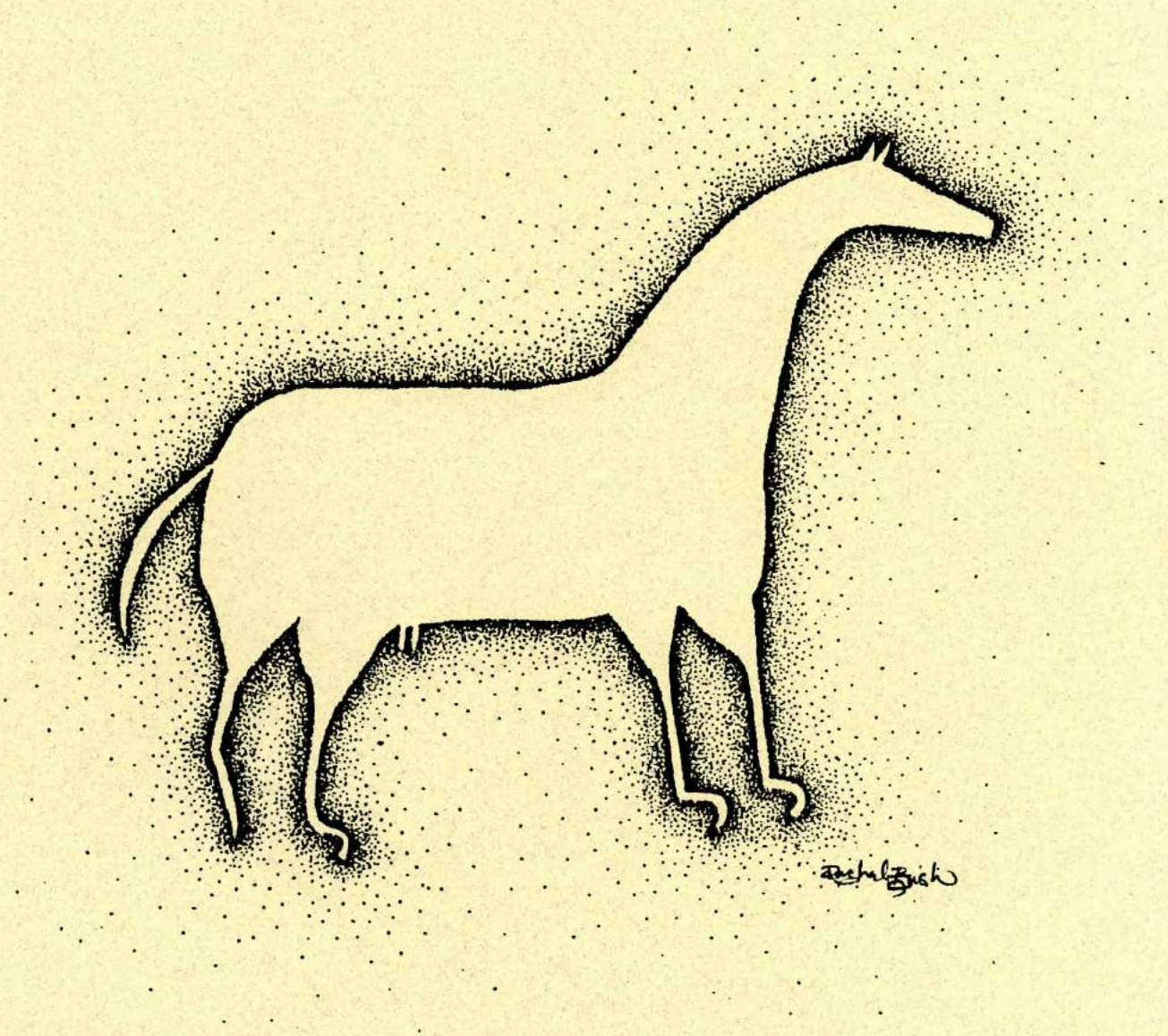
VOL. I



# PATINA

AN INTERIM PUBLICATION OF THE
UTAH ROCK ART RESEARCH ASSOCIATION
JUNE 1993

# Patina

# Volume I

**An Interim Publication of the**
**Utah Rock Art Research Association**
**(URARA)**

**Salt lake City, Utah**
**1993**

Compiled by Vernon E. Bush

Published 1993 by the Utah Rock Art Research Association
Second Printing August 2001



Printed in the United States of America.

# *Patina:*

***A surface appearance of something grown beautiful especially with age or use.***


jibush
©1992

## TABLE OF CONTENTS

Cover illustration - Southeastern Colorado Horse petroglyph, by Rachael Bush

III. Table of Contents

V. PREFACE
Vernon E. Bush

1. WHERE HAVE ALL THE MAMMOTHS GONE?
Bill Thompson

2. WHERE HAVE ALL THE MAMMOTHS GONE? PART II.
Bill Thompson

3. ROCK ART AS AN IN-SITU ARTIFACT.
Clay Johnson

4. PUEBLO ARCHITECTURE AS A METAPHOR.
Carol Patterson Rudolph

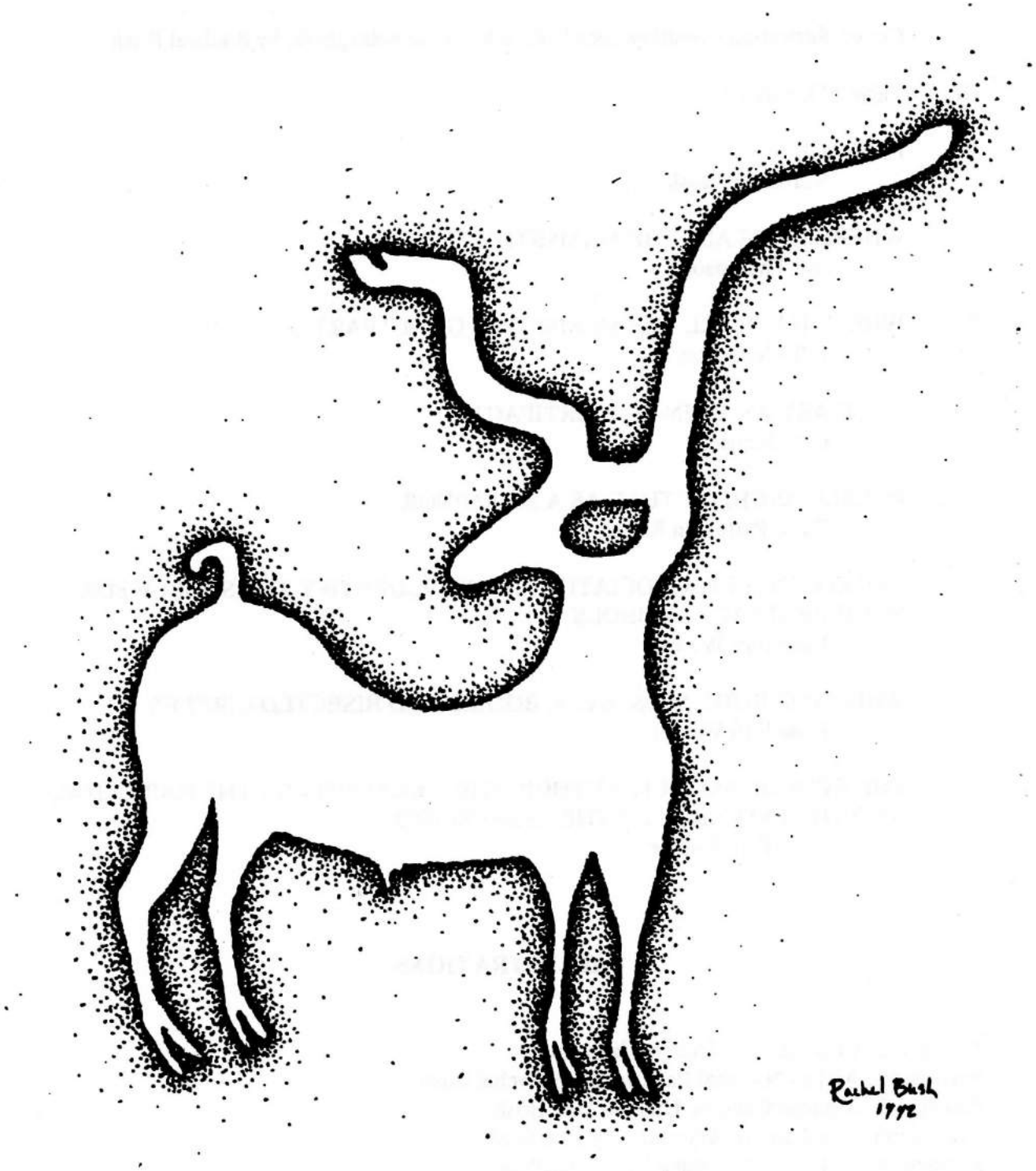
5 USING CONCEPT ASSOCIATION TO HELP IDENTIFY THE SOURCE FOR SOME ABSTRACT SYMBOLS.
Jesse Earl Warner

6. WHEN THE BODY SEES: EYES, BODIES AND BISECTED CIRCLES.
Jesse Earl Warner

7. THE SYMBOLISM OR IT AUTHOR, THE NARRATION OR THE NARRATOR, AND THE RESEARCH OR THE RESEARCHER.
Jesse Earl Warner

## ILLUSTRATIONS

Petroglyph, Coal Canyon, Utah by Jane Bush
Petroglyph, Arches National Park, by Utah Rachel Bush
Petroglyph, Johnson Canyon, Utah by Jane Bush
Petroglyph, Pine Canyon, Wyoming by Jane Bush
Petroglyph, La Barge, Wyoming by Rachel Bush
Petroglyph, Stub Canyon, Utah by Jane Bush
Petroglyph, Johnson Canyon, Utah by Jane Bush
Petroglyph, Nine Mile Canyon, Utah by Rachel Bush


Rachel Bush
1992

## PREFACE

This is the first of what I hope will be many volumes of material presenting ideas and research from URARA's membership. We have been in need of additional outlets for work being done that is not intended for formal presentation at our symposia. We have also needed a vehicle for the publication of material that is not ready at the time of publication of the symposium volume for which it was originally intended. Out of this need the idea of an Interim Publication emerged.

This volume of our Interim Publication is made up of papers presented at previous symposia that were not included in the Symposium Publication for that year; of papers presented at other Conferences or Symposia and also submitted for publication here. Also included are papers of research done by those excited enough by to research and document a topic, but do not wish to get up before a group and make a formal and personal presentation. Here then is a place intended to keep the shy researcher from hiding in notebooks, boxes, attics and garages, the work that has excited them. Here is a place for those papers that fascinated us at a Symposium a year or two ago, but we couldn't find among the published papers for that specific years Symposium Publication.

Perhaps this will also stimulate some of our fellows to do the research that seemed senseless to pursue knowing there would never be a time when they would get up and present the results to the group. If so, then for no other reason, this publication will be worth while.

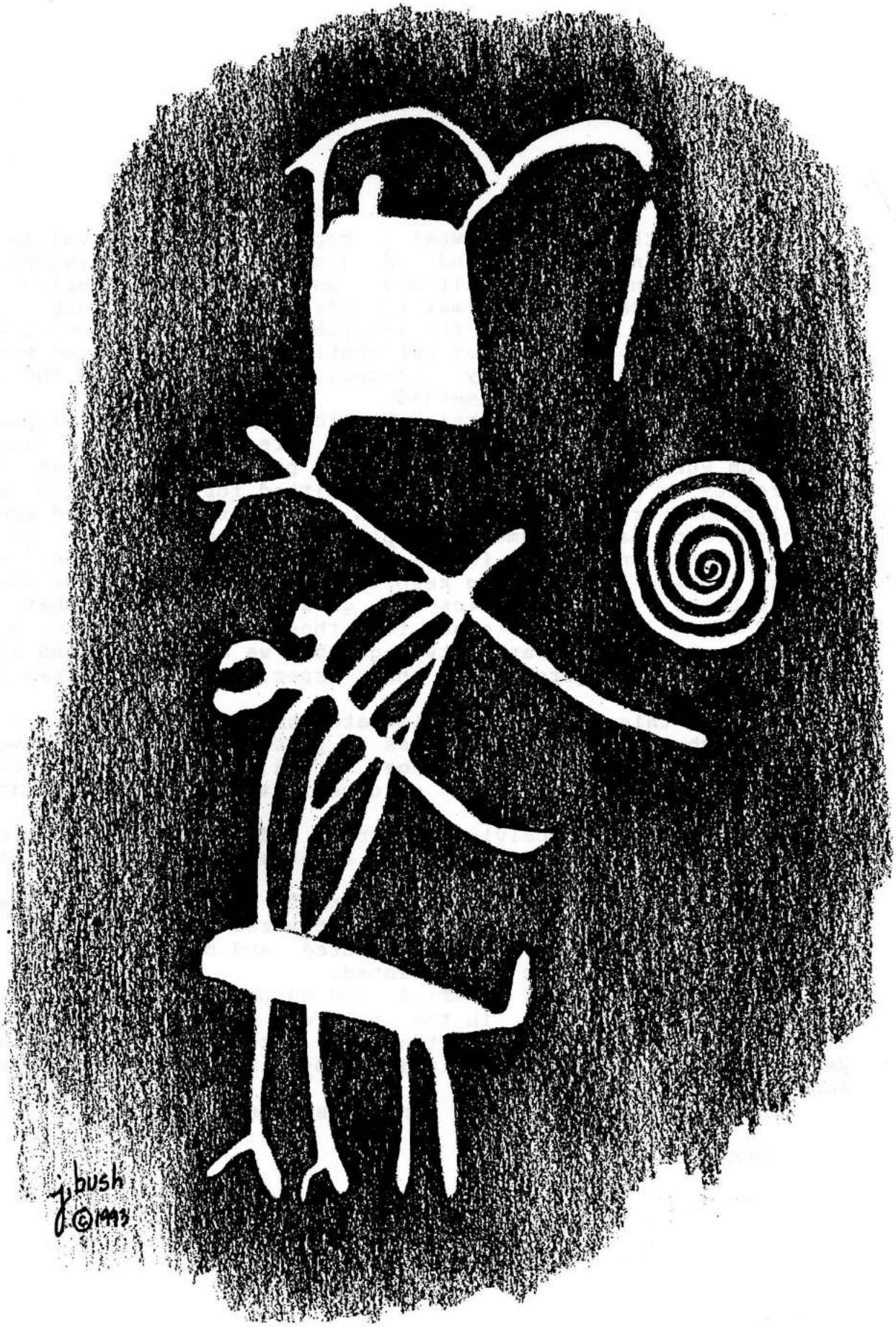
We are already receiving inquiries and articles for a second volume. A most satisfying aspect, after many months with little or no perceptible activity.

Articles submitted should either be on computer disk with accompanying illustrations, or hard copy ready for the Printer. Work will be compiled, indexed, printed and bound. So how you submit it will be how it is presented.

Thank you for your material and support, my hopes are for many additional volumes in the future. As with the present, there can possibly be more than one interim publication each year. A volume is only limited by the number of pieces submitted.

Thank you, we're off and running so don't stop now.

Vern Bush


j. bush
©1993

# WHERE HAVE ALL THE MAMMOTHS GONE?

by Bill Thompson

From the many examples of what I believe to be mammoths found in different states, is the rock art older than we now believe, or have the mammoths been here longer than we now believe? We date rock art at just a few thousand years old, but yet they believe the mammoths died at 11,000 years ago, or near that time. Yet they must have been here at one and the same time, or how can we explain the figures of mammoths carved or painted on the rock black boards of time. I cannot prove that the one was here longer than they believe or are older than we believe. But I will show you that the Ancient American Indians and the mammoth were here together. Did the mammoth become extinct through hunting pressure, or through climatic changes? Did the climatic changes make a difference in the food the magnificent animals eat and eventually starved them to extinction? Or was the hunting pressure so great by our Ancient Americans that they could not recover.

An article by Peter Tyson, published in the Omni Magazine, states that Larry Agenbroad, (an expert on mammoths according to the Salt Lake Tribune, dated Sunday April 12, 1992) while exploring Utah's Becham Cave in 1983 stepped in the first mammoth manure found in the Western Hemisphere. From analyzing the well-preserved dung, Agenbroad believes the mammoth died out from over kill. If this is the case, they were probably killed by Native American Indians, and these Indians were able to see and study the mammoths, and put their pictures on the stone drawing boards that we enjoy today. But does this put the American Indians back 11,000 years ago, or put the mammoths here in the past few thousand years? Could some of these experts or researchers be wrong. Could most of the mammoths die out, but some have survived longer in other areas? Could they have been seen by Ancient American Indians? Did the Indians see the living animal, or just the dead and decaying remains of this magnificent animal.

Philip Seff, Ph.D. in "Our Fascinating Earth" states that there were indeed isolated groups of these large animals with the big ears and trunk. He states that Europeans stranded here in the new world in the 1500's often reported, after being rescued and returned to Europe, that in their American travels they saw Indians hunting the big eared shaggy animals with trunks. Agenbroad and Seff are two who believe that mammoths and the Ancient American Indians were here at the same time. There are others.

In the book "Extinct Species of the World" by Jean Christophe Balonet, illustrated by Eric Alibert, Balonet states that mammoths and mastodons were hunted by Native Americans in North America where human settlement is comparatively recent (dating from 40,000 years ago).

When the mammoth was found in Price Canyon at the 9000 foot level, and arrowhead was found near the bones, another indication of both existing in the same period.

If the artifacts Richard McNeish discovered in 1990, while digging in a shallow cave near Oregrande, New Mexico, are found to be convincing proof of human presence, it would mean that humans lived in America 38,000 years ago. This is far earlier than most archaeologists think the first humans arrived. There are other areas where artifacts have led researchers to believe that man was here before 11,500 years ago when they came across the Bering Strait.

At the Blue Fish Caves, 23,000 years ago.
At the old Crow Basin, 60,000 years ago.
(Both of these noted in the Yukon Territories, Canada.)
At Meadow Croft, 18,000 years ago.
At Shreaver, 15,000 years ago.
(Both of these in eastern United States.)
At Taima-Taima, in Northern South America, 15,000 years ago.
At Pedra Furada, in Brazil, 45,000 years ago.

There are many others in addition to these listed that date past the time that the mammoths were supposed to have become extinct.

If I were to describe a mammoth to someone who hadn't seen one, I would say, "It is a big animal with shaggy hair, a sloping back, big ears, and a large trunk, but with a short tail." Now they would ask, "What is a trunk?" and I would say that it is like a tail, only longer, and it is used for drinking and eating. You know they would have a hard time believing this, so maybe 20 years later, the artist would drop the trunk from their drawings. Twenty years later, they wouldn't believe an animal could have large ears that were described to them. Because all the animals they have seen have short ears, so the ears are drawn like those they are familiar with. Still later, an artist may use his imagination and draw an animal not nearly as tall, without a sloping back, but with a hump like a buffalo. Having seen a buffalo, they can associate with these animals, and draw a buffalo on the black boards of time. Buffalo figures are seen in many areas, but there are also mammoths seen in many areas, as I will show you.

Lets assume that the mammoths and the Ancient American Indian were here at the same time. Everyone who has seen the Moab Mammoth (Figure 1) says it does resemble and elephant. But would you dream up an animal with a tail on both ends? We have

too many widely scattered areas where a mammoth has been pecked or painted on the walls in Utah, Arizona, Nevada, and the four corners region, as well as the caves in France and Spain.

We have only to cross the river from the Moab Mammoth to see animal forms that could be meant for mammoths (Figure 2).

Up Ferron Canyon at Birch Creek, we see a fine example of two pictographs of a mammoth (Figure 3).

At Clear Creek are the remains of one (Figure 4), although the legs are the only part remaining. The rest of the glyph has eroded away.

At Quitchupah (Figure 5) is another example of one. Unless we are looking for a certain figure or figures, we may overlook something that is very obvious.

Another at Hog Springs (Figure 6) where they were probably seen or told about. The Native Americans traded with others, or migrated, so they shared ideas. Or possibly, one or two persons put all the glyphs on the wall. But I believe they were done by different artists from what each had observed. Maybe some of these creatures were mythical, a product of the artist's dreams, or did they have ESP.? When we see just one figure of anything, then we may wonder about this figure, but when we see the same figure over a distance of many miles, then we have to believe that the figure is represented correctly.

We have seen the glyph at Valley of Fire in Nevada (Figure 7), and called it an elephant, but research was done determining that when the glyph was put on the wall, it was impossible for anyone to have seen an elephant near this area. There appears to be two or three bubbles beyond the trunk of the glyph at this site. If this represents a mammoth squirting water, then the artist must have seen the living mammoth to realize the animals could blow water. To me, this is another example that they existed at the same time as the American Indians.

Down Snake Gulch (Figure 8) is another of the mysterious mammoths. Is this just another case of an animal being pecked on a rock because of a dream or ESP? I believe not. I believe they existed at one and the same time.

At Tsegie, Arizona, is another mammoth (Figure 9), but this one is different. Instead of having a trunk, this one has two large tusks extending from the face.

Near Cottonwood Wash, west of Milford, we have another example of this magnificent animal (Figure 10). This is in Don's Canyon. Here I believe, is one more example of a mammoth, maybe two, as another member reported seeing one.

So we have them scattered at many locations, from areas of much water, to areas where there has been much water, to areas that may never have had much water. But as the elephants of Africa today, have to move from one water hole to another as the water holes dry up, and the dry season continues. I believe that our great mammoths also had to move to be near food and water. As they wandered to different areas, more of our Native American Indians were able to observe and record them. Whether they were recorded as rock art at the time, or the description was passed down by word of mouth from generation to generation. We may enjoy them today and wonder how it all came about. Were they actually seen, or were they dreamed of by visionaries of their day.

In Michael R. Kelsey's book "Hiking and Exploring Utah's San Rafael Swell" he tells of the Ice Age Nomads following the large animals, the big horned bison, and the mammoth southward along the flanks of the Continents western mountain ranges. Scanning the plains from the Rocky Mountain foot hills, Ice Age nomads easily spotted herds of mammoth and large bison. Trailing them on foot through the tall grass, they drove the animals over bluffs and surrounded them, slaying them with stone-tipped spears. These nomads lived like this until about 10.000 years ago, when the glaciers began to recede, water became scarce, and their big prey died out.

As stated in "Mysteries of the Ancient Americans" the only organic remains found at the Calico Hills site in California's Mojave Desert were tusk fragments probably from a mammoth. These tusk remains dated 40,0000 years, by radio carbon dating, at a depth of 151 inches. Although this site is highly controversial, Dr. Louis B. Leakey and Archaeologist Ruth DeEtte Simpson of the San Bernadino County Museum believe there is good evidence that humans were present 200,000 years ago. The age determined for the artifacts found at this site didn't surprise Dr. Leakey at all. Due to the many different languages spoken from Alaska to Cape Horn, Dr. Leakey believed this indicated the presence of man here in the New World more than just a few thousand years ago.

The Woolly Mammoth site, named for John Woolly, is described in the same book, and located in Santa Rosa Island, one of the Channel Islands of Los Angeles. This site has long been known for its prehistoric population of dwarf mammoths. Primitive stone tools have turned up there, but have never been associated with the mammoth until 1976. In that year, Woolly came upon a hearth, a bowl shaped area of reddened earth. From it he extracted bones, tools, and charcoal that yielded a radio carbon date in excess of 40,000 years. Again, another example of man and mammoth associating together.

From the same book, as above, it details work done on three sites in the Aldan River Valley in North East Siberia by Soviet Archaeologist Yuri Mochanov is beginning to provide solid evidence of a human presence at 35,000 years ago. This makes a crossing to the new world 30,000 years ago more likely, and making the original dating of the caribou scraper seem believably true, with the time of human presence here 12,000 to 13,000 years ago. A time when ancient man and mammoth existed here together.

Again from the same book, according to H. Marie Wormington of Colorado College, the strongest evidence for an entry date of about 30,000 years ago from sites near Valsequillo, south of the Mexican city of Puebla. But other archaeologists and geologists give a time of 250,000 years ago for man.

One of the most extraordinary of all South American sites is Monte Verde, near the town of Puerto Montt in Chile. Here not only mastodon's bones, but stone artifacts have turned up at 12,000 to 14,000 years old.

From the Encyclopedia Americana it states that for thousands of year's mammoths were hunted by early humans. In fact such hunting may have been the cause of the extinction of mammoths in North America and Europe 3,000 to 4,000 years ago. The evidence for hunting by humans includes mammoth bones found with tools and the remains of camp fires, and prehistoric European cave paintings and bone carvings depicting mammoths.

In the northeastern state Pisui in Brazil near Sao Raemundo Nanato in 172 different surveyed limestone rock shelters showed evidence of continuous human occupation over thousands of years. Brazilian archaeologist Niede Guidon has concentrated on one of these caves, Foca da Pedra Furada, where she has found to be probably the oldest rock paintings from 17,000 to 32,000 years old at different levels. This would make rock art even older than the famous rock art at Lascaux, France, and Altimira, Spain. Another example I believe that our rock art could be and probably is older than we now believe.

Again in the book "Mysteries of the Ancient Americans" the article "Big game hunters Paradise" states that ice age hunters found in the new world a wealth of big game animals, the likes which the world may never see again, not as a large concentration of different animals at one time. But more likely one at a time, in caves, near water holes, on the edge of the forest, or in great herds on the American Plains. The best known of the ice age mega fauna (so called because they were larger than their modern relatives) as the mammoth, whose very name is a synonym for huge. The 9-foot high Woolly Mammoth was adapted to life on

the cold northern plains, thanks to 3 inches of insulating fat, an undercoat of wool, covered with long shaggy hair, and small ears to reduce heat loss. By small ears, they were smaller than the African elephant of today, but much larger than the other animals the Native Americans were used to observing.

In the book "People of the Fire" by Michael Gear and Kathleen O'Neal Gear, two noted archaeologists. Kathleen a former archaeologist for the U.S. Department of the Interior, Bureau of Land Management. Kathleen is recipient (twice) of the Federal Governments Special Achievement Award, for outstanding management of our nations' cultural heritage.

W. Michael Gear, a native of Colorado, has conducted extensive historical and archaeological studies in the Rocky Mountain region, and now has his own archaeological research firm. They talk about the natives hunting the monster animals, the animals with the sloping back and big ears and teeth, and with a thin tail growing out of the snout. In the foreword of "The People of the Fire" they write, from the time of the first human incursions into the Western Hemisphere, a thriving big game hunting tradition known as Paleo-Indian flourished throughout most of North America. Highly efficient, these human predators, in addition to climatic changes and possible epizootic diseases accelerated the extinction of animals such as the mammoth, giant sloth, horse, and camel. Again references being made to the Ancient American Indian and the mammoth being here at one and the same time.

In the "Natural History" magazine they tell of mammoths being hunted by Ancient American Indians.

From the "Nevada Handbook" by Deke Castleman, he tells of the Paleo-Indians hunting Woolly Mammoth, bison, mastodons and caribou, as early as 11,000 B.C.

