

SYMBOLIC SOLAR INTERACTIONS
AS A NEW AND VALID RESOURCE

BY

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In the world of archaeology there is a limited number of standard resources that contain the kinds of information that when processed will produce valid, viable, concrete data. To some of the old standards such as architecture, lithics, ceramics, textiles, basketry, and human remains have been added; Tree ring and C-14 dating, Obsidian hydration, Pollen analysis, DNA and on to new and more high tech methods of dating, examining and processing various materials. Each of these that have been added one by one to the archaeologists bag of tricks help him to obtain new or additional information that was previously unavailable. These additional sources help to create a more complete and accurate interpretation of various types of evidence left by past cultures. Because of their ever increasing usefulness he has gained a dependence on all of these resources. Archaeology has now become so dependent on these that now without being able to obtain the different kinds of information from one or two of them, they now feel that their research is incomplete, or lacking in that one more piece of support or new insight.

As each of these were being added to what had become the old guard of techniques, there were always those who were reluctant and skeptical of the abilities of the new technique on the block to perform. And there is justifiable skepticism in some cases in that some new techniques such as some types of dating were found to contain some serious flaws that were discovered after the hoopla of their original introduction was over. The idea seems to be that few are ever as good as they have been hyped up to be. For those who are interested in "rock art," there has always been that lack of understanding for why the "professional," doesn't want to use these remains to help them in their work of reconstructing the past. For those who have been raised in the field of archaeology, rock art contains far too many problems that the amateur enthusiast too often complicates and accentuates. To the archaeologist who lives in a quantitative world, where everything must conform to standards of variations to be accepted as a valid candidate for every things from style identification to the function of the object, rock art has only provided a nightmare that is far scarier

than anything Stephen King could have created.

Relatively speaking, here in America, it has only been very recently that petroglyphs and pictographs have received any significant or serious degree of consideration let alone credibility. Even though they are still coming into their own area of research there still remains those traditional skeptics that have no choice in their minds but to refuse to look at the validity of the evidences that this new area of concern can provide. And even before we have allowed those who will, to look at and to chew on all of the thousands of recent papers of those who have jumped onto the "rock art" band wagon, we throw another aspect into the works for them to consider. Archaeoastronomy, one specific type or application of symbol usage that is verifiable and now fairly well accepted by many in the field still chokes many professional archaeologists.

Now there is another area of investigation, a newer aspect of what was previously called archaeoastronomy that a few of the archaeoastronomers are even refusing to seriously look at. That avenue of research may take a little longer in its struggle for independence. Archaeoastronomy, is primitive, naked eye astronomy that deals with observances by ancient man and their involvements with heavenly bodies. That only contains a small amount of what man did with these "stone stories." What I have been doing from the beginning of my research, in observing light and shadows that move across symbols has been referred to as archaeoastronomy for some time for the lack of a better term. But it didn't fit into that definition in the beginning and it fits even less now. There are a few that refuse to let us have our independence and still try to force us into the Archaeoastronomy cubby hole. The problem is that it will never fit even if it is pounded in with a larger hammer. Being a larger, round peg, and punched into their smaller, square hole doesn't make it conform to that definition or the techniques of archaeoastronomy.

What I have come to call this area of investigation in several previous presentations is Symbolic Solar Interactions (Here after SSI). Watching shadows move across the rocks in just a calendrical sense to determine a time of the year or a difference in time is close to astronomy, since that still falls within the definition of measuring the movements of heavenly bodies. That is a part of the definition of astronomy. But what I do is not calendrical. In 1987, at ARARA's St. George Conference, Von Del Chamberlain, Director of the Hansen Planetarium in Salt Lake City, Utah,

publicly congratulated us for slaying the Dragon in Black Dragon Canyon and winning the prestigious Castleton award and then severely condemned us for resurrecting the panel "in the form of another dragon, an archaeoastronomical one." The reason I believe he did that is that he didn't understand exactly what we were doing because at that time he was looking at what we did as an attempt at identifying their ability at defining time. That wasn't our intent at all as was stated in a paper published by URARA on that site in 1985 prior to his condemnation in '87 (Warner, Warner 1985, 1994). The '94 paper was presented in Santa Barbara, Cal. in '85).

