and the binder, usually animal or plant oil, used to adhere the paint to the rock surface. Red is made from hematite or red iron oxide; yellow is created from limonite; orange combines the red and yellow; blue is formed from azurite; and green is formed from malachite. Turquoise-colored paint was also created from ground turquoise rock mixed with clay. Techniques for making both pictographs and petroglyphs were consistent throughout the Southwest and are helpful in the interpretation of the resources available and the cultures that created the rock art. (Schaafsma, 1980: p.25-32)

Some of the earliest rock art in North America was in the form of pictographs. Horseshoe Canyon and Buckhorn Wash in the San Rafael region of southern Utah are two places that display some of these early works. Although it is rare to determine the absolute age of a particular site, various methods have been used to estimate the age and time frame of panels. Procedures used to determine the age of pictographs include 1) optical microscopy, which confirms original paint layers, 2) scanning electron micros-

copy, which conducts a chemical analysis to view the microstructure of the pigment, and 3) x-ray diffraction, which determines the minerals in the white paint (Chaffee et al, 1994). The All-American Man pictograph of Canyonlands National Park in Utah was examined using the aforementioned methods. It was determined from such procedures that this pictograph contained a natural layer of pigment from dehydrated gypsum. In addition, carbon dating was also used to date the age of the blue color containing charcoal found in the All-American Man. From various dating techniques it was estimated that this pictograph figure dated back to around 1260 A.D. \pm 46 years (Chaffee et al, 1994). Another procedure commonly used to date pictographs is accelerator mass spectrometry, which uses considerably less paint in the analysis of the rock art. Only a pinhead size amount of paint is needed, which is much less invasive and advantageous to the archeological site (Chaffee et al, 1994).

Although different from pictographs, the relative dating of petroglyphs can also be determined by examining the amount of patination or desert varnish that has reformed over the rock art symbols. The darker the patina, the older the petroglyph. More recent petroglyphs will be lighter in color than the rocks' original patina. Another way to determine age is to look at superimposition of rock art. Often newer petroglyphs are drawn on top of older petroglyphs, with the youngest being the top layer of rock art. Independent of rock art type (i.e. pictograph or petroglyph), substance and style can also be used to determine the general age of the panels. Examination of the objects associated in the panels is used to determine the age of the art. For example, the appearance of the bow and arrow replacing the atlatl is a determinant of the era between A.D. 200 and 600. Additionally, depiction of the horse indicates a rock art panel is post-Spanish conquest. (Schaafsma, 1980: p.13-15).

The style of the rock art is suggestive of particular cultures of Native Americans and the time and the geographical location from which they existed. For example, Fremont rock art typically shows figures as broad-shouldered, trapezoidal torsos with horned or intricate headgear and necklaces. This culture thrived in the Southwest from A.D. 500–1300. Another determining factor in dating the All-American Man is that this figure was "horned" and therefore suggestive of the Fremont culture era (Chaffee et al, 1994).

The Histasinom, on the other hand, had many different rock art styles, each indicative of a particular geographical region and chronological era. These representational styles include the San Juan anthropomorphic figures, Chinle, Hidden Valley, Rosa, and Cave Valley to name a few. Many techniques, including scientific analysis as well as geographical location, style and substances are used in determining the relative age of rock art. Determining the age of a particular rock art panel plays an important role in interpreting the meaning or purpose behind the art. For example, panels depicting "rain makers" were perhaps drawn as pleas or prayers during times of drought. Although this is just an example, calculating the date of the panels can provide archeologists with some evidence regarding the culture of the people who left them.

Examination of the rock art panels gives some insight about the cultures and may provide some historical evi-

dence of their existence. It is important to keep in mind that the absolute purpose of rock art is speculative at best. Some anthropologists believe that rock art panels are a form of written language, while others believed they expressed religious beliefs. Still others believe the purpose of rock art was to provide historical or geographical evidence of Native American cultures.