We have read lately about an incident, where a boulder was removed from Indian Creek Canyon, and later returned. We know that we are not to remove or destroy any type of artifact. Whatever the reason was for removing this boulder, the glyphs on the boulder, were the ancient recorder's thoughts of a mastodon. We may not all believe that these glyphs resemble any special being, whether it be human or animal. What I am trying to show to you is that, the more we look and study, the more we see and believe. So here in Indian Creek (Figure 11) is another example of a mastodon in this persons eyes.

Finally, on my only visit to the Sid and Charlie site, through the generosity of our group leader, I saw what I believe are two more mammoth glyphs (Figure 12). The first one I missed, but through the observance of a good friend he pointed this glyph out to me. Then at another panel (Figure 13), I was to observe another finer mammoth glyph. So now I have shown you many

examples of what I believe to be glyphs of mammoths. But let us observe and appreciate these fine examples of rock art, created by our Ancient American Indians.

In May 1953, Dr. Alex Krieger discussed whether there was a connection between Asiatic arrowheads and the Folsom Points. He stated that the American Indian had points as early as 10,000 B.C. So here again is more evidence, that the mammoth and the Ancient American Indians existed at one and the same time. From the book "Pale Ink."

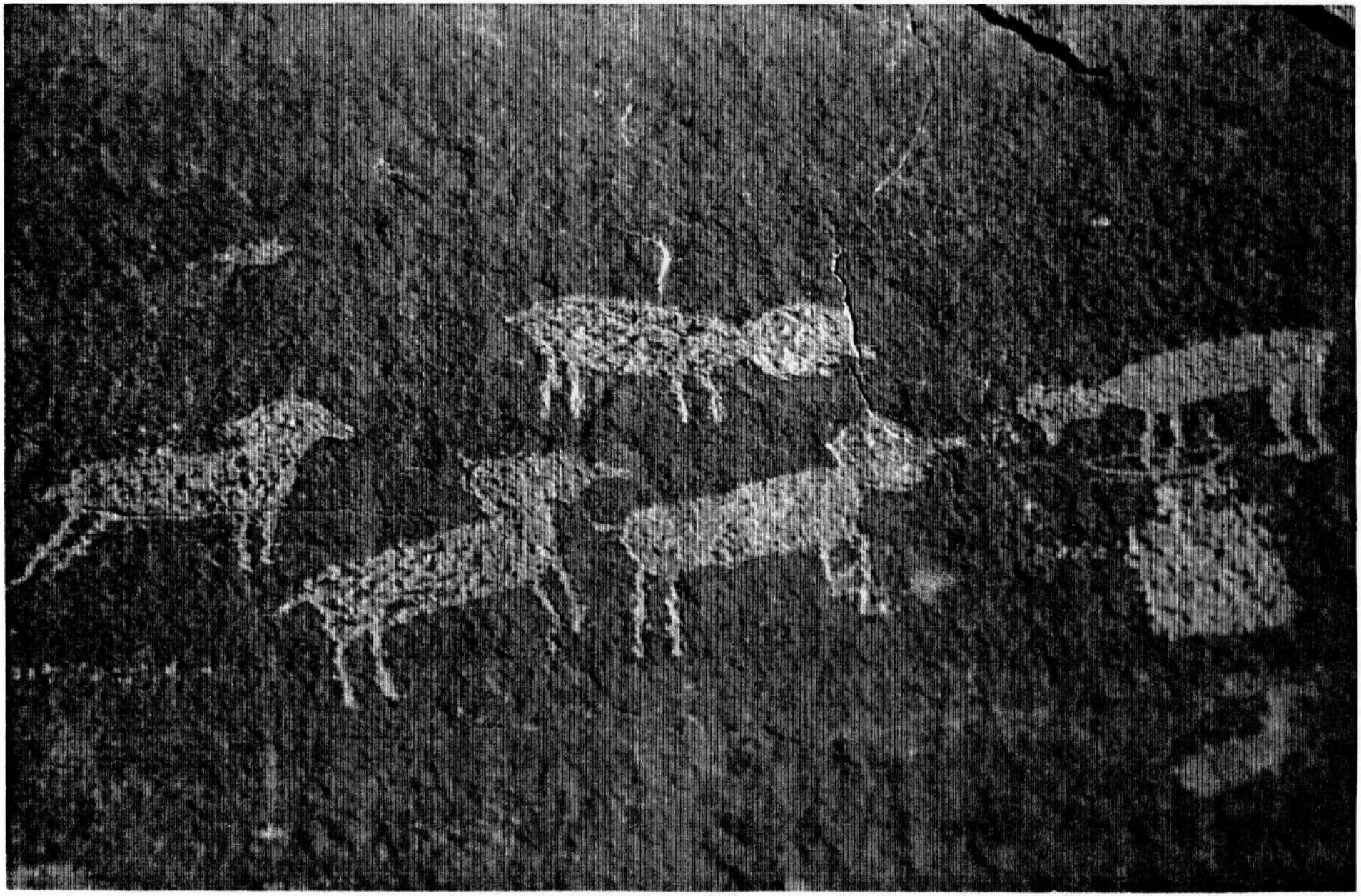
Also, from the same book, it states that in a cave at Four Corners is found a petroglyph of an elephant or mammoth along with what they call writing. So, if the petroglyphs are 3,000 years old or so, then the elephant must be a mammoth or mastodon.

Here we have heard of many examples where man and the mammoth were here or could have been here together. Now, can the petroglyphs or pictographs be older than we believe, or were the stories passed down over a period of thousands of years, or were the mammoths here much longer than is now believed.

Finally, I close with a quote by Bertrand Russell. "even when the experts all agree, they may well be mistaken."

Moab Mammoth, South Bank of Colorado River

Figure 1.





Animal Forms that could be meant for Mammoths

Figure 2.

Birch Creek, Utah Pictographs



Figure 3.

Remains of Mammoth Figure at Clear Creek, Utah
(All that remains of figure are the legs, visible just below the light colored area near the center of picture above and to the left of the horned, four legged animal).

Figure 4.

Tusked Mammoth at Quitchupah, Utah

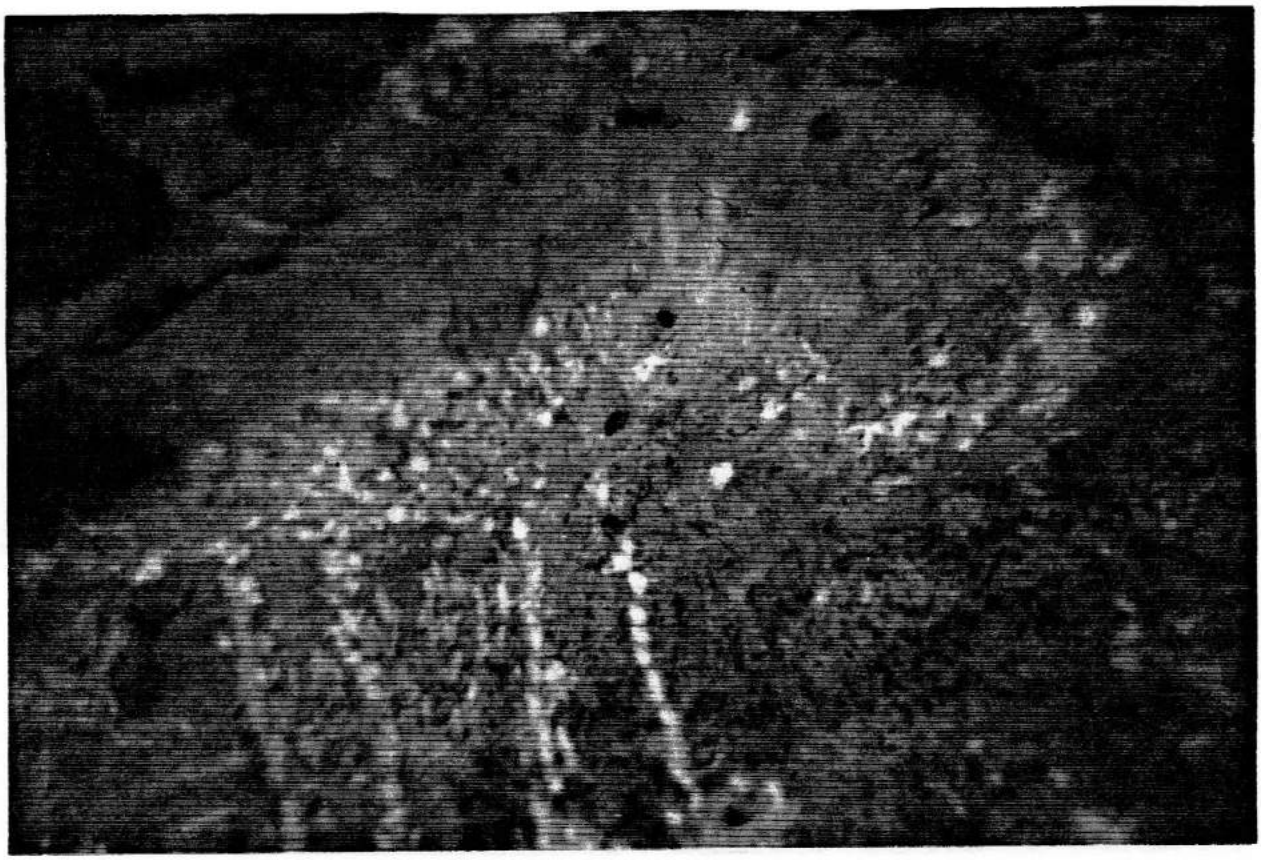
Figure 5.

Mammoth Petroglyph at Hog Springs, Utah

Figure 6.

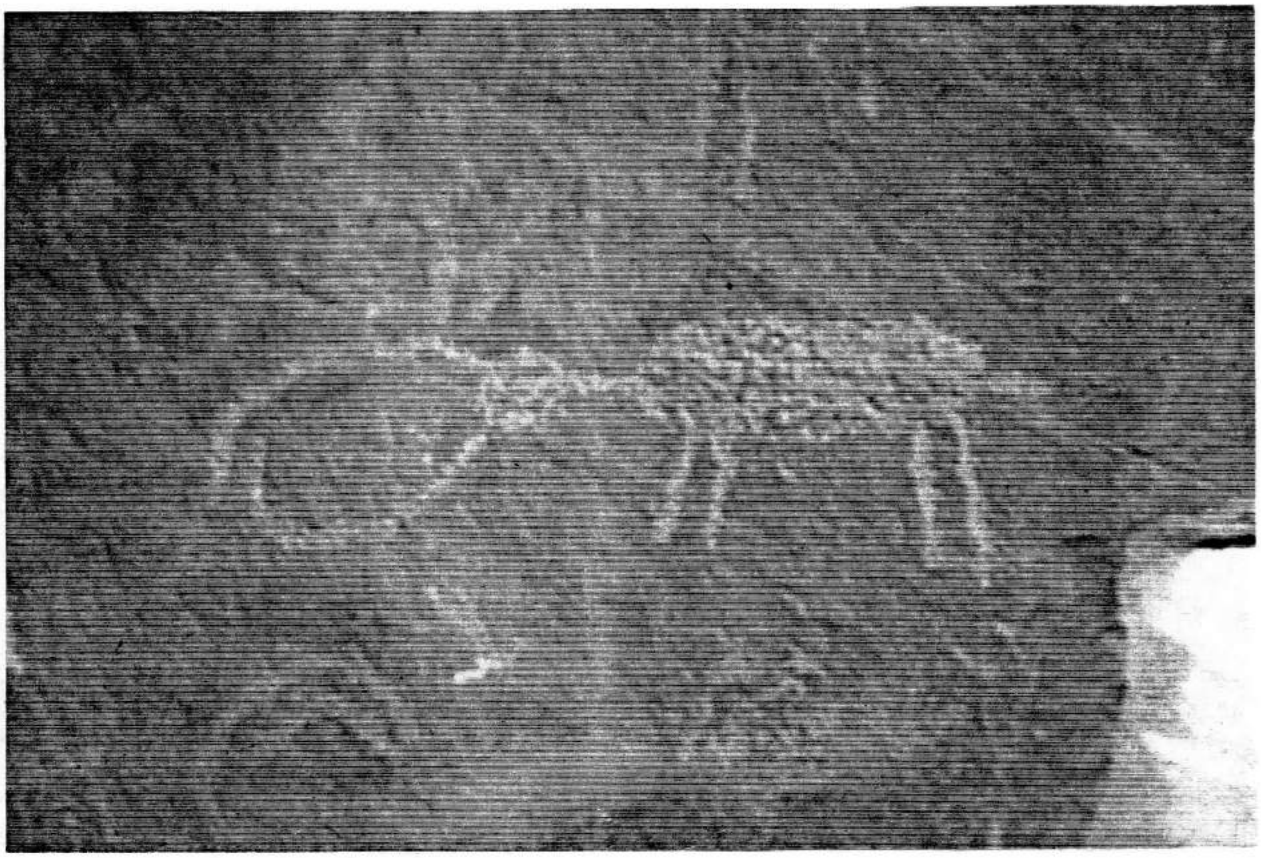
Valley of Fire, Nevada

Figure 7.



Snake Gulch, Utah

Figure 8.



Curved Tusked Mammoth at Tsegie, Arizona

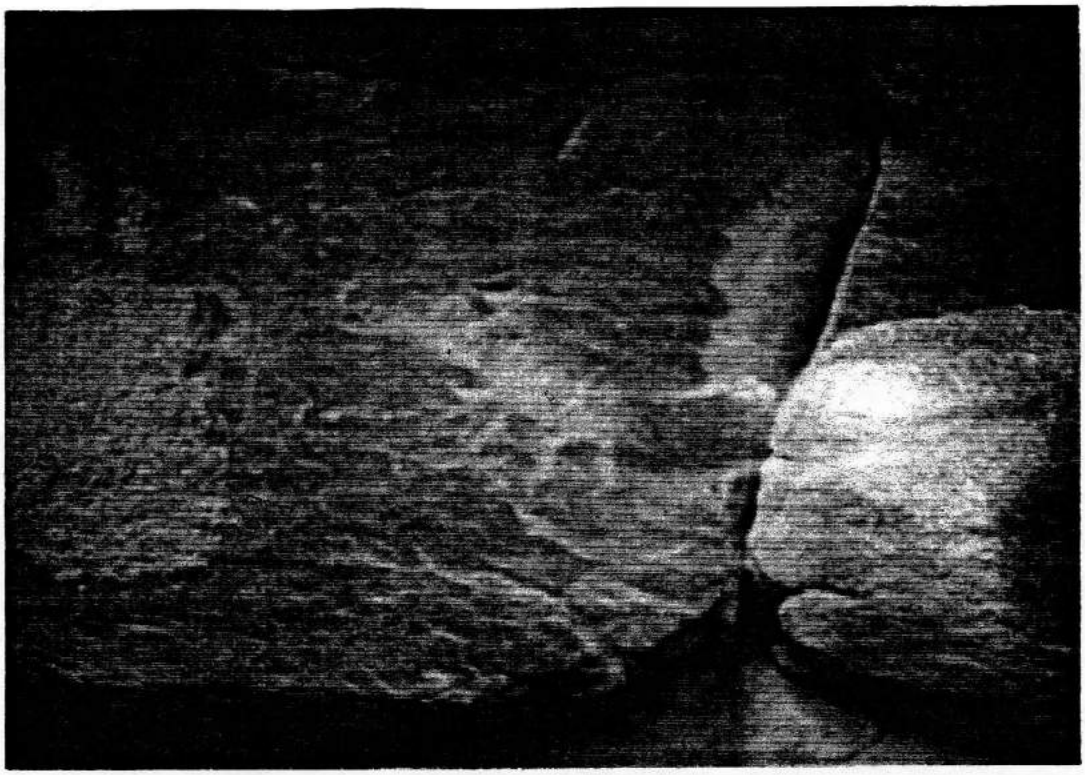
Figure 9.

Near Cottonwood Wash, West of Milford, Utah

Figure 10.

Indian Creek, Utah

Figure 11.



Sid and Charlie, Utah

Figure 12.

Sid and Charlie, Utah

Figure 13.

BIBLIOGRAPHY


1. Encyclopedia Americana, Volume M, page 210.

2. Jean Christophe Balonet, "Extinct Species of the World," illustrated by Eric Alibert.

3. Michael R. Kelsey's, "Hiking and Exploring Utah's San Rafael Swell."

4. "Mysteries of the Ancient Americans," pages 77,79,80 and 88.

5. Pedro Ramirez Vazquez, "The National Museum of Anthropology, Mexico."

6. "Natural History Magazine", early 1988.

7. Deke Castleman, "Nevada Handbook."

8. Peter Tyson, "Omni Magazine."

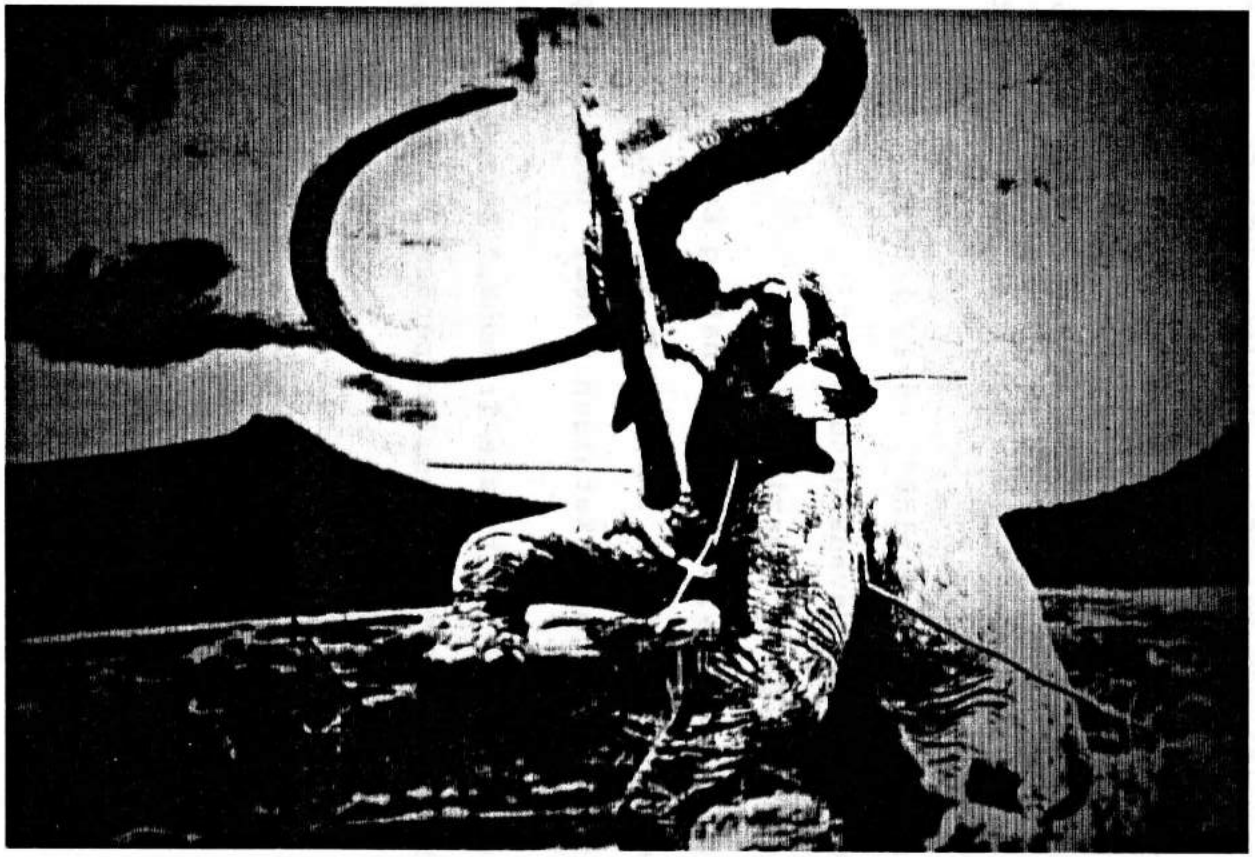
9. Philip Seff, Ph.D., "Our Fascinating Earth."

10. Henrietta Mertz, "Pale Ink," page 99, 115.

11. W. Michael Gear and Kathleen O'Neal Gear, "People of the Fire."

12. Richard McNeish, "Salt Lake Tribune," December 9, 1991.

13. Moab Newspaper, "The Times Independent," April 10, 1958.



# WHERE HAVE ALL THE MAMMOTHS GONE?
## Part II

by Bill Thompson

Some of our noted experts tell us that man has only been on the North American Continent about 10,000 years, while other experts tell us they have been here much longer, possibly as long as 40,000 years. Somebody is wrong. also, some experts tell us that the rock art goes back maybe 30,000 years. Again somebody is wrong.

Except for the fancified figures carved on the rock black board at Rochester Creek, which may or may not resemble any living animals. I believe that our noble American Indians saw the animals they carved or painted on the walls of time. Then if they saw these noble animals, have the mammoths been here longer than believed, or is our rock art much older than now believed. With some rock art in South America dated from 6,000 years to much more ancient, then if the native Americans came across the Bering Strait and traveling through here to South America then why can't our rock art be as old as 6,000 years or older.

As with most experts when they present a scientific article, if there is a chance that they could be ridiculed, then they will not publish their article. But with amateurs as myself, then ridicule can be a learning tool, then we can do and say things that we believe in, but may not be so. And rock art is a science, something that we are learning to understand, or are hoping that we can understand it.

According to Stephan Metzger, by around 20,000 years ago the climate had begun to warm and about that time the first human probably appeared in Colorado. Nomadic hunters, most likely still enroute south after having crossed over the Bering Strait land bridge, tracked mastodons, mammoths, ground sloths, and antelopes across the eastern plains and the western plateau area. Discoveries in the North American southwest turned anthropology on its ear by proving that humans had come across from Asia at least 10,000 years ago, or 8,000 years earlier than previously thought.

But according to Don Pitcher, humans have been in Wyoming for a very long time, perhaps 25,000 years. A mammoth kill site near Worland, Wyoming, dates back more than 11,000 years.

Then according to National Geographic Society's America's Ancient cities, believe people came to North America from Asia as early as 40,000 B.C., about the same time as other people moved into Australia, but evidence remains inconclusive. Archaeologists do know that by 12,000 B.C., bands of hunters moved across the North American Continent. Paleolithic hunters in Siberia moved onto the vast steppes of the land bridge in pursuit of game, such as woolly mammoths and long-horned bison. Also around 10,000 B.C. a hunting innovation, a new kind of stone tool, swept North America. Archaeologists

named the complex tools clovis, and clovis mammoth hunting meant winter encampment. North America with more than 7.3 million square miles, was settled more than 30,000 years ago by Native Americans, or who became Native Americans, who crossed the Bering Strait on an ice bridge.

At his laboratory in the National Museum of Natural History, Stanford compares plastic casts of thumb-size stone spear points, knapped in Siberia about 25,000 years ago, with matching stone points found in New Mexico, and other similar points found with Mammoth bones near Mexico City. Its an older form of Mammoth that lived 11,000 to 16,000 years ago, or more. We can't get precise dating because the bones are so mineralized, says Stanford.

People migrating from Siberia 25,000 years ago would have faced the ice sheets. But geologists believe that from 22,000 to 19,000 B.P. the western ice sheet (Cordilleran) and the eastern ice sheet (Laurentide) drew apart, creating an ice free north to south corridor.

A complex community existing as far south as Chile, 13,000 years ago, means that people must have crossed into Alaska much earlier. At these sites in Chile, not only potatoes, but nuts, fruit and mushrooms, but mastodon meat has also been found. All radio-carbon datings have verified the 12,000 to 13,000 B.P. time in all the 25 tests.

Archaeologists agree that the first Americans came from Asia, across the Bering Strait. Then they should have left artifacts of their passing in the Arctic. And in the Yukon, at the Old Crow Basin and at the Blue Fish Caves, archaeologists have found mammoth bones that may have been marked by these early Siberian pioneers.

So if we find mammoth meat in Chile, and mammoth bones in the Yukon, then the Indians here in the western United States were also here with the mammoth. We have seen pictures carved and painted on the stone walls. Does this not indicate a longer time period for the ancient American Indian rock art?

Rock art is an interesting and intriguing art. A type of art, that we all have different ideas or thoughts of this work. We can talk to other people about what we see or believe, and to some, there is no beauty or great art work to the panels. Those of us that are interested in this style of art, try to show or explain what they believe it shows, but as Lord Bertram Russell stated, "we may all be wrong." But if we are wrong, let us show to others the greatness of this type of art, that it may be protected for our grand children and great grand children. We each believe we have the right way to protect this art, but by working together maybe we will succeed.

The story of Noahs Ark for the first time puts forward the idea of humans taking on the responsibility of ensuring the survival of animal species. Noah did not consider it possible to live in an environment devoid of animals. More over, the ark was designed to take in 3 pairs of each species, a number recognized today as the minimum needed to guarantee survival.

Today soil erosion follows deforestation, over grazing, and fire leads to the loss of the means of subsistence. The Chinese have known this for a very long time, as the 67th Commandment of Taoism reads "Thou shalt not burn the pastures and the mountain forests."

So as of the past, even today, animals, plants, insects, and trees continue to become extinct. So even with extreme measures they continue to become extinct, as was the case of the Aurocks in the thirteen century. Different measures were tried to preserve this animal, but in 1627, the animal was to become extinct. False Aurochs have been reconstituted by cross breading of European cows. But again this is not a true Auroch. But the ancestors of modern man knew this animal well, since they painted it on a number of cave walls, hunted it, ate it, carved the bones, and shaped the skin to make tools or clothes. This primitive ox stood more than 6 1/2 feet high and had spiral horns that could reach a length of 32 inches. These paintings are in the famous caves of France and Spain.

The Russians had the idea of revising the mammoth from a cell taken from bulls frozen in the Siberian ice sheet, by using an ovum and the uterus of a female elephant. This made sensational news in 1982, but if the research was done the results are still not known.

So it has been our ancient ancestors who have preserved some of these magnificent animals on the ancient black boards in both petroglyphs and pictographs.

So again did the mammoth and other mammals of that time die out from overkill or over-chill. Did it become extinct because of being hunted by our ancient American Indians along with a change of climate. Or did they die out by just the change of climate to a more colder, there for less food for the magnificent animals. But if they became extinct from over-kill, can that not make our Indian rock art older than now believed.

In 1879, a young girl made the first discovery of prehistoric art. While exploring a cave in Spain with her father, she found pictures of large bull like animals, painted on the caves ceilings.

The earliest artistic engravings carved on bone, date from about 35,000 B.C. Prehistoric people developed several forms of art. They painted on rocks, modeled in the clay, and engraved antlers, bone, and ivory.

Early artists painted with four basic colors. They obtained black from charcoal and ground up manganese ore, white from clay, and lime mud, and ground up iron compounds. They mixed the colors in animal fats or blood, and produced a paste like paint.

Although Paleolithic art is best known from western European examples, discoveries in the Soviet Union and Australia have extended our knowledge of the independent development of mans first creative efforts.

Rock art of no great age is found in North and South America. Eskimo art being from about 300 B.C. with stylized carvings and engravings of men and animals. That of Anasazi or later Pueblo Indian farms in the American southwest from about 500 to 1,000 A.D. is concentrated on the rock walls along rivers. Rock art of the Great Lakes is by later Alongurian tribes. South America rock art is most complex in Peru and is often related to present day Indian culture.