At that time, however, I hadn't totally defined what it was that I was doing that wasn't archaeoastronomy. In Chamberlain's presentation at the ARARA Conference in St. George in '87 he challenged us to go out on April fools day or a birthday and watch shadows (Chamberlain 1987). We did, as well as Memorial day, Easter, Labor day week end, etc. etc. and we still saw things happen. Thanks to Von Del, we discovered their marking time with a 1/16th date as well as with 8ths.

There is the watching of shadows that are purely calendrical, that is dealing with the concepts of a calendar. And then there are those types of interactions that do not deal with the calendar pulse, but do function on special calendar dates. These I have chosen to call symbolic, since a shaft of light coming from a mouth or a groin can be equated more to the picture at the top of the calendar or the notations written within the dated box (that is analogous to the action or activity that took place on that day or that involved the "rock art"), rather than just or only the number that is stuck in a little cubby hole at the bottom of the calendar page. That in a nutshell is the difference between the two. What I am more interested in is the action, activity, or the social-ceremonial function of the solar interaction rather than simply the day that it happens on.

For instance, let's say that X number of interactions of one particular type took place on Equinox verses a lessor number of that same type that occur on Winter Solstice. That information does have an importance, but it doesn't tell us what I believe I have tried to illustrate. What I have tried to illustrate is that there is a far greater potential from watching light and shadows on rock art. What I am looking for is the greatest potential that there is of learning from this different area of investigation. There is nothing wrong with doing the calendrical as long as the SSI are also recorded. Calendrical research needs to be done. To

maximize my time and effort and the amount of information that is retrievable, what I am looking for are areas, variations and limits of concept associations involved with solar interactions, not just calendrical statistics. The statistics can always be pulled out of my research later. In fact John Fountain, an astronomer associated with the University of Arizona Lunar and Planetary lab at Tucson, Arizona spent a week and went through many of my files to pull out much of that information.

A symbol is a thing one knows that suggests something else by reason of relationships, associations or conventions. Thus without that knowledge we don't always know what a specific symbols function or meaning really is, unless there are other extenuating circumstances present. In Archaeology there is a preoccupation with cubby holing. Everything needs to be put into a place. If it is unidentifiable, it often gets stuck into the "Ceremonial object" cubby hole. That is often the butt of many jokes. "Rock art" or other symbolic remains often have the unique ability to take the unknown from out of the realm of material culture and place a tag onto it. When an object in the realm of material culture whose exact function isn't certain, and can be identified in "rock art" when it appears in a concept association it's function or an associated concept for it's use can be established (McCreery 1992, Patterson 1992, 1993, 1995). In that respect "rock art," can be a valuable tool.

What rock art does to or for archaeology, Archaeoastronomy and SSI can do for rock art. In other words when an unknown exists in "rock art," watching forms of light and shadows interplaying with it in a purely calendrical or purely symbolic nature can provide different aspects of a whole new area of information previously unavailable since that information wasn't painted or pecked on the wall and never survived in any other form of material culture. But the amount of information that shadows can provide, relatively speaking, seem very limited within the calendrical realms. On the other hand, however, there seems to be no limits to the kinds of information and the variety of things that can be done with the use of light and shadows (SSI) and how they interact with a wider variety of symbols in the symbolic sense. In the symbolic realm there is no limit. There may be a limit to time, but not to symbolism.

Artifacts do not reveal, predict or manipulate time. Rock art as an artifact, in and of it self, as well does not reveal, predict or manipulate time. The manipulation of some types of rock art

figures with light and shadows can mark or join a specific time to a place in a specific space. To those symbols then time and space become one continuum. And that information does not find its way onto a site form. That is basic archaeoastronomy. The types of interactions that associated figures may have that portray symbolic concepts do not just or simply reveal, predict or manipulate time as such. The types of SSI on them can and do reveal, predict and manipulate time, but there concern is not just time, but symbolic actions and concepts associated with time and space. Up to now with traditional Archaeoastronomy you are, more than not, just left with time, but without what the time is associated with that is beyond the concept of time itself. SSI fill in the rest of the story about time with contexts and concepts that provide denotations or connotations that are absent in both archaeology and archaeoastronomy. Therefore SSI have two up on archaeology and one up on archaeoastronomy.