Weaver (1984) suggested that rock art documented important events and marked natural events such as the summer and winter solstice or astronomical events such as the supernova of 1054 A.D. Weaver further suggested that rock art facilitated record keeping and marked clan boundaries as well as popular crossroads. A good example of a crossroads can be found at the Willow Springs site, near Tuba City, AZ, where vertical rows of rock symbols are found representing some twenty-seven clans. It is thought that this site commemorates the Hopi Indians' pilgrimage to the sacred salt deposits near the confluence of the Colorado and Little Colorado rivers. During this pilgrimage, the Hopi passed through Willow Springs and left a mark of their participation in the journey (Weaver, 1984). Documentation of such journeys as well as a strong oral Hopi tradition has enabled scientists to formulate an interpretation of this historical event. In addition to pilgrimages, ancient rock art is thought to represent migration patterns because similarities in clan symbols are found in many locations (Waters 1963: p. 103). As the migration patterns began to end, rock art was thought to document their travels.

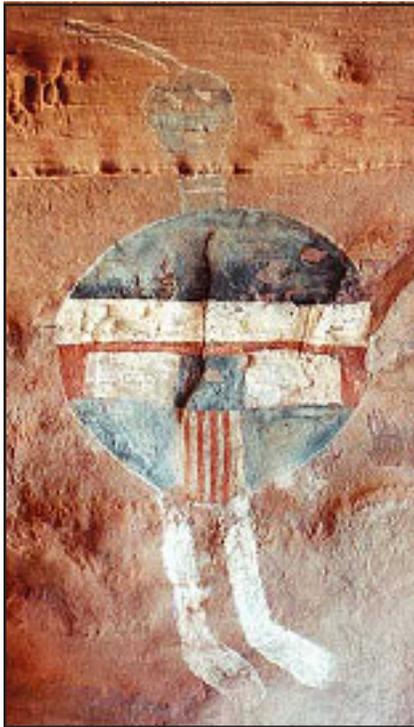
Childbirth has also been the subject of many rock art panels. There are several rock art panels that depict either pregnant or birthing mothers of both animals and humans. One notable panel is located in southern Utah at Kane Creek just west of Moab. This panel clearly shows a mother giving birth to an infant thus symbolizing a new beginning. Again, much of the interpretation of rock art is speculative; however, if a historical approach is taken, perhaps some information can be deduced as to the significance of the cultures.

Another interpretation of rock art is that the abstract lines and spiral circles served functional purposes. The spiral circles are often interpreted as representations of objects on a map such as springs or wells (Weaver, 1984). Although there are a few rare instances where the art does depict maps, this is an unsubstantiated interpretation. The same is true for the abstract squiggly lines. Some amateur archeologists have misinterpreted the lines as possible roads or paths that may lead to fertile land, cached food, or trade locations. The truth is that not even scholars are able to interpret these abstract designs (Weaver, 1984).

Cole (1985) describes another functional role of rock art in the San Juan area of southern Utah. Cole examined Basketmaker face pictograph representations in rock art and the association of those with masks found in the area. It appears from some of the San Juan panels that the face pictographs show similar details, such as a loop handle on the top of the head, to the mask artifacts found. The loop was thought to help attach the mask to the face of the individual wearing the mask. Thus, it is possible to gain some insight as to the function of the rock art symbols and what they possibly represent.

Animal or hunting scenes are perhaps the single most depicted form of rock art and suggestive of the types of

animals present during ancient times. Although, we name the rock art based on their descriptors, Weaver (1984) emphasizes that the artist of a particular rock art panel may have intended to depict a mythical clan ancestor and not what appears to us as a bighorn sheep. But, the ancient Native Americans may have used the rock art as a means of recording a large successful hunt or as a means of asking the gods for "hunting magic." Panels all across the Southwest depict various animals such as big horn sheep, deer, antelope, elk, bison, eagles and lizards. By portraying elaborate panels of successful hunts, the panel creator could be insuring future success in real life hunts. Therefore, the natives would have invested a great deal of time in producing panels that showed a multitude of animals (Weaver 1984). Whatever their meaning or purpose, it is apparent that the rock art was important to the Native Americans.



"All American Man"

through trances and ceremonies. Thus, rock art may be directly associated with ancient rituals, ceremonies and visions. Many of the abstract rock art subjects, or anthropomorphs are disfigured or resemble alien beings and may have been seen in dreams. Anthropomorphs look like human beings but often have many significant amenities such as horned or antennae clad heads, armless or legless trapezoidal shaped torsos and are disproportionate in size. They may represent a ghost or spirit witnessed in a religious ritual or in a vision. In addition to the various anthropomorphs, several zoomorphs are often depicted accompanying the spirits. Zoomorphs are considered to be spirits of animals and share similar characteristics of the anthropomorphs (Hunger 1986). Sejo Canyon panel north of Thompson Springs, Utah depicts many spectacular specimens of anthropomorphs. Many scientists interpret prehistoric rock art as a way to appease the supernatural forces in return for prosperity, fertility, health and success in hunting for either an individual or groups. If the

shamans were the artists of many of the rock art panels, then it could provide evidence for a direct correlation between rock art and religion.