It was 12,000 to 13,000 years old, too old by more than a millennium. It was a human foot print. But archeological orthodoxy says no human reached even the northern most parts of the new world via the Bering Strait until the glaciers receded, prior to 11,500 years ago. Before that mastodons trumpeted in the cool rainy forest. Further discoveries at Monte Verde, and elsewhere in the Americas have raised even more startling questions. Could Humans have been here, not just 13,000 B.P. but as long as 30,000 B.P. or even longer.

Since 1973 French archaeologists Neide Guiden, has been stepping around rattlesnakes to study a series of about 100 natural hollows in a 120 mile rampart of cliffs. Painted on these walls are deer, armadillos, rheas, crabs, jaguars, and people. Drawings on the rocks at Pedra Furado date to between 6,000 and 12,000 B.P.

So if they find mammoth bones in the Yukon marked by the Siberian travelers, and rock art at Pedra Furado dating at over 6,000 B.P. could not our rock art be much older.

A linguist from Stanford University, Joseph Greenberg, believes ancestors of modern Indians came from Asia in three or more migrations, starting over 15,000 B.P. or earlier. But linguist Johanna Nichols of University of California Berkley, believes the ancient Indians must have separated from the Asian origins much farther back. The unmistakable testimony of the linguistic evidence is that the new world has been inhabited nearly as long as Australia or New Guinea, perhaps over 35,000 years, she says.

But biologist Rebecca Cann from the University of Hawaii, by analyzing modern Indians, she has placed a common ancestor 50,000 years ago, as possible evidence for an early new world migration.

University of Alberta archeologist Ruth Gruhn argues that humans must have entered the new world some 50,000 years ago, because by 10,500 people had reached South Americas tip.

"To finally have an answer is more satisfying than merely being right," says Dana Dincauze. And Vance Haynes says "Before I leave this planet, I want to know what really happened."

To this we may all add, that we to want to know what really happened. I have shown you several places in part one, where mammoths have been carved or painted on the black boards of time, now it is up to each of us to decide, if the rock art is older than we now believe, or were the mammoths here much longer than believed. But which ever, the Ancient American Indians needed to see these beautiful animals to have drawn them.

There are so many articles about our ancient American Indians hunting the magnificent mammoth. The only reason they only talk about the mammoth and not other animals of this same time period, is that mammoth kills have been found, or projectile points have been found associated with mammoth fossils.s But partial fossils of other animals have been found, but have not been associated with the ancient Indian, because no artifacts have been found. But there were many other animals here at the time of the mammoth, that also became extinct about the same time. Surely our ancient Indians hunted other animals besides the mammoth. We have their pictures on the tapestry covered walls for us to see and enjoy today.

From Jean M. Auels books "The Mammoth Hunters" for telling of ice age hunters of the mammoth in the Ukrainian Upper Paleolithic time, and the musical instruments made out of mammoth bone by the ice age people. Now this is not the North American continent, but it shows that they hunted the mammoth about the same time the mammoth was being hunted here, plus they hunted the aurocks there. Proving that they indeed did hunt other animals at the time they were hunting the mammoth.

In the Travel Holiday Magazine, for July-August 1992, tells of small bands of nomads wandering about the wild country, which later would be known as America, hunting mammoths and mastodons. Then why not the other animals that are on our drawing boards of time.

In the Salt Lake Tribune, dated July 30, 1992, tells of finding a line of more than 20 mastodons foot prints, which are more than 110,00 years old. It goes on to say, one puzzle about mastodons has been why they suddenly died out about 10,000 years ago, after roaming the continent for several million years. because their extinction coincided with the arrival of the first humans in north America, one theory is that they were hunted out of existence.

Again from Science News dated December 12, 1987, tells of finding mammoth bones in England that are about 12,800 years old, but this contradicts the wide spread scientific view that mammoths disappeared from England during the maximum expansion of ice sheets between 18,000 and 15,000 years ago. The age of these mammoths (English) are only about 2,300 years older than the latest known mammoth remains North America. The new discovery makes it more likely that mammoth extinctions were synchronous in Europe and North America. There may have been a return of cold temperatures around 11,000 years ago, that fostered the mammoth demise in North America. Never the less, says Paul S. Martin there were far more large mammal extinctions in North America, where there is little evidence for late ice age shifts than in Europe. Martin stands by his theory that human hunters wiped out many North American species between 12,000 and 10,000 years ago.

The many areas that mammoth rock are has been found, and I have shown you a dozen places, tells me that many artists carved or painted these animals on the patina tapestries of time. I have shown you these animals in three states, and since the first publication there are more to add to the list, that these animals were scattered over a large area. They have been found at both high and low elevations, where there has been lots of water and areas where there has never been lots of water. But where these animals were, there

was the ancient American Indians, putting these pictures on the wall thousands of years ago.

I was given a slide from Manila, Utah, area (Figure 1) by a member of the Utah Rock Art Research Association, and permission to use it, so this one is from an area of great amounts of water.

Then from the Cane Beds area of northern Arizona, is another of these animals (Figure 2), but from an area with little water for thousands of years. But this mammoth appears to have a set of antlers on the head, whether this was going to be a different animal only the artist knows. No one but the artist himself who carved this work knows his thoughts or intentions.

Sometimes in our eagerness to prove one thing, we may overlook the obvious, or at least the meaning may be different than we believe. As I wrote the first article on mammoths and native rock art, I believed that these animals (Figure 3) on the Potash Road could be mammoths, but may be they belong to another species of animals with a short movable trunk that inhabited the Americas. Now the only place these animals inhabit the Americas is South America, and have become extinct in North America. Tapirs originated in Europe, existed in North America, and migrated to Asia and South America.

The tapir looks like a pig, but is related to the rhinoceros and the horse. Four species make up the genus Tapirus, family Tapiridae. So these animals could be mammoths, but more likely are Tapirs. We each have different ways of looking at the same thing.

So now let us travel again back to the Potash Road. A friend told me about what he believes a figure here to be a camel (Figure 4), and after having been shown the figure, I too believe it could be a camel. This figure is a two humped camel. Unlike other mammals of the order Artiodactylae, camels and llamas (seoulder Tylopoda) family, Camelidae have remained a separate stock since upper Eocene time. The Eocene Protylopus, was small and short limbed, but camel like animals became more numerous during the Oligocene.

The camel family originally flourished in North America, but became extinct there in the middle Pleistocene, less than 2 million years ago. The sub-order was known in other continents until the coming of desert conditions in the Pliocene, when forms with digitigrade and padded feet entered South America, Asia, and Africa.

Another article from Science News dated, October 8, 1987, tells about the simultaneous demise of mammoth, mastodons, and sabre tooth cats, not to mention native horses, ground sloths, native camels, and many others about 11,000 years ago. Paul S. Martin suggested that Clovis big game hunters crossed the Bering land bridge from Asia to Alaska, and moved through an ice free corridor just east of the Canadian Rockies about 11,500 years ago. They then entered a hunters garden of Eden, populated by 50 to 100 million large mammals similar to prey that had been hunted in Europe and Asia, but unadapted to human predation, and in their southward migrations could have left many big game extinctions in their wake. In addition, archaeologists have found that

11,500 to 11,000 years ago parts of North America were occupied by people whose fluted spear points had been found with the remains of mammoths, mastodons, horses, tapirs, and camels. These people called the clovis, may have been the first to penetrate far into North America, although others argue that there were earlier settlers.

As we all know as we observe rock art, that when we see a certain figure, that same figure will again appear. Some times it maybe many miles distant, or it maybe several years again before we see a figure that resembles the original figure. So, that has been the case here. On my last trip into 9 Mile Canyon in June 1992, I found a good petroglyph of a mammoth (Figure 5).

Also at this site, I was shown another drawing of an animal, which is so life like to another living animal today, but not on this continent. Nor have I been able to find that it has ever lived on this continent. But if it does represent a living animal, another drawing will appear.

Again from Science News dated, January 25, 1986, about an archeology dig in southern Florida. They state they know of no site in North America where there is a distinct association of human and extinct animals from 10,000 years ago. From the 500 species of animals represented at the site, includes mammoths, bisons, giant sloths ,and others. Here we have mention of the great sloth at the time of the mammoth. They argue that with a rapidly expanding human population, containing proficient hunts, could have wiped out large animals such as the mammoth and other large animals in as few as 200 years.

So we have now the giant sloth associated with the mammoth and other animals at the same period of time. Then maybe the petroglyph at 9 Mile Canyon, that resembles a hippopotamus (Figure 6), but may really be a ground sloth. They carved the animal as if it was going up a hill, but could not this be the ground sloth feeding. By reaching up into the tree branches to eat the leaves and twigs.

Ground sloths with their three claws on their front feet, did pull the branches down to feed. So becoming extinct with the mammoth at about the same time, it was possible to be seen and the pictures carved on the walls of time for us to enjoy.

During the wiirn glacial period that extended from France to southern Russia sustained vast herds of bison, reindeer, horses, and even larger animals such as wooly elephants and rhinos. The wiirn glacial period occurred in the late Paleolitic period.

So again from the October 31, 1987, Science News, describing and listing the many animals found that had become extinct, indicates that 35 classes of mammals became extinct in North America. These again include the mammoth, mastodons, sabre tooth cats, native horses, ground sloths, native camels, armadillo-like glyptodonts, giant picearies, mountain deer, giant beavers, four pronged antelopes, dire wolves, native lions, and giant short faced bear. Another place where the mammoth and the ground sloth were in the same time period.

Also, from the International News Letter of Rock Art, No. 2, 1992, tells of the rare animals found in Paleolithic art of mammoths and the rhinoceros found in the Grand Grotte at Arcy-Seer-Cure (Yonne, France). Although again on another continent, but being associated together.

Now through another friend, I have been given a print, and permission to use it, of an animal taken in Grand Canyon (Figure 7). This photo, of what appears to be a rhinoceros, if it is so, at some time another glyph will turn up that we may see it or compare it. Or else, was it just a wild guess or idea of the artist that made this drawing. Maybe we can't explain some of the carvings on the walls, but there is an explanation some place. If we understood all that we see or hear, there would be no need to study or explain these figures. But if there was no mystery, there could be no knowledge gained. What experts said 10 years ago, may not be true today. Science is advancing so rapidly, that events or objects tomorrow may be obsolete the day after.

Rhinoceros, the second largest land mammal alive today. The rhinoceros has a massive head, short neck, broad chest, and a stout thick set body. It is a perssodactyl, or odd toed ungulate, related to the horse. The elongated head usually carries one or two horns on the upper surfaces of the snout. They are not true horns, however, but nearly agglutinated hair or Keratin, a protein found in hair. Rhinoceros is derived from the greek work "rhino" meaning nose, and "Kera" meaning horn. Fossil rhinoceros are known from the Eocene Epoch to the Pliocene Epoch in North America, which was still open migrated the mammoth, the woolly rhinoceros, mush oxen, reindeer, saiga antelope, bison, sheep, goats, wild ass, boar, ibex, chamois, wolves, and bear from the old world to the new. In the Pleistocene period, the neotropical region after millions of years of isolation, was now joined once more to North America, ungulates and carnivores animals migrated to South America. But other experts believe the rhinoceros traveled the opposite direction to populate Asia and finally into Africa.

Cenozoic era is the most recent era in the geologic time scale of the earths history. It is some time called the age of mammals. Pleistocene Epoch began about 2 million years ago and ended 10,000 years ago as the Holocene Epoch started. During the Pleistocene Epoch, modern human being developed, mammoths, woolly rhinoceros, and other animals flourished, but died out near the end of the epoch.

In some instances I have given different dates and places in this article, because in the different references I have studied, the different authors have themselves contradicted each other. So in all of their articles maybe we have found the right answer, or just maybe they are all wrong.

But if they are all wrong, we still have the paintings and carvings of mammoth, possibly tapir, probably camel, and maybe a doubtful rhinoceros and just maybe a ground sloth. But whatever, I believe the ancient Indians saw these animals or were told of these animals so that they could put them on the walls. Then what ever we believe, have we proven that the rock art is of an older age than now believed by most students of this fascinating art in the western United States.

From another article in the Science News Magazine, dated January 24, 1981, telling of petroglyphs or rock carvings, found in the upper Amazon in South America, have generally been passed over as unfathomable art. But Guyanese archeologist Dennis Williams has surveyed hundreds of them and concludes, based on the punctate marks and furrows typically found with representations of fish, plants, and game, that they were an important tally system, rather than an art form. If this is so, then these petroglyphs may help trace the dates and movements of hunter-gathers who lived in the Amazon region as early as 7,000 years ago.

Another piece of evidence that I believe, that should make our rock art here much older than now believed.

From the book "Early Man" by Life Nature Library.

In the mousterian culture of France, the woolly rhinoceros was one of the animals hunted for food. This culture lasted from 35,000 to 110,000 years ago.

Then from Czechoslovakia of hunting mammoths in an early cultural phase of the Upper Paleolithic period.

Woolly mammoths were carved on the stone walls in the Rouffignac cave in France. Also at the Rouffignac cave are paintings of rhinoceros. Also paintings of mammoths at Font-de-Gaume in France. Necklaces were also made from mammoth bones in this time period.

Neanderthal people first appeared in Europe about 110,000 years ago. The Neanderthal hunted other animals besides the cave bear, and the woolly rhinoceros.

Anthropology Today - Crm books, Del Mar, California

During the wiirn glacial period that extended from France to southern Russia sustained vast herds of bison, reindeer, horses, and even larger animals such as woolly elephants and rhinos. The Wiirn glacial period occurred in the late Paleolithic period.

From the prehistoric cave art from Spain, France, and the mediterranean, associated with the Aurignacian period (about 30,000 B.C.) consists of a tangled series of three parallel lines etched on cave walls. The curves of these obviously non-utilitarian lines have so far defied understanding. They may well be nothing more than imitations of the scratchings of the three toed sloths that inhabited the caves (Figure 6).

These enigmatic lines are found together with later, recognizable forms, but other nonrepresentative forms were produced throughout the 20,000 year period when the cave arts flourished.

On the Virgin River below the Quail Creek Reservoir are found very similar lines, carved on the flat surfaces of the rocks of cliffs and also in a rock shelter. They are mostly in two or three line groupings, with others of several lines.

Rock paintings in South Africa mainly of human and animal scenes, that were probably created by hunting and pastoral societies. They resemble European cave arts in some general ways, as in the progression from monochrome to poly chrome, in the emphasis on animals, and in conventional treatments of the human figure. It is fairly certain that these rock paintings are no more than a few thousand years old.

In Australia, too, there are quite recent cave paintings and rock etchings. Some of these etchings are thought to be 4,000 years old.

Oregon Handbook by Stewart Warren and Fred Long Ishi Kawa

Petroglyphs on the walls of a cave just east of the Willamette Valley that are dated 5000 years old. Charcoal from a hearth found at Fort Rock, east of the Cascades are thought to be over 13,000 years old.

In terms of a written history, a manuscript found in a Chinese Monastery could have the distinction of being the first written account of a voyage to our continent. The manuscript spoke of encounters with red faced men. Read the book "Pale Ink" out of print now, by Henrietta Mertz.

There are also many rock engravings in North America, particularly in the less populated areas of the west and southwest. These engravings tend to be schematic and often symbolic, and, as with the arts of most hunters and gathers, men and animals constitute the principal subject matter. These rock arts are of no great age and can be related to the historically recorded artistic endeavors of the American Indians.

Weston LaBarre internationally known authority on cultural anthropology, studied prehistoric caves art.

From the Salt Lake Tribune, Friday, May 15, 1992.

An archeologist says seven human finger prints found in a prehistoric cave near Orogrande, New Mexico, bolsters a theory that humans were in the new world at least 20,000 years earlier than generally believed.

One of the finger prints in the cave on the Army's Fort MacGregor Range is believed to be more than 35,000 years old, says Richard MacNeish, Director of the Andover Foundation for Archeological Research in Andover, Massachusetts.

From the book "Fossil Man" by Michael H. Day, it states that during the last glaciation period, mammoth (Mammuthus) woolly rhinoceros (Ceolodonta antiguitus), red deer (Cervus elaphus), reindeer (Rangifer tarandus), wolf (Canis lupus), and ibex (Capra ibex) ranged widely over Europe, but also in North America.

The Neanderthals - by Time-Life

Wherever herd animals were lacking, men also stayed away. This holds true whichever continent you may be on. Also true in the past with a hunting-gather people as it is true today. The finding and killing of animals that were solitary grazers was so difficult at this stage of development that men simply could not prosper in these regions.

The hunters would have seen herds of elephants, reindeer, and rhinoceros moving slowly under the leaden sky.

Woolly rhinoceros

With a thick coat and a low slung head, the woolly rhinoceros was perfectly built for a life spent grazing the stubby vegetation of the tundra near the edge of the glaciers. Its front horn, about 3 feet long, served as a weapon and a snow shover for winter foraging.

Bison

Sporting horns up to 4 feet wide, this bison grazed the grasslands of Europe in enormous herds during the ice age. Its numbers seemed to have declined when its habitat changed into woodlands after the climate warmed, and the species finally disappeared from Europe 10,000 years ago.

Aurochs

The hefty, 12-foot long aurochs was the ancestor of all domestic cattle but, unlike its mild mannered descendants was a formidable creature. Intensively hunted by men of ancient and modern times, the aurochs survived in central Europe until the early 17th century.

Woolly Mammoth

The eight ton, 12-foot tall woolly mammoth was ideally suited to the rigors of ice age Europe. Shaggy hair and a layer of fat insulated it from the cold, and its ears were small to reduce heat loss. But such specializations probably proved to be its undoing, like the woolly rhinoceros, the woolly mammoth disappeared about 10,000 years ago. Presumably unable to adept to the increasingly temperate climate of its last home, the grazing grounds in Siberia and North America.

From the book "Washington Handbook" by Dianne J. Boulerice Lyons and Archie Satterfield

One of the most fascinating discoveries occurred in 1977, when Emanual Manis retired on a farm outside of Sequin, Washington, was digging a pond on a back corner of his land and found two enormous tusks. A Washington State University archeological team, lead by Zoologist Carl Gustafson, concluded that these were mastodon tusks, between 12,000 and 14,000 years old. The group discovered other mastodon bones, including a rib that contained the bone point of some prehistoric weapon used to kill the animal.

From the Readers Digest "Scenic Wonders of America" video, "Atlantic Vistas" talks about the Indians and mammoths living here together in Shenandoa Valley.

From the "Encyclopedia of Animal Evolution"

Woolly mammoth (Mammuthus primigenuis)

Woolly rhinoceros (Coelodonta antiquitatis)

Imperial mammoths (Mammuthus imperators) one of the largest probonscids that lived on the great plains of southern North America. With a height of about 12 feet.

Sabre toothed cat (Genus similodon). It probably preyed upon elephants and mastodons.

Great ground sloth (Genus Megatherium) the largest of all ground sloths. Maximum length 20 feet.

Bison (Bison antigguis) a genus that was larger than modern bisons.

Then from the Arizona Highways, November 1992, at the Lerner Ranch. A dozen elephants lumbered down the slope to the water hole, picking their way through the dense grass. Their leader, a huge male, stopping occasionally to test the air for enemies, but failed to detect the hunters in the clumps of grass, who had already picked out a younger elephant to attempt to kill. This could be Africa of a few years ago, but this happened in south eastern Arizona, 12,000 years ago. At this water hole, now called Mammoth Kill Creek, evidence shows that primitive hunters also ambushed bison, tapirs, bears, and wolves, as well as American lions, a cousin of the sabre-tooth tiger besides the mighty mammoth. This discovery at Mammoth Kill Creek which began in the spring of 1952, bones of mammoth and a tooth plate were found. After a flash flood in the summer of 1955, exposed a layer 50 feet long where animal remains could be seen. Then in December of that year a major excavation was started and at this time the scientists had another great surprise with two spear points appearing among the rib fragments of a mammoth. analyzing the charcoal found at the site also determined that man and the mammoth existed 12 millennia ago in Arizona, and that man engaged in mammoth hunting. This discovery gave us proof beyond the doubt that mammoth and man existed at the same time, says Professor Emil Haury.

Other digs followed including one at Murray Springs, 20 miles north of the Lehner site. This dig turned up evidence of three mammoths, plus lions, camels, bears, and three types of wolves. Another example where man and mammoth and other early mammals existed at the same time, but also by existing at the same time makes it possible that rock art could have been done at this time, and be older than now believed.

From another source, the Alaska magazine, dated November 1992, Alaska has always been a fabled and mysterious area of landscapes and unusual creatures. Great hairy beasts with 12 foot tusks, and shaggy animals with huge antlers

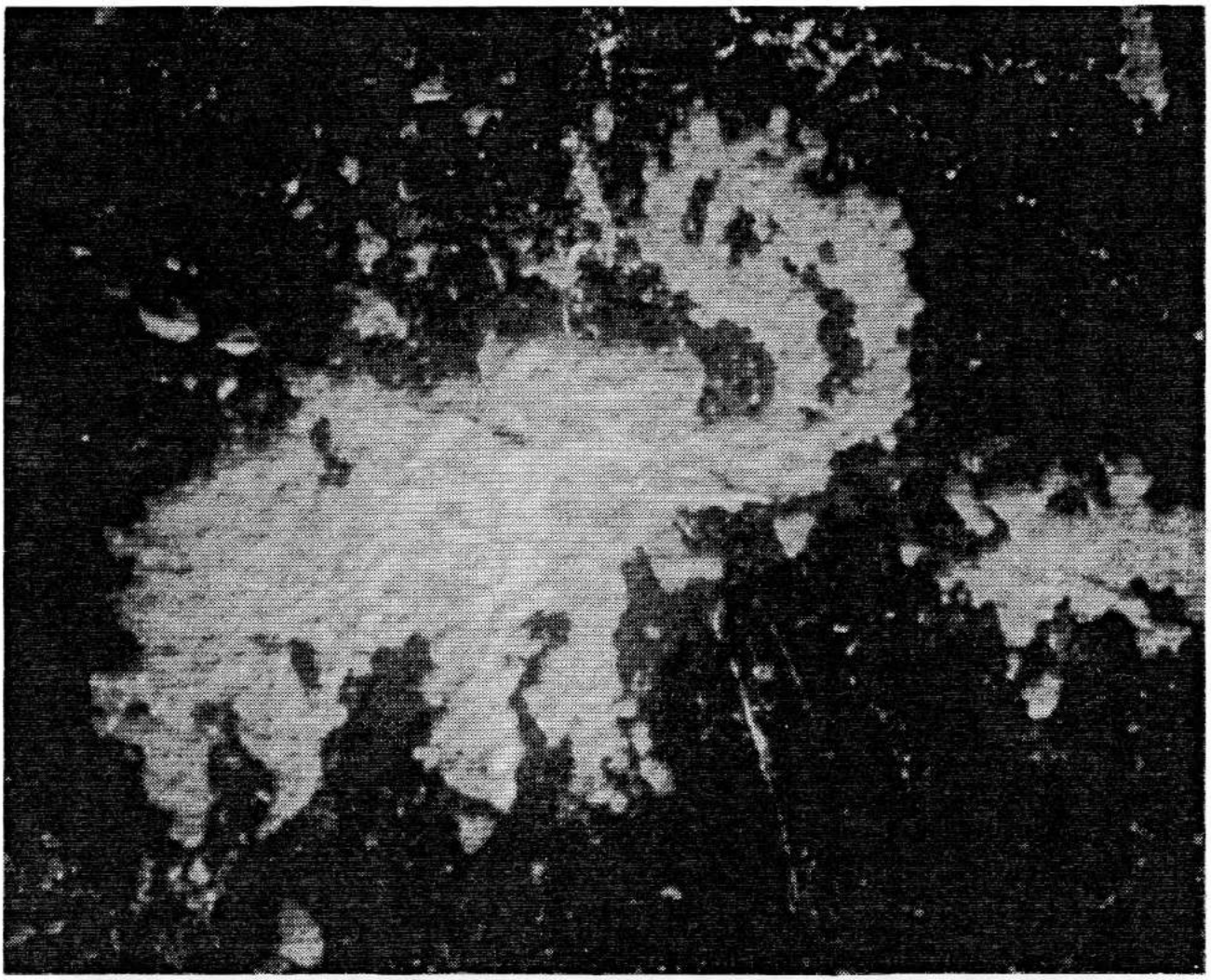
wandered the dry grassy plains by day. Lions and tigers prowled the frigid nights. The caribou and perhaps the grand daddy of Alaska's living links, arriving 1 million years ago, as also the stocky mush ox which arrived shortly after the caribou. Along with the gigantic mammoth, the steppe bison, and the arctic horse, the caribou and musk ox were the most common mammals roaming ice-age Alaska's appropriately named "Mammoth Steppe." But some thing big started happening to the earth about 14,000 years ago. The icy earth started to heat up. Alaska's mammoth, horse, lion, and sabre-toothed tiger disappeared. So did the camel and saiga antelope. As the hairy giants retreated north or died out entirely, that ultimate adapter - man - again returned to the arctic.

We are not satisfied to be right unless we can prove others to be quite wrong.

William Hazlett 1830 A.D.

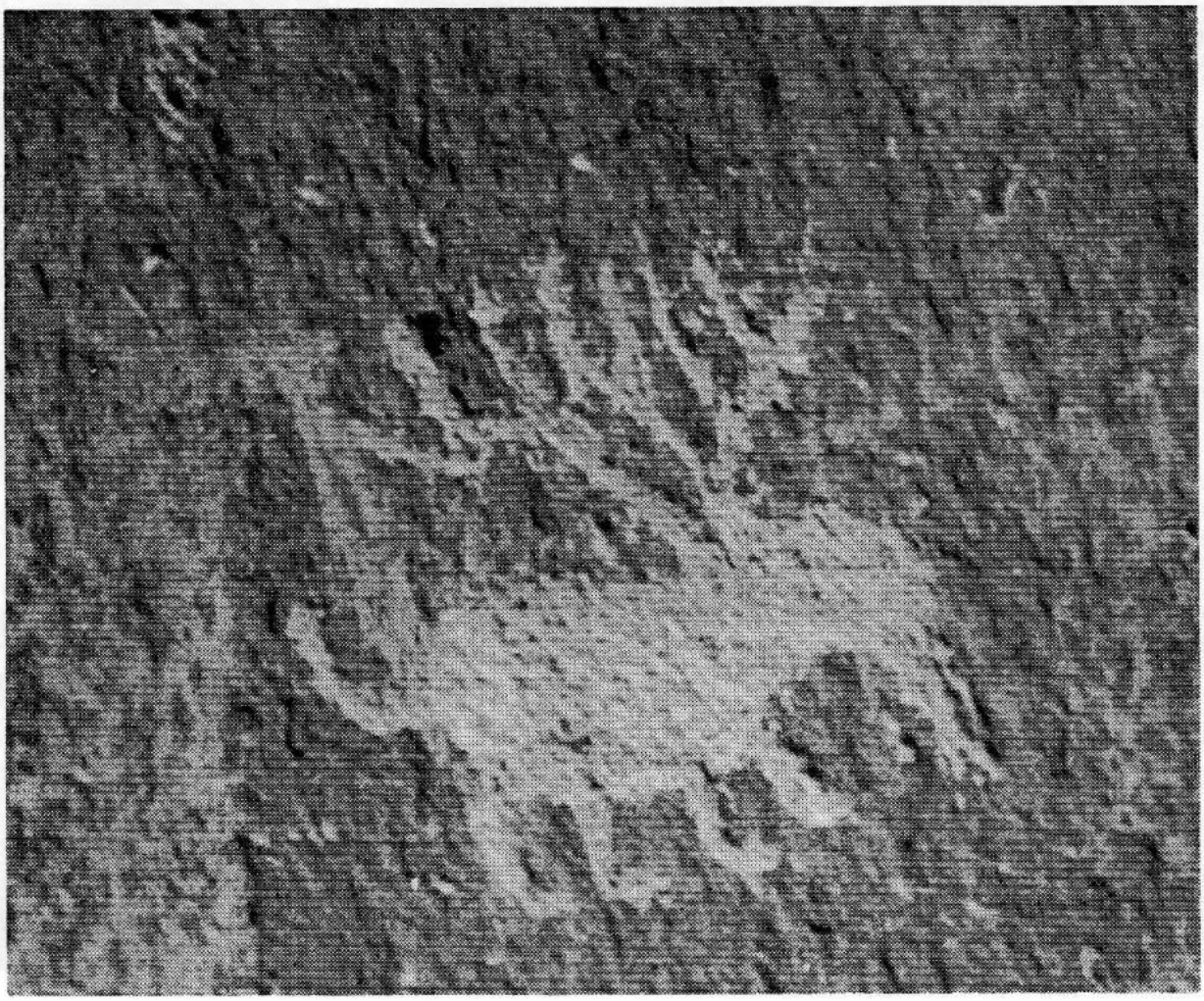
There ain't nothing more to write about, and I am rotten glad of it, because if I'd a knowed what a trouble it was to make a book I wouldn't a tackled it, and ain't going to no more.