It is not always possible for an artifact to tell us its function. For example the chipped crescentic objects found around many of the pluvial lakes in the Great Basin. They have totally illuded the professional as to what they were made for. They have been suggested to have been used as scrapers, stingers, nose plugs for pierced nasal septums. They have been suggested to be object of witch craft or objects supposedly shot into a victim that a sucker would then have to then suck out. They have been thought of as gaming pieces, or divinitory objects cast to divine spells. What are they? That's another paper. What about Fremont balls, those odd, or exotic assortment of gaming pieces, other odd objects that are totally baffling that are labeled "ceremonial objects" and even clay figurines etc. etc.?

That is the same thing that happens when one tries to use rock art symbols alone as an artifact, to be quantitatively measured and then left to sit on a shelf to collect dust. What else can you really do with them before the recent push to make rock art definitive? As several have said the examination of another arrow head, pot shard or pit house will not tell us who or what the Fremont really were (Madsen 1989, Nielson 1987). As an example of that look at the left personage in Figure 1. The graphics tell us relatively little. The only thing that separates the big guy from any others in time is his head treatment. He is a special subcategory of the Classic Vernal style. An analysis of his particular head treatment suggested that he had an affinity to the Classic Vernal Inverted Bucket Head style. There is a fair amount of variation in that type of expression, but the main form with two

