

LITTLE BLUE TABLE REVISITED

by
John S. Curtis

The Moving Finger writes; and having writ
Moves on; nor all your Piety nor Wit
Shall lure it back to cancel half a Line,
Nor all your Tears wash out a word of it.
...Omar Khayyam

The Equinox

It all began when I joined the Utah Rock Art Research Association in 1988. Soon after I joined, it became the custom for the Utah group to go on an annual field trip to Idaho to view petroglyphs. I, as an active Idaho member became the leader of these field trips. The term 'leader' is used loosely here because I usually spent most of my time trying to keep up with the group instead of leading them. As soon as they were shown a petroglyph region, they immediately swarmed all over the place like ants on an ant hill. Such was the case when we went to Little Blue Table in Owyhee County Idaho. (See Curtis 1990). As soon as I said there were petroglyphs on the rocks near where we had camped, everyone disappeared and I was left to try to find them. I finally located a group of them at a large petroglyph site and included in the group was Nal Morris. He had a computer set up on a convenient rock and was peering through the telescope of a theodite measuring the sun angle or something like that. As a result of his studies, he concluded that a particular panel was a possible equinox site and that the irregular shadow of a portion of the cliff would fall on a particular petroglyph precisely at the time of equinox.

I have been a notorious skeptic of the significance of the 'shadows' seen by many members of the Utah Rock art Research Association (URARA), even suspecting the use of peyote, or something similar, by the viewers. I did, however, decide to return to Little Blue Table on the equinox to see if the site designated by Nal Morris has any special meaning at that time. After examining the panel at the appropriate time, I found nothing of special significance. But while at Little Blue Table, I scouted a nearby site to familiarize myself with its content prior to formally recording the site. One petroglyph panel stood out above all others, not only because of its appearance, which was very fresh and bright, but also because of its content. (See figure 1.)

It has never seemed prudent for me to attempt to interpret the meaning of petroglyphs. The cultural differences between the

maker of the petroglyphs and the interpreter are so great that accurate interpretation seems a very remote possibility. However, the meaning of the petroglyphs shown in Figure 1 seemed so clear, I thought I understood what the unusual panel was trying to tell me.

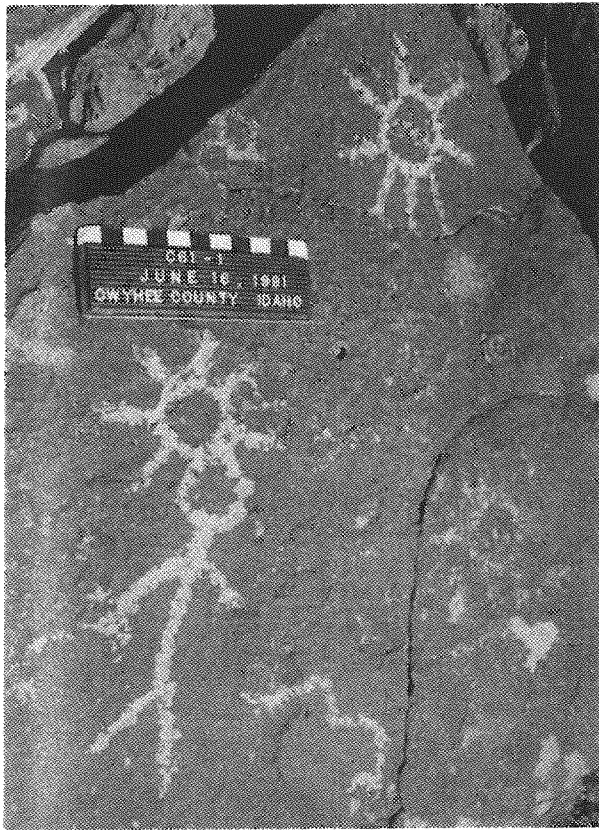


Figure 1
The Sunwatcher Panel

authors and students of petroglyphs have arrived at the same conclusion in similar situations.

