Generally when we examine a rock art panel, we ask questions like: “What does it mean?”, “Who made it?” and perhaps, “Why was it placed here?” Sometimes we may even ask, especially if we are from Utah; “What the heck is this?” All of these questions, and more, are likely to be asked about ovoids when they are first encountered, and even when they are subsequently encountered!

What are ovoids? Ovoids are generally oval shaped features or images that are on cliff faces, in alcoves and on large boulders in Southeastern Utah. I believe that ovoids are one of the greatest mysteries in the rock art and archaeology of Utah. This statement is based on having seen thousands of rock art sites over the past 36 years.

If you have visited rock art or archaeological sites in southeastern Utah, you have likely seen ovoids. Apparently, however, little or no attention has been given to them. Perhaps this is because no one has realized how many of them exist, how extensively they are distributed and that their form and appearance is surprisingly consistent.

The purpose of this paper is to define ovoids and discuss their meaning, purpose and distribution.

**DESCRIPTION**

Ovoids (Figures 1-76) are typically oval shaped images or features with an amorphous surface. The form of these images, however, varies from round (rare), through elliptical, to a rectangle with rounded corners. Ovoids vary in size, although most seem to be 20 to 30 centimeters in length (vertically). Nearly always, ovoids are grouped together and arranged in one or more rows. The rows are not usually evenly aligned.

Ovoids generally appear as uniform areas of a lighter color than the rock surfaces on which they were placed. Sometimes, however, the ovoids are darker than the rock surface (Figures 53, 62, 63 and 66). Some ovoids have a dark border around them (see examples in Figures 1, 24, 27 and 50). The long axis of the ovoid is nearly always placed vertically. Figures 19, 33, 43, 45 and 46 contain examples of horizontal ovoids. Figure 14 shows the rare single ovoid. Ovoids usually have well-defined edges, however, sometimes several are created in the same place, or nearly in the same place, so that the resultant edges are blurred.

Sometimes an ovoid is superimposed over other ovoids. Figure 1 is a good example of superposition. It shows the dark outline of subsequent ovoids that were superimposed over earlier ones. In some instances, ovoids were created repeatedly in the same general location, with apparently little regard for previous images so that they overlap (see examples in Figures 21, 23, 26, 27, 39 and 58).

Ovoids seem to occur only on vertical, or nearly vertical, rock surfaces. They are often located beneath overhangs, which offer some protection for them. They are also placed near the base of tall cliffs and on large boulders.

**DISTRIBUTION**

I first became aware of the existence of ovoids in October 1992. (I wonder now how many of these I had previously looked at but not really “seen”.) To this date, I have found that ovoids exist principally in the southeastern portion of San Juan County, Utah, along the tributaries of
the San Juan River, although a few have been found in northeastern Arizona (Figure 77). This distribution should not be considered absolute because I have not spent much time looking for them south or east of this area. As more are discovered, their areal distribution may increase.

**SITUATION**

Most ovoids are located along stream courses that form major drainages with deep canyons. A few have been discovered in small tributaries to these major canyons, and a few have been found in short tributaries that end abruptly.

Ovoids seem to have been placed most often in locations that are easily seen. They often face outward from the cliffs that line the canyons, and they can be seen from the canyon bottoms, or often now from modern roads. Thus, they were apparently meant to be seen by anyone traveling through the canyons. This suggests that they were not meant to be secretive, but rather were part of “public life” and meant to be seen by anyone passing by.

They are sometimes in or near habitation sites with large numbers of structures. They are just as often located far from any habitation sites – if that is possible in southeastern San Juan County. They do not appear, therefore, to be exclusively associated with habitation sites and the activities that occurred there.

**CONSTRUCTION**

Nearly all ovoids are the vestiges of a substance that was placed on the surface of the rock. It may not be obvious from an examination of the photographs here that the substance that created these images is no longer present. Apparently, all traces of the material have been removed by weathering. The following is an explanation of what may have created these peculiar images.

**Fluidity**

Many ovoids have a definite and clear outline, suggesting that they were created by a thick or paste-like substance, because it did not run nor flow down the rock surface. However, beneath other ovoids, there are evidences of dripping and running (see especially Figures 30, 33 and 45). This suggests that the substance was occasionally fluid enough that it could drip or run, rather than consistently being like a thick paste. These evidences suggest that there was some variability in the fluidity of the substance.