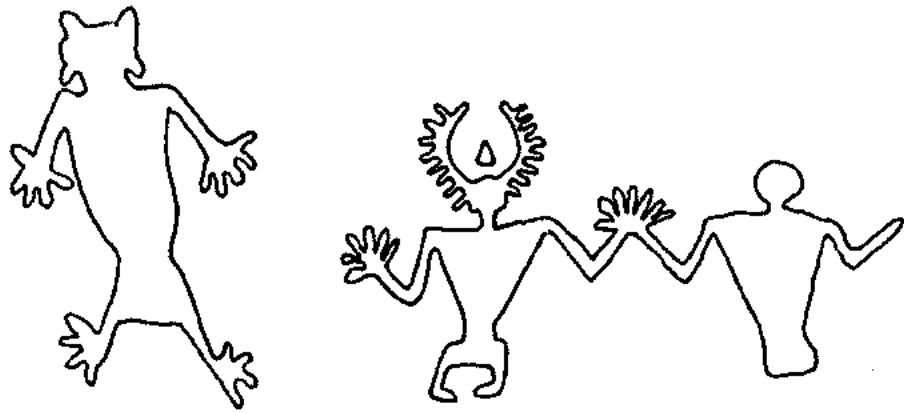


FIGURE 1

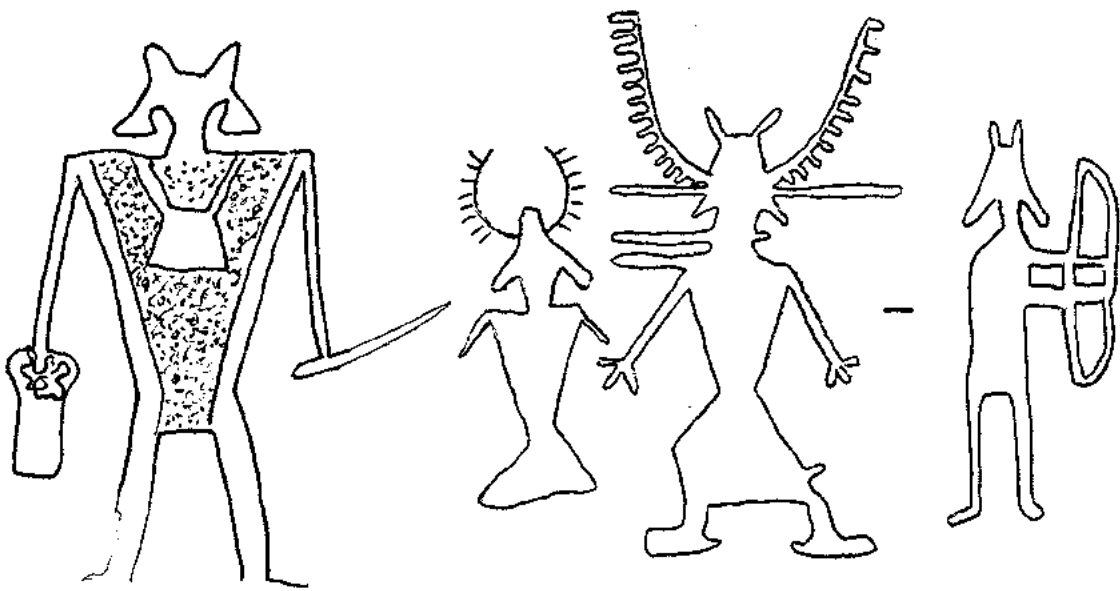
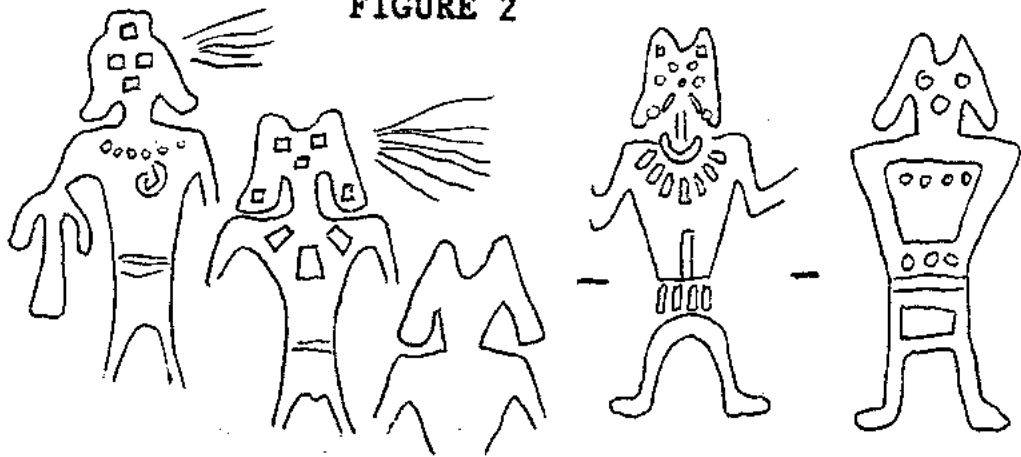


FIGURE 2



upper and two lower lobes has maintained enough anonymity to allow it to become a convention and a hallmark of that substyle (Fig. 2).

But what else can we say about him? He remains as mute as any unidentifiable artifact as far as his purpose for being is concerned. He is one of three individuals, a part of, yet apart, since the other two hold hands. He is also larger. What can this artifact tell us about the ones who made him? If just or only treated as an artifact it tells us a size, a shape, a context, a head treatment and various aspects of technique. But without a stratigraphy, any accurate dating, social insitu context, etc., what does all that reveal? Very little. There is no real substance in that information at all.

Ok now, what can the archaeoastronomer tell us about him? Since that is a viable area of research now, what could they add to our existing laundry-type list of information about them? Without prompting them, they would probably tell us nothing. Why? Because they wouldn't even consider that panel for a possible calendrical interaction, and wouldn't probably try to stand in front of it to see if it would mark a distinctive place on the sky line where they may or may not have "coincidentally" watched some heavenly body. Ok, let's say they did do that. Let's even say that these figures stand in a very special place that marks multiple dates and times on the horizon as well as on the roof of the cave. Ok then, what does that tell us? Simply that they marked those specific dates. Ok, then what? Big deal. Chalk one more up for a Winter Cross Quarter sun rise, an 8th date (which very few know about or even recognize) and a Winter Solstice sun rise and or sunset position.

Ok now I really want you to grasp the fact that now we really know what he was, and we really know what he was doing, right! But how much do we really know now than the average width of line, relative size of figure, appendage expression and head treatment, etc. told us? I mean, we really know him now! Right? He is a sun-watcher, a Fremont (?) sun-watcher.

Just around the corner from those figures there are about 40-50+ odd figures that were placed to mark every possible date for the sun to rise or set so that they could tell all of those times that they needed to know as well with a great deal more conclusiveness. So what do those figures add to that existing information? It only adds that those with that style head treatment watched the sun as well. But we already knew that from other observations.

Archaeoastronomy has added only a little more to the knowledge that the site survey form gave us for these figures. It also added to the mystique of their persona. But what do we really know about them? Not a whole heck of a lot more.