Certain petroglyphs are associated with known sun watching sites according to McCreery and McCreery (1982). Among the symbols identified by them as being sun symbols are rayed circles, concentric circles, two concentric circles with a centered dot, and spirals. Warner (1984) confirms this list with the addition of dots. Warner and Warner (1986) indicate that sun-headed figures, which include not those figures with the sun for a head but also those figures with the sun above, on, or near the head as is the case with the Little Blue Table Panel. Warner and Rayl (1990) state "By placing the sun symbol directly on top of the head... It was assumed that it probably identifies solar observation..." While no petroglyph interpretation can be done with absolute certainty, there seems to be a strong consensus that the rayed circle represents the sun and that a sun-headed

My interpretation of this interesting panel is not based on interpretations made by others but is strictly intuitive. I think that the rayed circle (upper right) represents the sun. If you doubt this interpretation, look at any beautiful sunset when the light from the setting sun is broken into rays by distant clouds, or ask any second grade student. In this instance, the sun has eight emanating rays, but when it rests above the head of the anthropomorphic stick figure, only seven rays are visible. (Lower left.) This could mean that one ray is hitting the head of the stick figure and that he or she is probably looking at the sun. The more general meaning may be that this is a place from which to observe the sun. Other

figure is a sun watcher.

A close examination of the sunwatcher panel shows that two other faint rayed circles are on the same panel. Immediately adjacent to the sunwatcher panel is a petroglyph showing three concentric circle with a rayed outer circle. (See Figure 2.) On the cliff immediately behind the concentric circle glyph, is a partially obscured petroglyph consisting of several circles or arcs of circles. Most of this faint glyph is covered with lichens, and hence hidden so the exact nature of the glyph is not known. On a lower rock, adjacent to the concentric circle is a strange symbol. (Fig 3.) It hints at being a rayed circle, but yet it is not, at least in the classic sense.



Figure 2. A Nearby Sun Symbol



Figure 3. A Strange Element near the Sunwatcher Panel.

All of these sun symbols, concentrated in a small area seem to indicate that this is a place from which to observe the sun. They all appear on or near the eastern face of a rather low (12 foot) lava cliff which trends almost exactly in a north-south direction. At this latitude, which is 42 degrees 20 minutes North, the sun does not appear in the north. The cliff prevents viewing the sun in the west. From these panels, portions of the cliff obstruct the view to the south leaving east as being the only direction in which meaningful observations of the sun can be made.

Looking to the east, (Figure 4.) one sees a distant, horizontal, almost featureless horizon to the right, and a nearby, nearly horizontal, almost featureless horizon to the left seemingly connected by a vertical cliff. Talus boulders form what appears to be a small cup at the base of the cliff. The distant horizon and the bottom of the cup coincide when viewed from the sunwatcher panel but appear at different elevations when viewed from above or below the panel.