S. L. Clemens (Mark Twain) 1885 A.D.



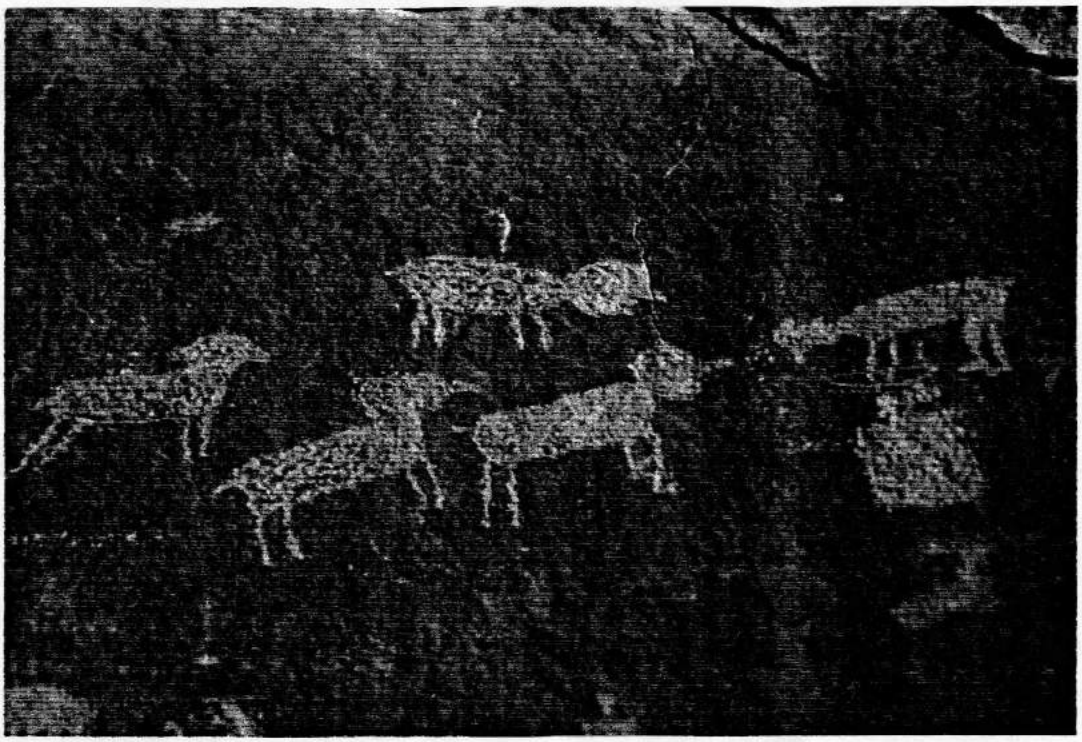
Manila, Utah

Figure 1.



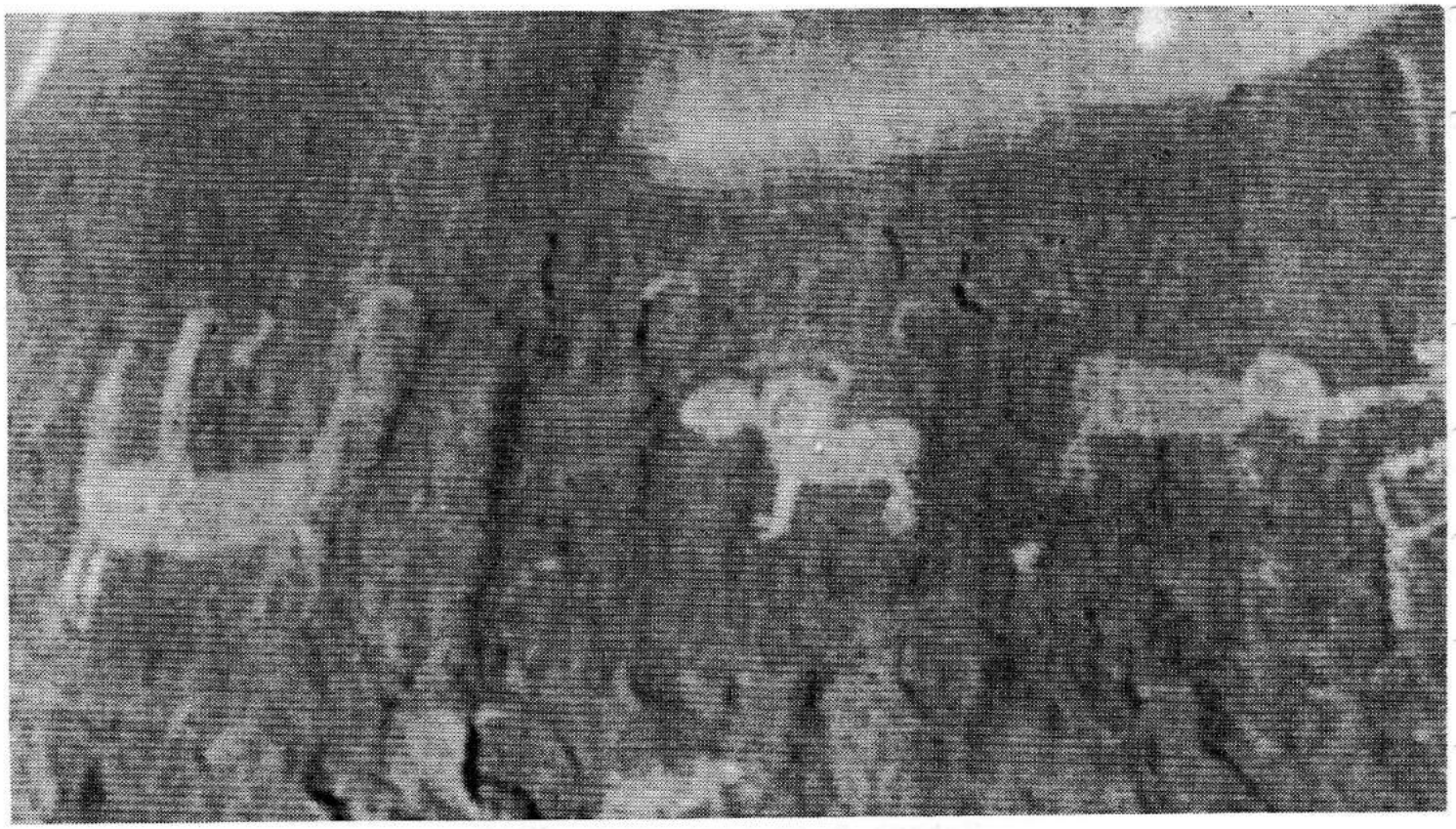
Cane Beds area of Northern Arizona

Figure 2.



Potash Road near Moab, Utah

Figure 3.

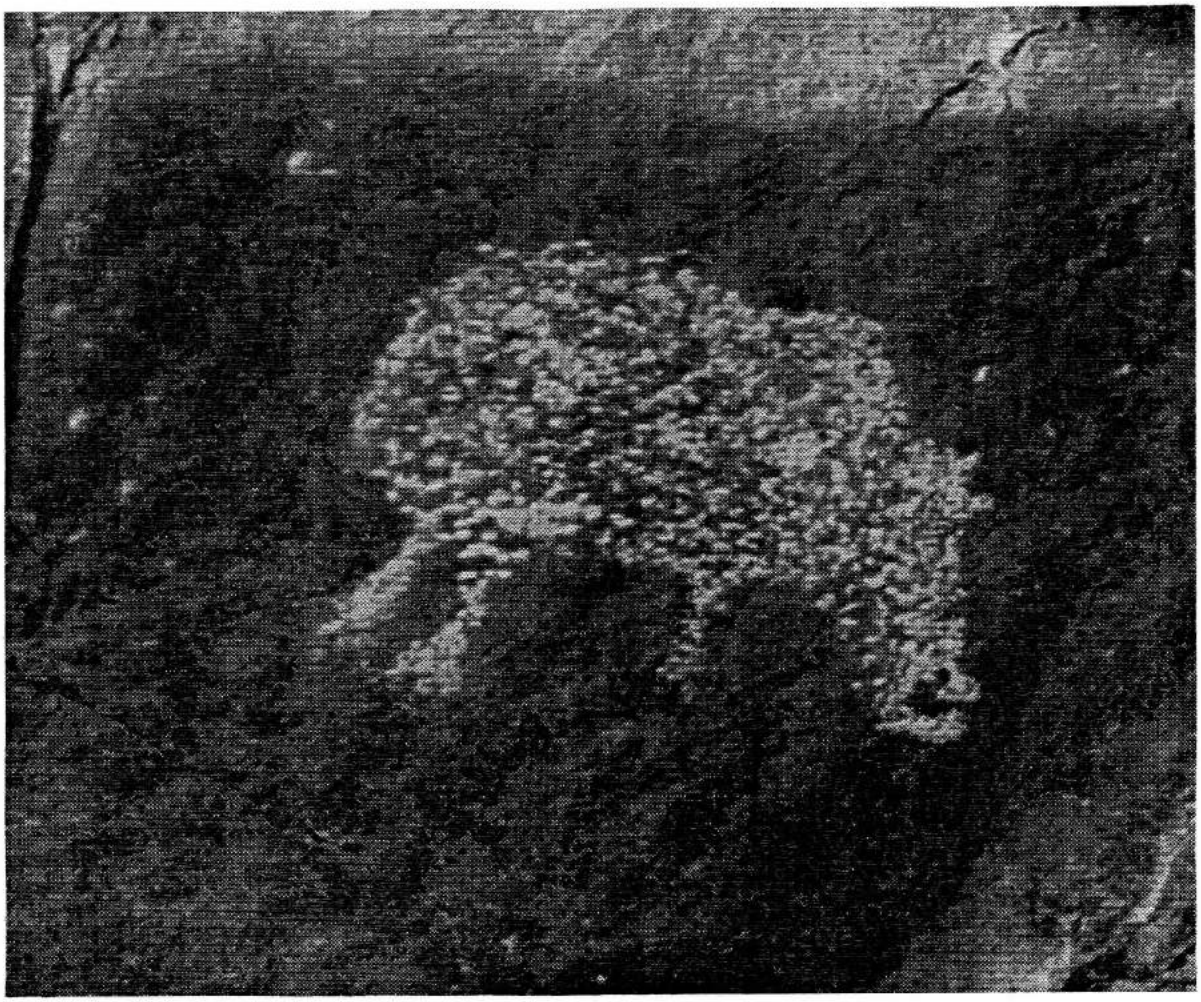


Camel Figure, Potash Road near Moab, Utah

Figure 4.

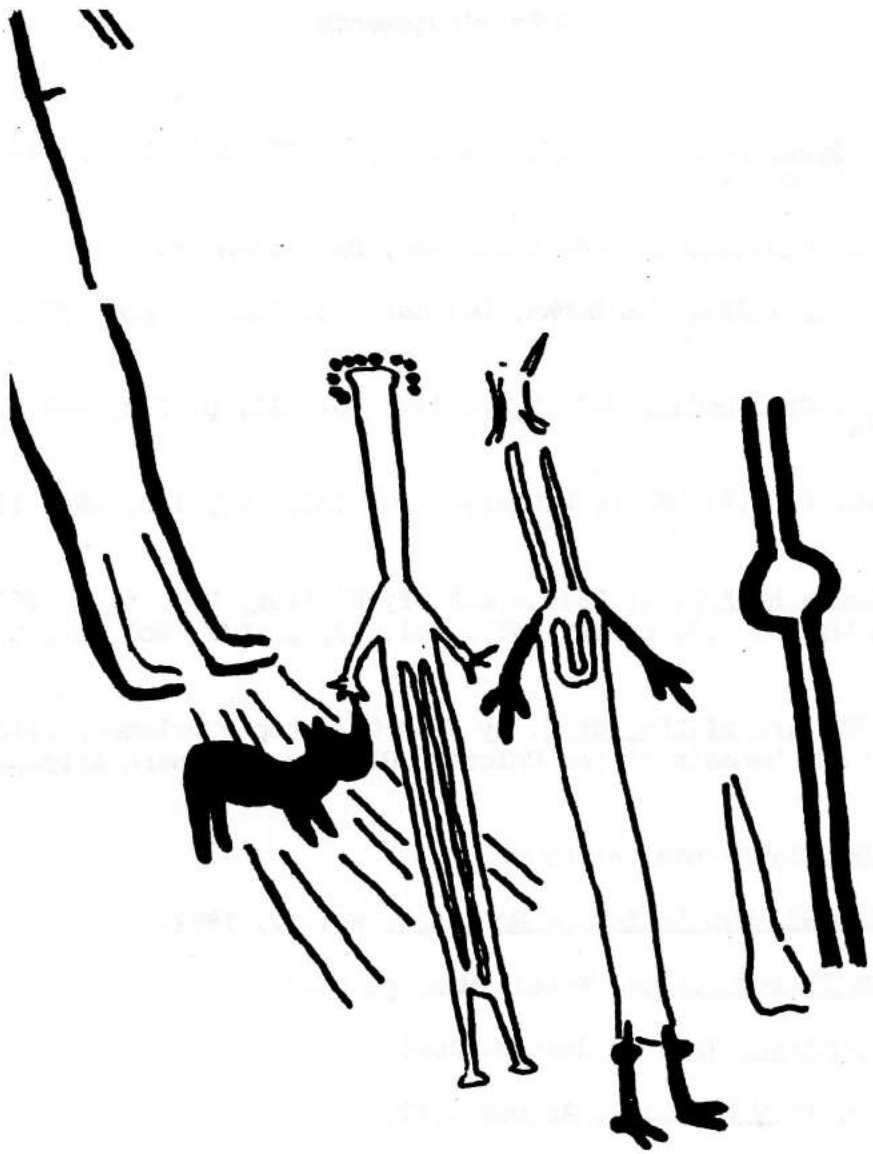
Nine Mile Canyon, Utah

Figure 5.



Nine Mile Canyon, Utah

Figure 6.



Grand Canyon, Arizona

Figure 7.

Acknowledgements

1. Academic American Encyclopedia, Vol. 4, p. 53; Vol. 13, p. 102; Vol. 16, p. 196; Vol. 17, p. 34.

2. Alaska-Yukon Handbook, Deke Castleman, Dan Pitchure.

3. Anthropology Today, Crm Books, Del Mar, California, pps. 231, 425, 427, 428.

4. Colliers Encyclopedia, Vol. 5, p. 197; Vol. 12, p. 314; Vol. 20, p. 39; Vol. 22, p. 69.

5. Early Man, by Life Nature Library, pps. 151, 157, 160, 166, 148, 147, 132.

6. Encyclopedia Americana, Deluxe Library Edition, Vol. 5. p. 262, 263; Vol. 14, p. 219, 220; Vol. 18, p. 209, 481; Vol. 22, p. 542; Vol. 26; p. 178, 276, 290.

7. Extinct Species of the World, by Jean-Christophe Bolonet, Illus. Eric Alaibert, Ice Age Mammals of the Colorado Plateau, Northern Arizona University.

8. Fossil Man, by Michael H. Day.

9. International News Letter on Rock Art, Vol. 2, 1992.

10. Knowledge Through Color, Fossil Man, p. 25.

11. Mammoth Hunters, The, by Jean M. Auel.

12. Natural History Magazine, August 1992.

13. New Dictionary of Quotations, A, p. 1042, 1341.

14. Salt Lake Tribune, Friday, May 15, 1992; July 30, 1992.

15. Science Magazine, January 24, 1992.

16. Science News, May 12, 1990; June 1, 1991; November 9, 1991; January 25, 1987; December 12, 1987; October 3, 1987; January 24, 1981; October 31, 1987.

17. Smithsonian Magazine, March 1991.

18. The Encyclopedia of Animal Evolution, pps. 44, 45, 46, 47, 41.

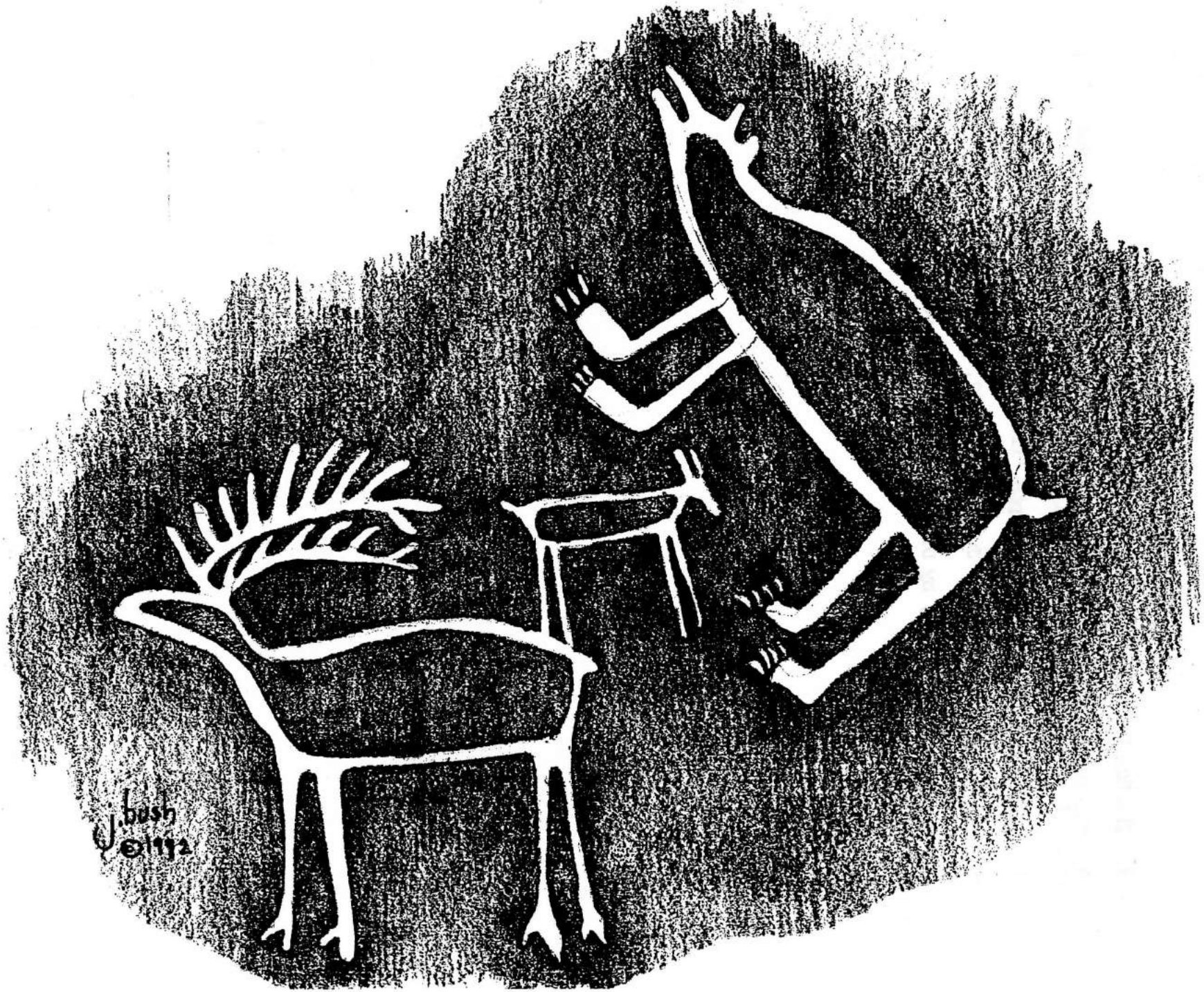
19. The New Book of Knowledge, Vol. 8, p. 131.

20. The World Book Encyclopedia, Vol. 3, p. 75; Vol. 13, p. 130; Vol. 15, p. 746, 746, 752; Vol. 16, p. 294; Vol. 19, p. 41, 141.

21. Time-Life, The Neanderthals, pps. 118, 119, 120, 40, 50.

22. Travel Holiday Magazine, July-August 1992.

23. Washington Hand Book, by Dianne of Boulerice Lyons, and Archie Satterfield, p. 15.


J.bush
©1972

# ROCK ART AS AN IN-SITU ARTIFACT

Adapted from a verbal
presentation with 35mm slides at:

49th Plains Anthropological Conference
Lawrence, Kansas
November 16, 1991

Clay Johnson
P O Box 31
Jensen, Utah 84035
801 789 3514

In the absence of techniques to derive more useful archaeological information, the archaeology of rock art has been confined to the merely descriptive, or to interpretation based on inference from ethnographic information. Based on two years of intensive field research centered on one site within Dinosaur National Monument in northeastern Utah, many rock art panels are redefined as artifacts constructed partially in response to an environmental factor. This factor is demonstrated to be largely responsible for the size, shape, and location of the elements on a certain category of rock art panels. Research methods have been developed which allow the archaeologist to establish dates for some panels, to examine panel construction as a technology, and to build or examine hypotheses with applications for many research domains. The factor is explained and demonstrated by examples, a brief overview is given of the research to date.

# ROCK ART AS AN IN-SITU ARTIFACT

That a change is needed in the archaeology of rock art is illustrated by these comments from Clement Meighan's (1981) paper on rock art studies theory and practice. "...the professional 'digging' archaeologist should play a more active part in defining and analyzing rock art. Whatever else it may be, rock art is a part of the archaeological record, and where it occurs it has to be fitted into the archaeology of a given region... Judging from published reports, many archaeologists take the position (by omission) that rock art may be interesting but it is not archaeology." and, "It may be that in the future a scientific, hypothesis-based approach will prove to be a better way to do rock art studies. However, it hasn't been demonstrated so far...It remains to be seen how archaeologists can combine new approaches with the strengths of their developed methodologies to gain a new understanding of rock art sites."

That the change needed is conceptual is demonstrated by the fact that this paper was slotted in the Art and Ethnohistory section of the 49th Plains Conference in spite of the fact the approach is not ethnographic and I do not consider rock art to be primarily art. My research consists of two years intensive study based primarily at one major Uinta Fremont rock art site called McKee Spring within Dinosaur National Monument in northeastern Utah, portions of which have been variously recorded as 42UN41, 42UN45, 42UN89, 42UN1727, and 42UN1708. That all this recording of one physical location has resulted in documenting less than 70% of the actual markings on the rock is also symptomatic of the conceptual problem.

Plate 1 is the typical photograph of Panel 12 in full, flat sunlight with scale attached (panel designations are the researcher's own as officially recorded designations are misleading or incomplete). Is any valuable archaeological insight to be gained from examining this photograph? Yet this approach typifies the bulk of rock art work over the last 60 years: the concept is that of a picture chiselled on a handy rock. Presumably the picture has meaning, which we try to infer. All too often the "research" consists of examining and comparing photos of the panels (or worse: photos of selected elements from the panels) rather than examining the rock art site itself. I submit that if the last 60 years of research into any other artifact or site type had been conducted by taking pictures of said artifact or site with a little scale next to them, very little would have been learned.

Let us examine the concept of rock art as an in-situ artifact, a technological construct for which the shape, location, and orientation in the environment result from the activities of man in that environment.

As Binford asked (1981): "What are the durable unchanging characteristics that the events of the present share with the past?" For a partial answer we might look to Binford (1983): "Since both light and temperature are factors which vary in regular ways on a global scale, we should therefore be able to begin to suggest correlations between site structure and geographical variations in both seasonal and day to day temperatures, as well as in cycles of natural light." It is in cycles of natural light that we find our useful "durable unchanging characteristic" for a certain class of rock art panels, described here as Interactive. Interactive rock art panels are those for which the selection of the surface for the panel itself, the location, specific shape, distribution, and to some extent size of elements on the panel are attributable to placement of the rock art to coincide with shadows moving on the rock on certain key dates important to the panel makers. This results in the shadows as observed on the panel design date or dates moving across the panel in a series of sequential alignments with glyph elements, defined as a Significant interaction. Sofaer's (1978) Fajada Butte paper interpreting an interactive panel as a calendar is a first (and not very typical) example of this phenomenon in the literature.

An intensive study of the McKee Spring site was initiated in 1989, examining the degree to which site environmental factors such as location, directional orientation, local topography, cyclic flora and fauna presence, or yearly meteorological cycles might be related to the rock art itself. The initial methodology was simply to visit and observe the site repeatedly throughout a year, spending as much time as possible at the site, noting available flora and fauna, water supplies, physical comfort range, shadow patterning, or any other physical factors for the site. It being assumed that in a basically blind observational approach such as this a large concentration of artifacts to be studied would increase the chance of identifying and comparing correlations, McKee Spring had been chosen at random from a list of several major rock art sites within a one hour drive of the researcher's home. Other sites nearby could then act as controls, or places to check developing hypotheses.

Research began in October of 1989 with once or twice weekly visits to the site, initially timed to coincide with sunrise and for the first few hours of the morning. A field form (Plate 2) was developed to identify panels and record daily observations. It was found that the site had not been recorded thoroughly, or with attention to a standard definition of the term "panel", thus panels were identified and assigned a number by this researcher. On the basis of incoming data it was found necessary to spend entire days at the site, from before sunrise to after sunset. It was noted that panels photographed or sketched in one light revealed further elements or more intricate shapes when viewed at other times, due to change in the angle and quality of light on the panels.