It may be that the indications of fluidity (streaks below the figures) are simply the result of slow erosion by rain. Water trickling down over the material would cause it to streak below the ovoids. That certainly may be possible, however, that would not explain the presence of drips and splatters, nor how some ovoids in exposed locations show no sign of running. A possible explanation for the absence of dripping or running marks below some ovoids is that the substance was thick, like clay, which, as it dried out, formed cracks, then simply flaked from the rock surface.

A peculiar characteristic of several sets of ovoids is that they have a dark outline around them. What created this dark outline is a mystery. These outlines also appear to indicate that the substance in these situations was so thick it did not drip or run.

**Substances that May Have Created Ovoids**

A similar situation that presently exists perhaps explains how ovoids were formed and appears to hold clues for the identity of the substance that created them. At the Hole-in-the-Rock tourist stop south of Moab, the owners painted the name of the site and other information about it, including a large arrow, on a high northwest-facing cliff. As the white paint was applied, it covered over the patina or desert varnish. When the paint eroded away, no patina was left beneath it, as shown in Figure 77. The paint appears to have destroyed the patina. Apparently, something similar took place when ovoids were created. The paint used at Hole-in-the-Rock was likely strongly alkaline, so perhaps alkalinity in the substance that was applied to
the cliff face prehistorically was responsible for creating the ovoids.

Several materials are considered below in attempting to determine the substance that was applied to the cliff face.

**Mud:** The material used to create ovoids was apparently not the typical, naturally occurring mud that exists after a rainstorm, because simple mud apparently applied prehistorically to petroglyphs and pictographs to cover them has not discolored the cliff surface anywhere close to the extent created by ovoids. In addition, many instances exist where the remnants of mortar (mud) from the construction of structures (some near ovoids) is still evident, and no discoloration like that produced by ovoids is present. Thus, the substance used to create ovoids was something other than typical, naturally occurring mud.

**Clay:** A substance similar to mud is clay. Prehistoric people were commonly using clay to create ceramic vessels, so perhaps ovoids were created with potter’s clay. However, this seems to be unlikely, since when the pH of clay was measured, it was not significantly different from normal mud. Clay, however, could have been mixed with something else, which in combination with it could have created the ovoids.

**Cliff Swallow Droppings:** A substance that has created similar features on sandstone surfaces is droppings from Cliff Swallow nests (Figure 78). The color, or discoloration, of the sandstone where these dropping fall is very much like that of ovoids, that is, if the sandstone face below the nests is sloping slightly inward. These droppings also sometimes form rows, since Cliff Swallow nests are also built in rows beneath overhangs.

Ovoids were not, however, created by swallows, since ovoids are found on isolated boulders and tall smooth cliff faces where there are no overhanging ledges nor swallow nests above them (Figures 16, 34, 38, 60, 61, 70 etc.). Additionally, ovoids generally have very distinct boundaries, while swallow droppings have more of an indistinct boundary, especially at the top and bottom. Bird droppings are also alkaline, which seems to confirm that ovoids may have been produced by some alkaline substance.

**Wood Ash:** Another alkaline substance that may have been used is wood ash. The ashes in a wood-burning stove, after burning Juniper and Pinion, had a pH of 9 to 10. Therefore, if ashes were made into a paste, or added to some neutral substance like clay or mud, it may have produced a material alkaline enough to create ovoids.

Additionally, the presence of wood ash might explain the dark outline around some of the ovoids. However, this is probably not likely because if the substance that was being used had charcoal in it, the entire ovoid would be black.

**Paint:** Given the situation at Hole-in-the-Rock, paint appears to be a good candidate for producing ovoids. The chemical composition of paint that might have been used prehistorically to produce the ovoids is unknown, so it is not possible to determine if it contained a substance or substances capable of producing ovoids. Presumably, prehistoric paint that still exists today in the rock art consists of a naturally occurring mineral pigment mixed with a binder. Many substances have been suggested as candidates for organic binders. Whether some of these prehistoric binders together with mineral pigments could have produced ovoids is unknown.