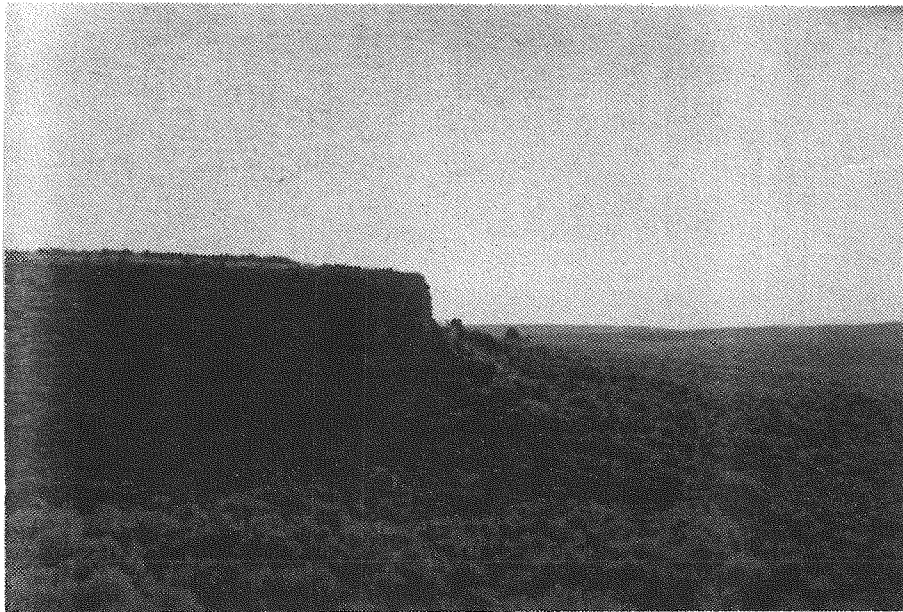


Figure 4. The View Looking East from the Sunwatcher Panel.

If the sun were to be observed in the east from the sunwatcher panel, the only significant time would appear to be at sunrise when its position could be compared to that of features on the horizon. Consequently, on the morning of the equinox, I took my position near the sunwatcher panel and photographed the sun as it rose. I obtained a sunrise photograph similar to that shown in Figure 5. The photograph in Figure 5 was taken a year later than my original photograph and is shown here only because it is more suitable for printing than my original photograph. The sun first appears exactly in the tiny cup at the base of the cliff and it appears to fill the cup.

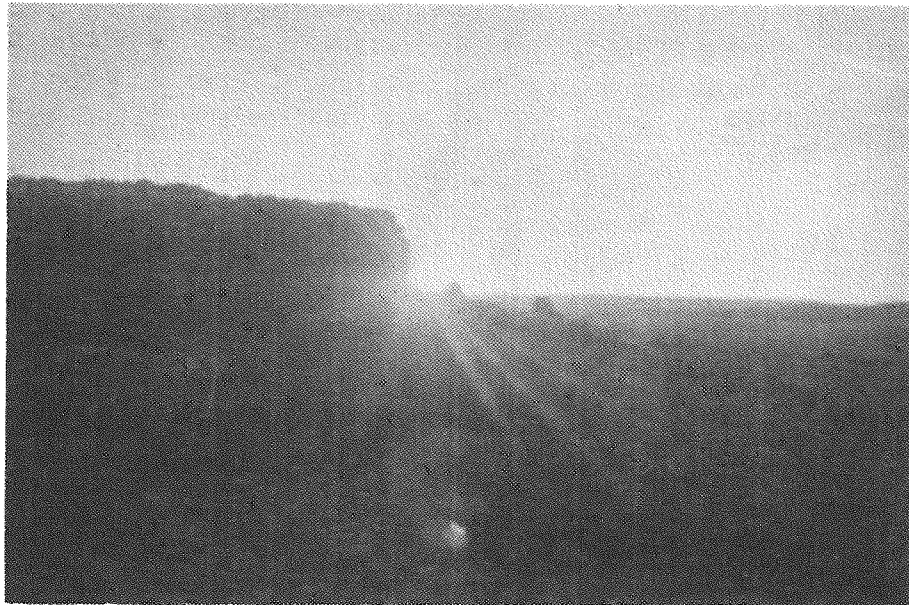


Figure 5. Sunrise on the Equinox.

At the time of the equinox, the position of the sun is moving along the eastern horizon more than one-half degree of arc per day. Since the diameter of the sun is very close to one-half degree of arc when observed from the earth, the position of the sun on the eastern horizon changes somewhat more than the diameter of the sun every day at the time of equinox. The distance moved along the horizon is not constant, and is greatest at the equinox and zero at the solstice. Since the sun fits nicely in the cup at the base of the cliff on the equinox, it is apparent that on a day earlier or later than the equinox, the sun would not appear in the cup.