Some panels were found not to receive sunlight at all during portions of the year, or to not receive sunlight before a certain time of day all year. Other panels changed back and forth from sunlit to shadowed several times during one day. A form (Plate 3) was developed to track changes in shadow condition for the panels. Collected data in the form of 35mm slides demonstrated that some glyph elements were so constructed as to be related to interesting shadow patterns on the panels, and that the relationships were most obvious on specific days of the year.

On the basis of this evidence, a survey was made of the amateur literature, most specifically the collected papers of the annual symposia of the Utah Rock Art Research Association (Garn and Everitt 1983, Everitt and Madsen 1985, Bowen 1989, Morris 1990a, 1990b, 1991), and it was found that observations from various Utah locales tended to support observations made at McKee Spring: certain naturally occurring shadow shapes were being used repeatedly in very similar ways at widely scattered rock art sites throughout Utah. It also became apparent that no one had developed any standard way to observe, describe, or document these shapes and their correspondence with elements on rock art panels. Without some standards, no progress was likely. This researcher thus developed a terminology for describing interactions and recurring utilized natural shadow shapes (Johnson 1990a), a methodology for observing and photographing shadow activity on a panel (Johnson 1990b), and some observations on the kind of conceptual management changes needed to protect interactive rock art sites on public land (Johnson 1990c).

Using the aforementioned terminology and methodology, in 1991 the researcher concentrated field efforts on identifying and recording alignments for all interactions on all panels at McKee Spring and on testing the methodology and terminology by spot checking other sites within Dinosaur National Monument for interactive shapes or elements utilized at McKee Spring. A theoretical tool (Johnson 1991a) was developed which could be used to extract archaeological information from interactive panels. With this tool it is possible to date some panels, to determine to some degree the panel <u>maker's</u> concept of events such as equinox, and to test hypotheses regarding the meaning or purpose of elements on some panels. Plates 4, 5, and 6 document some very simple alignments in an interactive sequence from Panel 7 at McKee Spring. Direction of shadow motion is defined by arrow.

In order to seriously consider the evidence, we must disable several paradigms.

1. That this research is archaeoastronomy, which is our study of how past peoples studied the heavens. For archaeoastronomy the focus is outward toward the sky, a background in astronomy is needed, and, that a given construct is meant to point to an astronomic object, at what time of what year, and at which object from what observer position all must be <u>inferred</u>.

In the archaeological approach, the focus is on the artifact itself, the connections between artifact and environment are demonstrated in the same plane on the rock surface, and inferences drawn from the data yield insight into the technology, settlement patterns, and subsistence concerns of the makers.

2. That rock art is crude, enigmatic, and lacks order because it is a picture chiselled on a handy wall more or less at the whim of an unsophisticated maker. We shall see this is not true.

3. That rock art panels were "constructed" in modern terms rather than being utilized. If we were to build an interactive display today to serve us as a calendar, an almanac, or a focus for public activity, we would begin by preparing a flat, regular, vertical surface. We would then paint the scene we wished to portray, and construct a gnomon (shadow casting object) to create precisely the shape of shadow we wished on the figure we wished precisely (and only) on the day we wished. The technology involved in Fremont panel making was used to augment or utilize existing impressive or interesting natural patterns 95% of the time. Thus while the alignments will be most accurate on the day the panel was designed, rate of change from precise alignment on preceeding or following days was not within control of the makers.

4. That shadow is the absence of light. For interactive studies, it is helpful to think of shadow as a presence on rock art panels.

To illustrate how shadows at key dates determine panel design we first examine placement of shield elements. Look again at Panel 12 (Plate 1). Instead of asking what this shield represents or means, let us ask what information is needed to draw a circle in a specific place? In other words, what must be known in order to construct a circle? Required are the center point and radius, or a portion of the arc for the circle to be drawn. Plates 7 and 8 document certain alignments for Panel 12 with direction of shadow movement shown by arrow. Plate 9 documents alignments for Panel 3. Plate 10 documents alignments for Panel 16. Plate 11 documents alignments for Panel 7. Each of the photos was taken on a key date: either solstices, equinoxes, or days halfway between solstices and equinoxes, the crossquarter dates. Each of the shadow patterns documented here is most accurately aligned with shield elements on the key dates.

In other words, because shadow patterns change during the day and from day to day, but repeat each year, there is a stratigraphy for interactive rock art, composed of 365 layers of different daily shadow patterns. Within those 365 shadow strata, the layers rich in cultural materials tend to occupy certain levels corresponding with the dates for the solstices, equinoxes, or other key dates the makers deemed important. The assemblage of specific glyph elements utilized by shadow shapes on each key date varies seasonally as an apparent reflection of cultural concerns.

Many panels at McKee Spring have alignments on all key dates.

Plates 12, 13, 14, 15, and 16 report alignments of shadow with glyph elements on Panel 6 for the key date specified on each plate. Shadow line alignments are delineated by lines. "X" marks element points (such as the corner of a head, or the end of an element line) connected with other points or with lines. Sun arrows (Johnson 1990a) are shown as angles at location of significant alignment. Alignments are documented by photos or video sequences. Some elements tend to be seasonal in nature. They support interactions only for specific key dates, or for one season of the year. Plate 17 shows the effect of combining the interactions for summer solstice and summer crossquarter. Plate 18 shows the effect of combining the interactions for winter solstice and winter crossquarter. Plate 19 shows the result of combining the interactions for all five key dates. Plate 20 is a sketch from a 35mm slide of Panel 6 (excluding 6b). As can be seen by comparing Plate 19 with Plate 20, the sum of the shadow positions utilized on key dates by this panel effectively is this panel. This statement also applies to the other interactive panels investigated at McKee Spring. Clustering of interactive panels at one site is in line with Binford's (1983, page 186) suggestion that "...the more a particular task requires a very specific sort of setting for its performance, the more intense will be the concentration of activity in places which meet those requirements". In other words, it seems likely that the selection of an interactive site itself may be to a large degree dependent on its potential for interesting interactions.

It has been a research paradigm that there is no understandable order (left to right, top to bottom) to the distribution of elements on a panel. Let us examine how distribution of elements on interactive panels is affected by shadow patterns. Plate 21 represents straight line geometric shapes constructed to enclose all elements on selected panels from McKee Spring. Some panels are not shown, either because they are incompletely investigated or because their element distribution is not elongated along any particular axis. The number below each geometric shape is the panel number, arrows within each shape show the direction or directions of shadow movement across the panel during significant interactions on the key dates of the year. Distribution of elements on each panel tends to be elongated along the axis of shadow movement, with the exception of Panel 11. Distribution along the axis of shadow movement has the effect of maximizing both the length of an interaction, and the amount of ordering possible for an interaction. For any communication to be effective, required are a way to connect things and a way to order things. For example, in the top photo on Plate 22 a shadow line moving to the right connects the empty oval in the sheep zoomorph belly and the amorphous blob above it (this and this). The shadow continues to move to the right as if pushing the oval toward the cervix of the zoomorph where the shadow, as seen in the lower photo on Plate 22, becomes a sun

arrow which remains in position for several moments (this then this). Three of the four panels at this site which have sheep zoomorphs display a sun arrow from the cervix on the same day (May Crossquarter, the end of the first week in May), identified by Utah Division of Wildlife Resources personnel as the beginning of the period for bighorn sheep birthing in this area.

The above facts (seasonality of elements, ordering of elements, distribution of elements, symbolism particular to the shadow patterns themselves) indicate that the potential informational content, especially the potential for ordered information, is much higher for interactive panels than has previously been assumed for rock art.

Plates 23, 24, 25, 26 and 27 are panel function sheets for each key date for McKee Spring. The sheets identify which panels are functioning, how many are functioning at one time, and whether the function is a significant, suggestive, or non-significant interaction (Johnson 1990a). Additional work since my 1990 paper indicates that the class "suggestive" may be superfluous, as suggestive interactions on closer examination tend to break down into either non-significant (only coincidental) alignments, or significant interactions composed of subtle alignments. Interactions labelled suggestive are currently being examined more thoroughly and reassigned to one of the other two classes. The fact that time of day for panel function varies from date to date for individual panels suggests that function at a certain time of day was not a major criterion for selection of a particular surface as a rock art panel.

Using the panel function sheets for the entire year, graphs can be constructed for each key date as shown in Plates 28 and 29. The dotted line on each graph plots at fifteen minute intervals for the entire day the number of panels functioning (having shadows on them as opposed to being totally sunlit or totally shaded). The solid line represents the number of those panels displaying significant or suggestive interactions. In other words, the potential for usage versus the utilization. Several panels remain undocumented; those panels are not reflected in either line. For several panels, the time of function is known although the class of interaction is not. Those panels are reflected in the dotted line but not in the solid line. It is thus expected that the value of the dotted line will be slightly higher at some points when the study is complete, and that the solid line will at some points have a higher value in relation to the dotted line. These graphs suggest some interesting points to consider.

1. Since the physical locations of the panels allow us to assess which panels might have been watched simultaneously by one observer, it can be estimated that on each key date a minimum of three observers would be required for most of the day to observe the interactions completely.

2. Panels were utilized throughout the day, rather than at a specific time or times of day.

3. Panel utilization levels at this site remained relatively consistent throughout the year.

4. Greater than five panels functioning, there appears to be decreased utilization of interactive potential. Greater than ten panels functioning, there appears to be effectively no utilization of interactive potential. Lack of utilization of existing panels probably depends on two factors. First, some instances of panel function have no definite pattern with the potential for utilization. the interaction is vague, undefined, or "blotchy", so that no amount of technological alteration employed by the makers would result in a useful pattern. Secondly, it is presumed that only a certain number of panels could be simultaneously utilized (observed) by available personnel.

5. There appears to be a slightly greater utilization of panels as a percentage of functioning panels at sunrise and sunset.

6. Some panels utilized at one time of year are at other times of the year either fully lit (no shadows) or fully dark (no direct sunlight) all day. This in itself could have been a factor in selection of the rock surface for a panel.

7. Graphs of another interactive site do not display peaks and valleys for the same times of day as do the graphs for McKee Spring. The time of day a panel was utilized, or peaks and valleys in utilization graphs for a site, are more a function of the broad pattern of sun and shadow on the site than they are due to selection of specific times of panel function by the makers. Rock surfaces were chosen to be utilized for panels based on the occurrence of interesting or spectacular shadow shapes appearing on key dates, rather than selection being based on function at a certain time of day.

8. Since the principle behind the design and construction of interactive panels has been defined, the minimum length of time and number of personnel required to design and construct the site can be estimated. Because many of the panels have elements sharing interactions on all or many of the key dates, it can be seen that design of the site would have taken considerably longer than actual construction.

This paper has to this point dealt with McKee Spring as if the entire site was homogenous: the result of one episode of panel building. That is of course not true. There are elements on some panels at McKee which judging by relative repatination are considerably older than the main (Fremont) figures.

There is at least one panel that is clearly post-contact, and elements on some Fremont panels that judging by relative repatination are younger than the main figures. Both the presumably older, and the presumably younger rock art at this site displays some significant interactions on key dates. Because this paper is examining the concept of interactive rock art, identified through conceptual recognition of rock art as an in-situ artifact, so far no separation has been made in this discussion on the basis of "style" or cultural attribution. It can be seen that with the exception of points 2 and 7 above, the inferences drawn from the graphs for this site rely to greater or lesser extent on the idea that the panels were all designed more or less as a unit, and utilized as a whole.

This is considered a viable working hypothesis for the majority of the panels at McKee Spring both because of the principle behind the design of these panels and because of relationships of several kinds shared by many of the panels. Design was accomplished by identifying specific positions of the moving shadows on one key date which coincided with or intersected specific positions of the moving shadows on other key dates, so that figures on a panel were the result of a combination of moving shadow displays, which connect all the elements designed as a panel in a series of interactions on (usually) a number of key dates. It is difficult to conceive how this type of design might have resulted from a palimpsest of unrelated construction events. Sharing of traits between panels presumed to be the result of one construction episode includes but is not limited to (a) a common style attribution, (b) a relatively similar degree of repatination, (c) element or figure matches from panel to panel, (d) shared interactions with panels to which they seem otherwise related, (e) concurrency, or "timed" sequential interactions with another panel, (f) an overall pattern of function which allows economy of time for observation personnel, (g) complementary panels which together seem to make up a coherent pattern of behavior covering the entire year, and (h) shared symbolism of the elements functioning given times of year, and of the interactive shapes utilized by panels apparently related by other factors.

Interactive rock art research offers many possibilities for the archaeologist. Several major factors affect the changing shadow display during a day. They are the topography of the surface chosen as a panel, the topography of the gnomon (shadow-casting surface), and the east-west "travel" of the sun during the day. Changes in shadow position from day to day and during the year are affected by the additional factor of declination, or the north-south change in the path of the sun. Detectable change in given shadow patterns over the centuries is the result of the degradation of the obliquity, or wobble of the planet about its polar axis. It is thus possible to determine the hour of the day and time interval for which a panel was designed, and to

determine the day or days of design precisely or to within two or three possible days. For some panels, it is possible to estimate a year date for construction by the decay in the interaction due to degradation of the obliquity. In some special cases a coincidence of known facts and interactive changes may allow dating a panel precisely to year, day and hour of design. See Johnson (1991a) for a discussion of the potential for dating panels non-intrusively by the interactions. Thus, many ideas about settlement and subsistence, culture process, and seasonal activities can be examined. A quite sophisticated technology utilizing rather standardized shadow shapes seems to exist over a considerable area of Utah (Johnson, work in progress). Examination and comparison of interactive potential and "style" both inter and intra-Fremont should prove interesting. With much of the physical structure of a rock art panel identified as necessary distortions to achieve alignments, what is left is likely to consist of information, the "noise" being eliminated. Purposes including that of calendar and almanac can now be described for some rock art panels. Graffiti can be identified with a high degree of confidence. Original shape of damaged glyphs can be reconstructed from the interactions.

## Summary

For a class of rock art panels, termed interactive, location, design, and construction of the panels are primarily the result of shadow-driven, goal oriented , technologically sophisticated activity performed on specific days of the year; days which were important to the rock art makers for various, but largely identifiable reasons. The hour and day, and in some cases the year of panel design or construction can be objectively identified. The fact that interactive panels were so constructed as to maximize amount (length of interaction) and ordering of information suggests that the potential of interactive panels to convey information is far greater than has been assumed. Some purposes for the panels are displayed by the interactions, others can be inferred from study of the panels plus their interactions. Interactive rock art moved from its original position thus loses immense archaeological value. Protection for rock art sites must be reassessed on the basis of the implications of interactive rock art. The concept of rock art as a picture chiselled on a handy rock must be discarded, and replaced with the concept of rock art as an in-situ artifact, owing its features to identifiable factors in the site environment, with all that implies for archaeology.

Although this paper focuses on one factor (interactive panels) identified through consideration of rock art as an in-situ artifact, it is possible that other factors may exist. All implications of the fact that rock art is an in-situ artifact should be considered in future research.

## REFERENCES

Binford, Lewis R.
1981 BONES: Ancient Men and Modern Myths
Academic Press
pg 28

1983 IN PURSUIT OF THE PAST. Decoding the Archaeological Record Thames and Hudson, Inc. New York, New York
pgs 186-191

Bowen, Nina
1989 Papers Presented at the Sixth Annual Symposium of the Utah Rock Art Research Association. UTAH ROCK ART, Volume 6. Salt Lake City, Utah

Everitt, Cindy and Rex Madsen
1985 Papers Presented at the Fourth Annual Symposium of the Utah Rock Art Research Association. UTAH ROCK ART, Volume 4. Salt Lake City, Utah

Garn, Phil and Cindy Everitt
1983 Papers Presented at the Second Annual Symposium of the Utah Rock Art Research Association. UTAH ROCK ART, Volume 2. Salt Lake City, Utah

Johnson, Clay
1990 a ESTABLISHING A UNIFORM TERMINOLOGY FOR DESCRIPTION OF SOLAR INTERACTIONS WITH ROCK ART PANELS
Paper presented at 1990 Utah Rock Art Research Association Symposium, Vernal, Utah. Manuscript on file with author. To be published in UTAH ROCK ART Vol X, available January, 1992

b METHODOLOGY FOR IDENTIFYING, OBSERVING, RECORDING, AND REPORTING SOLAR INTERACTIVE ROCK ART PANELS
Paper presented at 1990 Utah Rock Art Research Association Symposium, Vernal, Utah. Manuscript on file with author. To be published in UTAH ROCK ART Vol X, available January, 1992

c IMPLICATIONS of SOLAR ROCK ART SITES for ROCK ART PROTECTION
Paper presented at 1990 Utah Rock Art Research Association Symposium, Vernal, Utah. Manuscript on file with author. To be published in UTAH ROCK ART Vol X, available January, 1992

Johnson, Clay
1991 a ACCURACY AND DECLINATION: Using Panel Activity To Answer Rock Art Questions
Paper presented at 1991 Utah Rock Art Research Association Symposium, Green River, Utah. Manuscript on file with author.

b McKee Spring Research: A Discussion
Appendix D in RESULTS OF DATA RECOVERY AT JUNIPER LEDGE SHELTER Truesdale, James A.
in review for publication at National Park Service: Rocky Mountain Regional Office

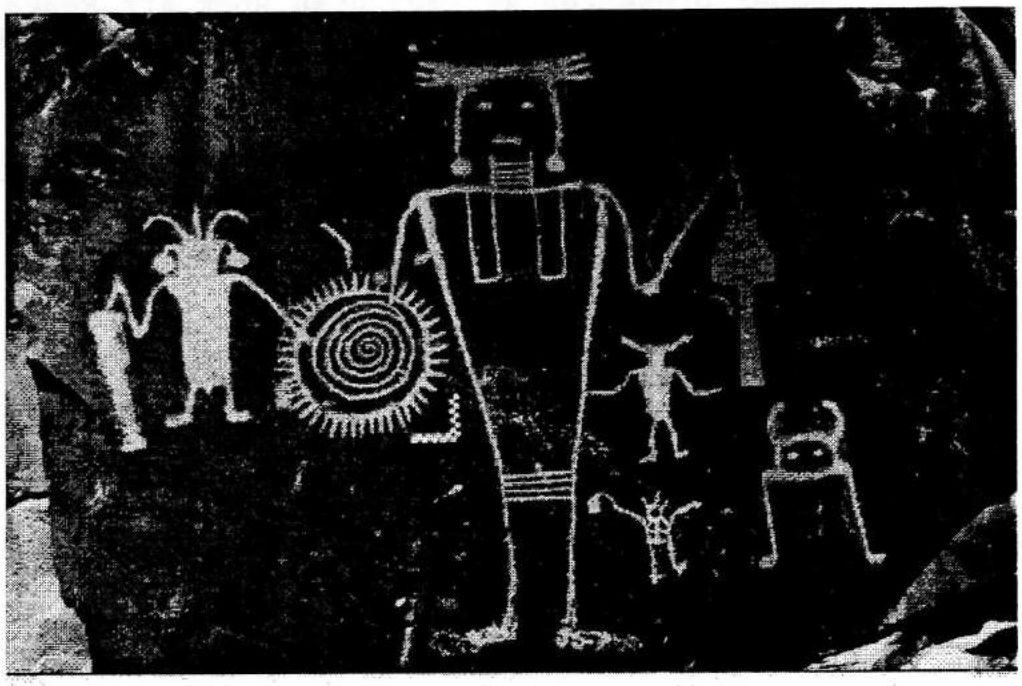
Meighan, Clement W.
1981 Theory and Practice in the Study of Rock Art
In: THE SHAPE OF THE PAST; Studies in Honor of Franklin D. Murphy, ed. Giorgio-Buccellati and Charles Speroni. Institute of Archeology and Office of the Chancellor, University of California, Los Angeles

Morris, Bonnie
1990 a Papers Presented at the Seventh Annual Symposium of the Utah Rock Art Research Association. UTAH ROCK ART, Volume 7. Salt Lake City, Utah

b Papers Presented at the Ninth Annual Symposium of the Utah Rock Art Research Association. UTAH ROCK ART, Volume 9. Salt Lake City, Utah

1991 Papers Presented at the Eighth Annual Symposium of the Utah Rock Art Research Association. UTAH ROCK ART, Volume 8. Salt Lake City, Utah

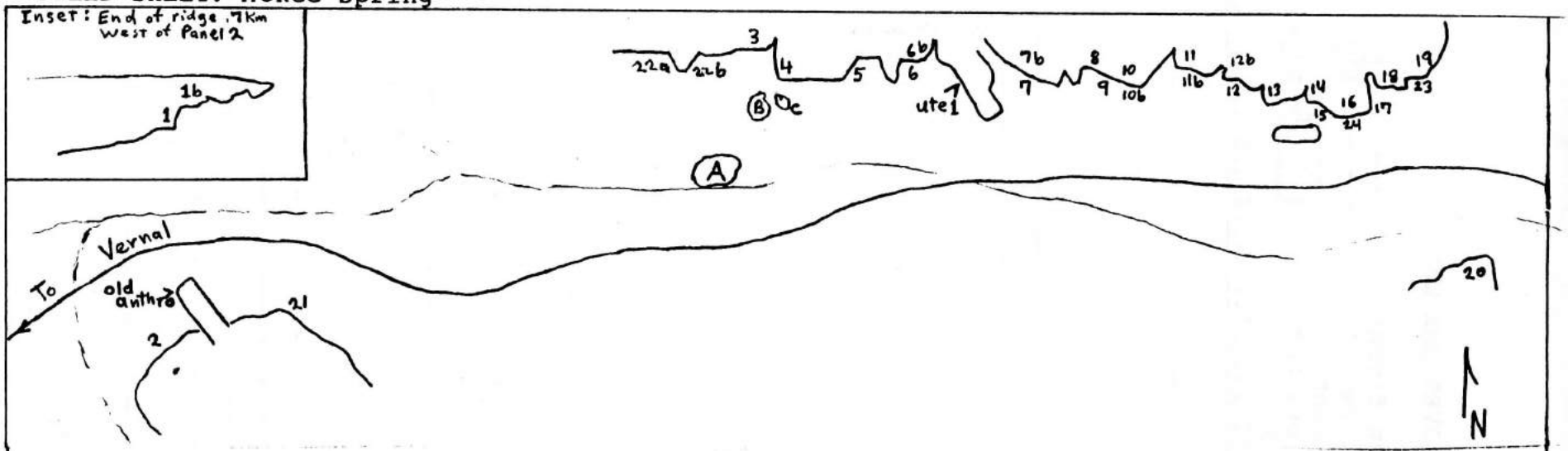
Sofaer, Anna. With Volker Zinser and Rolf Sinclair
1978 A UNIQUE SOLAR MARKING CONSTRUCT OF THE ANCIENT PUEBLO INDIANS. In: AMERICAN INDIAN ROCK ART, Volume 5. Dalles, Oregon 1979



McKee Spring: Panel 12
7 November 1991, 12:38 PM MST

Plate 1

FIELD SHEET: McKee Spring




DATE:_____ TIME ON SITE:_____ DATE SIGNIFICANCE:_____

CONDITION: D = dark L = lit A = sun & shadow on glyph
INTERACTIONS: N = non-significant M = suggestive S = significant alignment I = no data

| Panel# & Name | | Panel# & Name | | Panel# & Name | |
|---|---|---|---|---|---|
| 1. 42UN1708 | | 7b. Sun Priest | | 15. Monkey Face | |
| 1b. Flat Panel | | 8. Rocking Horse | | 16. Confluence | |
| 2. S&M King | | 9. Little Man | | 17. Wet Sheep | |
| Old Anthro | | 10. Pinwheel | | 18. Flat Top Fam | |
| 3. Wife Killed | | 10b. Low Anthro | | 19. Kokopelli | |
| 4. Lone Combhd | | 11. Cut Belly | | 20. Rock Shelter | |
| 5. Dot Man | | 11b. Lasso Anthro | | 21. Snake Map | |
| 6. Comb Family | | 12. Flat Top | | 22a. West Eye | |
| 6b. Hiding Man | | 12b. Dot Sheep | | 22b. East Eye | |
| Ute 1 | | 13. K7 | | 23. Old Box | |
| 7. Bug Man | | 14. 3 Knives | | 24. Below P16 | |

COMMENTS (Also back of sheet):