Ok, then let's put SSI to the test to see if we can tell more about what a figure really is than what Archaeology or Archaeoastronomy can tell us. On Winter Solstice a shaft of light comes out of the face of the left figure (Fig. 3, line 1). That shaft of light then moves down from his mouth to his left hand, and moves over to the hand of the figure standing next to him. From there it changes direction and moves up to that figures mouth (Fig. 3, lines 1-3, 5 right). As that is happening another, second shaft of light comes up to come out of the bigger, left figures right hand and then it moves up to his mouth so that he seems to speak with light twice in a sequential interaction (Fig. 3, lines 4-5 left). But at the same time that he speaks the second time, the figure next to him also speaks, as well as the next figure over. All three speak with light at the same time (Fig. 3, lines 5 right and left).

Now what do we know that we didn't know before? Speaking with light or what ever that light may represent, or may represent with those positions is a very, very important and powerful thing. And to have that light move from ones mouth to ones hand or from ones hand to another hand and then to the others mouth is highly symbolic of a doing, a speaking, an intercourse of powerful conversation. That is a very phenomenal situation that suggests the symbolism of a transferal, a giving or a receiving. And then there is the majesty of three beings that speak at the same time. That is rare and a phenomenal situation by any means observed so far with the more impressive SSI. Even though we see them doing that we still don't know exactly what they were doing, but at least now we have a knowledge of what actions or activities they are involved with that denote certain kinds of things and connotes others. That is only a part of what they are doing, but it is a large part of what they are doing. Also notice that it was not only the hand of the middle figure that marked and took advantage of the position of the change in the direction of the movement of the point of light. Another change in the direction of the light was marked by the middle figures mouth as the light moves back in the direction that it originally came from (Fig. 3, line 5-6). That is a tremendous use of power that archaeology parse and archaeoastronomy can not in any way shape or form identify, but that is the type of things that SSI seek to identify and record.