**Blood:** A rather interesting possibility is that ovoids were created by the application of blood to the cliff surface. Blood however has a neutral pH about like that of sea water, so blood does not appear to be a likely candidate; however, blood has not yet been placed on a cliff face to determine what it would do to patination, so it cannot be ruled out at this time.

**Combinations:** Another possibility, of course, is that combinations of any of these substances could have been used. Additionally, there are
 probably other substances that could have been used that have not been discussed here.

**Applied Once or Repeatedly**

As noted above, panels of ovoids appear to have been created both by the one-time application of the substance and by repeated applications. The unanswered question is whether ovoids could result from just one application of the substance or if it took multiple applications to create them. It seems likely that some of the time, the images were created by the application of the substance only once or at the very least, only a few times. If the substance was repeatedly applied to replace that lost by weathering or erosion, it would seem that the lower part of the ovoid would be indistinct, because when the substance was repeatedly washed or eroded down the rock’s surface by weathering, the same effect would be created below the ovoid as it was in the body of the original ovoid. Repeated application would result in the obliteration of the distinct outline at the bottom. The distinct overall boundaries of many ovoids suggest that the material was applied only once or that it was carefully applied only a few times.

A few panels of ovoids clearly show that the material was applied to the rock surface several times. However, in these situations ovoids overlap other ovoids, the edges are indistinct and there are evidences of running beneath them. This appears to further confirm the above conclusion.

**COMPARISON WITH OTHER FEATURES**

Other features in the archaeological record have patterns similar to ovoids. Bedrock metates, for example, are also oval shaped, rectangular with rounded corners, etc., and like ovoids, they are often arranged in parallel rows (Figures 79-81).

Well-known bedrock metate sites, adjacent to rock art panels, are found in widely separated areas of Utah such as: Canyonlands National Park adjacent to the Davis Canyon Faces, in Capitol Reef along Pleasant Creek, in the Uintah Basin along Ashley Creek and along its tributaries and near St. George along the Santa Clara River. It is unknown if ovoids also occur in these locations.

Simple abraded areas with similar shapes and ordered rows also exist. These are found individually and scattered over rock surfaces.

The existence of all these oval and oval-like features, and their ordered arrangements, suggests that our understanding of the meaning and function of these features is incomplete, or perhaps, absent entirely.

**WHO CREATED OVOIDS?**

There are many candidates for the creators of these features. Most of the rock art in this area of southeastern Utah may be attributed to the Basketmaker and Pueblo Anasazi, who occupied the area from about A.D. 50 to A.D. 1300. Roughly, twenty thousand archaeological sites attributed to these cultures have been recorded in San Juan County. Thousands more exist that have not been recorded. In this area, there is also rock art from the Archaic period, as indicated by cultural remains and rock art. Historic Indian tribes (the Ute and Navajo) have inhabited this area for a long time, and they still live here today. The list of candidates can be narrowed substantially because ovoids are superimposed over Archaic and Basketmaker images (Figures 34, 35, 48, etc.). They also apparently superimpose some late Anasazi images (Figures 40, 41, and 72). In one instance, the image of an early Navajo horse was scratched over an ovoid (Figure 7). These examples suggest that ovoids were created by the Pueblo Anasazi culture.

Perhaps the best evidence for dating and cultural affiliation of ovoids is from two sites: Monarch Cave in Butler Wash and Poncho House in Chinle Wash. High on the northeastern back wall of Monarch Cave there are three ovoids. They are high above the bedrock floor (Figures 82a and b). It is evident that they were created
before the large Pueblo III structures, which are just to the south, were built. Mortar is still evident on the cliff face where multistory masonry roomblocks once abutted it, as are beam sockets where ceiling beams or floor joists were secured to the cliff face. These structures were apparently removed by the later Pueblo occupants of the cave. The three ovoids were created when the initial multistory masonry structure existed, indicating that they were likely created in the Pueblo II or early Pueblo III period.