Plate 2

# PANEL FUNCTION OVER ONE DAY

SITE: McKee Spring
Time of Year:
Circle: (MST) or DST

N= non-significant
M= suggestive
S= significant
I= incomplete data

——— = dark
- - - = lit
▭ = interactiv

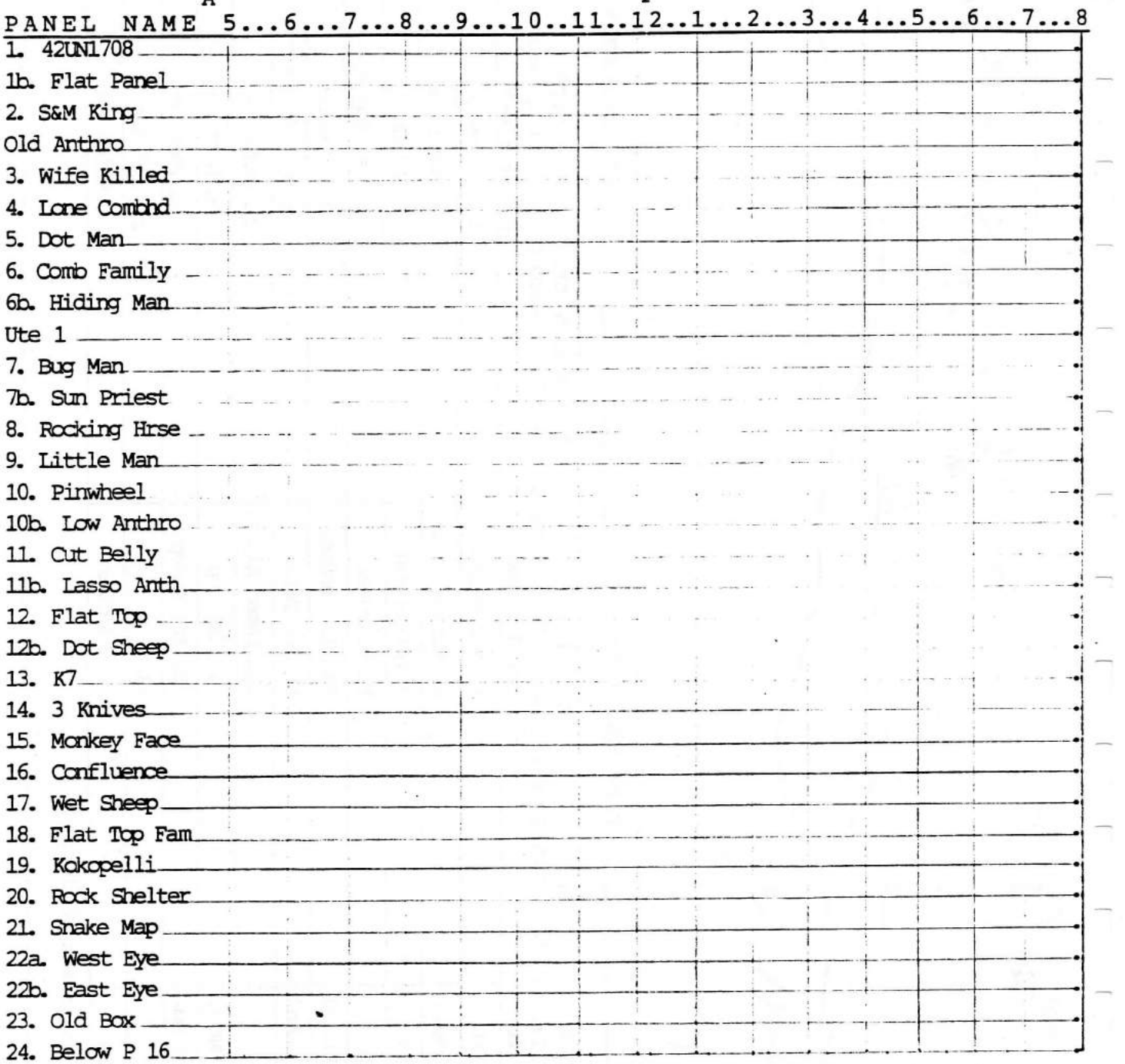



Plate 3

McKee Spring: Panel 7, Equinox
23 September 1990, 8:33 AM MST

McKee Spring: Panel 7, Equinox
23 September 1990, 8:38 AM MST

Arrow Shows Direction of Shadow Movement

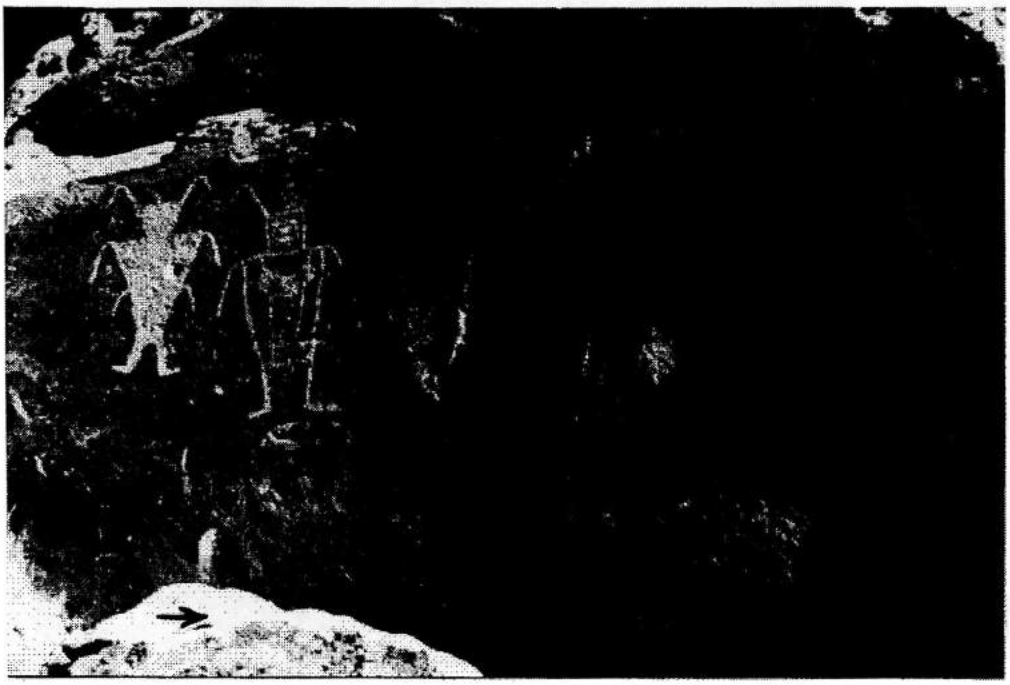
Plate 4

McKee Spring: Panel 7, Equinox
22 September 1990, 8:46 AM MST

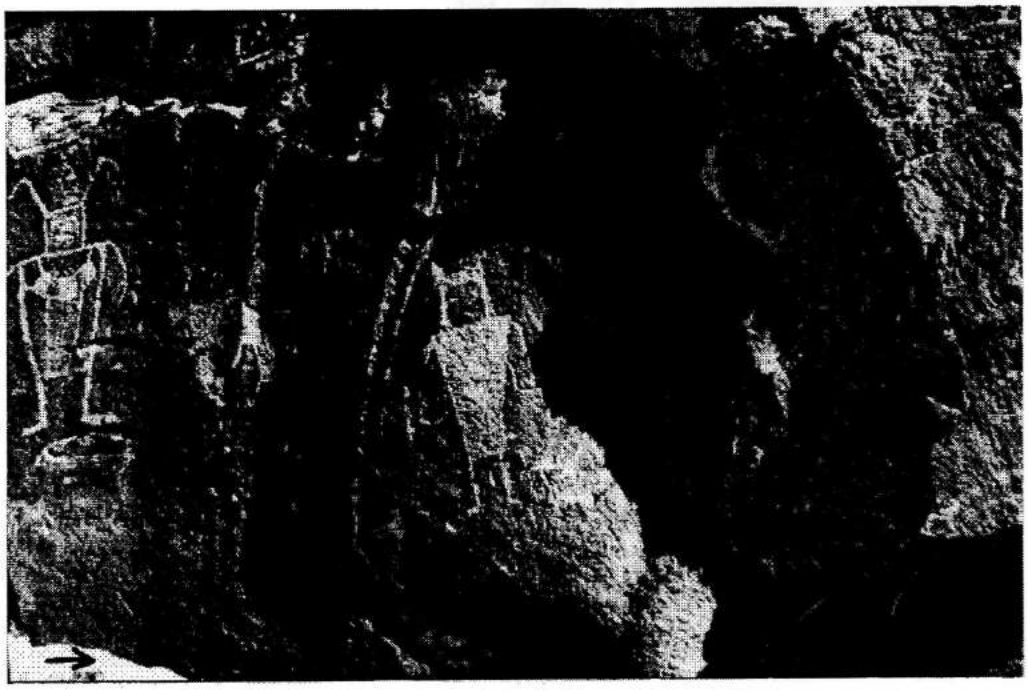
McKee Spring: Panel 7, Equinox
23 September 1990, 8:56 AM MST

Arrow Shows Direction of Shadow Movement

Plate 5



McKee Spring: Panel 7, Equinox
23 September 1990, 9:03 AM MST

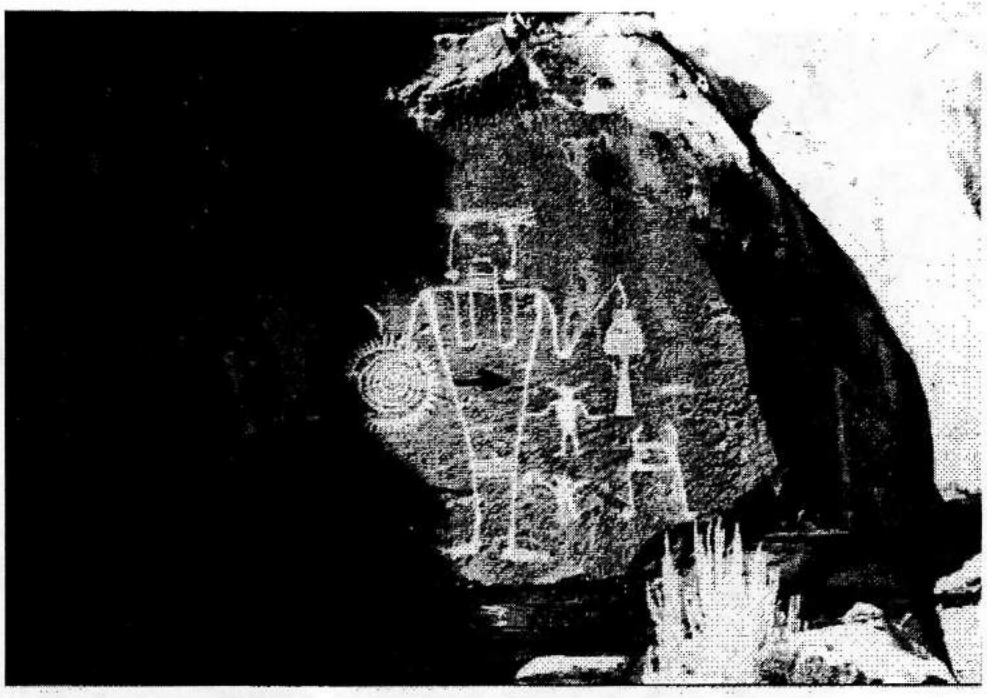


McKee Spring: Panel 7, Equinox
23 September 1990, 9:16 AM MST

Arrow Shows Direction of Shadow Movement

Plate 6

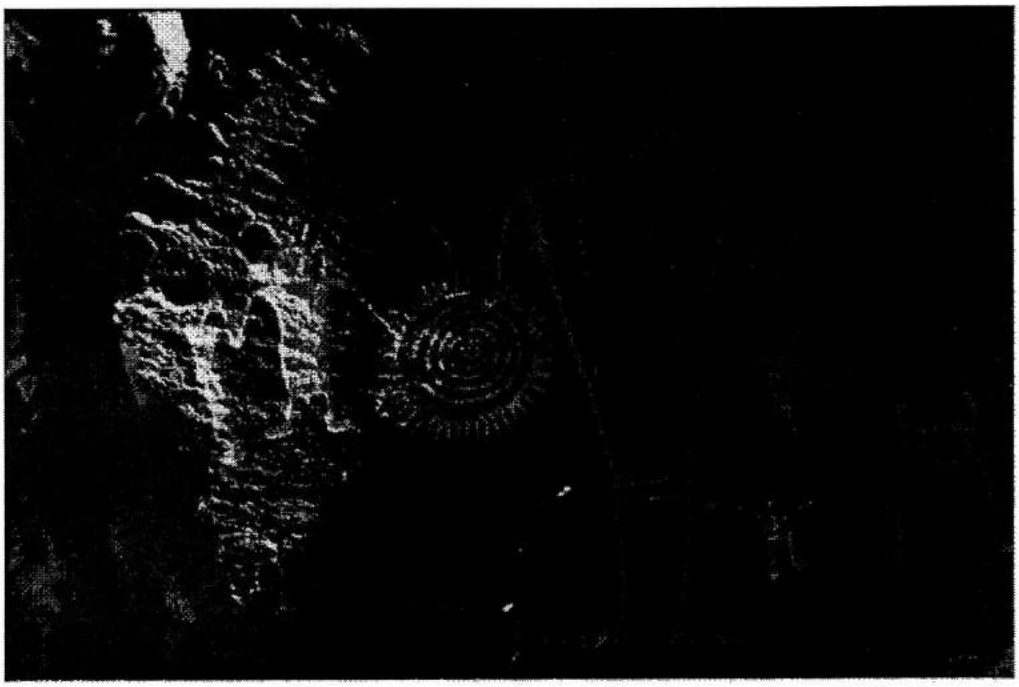
McKee Spring: Panel 12, Equinox
22 September 1990, 8:21 AM MST



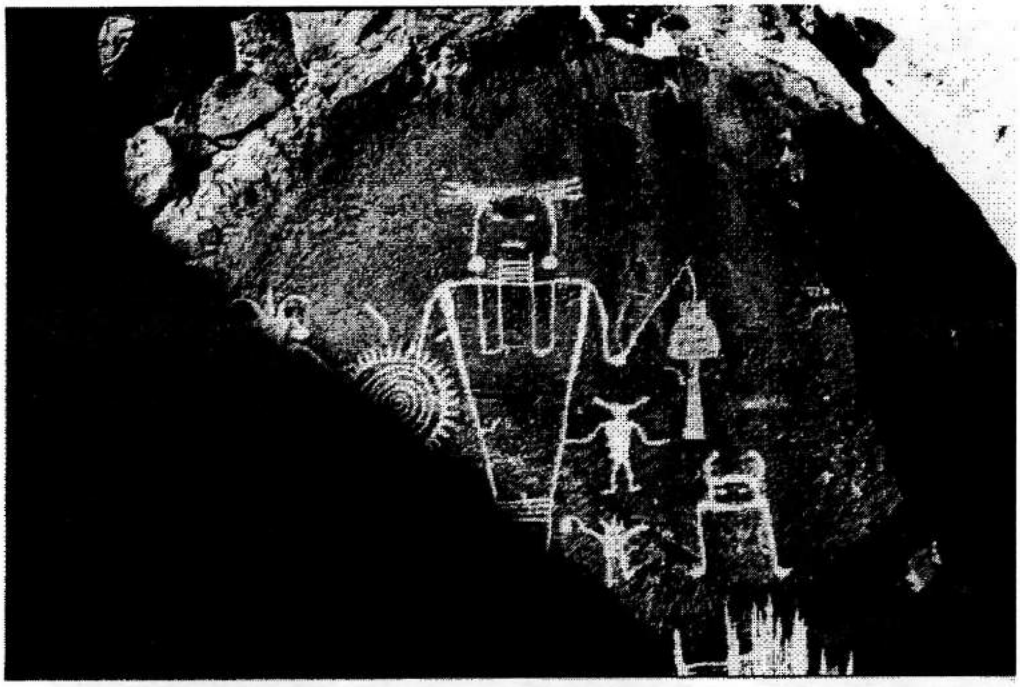
McKee Spring: Panel 12, Summer Solstice
22 June 1991, 4:00 PM MST

Arrow Shows Direction of Shadow Movement

Plate 7



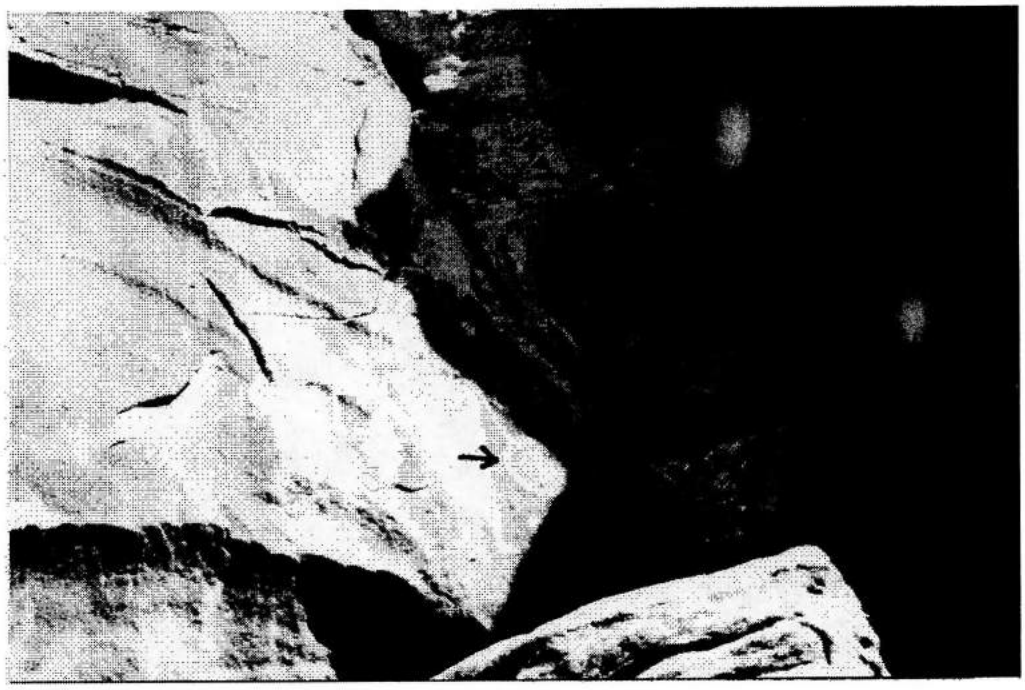
McKee Spring: Panel 12, Summer Crossquarter
5 May 1991, 9:22 AM MST



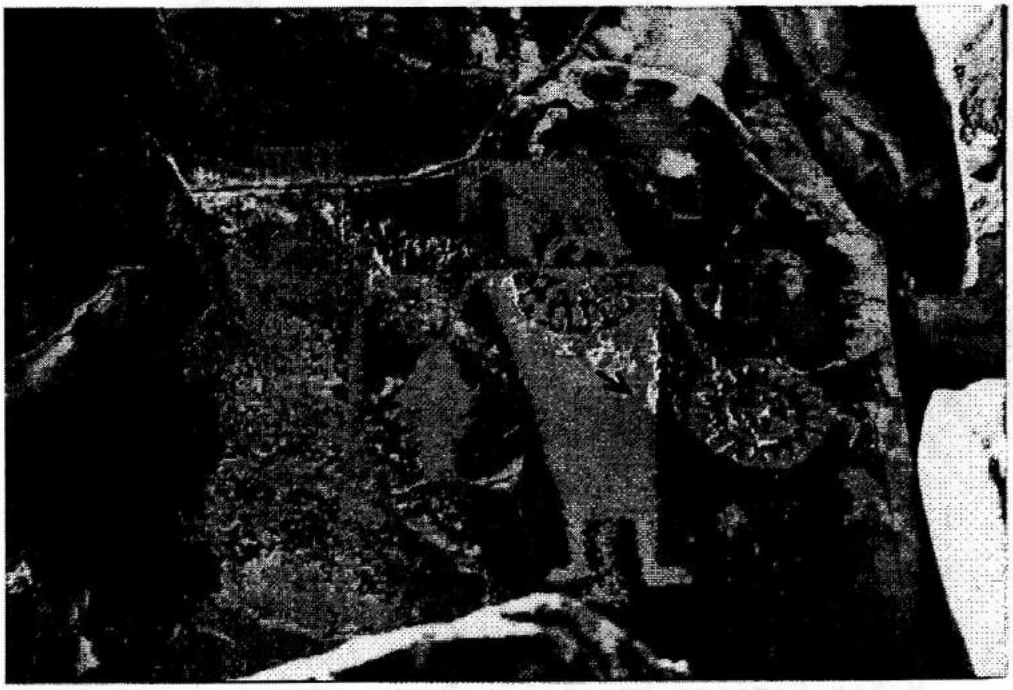
McKee Spring: Panel 12, Summer Crossquarter
7 August 1991, 4:10 PM MST

Arrow Shows Direction of Shadow Movement

Plate 8



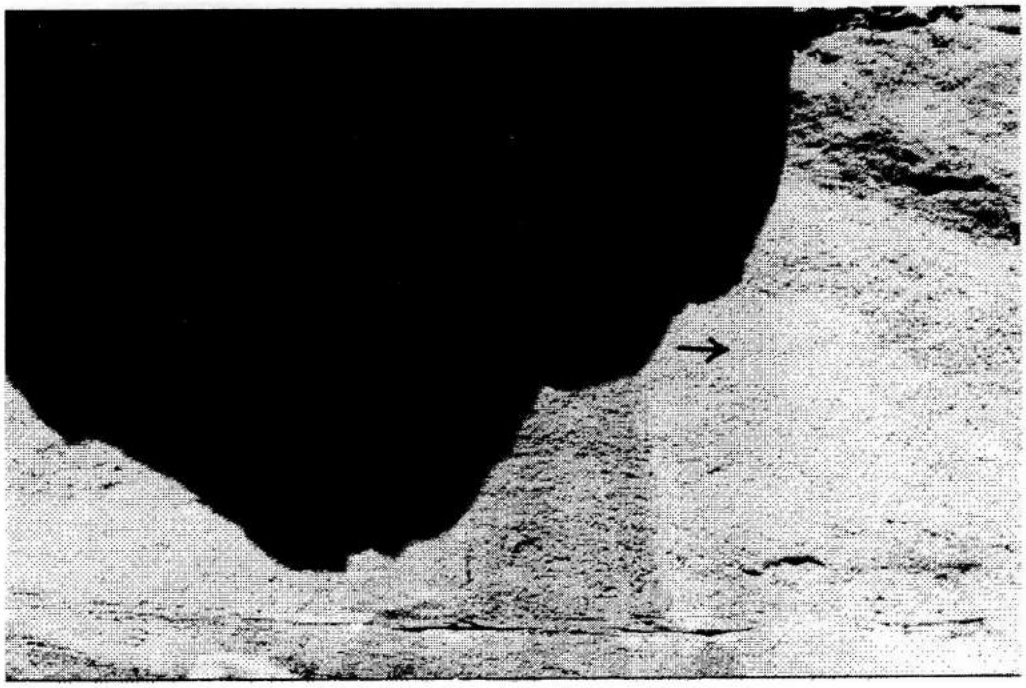
McKee Spring: Panel 3, Equinox
23 September 1991, 10:39 AM MST



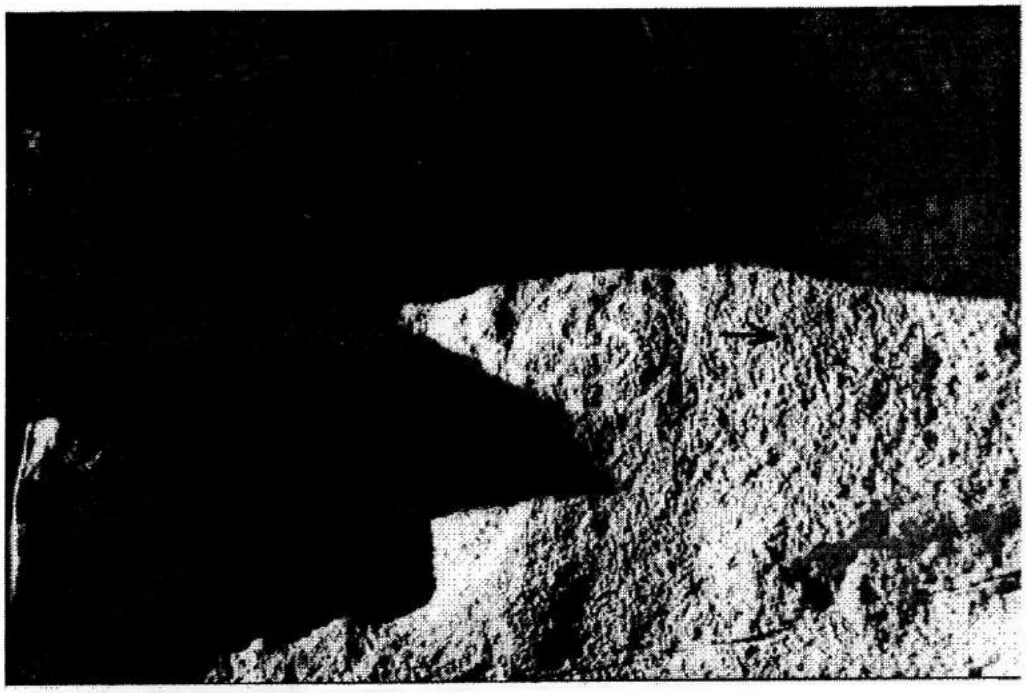
McKee Spring: Panel 3, Summer Crossquarter
5 May 1991, 4:07 PM MST

Arrow Shows Direction of Shadow Movement

Plate 9



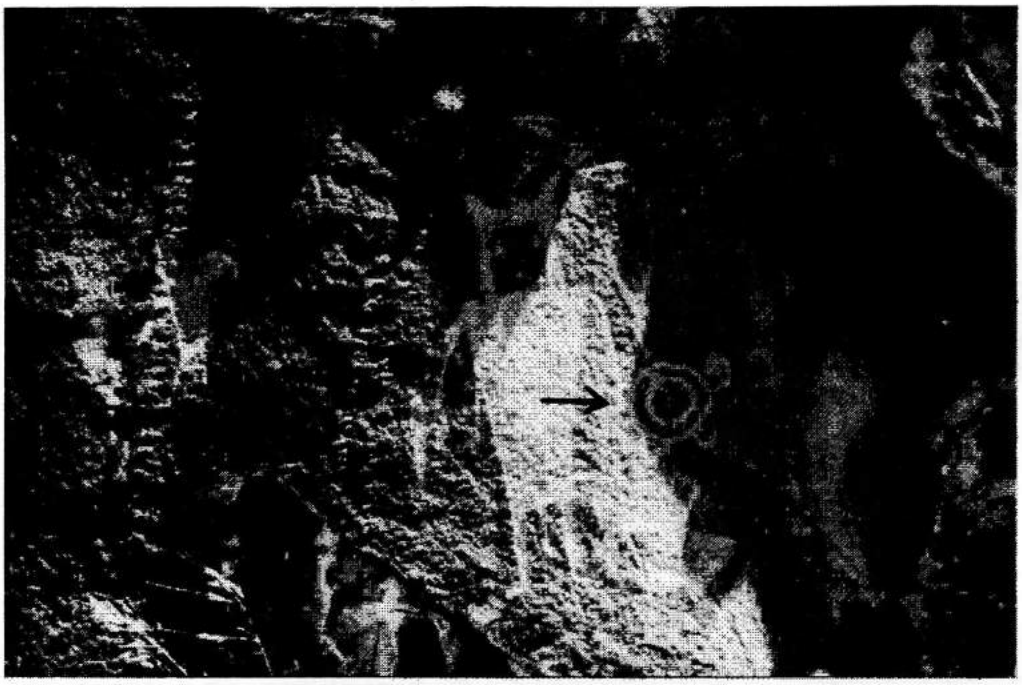
McKee Spring: Panel 16, Equinox
23 September 1990, 11:04 AM MST



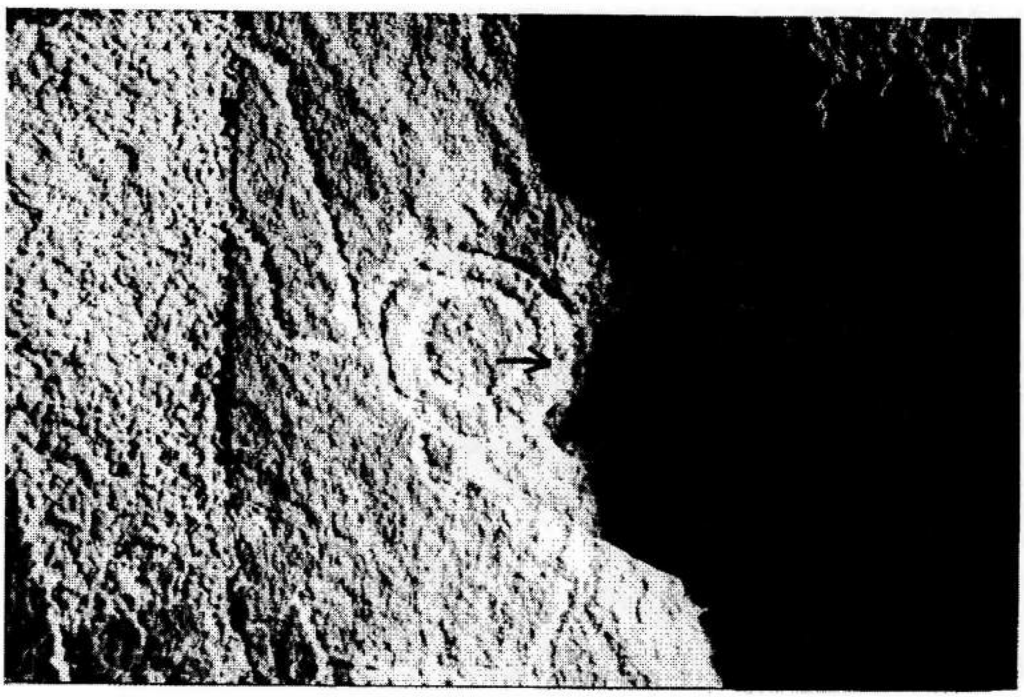
McKee Spring: Panel 16, Winter Crossquarter
7 November 1991, 3:00 PM MST