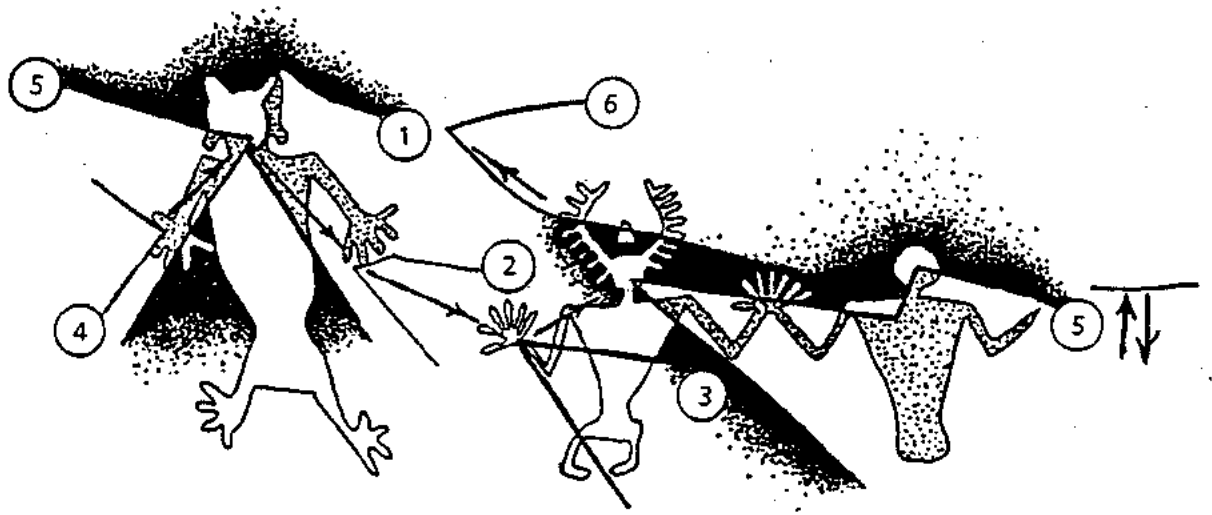


FIGURE 3

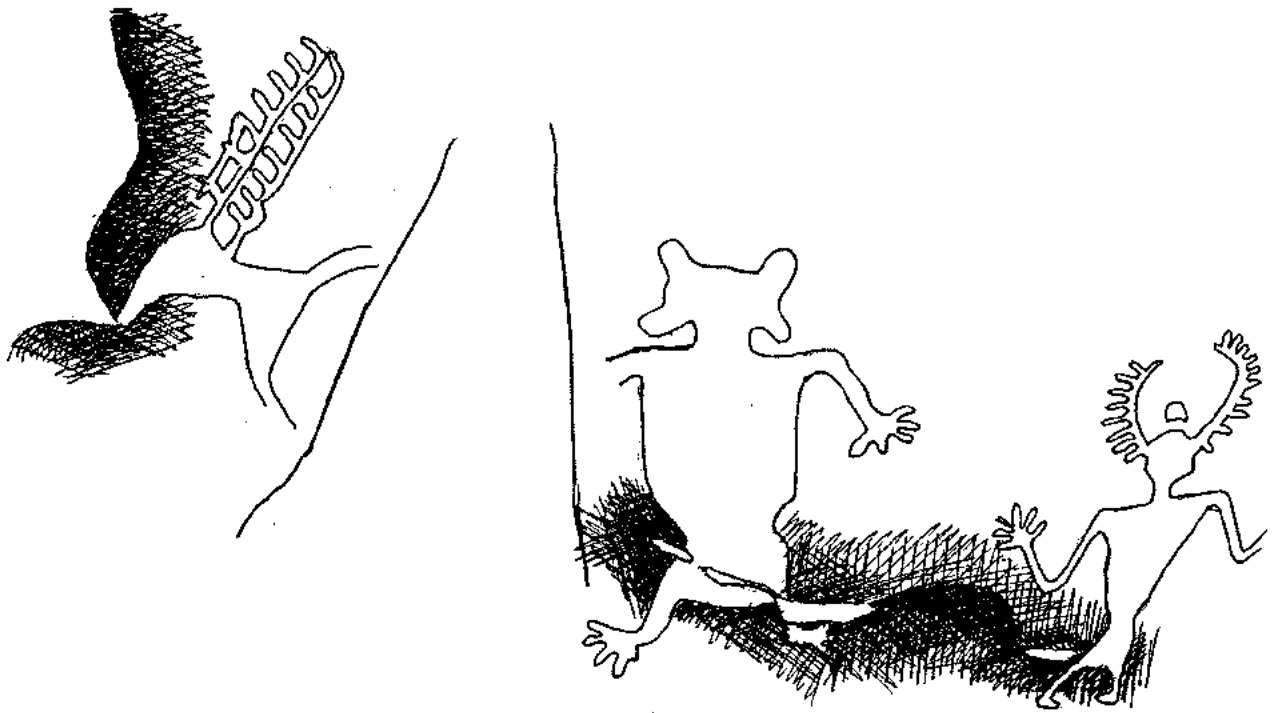


FIGURE 4 A.