The Solstice

A few feet from the location of the sun symbols mentioned previously, the cliff has cracked and a six-foot block of lava, roughly in the shape of a cube, has moved away from the cliff, leaving a passageway along two sides of the cube. The width of this narrow passageway varies from eight inches to eighteen inches. Talus boulders have fallen down from the cliff above, some smaller ones falling into the passageway but larger ones lodged on top. Enough boulders have fallen to completely cover the passage way. With the passageway completely covered it has become, in effect, a cave with two entrances. From the entrance shown in Figure 6, the passageway goes straight back for eight feet. It then makes a right-angled turn to the left and goes eight feet out to daylight and the other entrance.

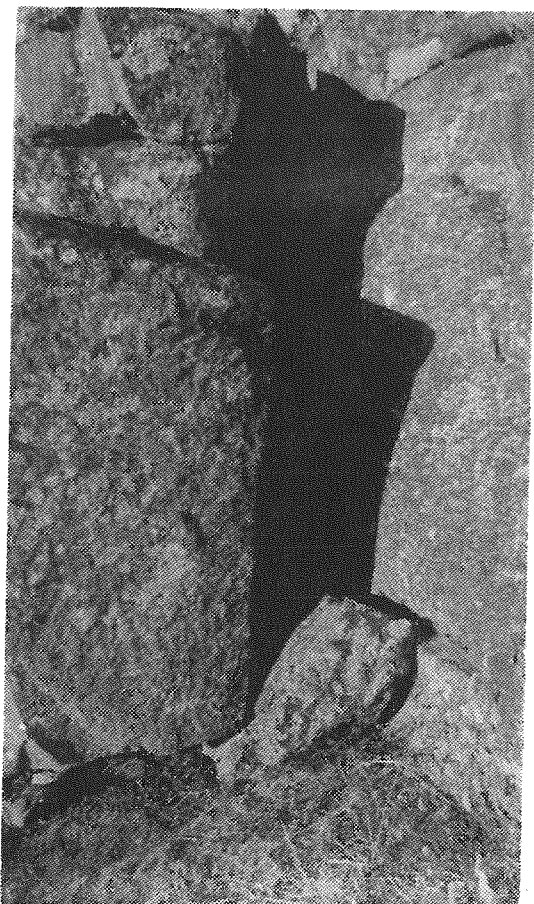


Figure 6. The Entrance to the cave.



Figure 7. Petroglyphs at the back of the Cave.

One day Dr. Thomas J. Green, Idaho State Archaeologist, his three sons, ages 3,5, and 8, and I were on an inspection trip looking at that portion of Little Blue Table in the vicinity of the cave. The three boys were having a great time crawling all over the rocks and exploring every nook and cranny. The eldest, Vance, ventured into the crack in the rock and soon loudly announced that there were petroglyphs on there. Without this fortuitous event this panel would not have been discovered for it was much to tight a squeeze for me to go in there just on the chance that there might be petroglyphs in there. It seemed a most unlikely place to find a petroglyph panel. The petroglyphs which Vance found are shown in Figure 7.

This panel contains several interesting features, the most prominent of which is the group of concentric semicircles in the lower left portion of the panel just above the crack in the rock. There are seven concentric semicircles. Below then and below the crack are seven concentric circular arcs. To the right of the semicircles are seven pairs of deeply incised dots. To the right of them is a vertical line of four dots and the right of this line are five pairs of dots in a vertical line. An enclosed

figure with several horizontal lines and numerous vertical marks lies to the right of the dots. Below the dots a wedge-shaped piece of rock protrudes from the crack a short distance. On this piece six vertical lines have been inscribed. In the extreme upper right portion of the photograph, several deeply inscribed marks are visible. It is not clear whether these marks are natural or man made. Currently I am leaning on the side of their being man made.