The correlation between religion and rock art has been well documented and could be the strongest argument in understanding the cultures of the ancient southwestern people. It was suggested by Hunger (1986) that figures engaged in sexual intercourse, such as the one in Wupatki National Monument in Arizona, are performing a religious marriage ceremony between a man and his female partner. In addition to human figures, there are also animals engaged in similar sexual positions. However, Hunger suggests that indeed these may represent animals, but also may be humans participating in religious marriage ceremonies donned with animal masks. Such rock art was also thought to bring about communication with supernatural powers and animal spirits. Also, Katchina religious associations are often depicted in the rock art of the southwest. Katchinas are supernatural anthropomorphic style religious spirits associated with clouds and rain (Schaafsma and Schaafsma 1974). The origin of Katchina representations on the rocks dates to around 1300 A.D. in the Rio Grande valley. Schaafsma and Schaafsma (1974) suggest the Rio Grande style of rock art came directly from the Katchina cult and is found most elaborately in kiva murals. The Katchinas often illustrate the importance of objects such as corn, the earth, the sun, rain and health. Therefore, insight about the Katchina religion leads interpreters of rock art panels to perhaps understand what the artist was drawing on the rock.

Many of the rock art panels and kivas contain elaborately painted Katchina masks and anthropomorphic figures adorned with modern-day sashes and kilts and are suggestive of ceremonial importance within that culture and the clothing worn during these ceremonies. In addition to Katchina figures, other rock art symbols such as horned serpents, birds, badgers, skunks, rabbits and mountain lions can also be found. During this time, important symbols such as rainbows, clouds and the four-pointed star appear. These are symbols that still represent the Katchina religion of the modern pueblos.

Information gained from modern Hopi suggest that these ancient rock art symbols were religiously important and began to show up around the beginning of the Katchina religion. The Katchina religion unequivocally is responsible for the change in rock art iconography of this era. Therefore, rock art found prior to the start of Katchina religion could be representative of an older religion of the cultures. Evidence of this is found in the use of older symbols found in the Katchina panels (Schaafsma and Schaafsma 1974).

Perhaps the most famous depiction in Katchina rock art is the Kokopelli, the humped back, flute-playing Casanova of the Southwest. "Koko" means "Katchina" in the Zuni language and "pelli" refers to "hemisphere" or "hump" in the Hopi language. This particular symbol can be found on numerous panels across the southwestern United States. The legend of Kokopelli is that he traveled from camp to camp during corn-planting time playing his flute and bringing good fortune wherever he went (Alpert 1991). Alpert (1991) believes that the hump on his back was a bag of songs while others believe it was a grain sack and legend has it that when he left a camp the crops would prosper and there would be a stirring in the belly of

the women. It is for this legend that the Kokopelli is known as the fertility god.

Another suggestion with possible implications about disease of that time is that the hump on the back was a significant deformity found during that time. It has been interpreted that the deformity could be as a result of tuberculosis of the spine (Alpert 1991). Since rock art rarely depicts normal figures, it could be that the Kokopelli was an actual individual with a significant spinal curvature. Alpert emphasizes that the Kokopelli rock art figure was not merely decorative but important in ceremony and ritual.

The early inhabitants of the Southwest did not leave behind written accounts or many other clues as to who they were. One way in which to explore their cultures is by taking a closer look at what they did leave behind. Although we cannot interpret the exact meaning of rock art panels, it appears that it was multifaceted and significant in its own way to each culture. Perhaps, the rock art was meant to record historical events or was suggestive of important ceremonies of the clans. Other interpretations of the rock art indicate that there was a religious importance among all forms of rock art. It is possible that based on information surrounding the Katchina religion that this was actually the main purpose of ancient puebloan rock art symbols. However, in the case of the Kokopelli it appears to represent both a religious and historical significance. We may not be able to properly interpret the purpose behind the rock art symbols, but close examination of rock art panels is helpful in determining the eras of the people who left them. Despite our interpretations and understanding, it is apparent that rock art played an integral part in each of the ancient cultures.

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