Arrow Shows Direction of Shadow Movement

Plate 10



McKee Spring: Panel 7, Summer Solstice
21 June 1990, 11:01 AM MST



McKee Spring: Panel 7, Winter Crossquarter
7 November 1989, 8:08 AM MST

Arrow Shows Direction of Shadow Movement

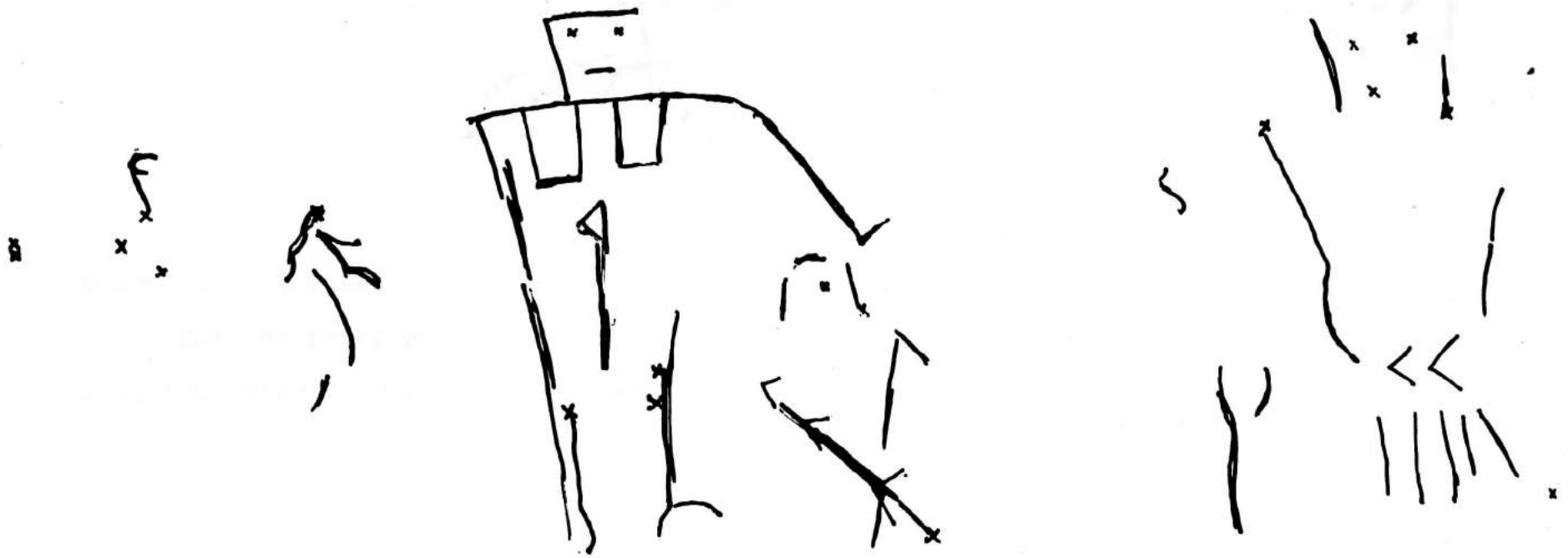
Plate 11

Shadow Alignments with Panel Elements

McKee Spring: Panel 6

Equinox

Plate 12



Alignments Traced from Projected Slides

Scale: None

Shadow Alignments with Panel Elements

McKee Spring: Panel 6

Summer Crossquarter

Plate 13

Alignments Traced from Projected Slides

Scale: None

Shadow Alignments with Panel Elements

McKee Spring: Panel 6

Summer Solstice

Plate 14

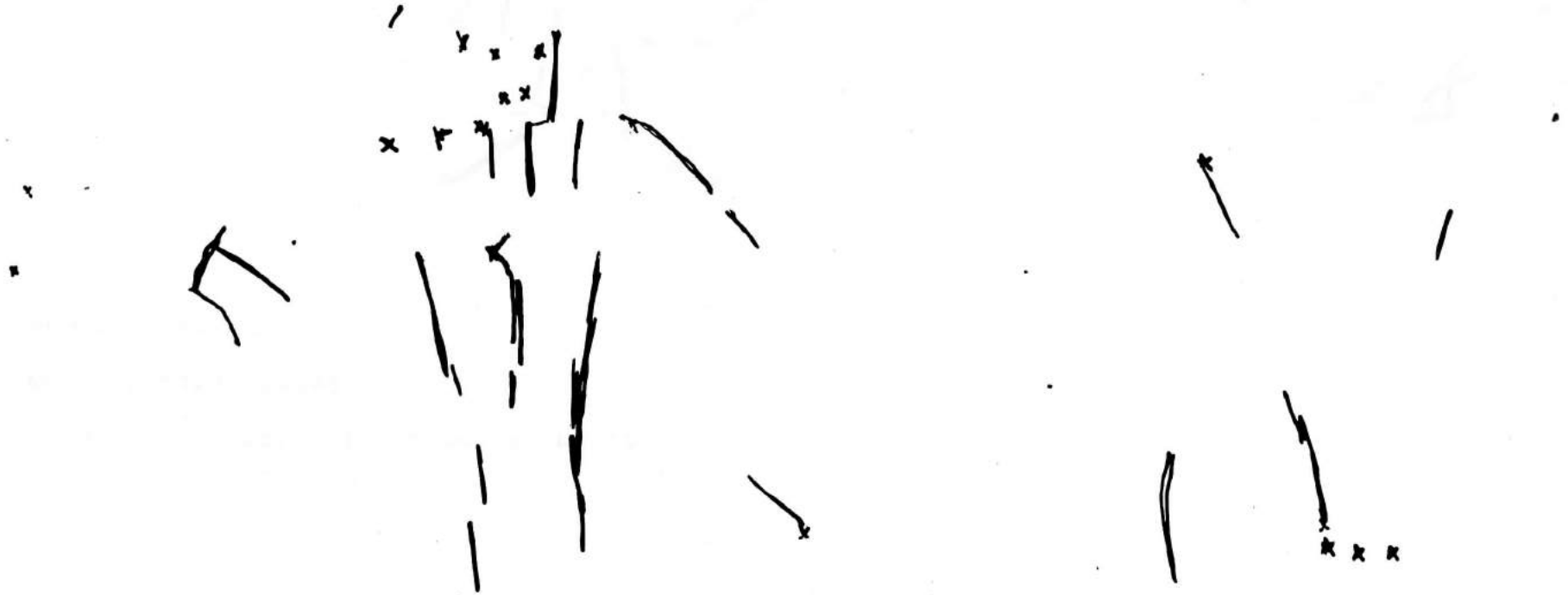
Alignments Traced from Projected Slides

Scale: None

Shadow Alignments with Panel Elements

McKee Spring: Panel 6

Winter Crossquarter



Alignments Traced from Projected Slides

Scale: None

Plate 15

Shadow Alignments with Panel Elements (Incomplete)

McKee Spring: Panel 6

Winter Solstice

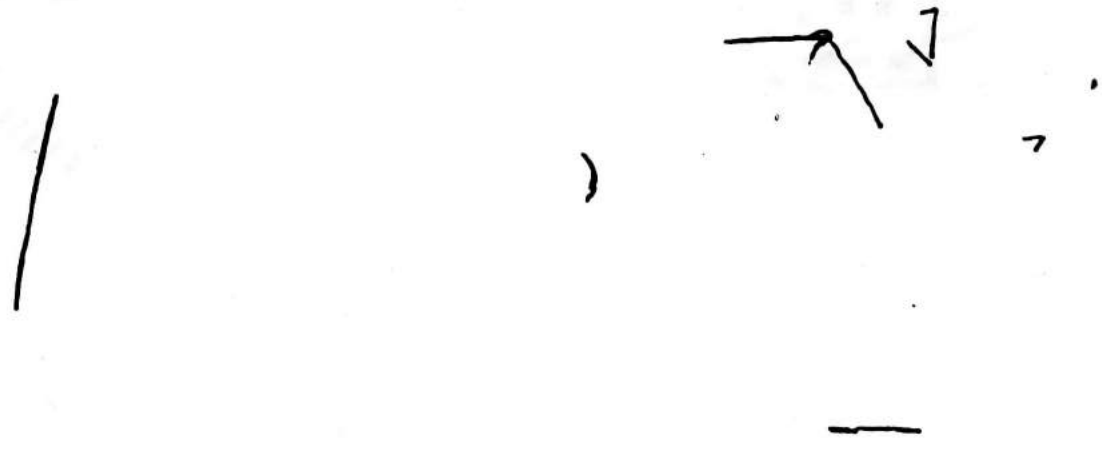


Plate 16

Alignments Traced from Projected Slides

Scale: None

Shadow Alignments with Panel Elements

McKee Spring: Panel 6

Summer Crossquarter Plus Summer Solstice

(Summer Quarter of Year)

Plate 17

Composite of Transparent Overlays

Scale: None

Shadow Alignments with Panel Elements

McKee Spring: Panel 6

Winter Crossquarter Plus Winter Solstice

(Winter Quarter of Year)

Composite of Transparent Overlays

Scale: None

Plate 18

Shadow Alignments with Panel Elements

McKee Spring: Panel 6

Equinox + Summer Crossquarter + Summer Solstice
+ Winter Crossquarter + Winter Solstice

(Sum of Alignments on Five Key Dates of Year)

Plate 19

Composite of Transparent Overlays

Scale: None

Sketch of Panel

McKee Spring: Panel 6

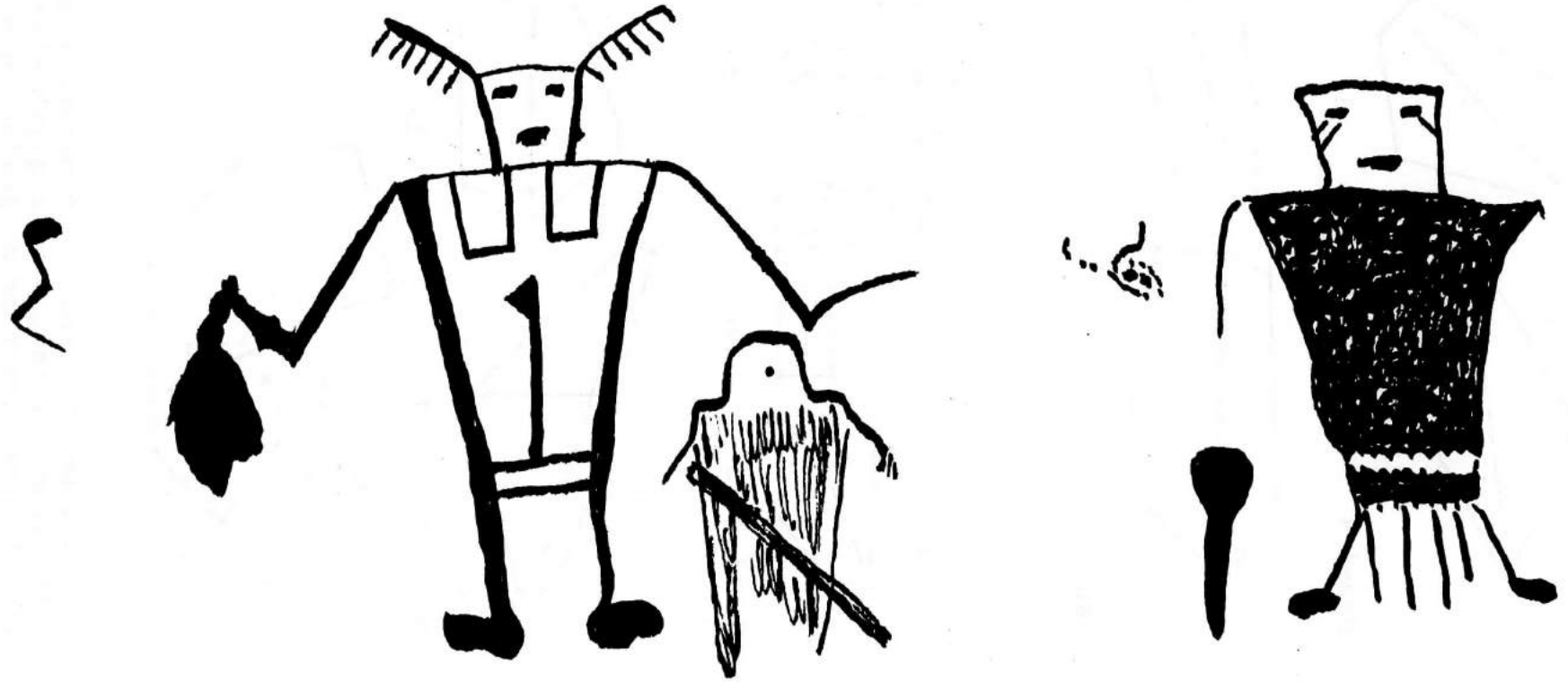
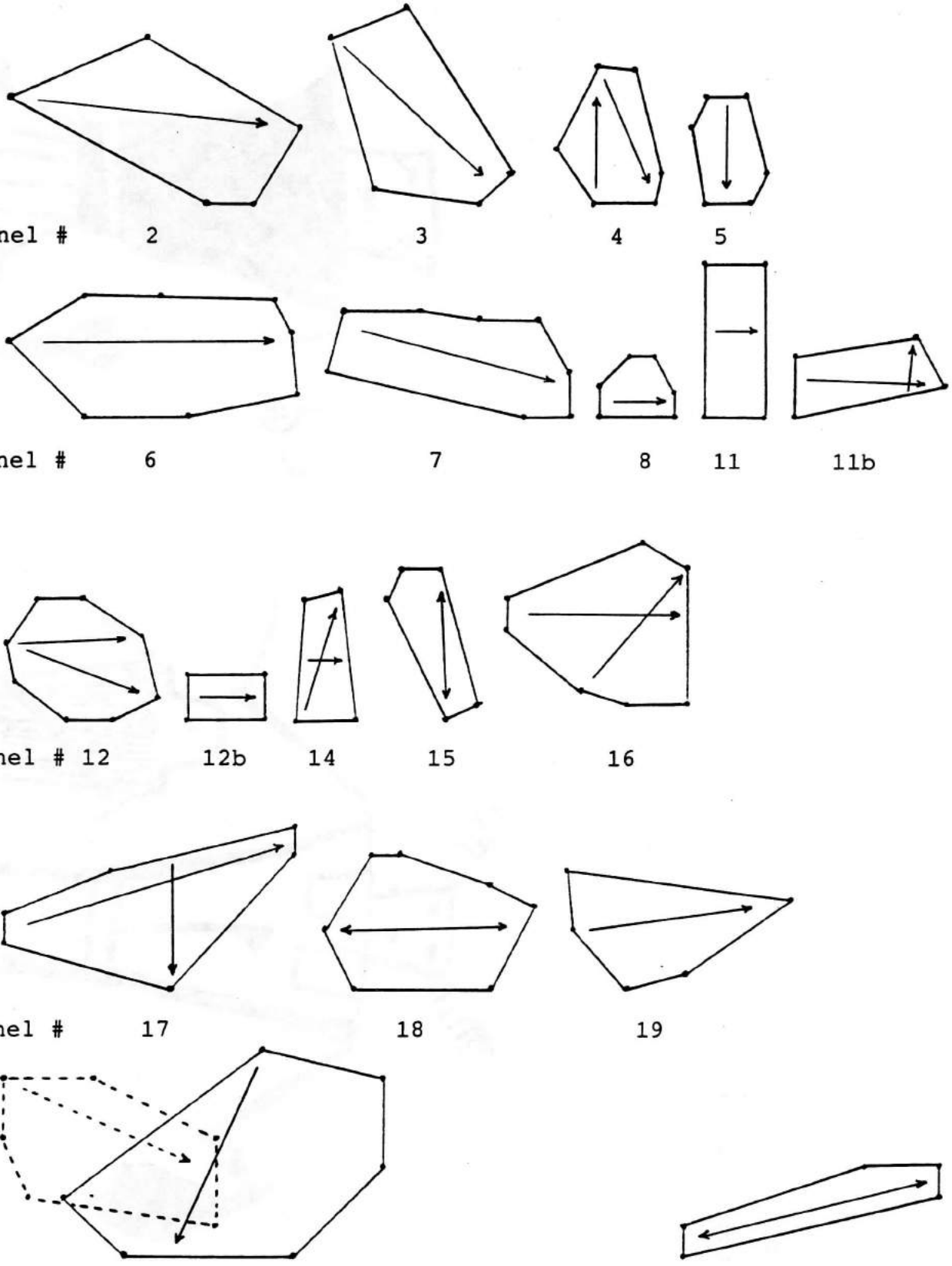


Plate 20

Traced From Projected 35mm Slide

Scale: None




Dotted lines delineate pictograph element assemblage
Solid lines delineate petroglyph element assemblage
Arrows show direction of shadow movement Scale: none