After squeezing into the narrow passageway and making sketches of the glyphs, (it seemed to dark to get a decent photograph) I gave them little more thought until I returned at a later date to record the large petroglyph site. The date was June 16, 1991, just a few days before the summer solstice. I recorded panels starting with the sunwatcher panel mentioned above. After recording about fifteen panels and becoming bored with my occupation, I decided to look at the hidden panel again to check the accuracy of the sketch which I had made previously. The light was different now than it was when I made the sketch and I felt that the design might possibly show up better in the different light. To my great surprise, a shaft of brilliant sunlight was entering the dark recesses of the narrow cave making a bright spot of light on the panel in the shape of a clenched fist with an extended forefinger. The long forefinger pointed exactly at the top dot in the right-hand row of dots in the double row of seven. I watched with wonder as it carefully pointed, one by one, to each of the seven dots in the row, then merged with the larger spot of bright light above it and moved off the panel.

The next day I returned to the hidden panel to photograph the strange phenomenon. I had been so intrigued and amazed by what I had seen the previous day that I had forgotten to look at my watch and check the time... I did know that it was near 1:00 P.M. Arriving early, I took the first photograph at 12:15 Mountain Daylight Savings Time. (See Figure 8.) The spot of light on the wall bore very little resemblance to the spots seen the day before. A second photograph taken at 12:40 (Figure 9.) still showed nothing similar to what I had seen the day before. From the direction of motion of the spot of light, it was apparent that it would not touch the panel on the places I had seen touched the day before. I began to suspect that I had been hallucinating.

At 12:45:45 a tiny spot of light appeared below and to the left of the large spot. (Figure 10.) It rapidly grew and formed the hand and finger seen the day before. At 12:49 the hand neatly cupped the large dot above the double row of 7. In less than two minutes, it moved down the panel and pointed at the first dot in the right-hand row of the double row of 7. The finger then moved down the row of dots pointing to each one in turn and lingering at each dot for little more than a minute. Figure 11 shows it pointing at the second dot in the row and

Figure 12 shows it pointing at the last dot the row.

The entire excursion of the finger from the first dot in the row to the last one took just under ten minutes. When it left



Figure 8. Spot of Sunlight
12:15 PM MDST

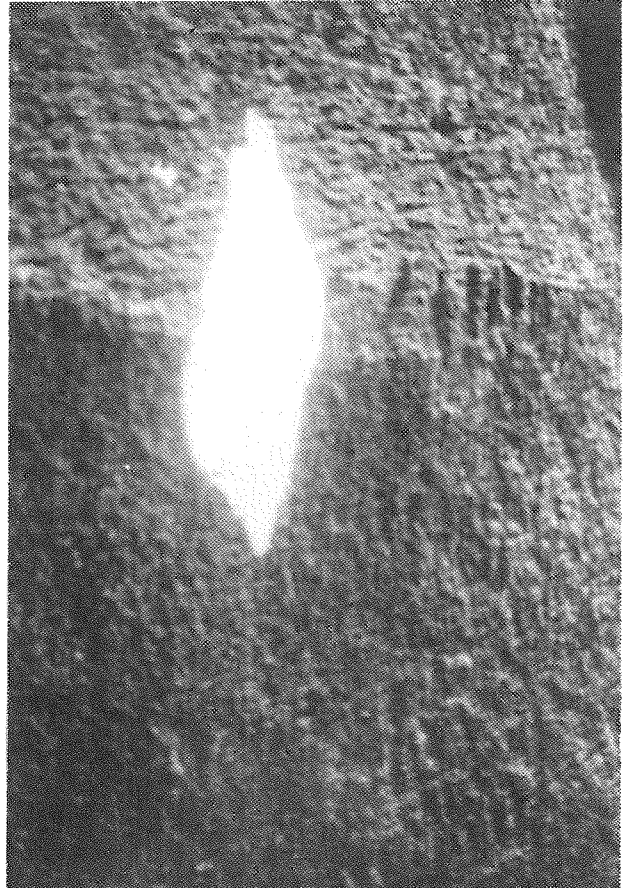


Figure 9. Spot of Sunlight
12:45 PM MDST

the lowest dot, the finger moved down the ledge formed by the little wedge of rock where it stalled until it merged with the large spot of light. It then moved to the right along the ledge and then down and off the panel.