Poncho House has the largest concentration of ovoids I have found to this date. They are on the cliff face high above the present Pueblo III masonry ruins (Figure 83). Like Monarch Cave, there was once a large group of multistory masonry rooms built against the back wall. These rooms were also removed before the present masonry structures of the late P-III period were built. The placement of ovoids above and surrounding these early walls, and not overlaying the mortar from the walls, which is still adhering to the cliff face, further indicates that the ovoids were created by the culture that also built the first multistory masonry walls here. Further substantiating the date of the ovoids is the presence of white pant superimposed over some of these ovoids (Figure 84). The white paint and other white painted figures are clearly late P-III in origin. The white painted figures also are superimposed over mortar from the earlier and now nonexistent walls.

It is evident from these two sites that ovoids were being constructed during the late Pueblo II or early III Period. It also appears that they were not being made during the late P-III period.

**CONCLUSIONS**

Ovoids generate many questions and provide few, if any, answers. The distribution and abundance of ovoids indicates that they were a well-known feature of the culture that created them. Furthermore, their uniformity in size, form and context indicates that they were a standardized feature with a well-defined meaning and purpose.

It seems like there would be no purpose, no constructive reason to create ovals of mud or pigment on a cliff face. What would be gained by creating these simple features? Why are they oval shaped and not round or square?

Perhaps if they were more complete than they are now, or if we had more information about them, we might be able to formulate a reasonable explanation for their creation. It is possible that the substance placed on the cliff face was a substrate for something else, like carved or painted images. Maybe they were decorated or embedded with materials, like feathers, stones or other ritual objects. Since both the material that made them and whatever might have been with them are now gone, we may never know what they were like originally or how they functioned.

One other somewhat unlikely possibility should be mentioned, and that is that ovoids were created when a painted image was intentionally obliterated, i.e., when pigment or mud was repeatedly rubbed over an image. Two Basketmaker images of detached heads in Grand Gulch were covered over and partly obliterated by smearing mud in an oval shape over them. This oval shape, of course, may have been coincidental. However, the possibility that some
image may have been eradicated, resulting in the creation of the ovoids, cannot be discounted entirely.

On the back wall of Poncho House, there are also several ovoids that appear to be more recently constructed than any others discovered to this date. They have white pigment and light colored clay-like material adhering to them. One of these is shown at the top of Figure 84 above the large area of white pigment that was placed over other ovoids. Weather or not these are original ovoids or only where later people added white pigment to them is still under investigation.

One other mystery is why some ovoids have a dark outline surrounding them. No reasonable explanation has been suggested for this feature. (This feature is also prominent in Figure 84.)

This paper has established the existence of ovoids, discussed their perplexing nature and suggested a few possibilities for their formation. By calling attention to the existence of these enigmatic images, it is hoped that further knowledge of their distribution, purpose, etc. might be realized.

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Owen Severance first suggested using the term *ovoids* to describe these images.

Research investigations on Navajo Nation properties were conducted under various cultural resource permits.

NOTES

1. The term ovoid has also been used to describe variously oval-shaped features of rock art in Northwestern North America.
2. The figures here show all of the panels of ovoids discovered to this date.

Map showing location of ovoids, as of this date.
Figures 40-43

Figures 44-47
Figure 77 Hole-in-the-Rock south of Moab showing the effects of paint on patination.

Figure 78. Droppings from Cliff Swallow nests produce discolorations on sloping sandstone ledges that are similar to ovoids.
Figures 79, 80 and 81 (left). These bedrock metates are similar to ovoids in shape and arrangement: The metates in Figure 79 are horizontal, those in Figure 80 are sloping and these in Figure 81 are vertical.

Figure 82a. Back wall of Monarch Cave. Ovoids are high on the cliff face above a row of beam sockets. Owen Severance in Photograph.
Figure 82b. Close up view of ovoids on the cliff face. Outlines of the walls are visible below the ovoids. The ovoids appear to have made by people standing or sitting on the structures that were removed by later Pueblo occupants.

Figure 83. Back wall of Poncho House. Ovoids are present above multi-story room blocks that no longer exist. The outlines of these rooms are shown by horizontal and vertical bands of mortar.
Figure 84. Detail showing white paint from the Pueblo III period superimposed over Ovoids. Also present are Ovoids that are dark, light and outlined.