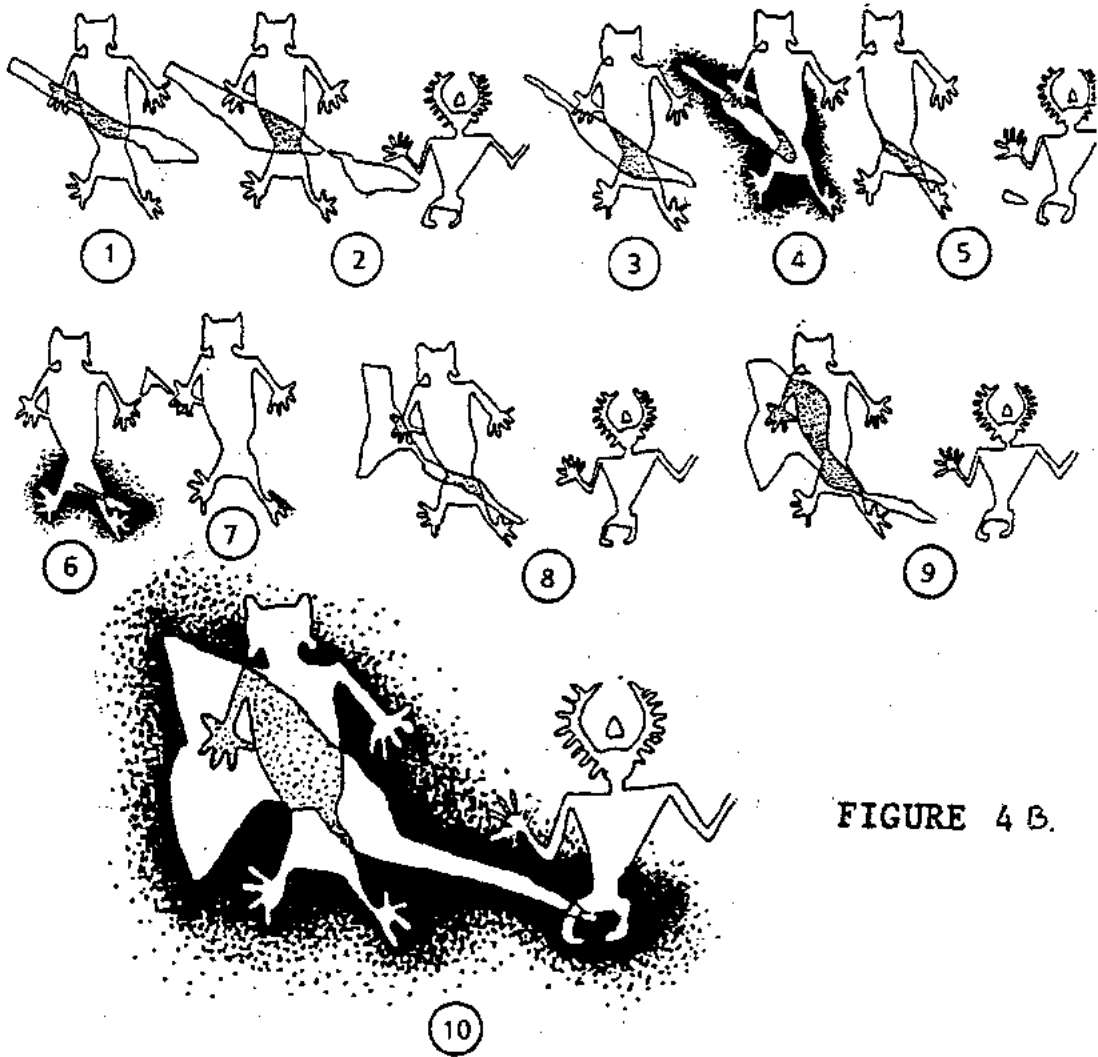


FIGURE 4 B.

But like these figures could be multiple indicators of observing a time on the horizon, they also act out another scene in this cosmic play. On the Winter Cross Quarter (about Nov.-Feb. 6-7th) the sun is higher than it was at Winter Solstice so the shadows and light interplay is lower. From that position the larger figure is provided with a sexual identification with a phallus of light which adds more to his identity and mystical persona (Fig. 4 B, lines 1,4,6). But that happens as a deer just to the left also speaks with a shaft of light (Fig. 4 A). The deer speaks as another set of theatrical events begins to take place. The shaft of light that obviously suggests this personages phallus at several different moments and positions is more than life size, it seems supernatural before it becomes more proportionate in its relative size. It moves across the cliff from his groin into the groin of the figure next to him (Fig. 4 B, line 10). That category or type of interaction provides a sexual identification for that figure as well. It also provides a new and vastly different context and associated concept. But what does it represent? Is carnal desire or gratification a part of that? Is he no more or no less than graffiti, no different than that found on a bathroom stall, like the so called "pornographic" figures at Rochester Creek? No, he is not pornographic nor graffiti, and yes he is related to the figure with a phallus of light at Rochester Creek, Clear Creek Canyon, 9 Mile, Nampawep, etc. etc. etc.. Even though all of those are different representations and are all different styles and times and places, I believe that they all share a common thread in their concepts. I believe that we can say that he also fits into the convention of a Divine Canubium, that is not pornography.

Alright now, what is more apt to teach us more about who they really were and what they were really doing? The archaeological record or site form if we are fortunate to have had a recorder who was more conscientious and dedicated than most who would only record a few things such as how tall he is, the average width of lines, width and placements of his appendages, the number of fingers that he has, his type of head treatment, etc.. As mentioned that tells us relatively nothing about him. The fact that the hand holders share a 6 fingered hand and they are painted white with a type of paint that is by normal standards no more than a poor quality wash doesn't tell us who he was except that he is whatever we poorly label Fremont (what ever Fremont is we still don't know). Whatever, he is assumed to be of some importance.