The summer solstice in 1991 occurred on June 21 at 3:19 in the afternoon M.D.S.T. The solstice photographs presented in this paper were taken on June 17, four days before the solstice. Therefore, they cannot honestly represent a solstice record. However, the summer solstice is the time when the sun stops its northward movement in the sky and reverses direction. This reversal is not abrupt but very gradual. Thus, there is very little movement in a north-south direction for several days prior to and following the solstice. It is doubtful that there is a detectable difference between records such as these, taken four days before the solstice, and those taken on the day of solstice. Any differences which might exist would be minute.

Six weeks following the solstice, I revisited this site to

see if the pointer was still there and what it was doing. It had broadened and moved about a foot to the right on the panel but nothing of significance in its action was apparent at this time.



Figure 10. Spots of Sunlight
12:45 PM MDST

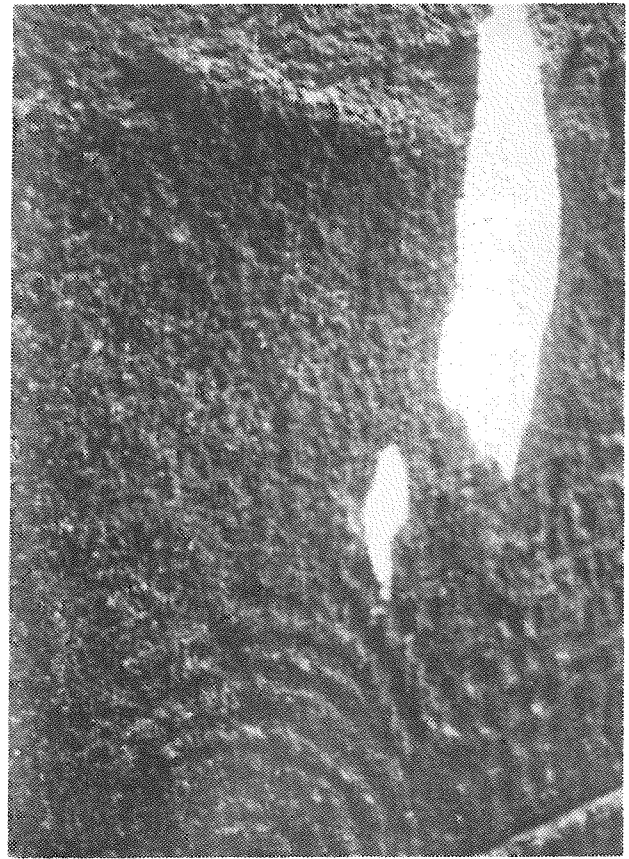


Figure 11. The Pointing Finger
12:53 PM MDST, Pointing at
the second dot in the row.

The accuracy with which the date of solstice can be needed before this question can be resolved. It is possible that the time and location of the first appearance of the small dot of light will provide means for removing much uncertainty. Very small differences in the location of the sun in the sky may result in large changes in the location of the dot when it first appears. With no refinement of technique, it is felt that the time of the solstice can be determined within a few days. Unfortunately, the data necessary to refine this determination can be gathered only once a year.

Discussion

It is not known with what accuracy the previous inhabitants

of Little Blue Table kept a calendar. It is also not known whether they were concerned with knowing the precise day of the equinox. When viewing the sun from this site, the timing of the 'event' is influenced by several factors. The first uncertainty is the event of being timed. The position of the sun could be

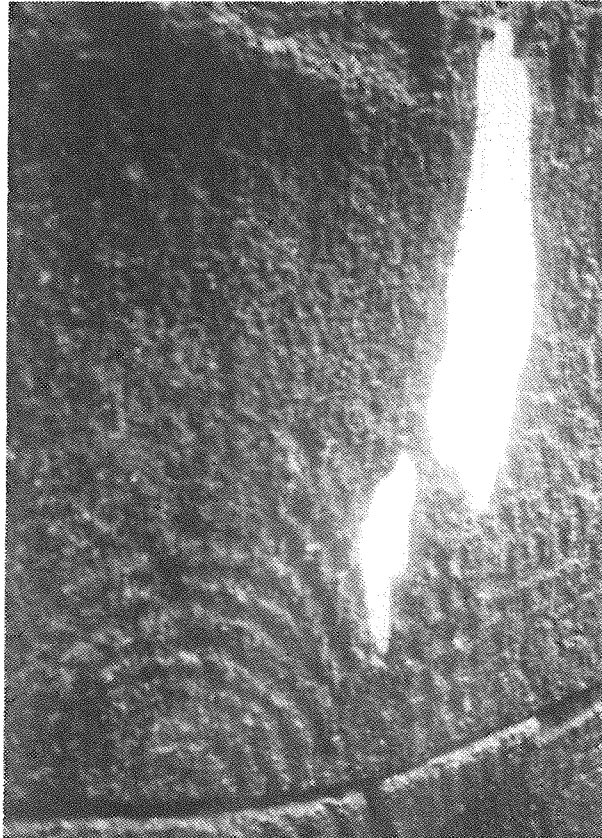


Figure 12. The Finger Pointing at the Last Dot in the Row.
at 1:01:30 PM, MDST.

observed 'falling over' the top edge of the cliff. Each of these would be a reasonable event used to time the equinox. Observed from the same precise location, the difference in time between the first and last of these events would be about 5 days. It was assumed in this paper that the appearance of the sun in the cup was the event being timed.

The precise location of the observing point also influences the timing of the event. Moving the observing point 5 feet in a north-south direction changes the timing of the event one day. Since the site extends a distance of 25 feet along the cliff, an uncertainty of 5 days is introduced. A further uncertainty is brought on by the changing position of the sun in the sly. While this is a very small factor, it is not negligible. Over the span of time when the Little Blue Table has been occupied by humans, the timing of the equinox when measured at this site could change by as much as one day.

It is known, that at this site, once the date of the equinox is established that this date can be determined each following year with a precision of plus or minus one day by observing the same event from the same observing point each year.

The hidden petroglyph panel presents a larger challenge. It is a rather complex panel consisting of several lines of dots, semicircles, circular arcs and a rather complex design. At this time only one row of the double row of 7 seems to be significant. The purpose of the remaining element is unknown.

The petroglyphs are deeply incised in hard basalt which means that a very substantial effort had to be put forth to make them. The quarters are very cramped and the petroglyphs are very near the ground level so the petroglyph maker would have to be in a very uncomfortable position to make them. With the obvious difficulty with which they have been made, it seems likely that every dot and line would be significant. Since it is known that the site is an equinox and summer solstice observation site, a logical time to observe this site would be at the winter solstice. The site may be difficult to access in late December because of its six-thousand foot altitude and poor unimproved roads, but an effort will be made on the coming winter solstice to visit it. If it can be established as a winter solstice site, it will provide evidence as to the time of occupancy of this area.

Conclusions

With respect to the equinox determination, we cannot be sure that this site was used to determine the precise date of the equinox. With the viewing position uncertain and the landmark with which the position of the sun was compared uncertain within a span of four or five days. What is certain is that a selected date can be determined each year with a precision of plus or minus one day. If the cup at the base of the cliff is used as the landmark, and if the observation site is at the entrance to the solstice cave, the date determined will be the equinox.

With respect to the solstice site, the coincidences are too great not to believe that the hidden petroglyph panel was used to mark the passage of solstice. In this instance, we have the strangely shaped spot of light which only appears near the season of the summer solstice, moves across the panel from left to right, and disappears. The maximum excursion to the left is marked by a row of dots and when the pointing finger returns to the row of dots, we know that another solstice has arrived.

The most reasonable conclusion which can be reached to explain the meaning of these events is that this site was a solar observatory used to set or maintain a calendar.

References

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