The archaeoastronomer would probably tell us nothing about him

because they only look at "calendrical symbols." But using their techniques we learn the fact that he stands there and looks out to see some very beautiful and some very theopic or mystical sunrises and sunsets on very sacred days. If they had discovered that, they would quickly add the fact that he was probably a great sun priest, or similar type of character, one offering devotion to the sun on those dates that he was trying so devoutly to anticipate. Is that their best shot? More or less.

SSI on the other hand provided much, much more information. And what is so nice about that information is the fact that a simple description of the interactions is a sufficient interpretation in and of itself without us having to impose our own biases. It in a sense validates itself. To the Archaeologist he is a "Fremont." To the Archaeoastronomer he is a Fremont "sun watcher", a man of letters so to speak, a man of science as well as religion. And to the ones who choreographed this production as only revealed through SSI he may have been the Sun God himself, of course a "Fremont" one. He seems to be engaged in one of the most important, pan-american mythical events in the history of the Americas. It is possible that he represents the father and is in the act of conceiving the Hero Twins. There may be no way to prove that he represents the Creator God, the one represented by the Sun as usually represented in that story. But the archaeologist can't prove that chipped crescentic objects are scrapers, stingers, noes plugs, things to be sucked out of victims or any other thing that has no verifiability either, yet that is what they suggest. Yes, the Nez Pierce put plugs through their noses, and suckers use slight of hand and suck out witch objects, everybody uses gaming pieces and many use objects cast to divine etc..

I seriously doubt that these crescentic objects fall into any one of those categories. Come on now, and many get mad at any rock art interpretation, even of the slightest little things. Those ideas about chipped crescentic objects are sheer conjecture and speculation, and these "interpretations" about who these figures really are, are based on some actions that they created without actually creating it, that was the doing of not doing. And they were suggested by Native Americans not I.

What is so nice about SSI is that one should not accept any newly identified type of SSI as a viable concept till it repeats often enough to be a convention by the definitions of rock art researchers themselves. A convention is a motif (or in this situation a specific type of SSI) that repeats often enough with

minimal variations so that it is identifiable in all parts of that style area. We are using the same type of "scientific" procedures as any other type of investigation that deals with "rock art" or archaeology.

By using the same types of practices and procedures that make archaeology a Science, we can make this just as much or just as valid a science, even though archaeology is not repeatable like an experiment in a lab, SSI are verifiable because those experiments, so to speak, repeat by themselves so that we can see the same experiment in operation over and over again with the same results as the seasons revolve around and around if we watch them at the same periods that the original observations were made. And we can see other repetitions of those same types of interactions with slight variations that add more to the story.

There are many other panels that could be used to help illustrate these points, but this is enough. Examining any more at this time would only belabor what we have already labored hard enough. It is gratifying to see that after my first presentations of SSI in any great detail at the International Rock Art Conference (IROC) in Flagstaff, hosted by ARARA, that the professional response was very well received. I have now been in communication with several other researchers who want to find out more about this type of information and to get additional information. The work is slowly moving onward with more who are willing to do what Von Dell Chamberlain said that the Indians themselves wouldn't do. The gist of what he said was that why would they sit there watching shadows all day long in the hot sun annoyed with dozens of horrible insects when all they would have to do is watch the sun on the horizon and then go on about their business.

That attitude is as bad as the one who took us to Chevez Pass at the IROC Conference, who helped record the site for the BLM. While we were eating lunch I pointed out two very impressive calendrical interactions (not SSI) to her that she could see from where she was sitting, but she refused to even turn around to look through a V shaped grove that would have allowed a corresponding V shape of light to come out of the center of a large spiral on the other side at sunrise on Summer Solstice. After questioning her about what she recorded there and asking her why, she responded with something like she wanted to make a more holistic report. When asked why she didn't record any of those possibilities, her only response was that she didn't know if they did that kind of thing or not. That kind of biased attitude has no business

recording rock art. Any skeptic that has gone out to watch shadows with us has never returned a skeptic.

Go out and watch your favorite panels (If they are in the open) and if you never find anything let me know and I'll be glad to take you out to dinner. But before I'll do that I want to see all of your slides of all the shadows that move across them on Summer Solstice, the Summer Cross Quarter (about May or Aug. 6-7), Equinox, Winter Cross Quarter (about Nov. or Feb. 6-7), and Winter Solstice, with both the morning and evening shadows. And if something happens that I can verify, I wouldn't be so bold as to ask you to take me out.

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