DISTRIBUTION OF ELEMENTS AND DIRECTION OF SHADOW MOVEMENT

Plate 21

McKee Spring: Panel 12b, Summer Crossquarter
7 August 1991, 3:46 PM MST

McKee Spring: Panel 12b, Summer Crossquarter
7 August 1991, 4:14 PM MST

Arrow Shows Direction of Shadow Movement

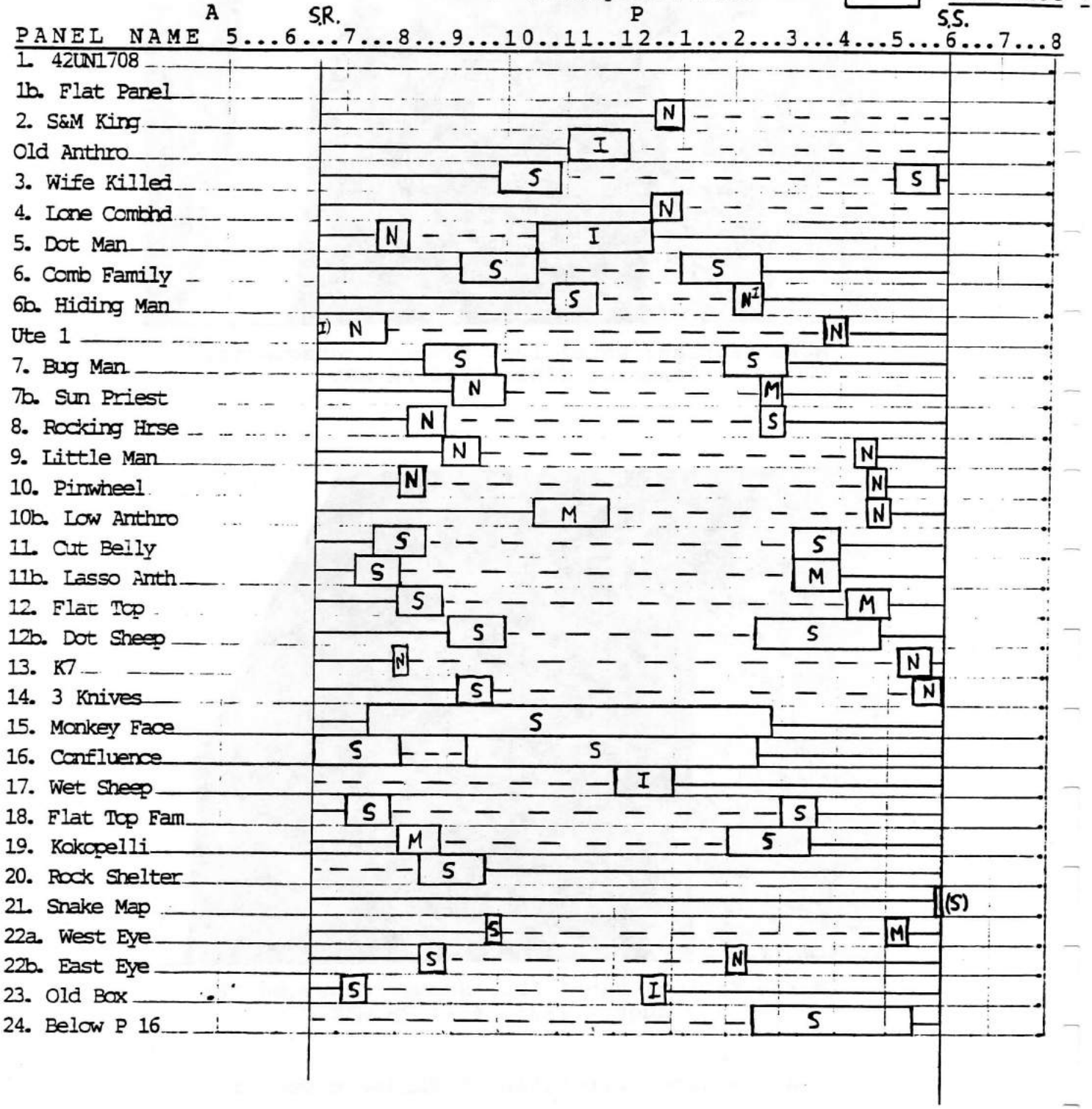
Plate 22

# PANEL FUNCTION OVER ONE DAY

SITE: McKee Spring
Time of Year: Equinox (Sept)
Circle: (MST) or DST

N= non-significant
M= suggestive
S= significant
I= incomplete data

—— = dark
- - - = lit
□ = interactiv




Panel Function at Equinox

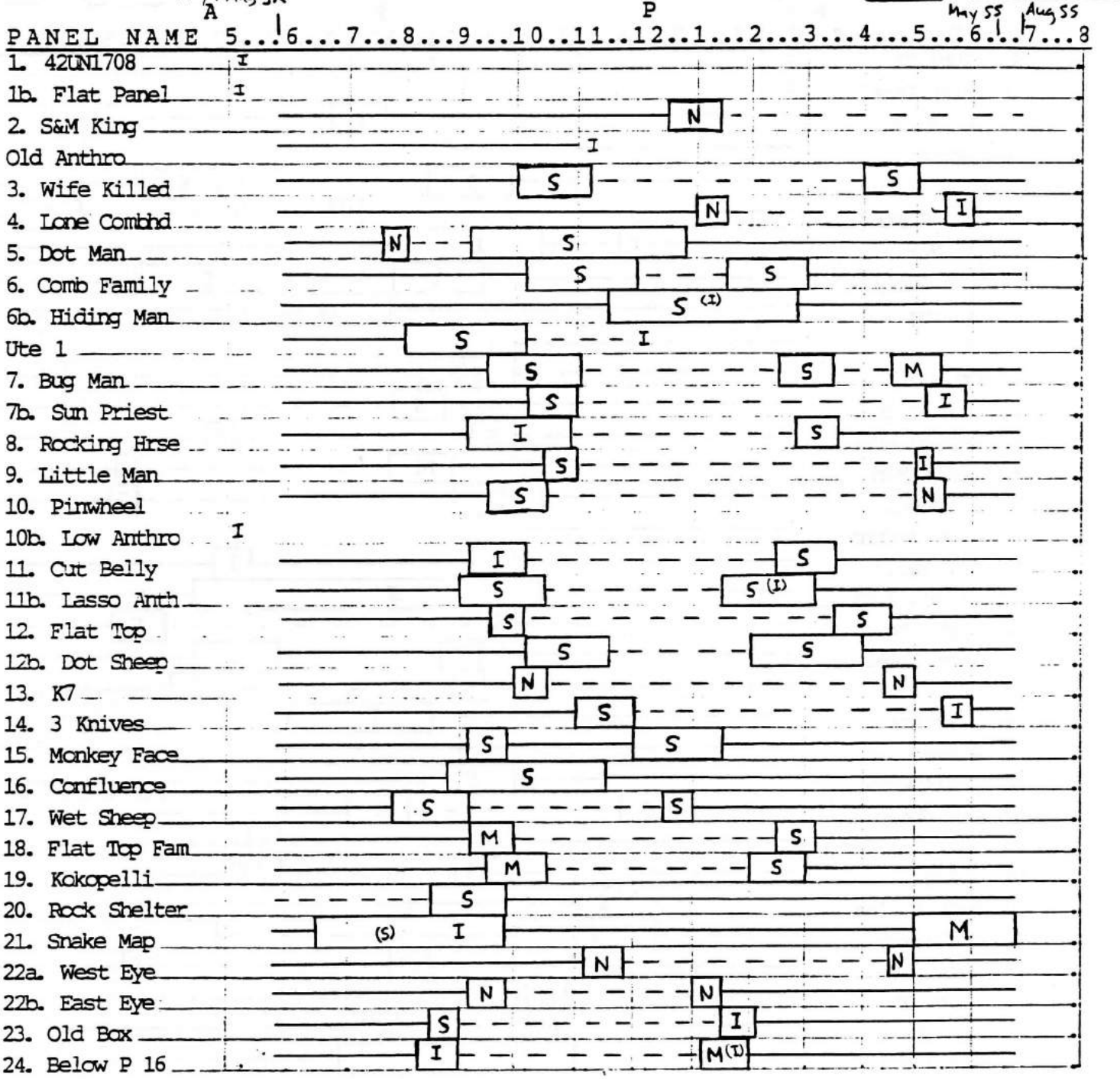
Plate 23

# PANEL FUNCTION OVER ONE DAY

SITE: McKee Spring
Time of Year: Summer Cross (Aug)
Circle: (MST) or DST

N= non-significant
M= suggestive
S= significant
I= incomplete data

—— = dark
- - - = lit
▭ = interactiv




Panel Function at Summer Crossquarter

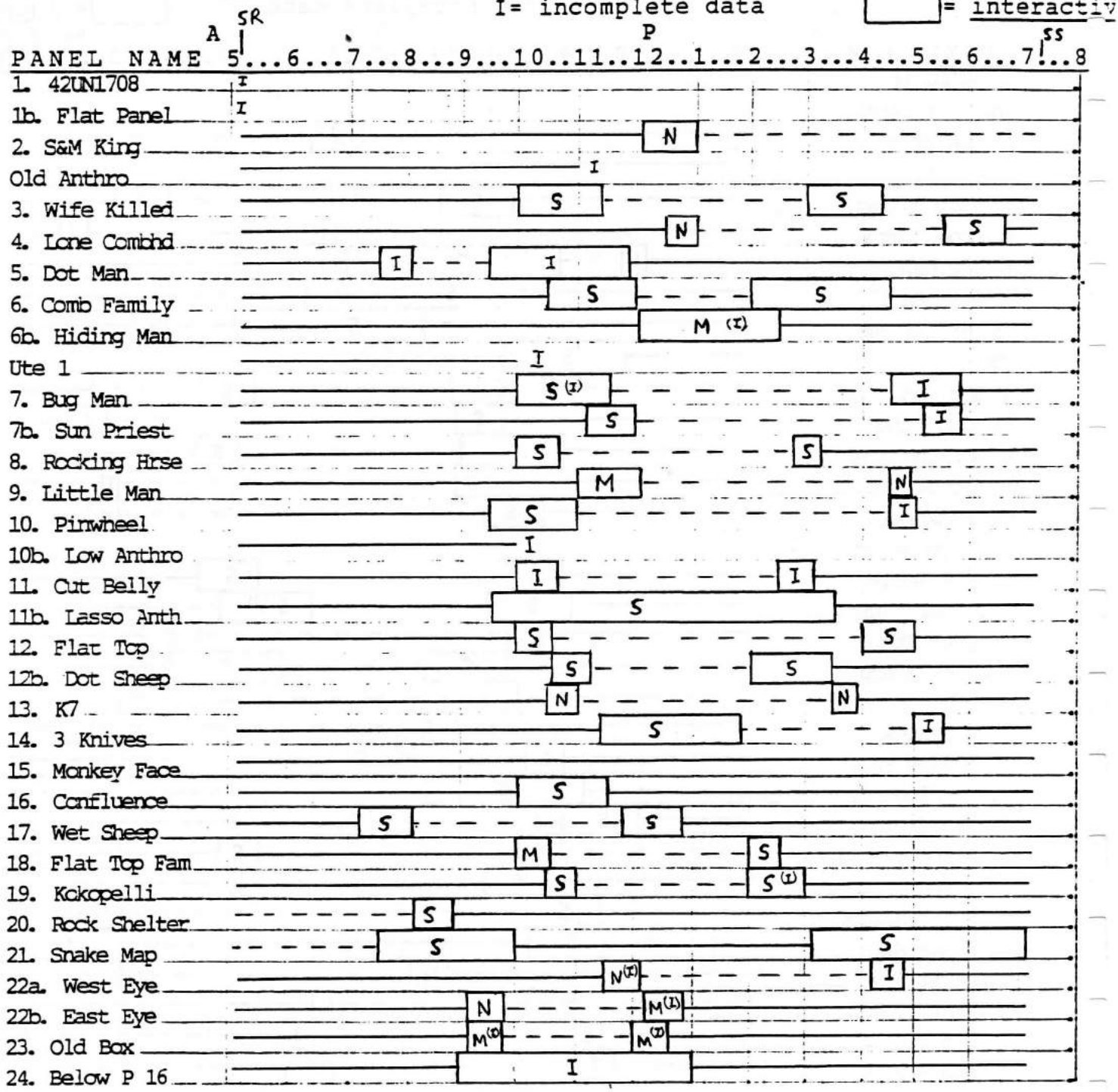
Plate 24

# PANEL FUNCTION OVER ONE DAY

SITE: McKee Spring
Time of Year: Summer Solstice
Circle: (MST) or DST

N= non-significant
M= suggestive
S= significant
I= incomplete data

—— = dark
- - - = lit
▭ = interactiv




Panel Function at Summer Solstice

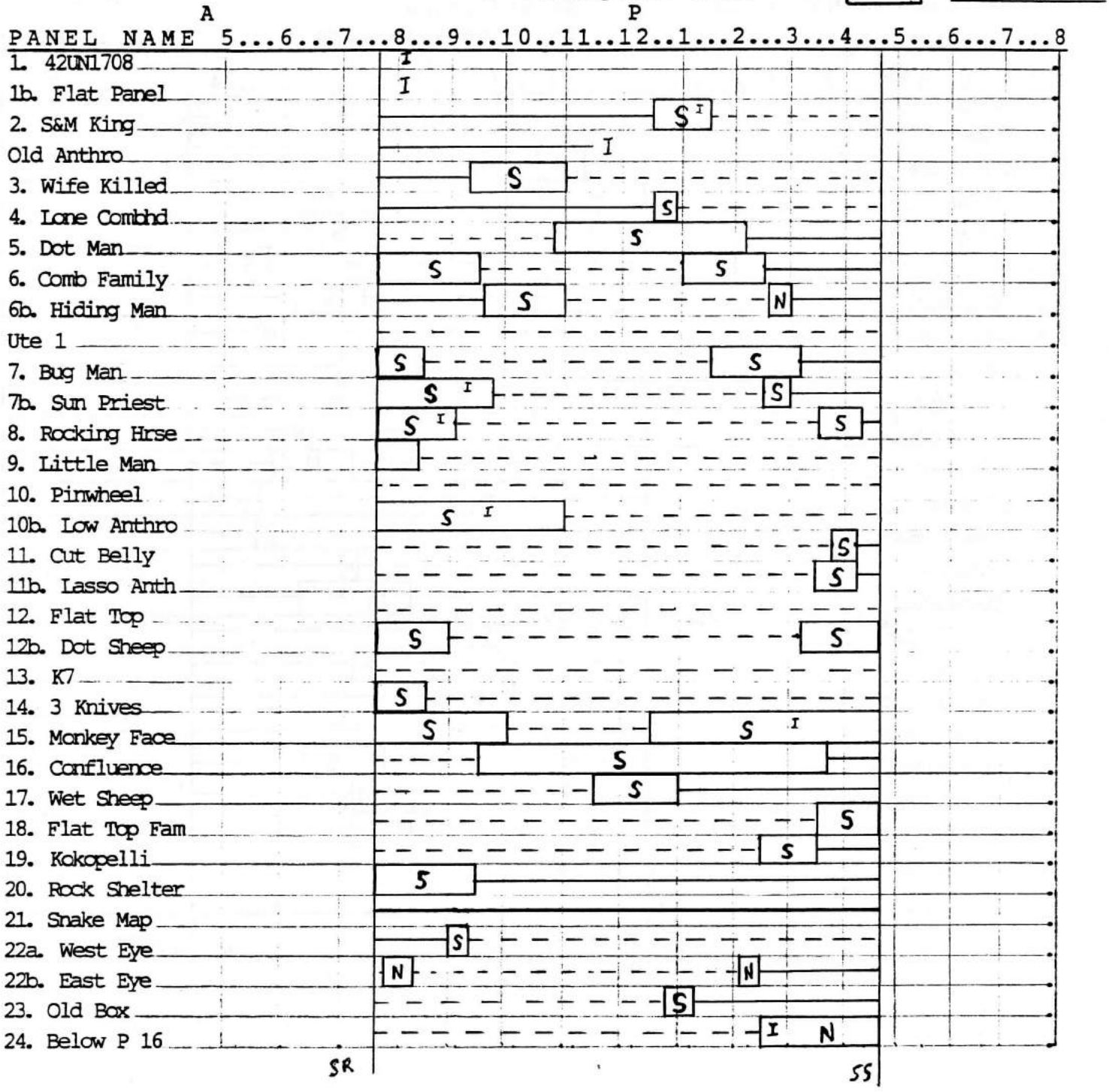
Plate 25

PANEL FUNCTION OVER ONE DAY

SITE: McKee Spring
Time of Year: Winter Cross
Circle: (MST) or DST

N= non-significant
M= suggestive
S= significant
I= incomplete data

—— = dark
- - - = lit
▭ = interactive




Panel Function at Winter Crossquarter

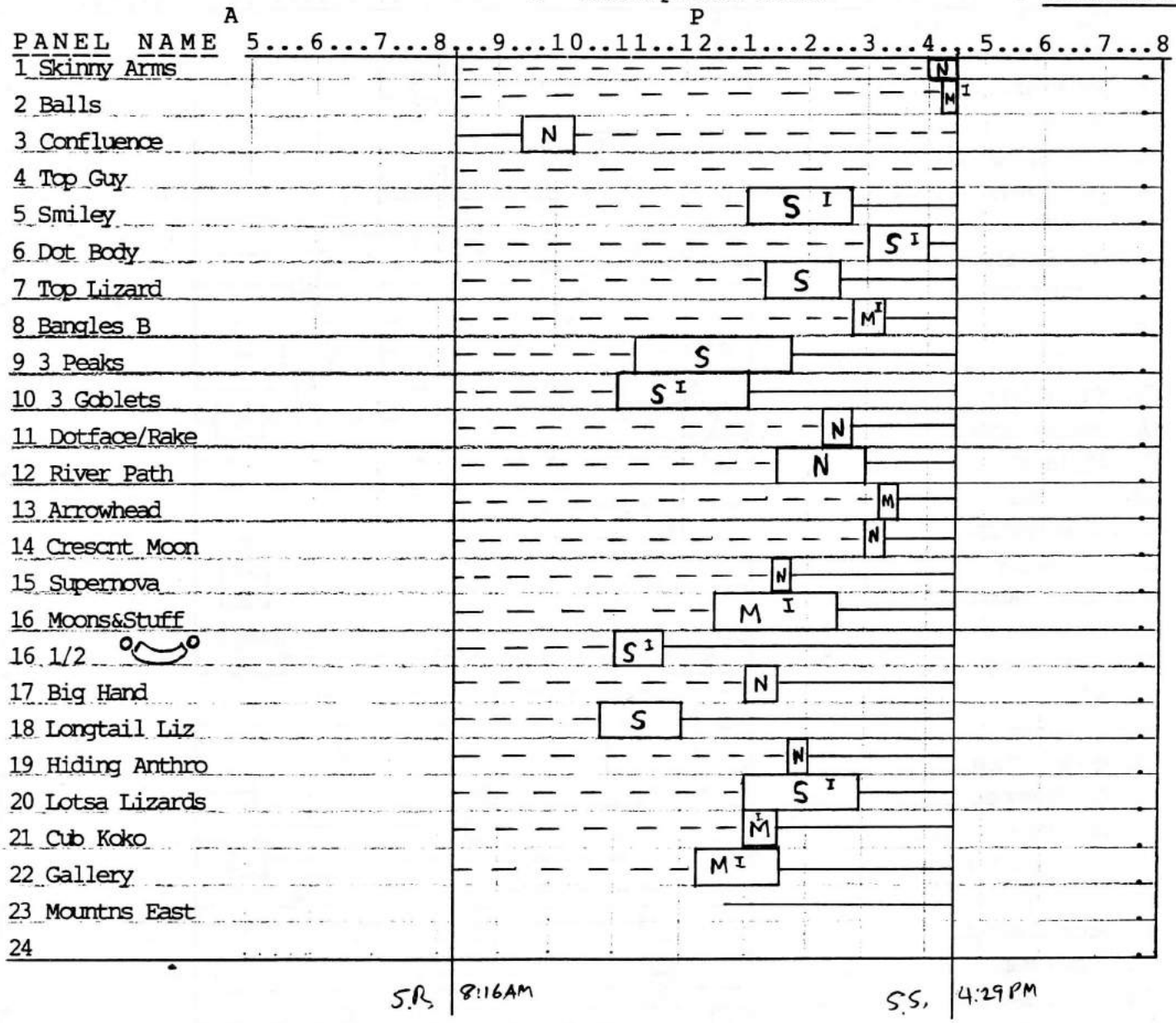
Plate 26

## PANEL FUNCTION OVER ONE DAY

SITE: Cub Creek (part)
Time of Year: Winter Solstice
Circle: MST or DST

N= non-significant
M= suggestive
S= significant
I= incomplete data

---- = dark
- - - = lit
= interactive

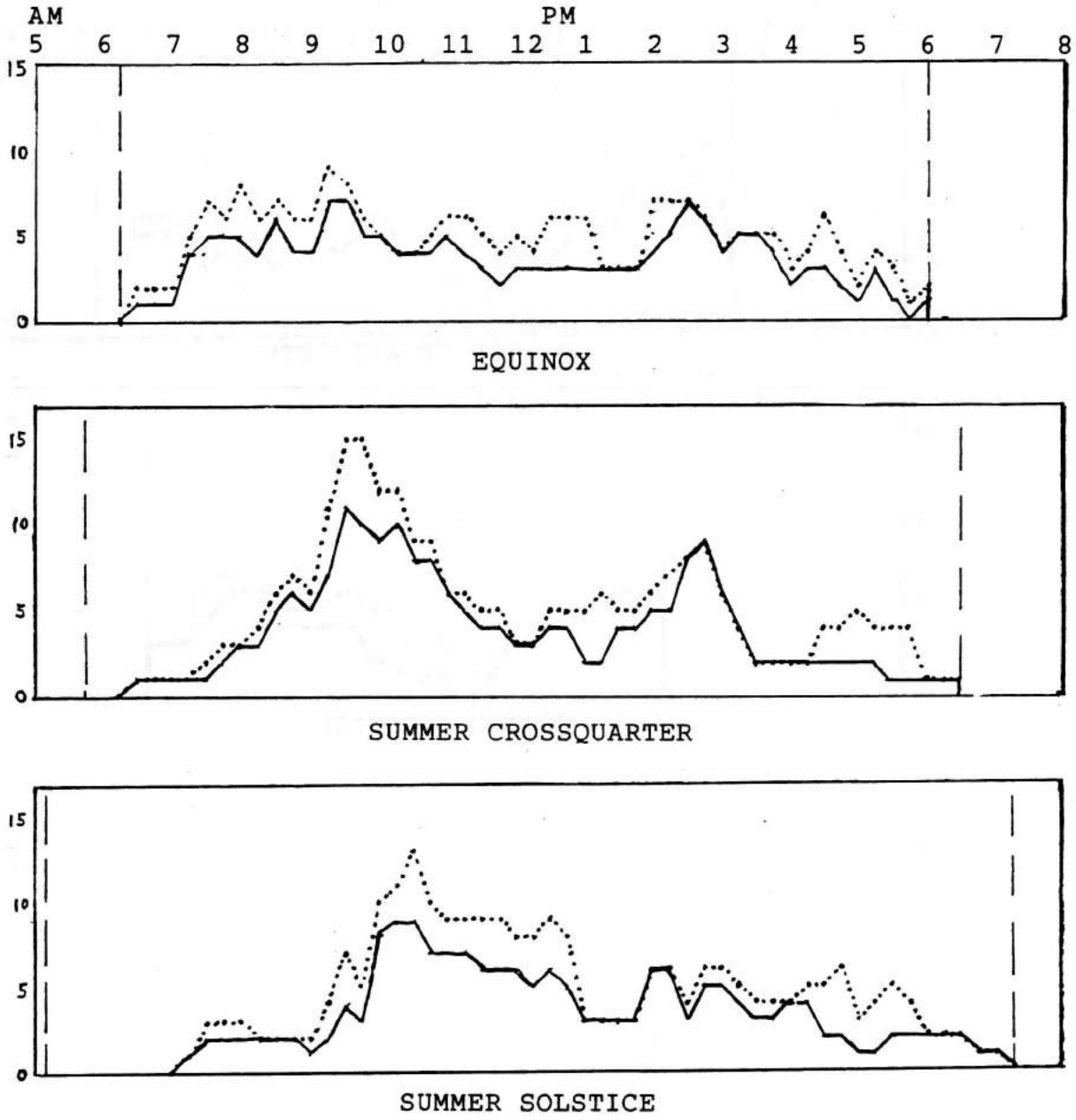



Panel Function at Winter Solstice

Plate 27

INTERACTIVE PANEL UTILIZATION VERSUS AVAILABLE PANELS

SITE: McKee Spring Mountain Standard Time



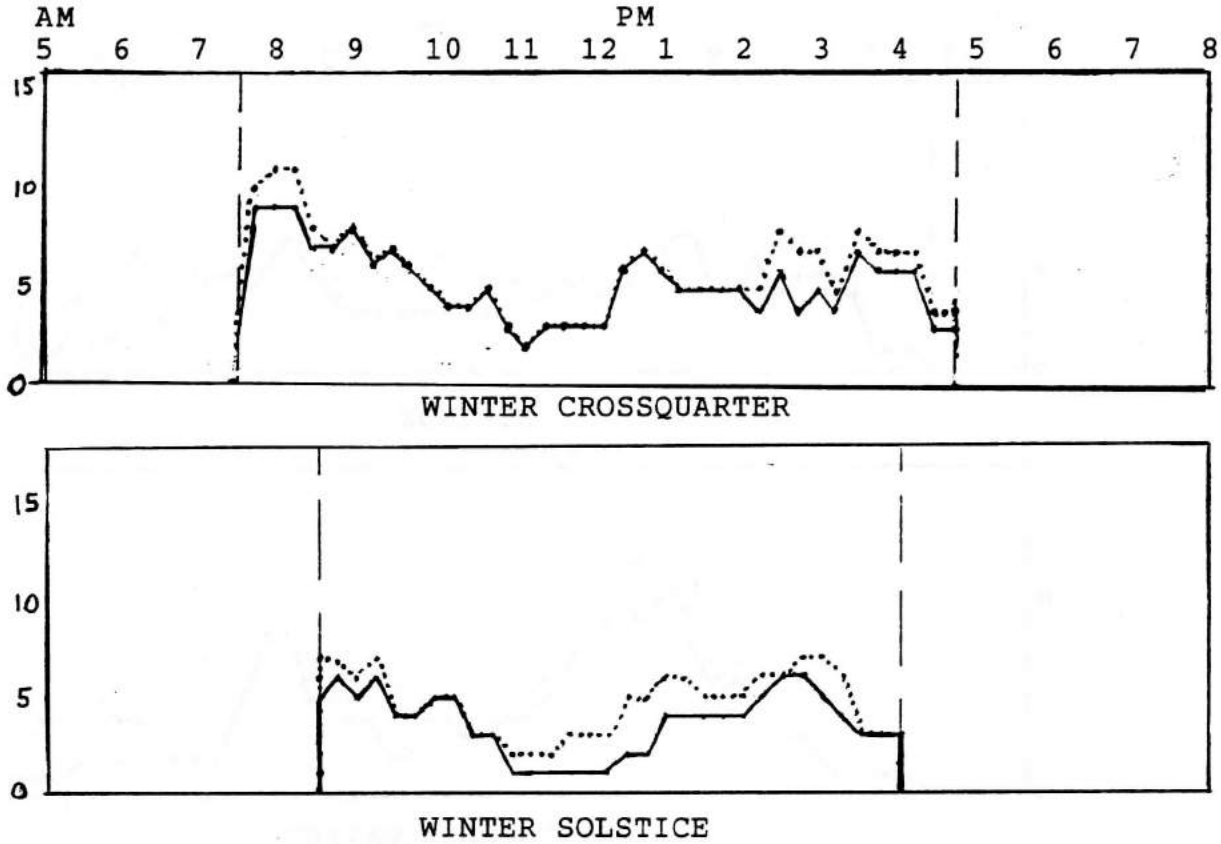

Data points are plotted at fifteen minute intervals from sunrise to sunset (represented by vertical dashed lines).

Dotted line plots total number of panels functioning.

Solid line plots the number of panels involved in <u>significant</u> or <u>suggestive</u> interactions.

INTERACTIVE PANEL UTILIZATION VERSUS AVAILABLE PANELS

SITE: McKee Spring Mountain Standard Time




Data points are plotted at fifteen minute intervals from sunrise to sunset (represented by vertical dashed lines).

Dotted line plots total number of panels functioning.

Solid line plots the number of panels involved in <u>significant</u> or <u>suggestive</u> interactions.

# Pueblo Architecture as a Metaphor

Presented to

**Utah Rock Art Research Association**

Green River, Utah

August 1991

by

Carol Patterson Rudolph

221 Gowen Pl.
Bainbridge Island, WA 98110

This paper addresses the many obvious enigmas found in the prehistoric roads of Chaco Canyon Historical Park and the buildings found at Hovenweep National Monument. First a background in the archaeological evidence supporting existing theories for the use and interpretation of both the roads and buildings, followed by the ethnographic data that exists and an alternative interpretation to these two enigmatic structures.

## CHACO ROADS

The roadways found leading into and out of the Chaco Canyon complex, are characterized by many **unique** features. The Chacoan society flourished between A.D. 950 and 1150 in what is known as the San Juan Basin, in northwestern New Mexico. The Chaco Canyon complex was the center of most of the activity, with many multi-story buildings, containing living areas, storage rooms and ceremonial chambers known as kivas.

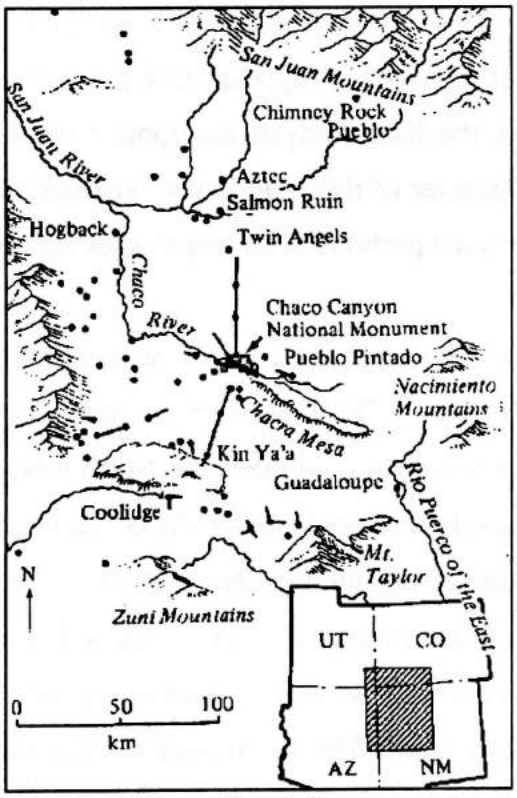



**Figure 1** Chaco Road System

The descendants of Chaco Canyon are known to be the present day Pueblo Indians of New Mexico and Arizona. Evidence supports the view that the Keresan Pueblos are the most directly related to the prehistoric Chaco people, through material cultural traits, kiva designs and oral histories. (Miller 1989)

There have been over 300 km of roads documented in Chaco Canyon. These roads have been commonly interpreted as avenues connecting outlying communities, for transport of trade goods, and groups of people traveling back and forth. This model portrayes Chaco Canyon as the center for political and economic development. With the large ceremonial structures found there, is was thought that the roads facilitated participation from outlying communities to participate at Chaco. Supporting evidence for these interpretations include: evidence from the middens of periodic intensive consumption of food at

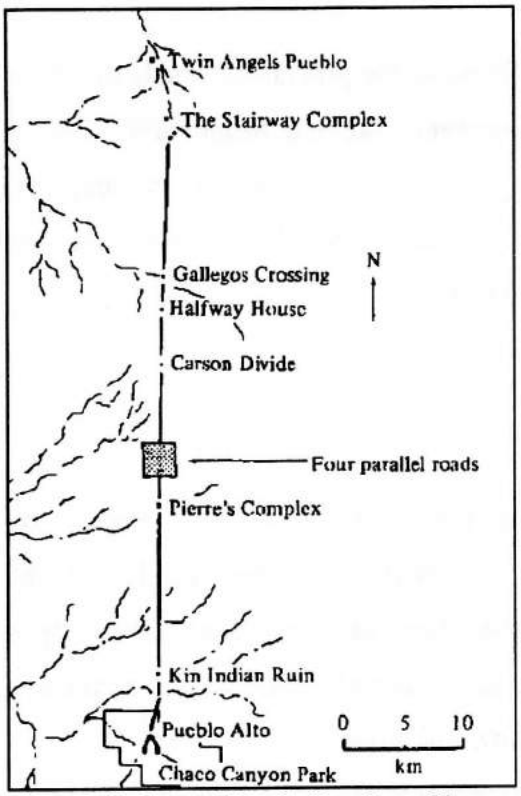


**Figure 2** Great North Road at Chaco

the large public structures; the dearth of burials and the presence of few "high" status burial, and possible large-scale ceremonial breakage of ceramic vessels (Judge, 1984, Atkins & Schelberg 1984).

## THE THE GREAT NORTH ROAD

The Great North Road begins at the Pueblo Bonito and Chetro Ketl, by staircases carved into the cliff up to Pueblo Alto, a ruin located at the north rim of the canyon. From Pueblo Alto, the road runs 13° to the east of north for 3 km to Escavada Wash. It then heads within 1/2° of true north for 16 km to where it articulates with Pierre's Complex, an unusual cluster of small buildings on knobs and pinnacles. The road then heads close to 2° east of north for 31 km and ends at Kutz Canyon. It appears to terminate at three small isolated sites, and a stairway descends from the Kutz Canyon escarpment to the canyon floor (Marshall & Sofaer 1988). The unusual character of this road is the existence of two and sometimes four, closely spaced, parallel roads in some portions of its length. (see figure 3)

From Pueblo Alto to Kutz Canyon, the road is not interrupted by any other adjoining roads. There are no communities on the course of the road. The large ruin of Aztec and Salmon are 20 km to the northwest, and 30 km beyond the termination of the Great North Road. The rest of the outlying communities are located to the south, west and east of Chaco Canyon.

The construction of the roads involved removing earth and vegetation down to the bedrock, and carving stairways into the cliff faces. The roads average 9 m in width, which is wider than most modern two-lane roads. It is far wider than what would be required for travel by ordinary merchants, war parties, hunting parties or messengers. The use of draft animals and wheeled vehicles was non-existent. In general, from an utilitarian perspective, the roads appear to be ***over built*** and ***under used***. There is no satisfactory explanation for its function (Marshal and Sofaer, 1988).

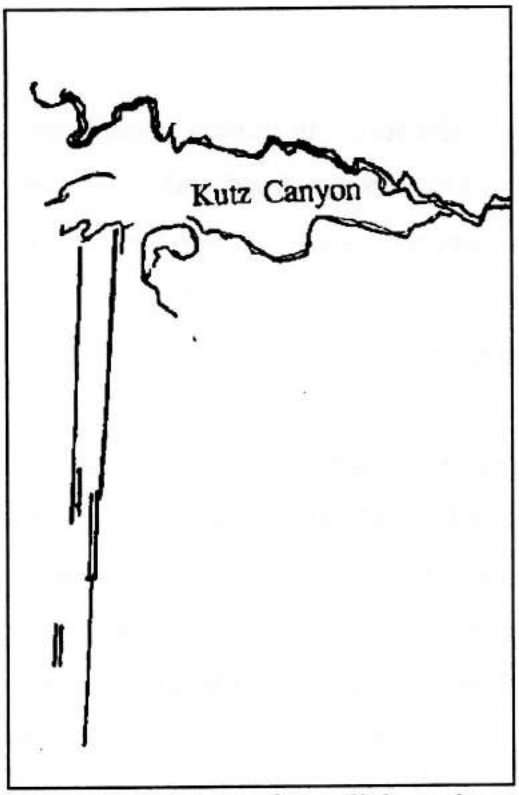



**Figure 3** Section of parallel roads at Pierre's Complex

Some roads lead only to topographic features such as pinnacles, springs, or lakes. Preliminary investigations suggested the Great North Road connected the communities of Twin Angels Pueblo and went on to Salmon Ruin and Aztec. However, ground investigation and aerial surveillance can produce no evidence of a road structure to these pueblos. A more efficient and direct route for travel would be more to the west avoiding the steep slope of Kutz Canyon. Also missing is evidence of hearths and chipped stone indicating encampments along the road way. From a utilitarian perspective, it would follow that the Great North Road would connect with outlying communities for trade and commerce, but to the contrary, the Great North Road supports no outlying communities and in fact leads to the most undeveloped region in the Chaco cultural area.

The great width of the road, and its parallel configuration, and termination at isolated geographical sites tend to emphasis the fact that an alternate perspective must by employed in interpreting these roads. From the utilitarian perspective, the road apparently goes "nowhere" and displays a level of effort far out of proportion to the meager tangible benefits that may have been realized from it. In many important respects, the road appears to be its own reason for development - an end in itself (Marshall & Sofaer 1988). Many of the small isolated structures found along the roads are small low-walled units located on distinctive land forms such as pinnacles or ridge crests (Kincaid, 1983). They are similar to the shrines build by the modern Pueblo people. These shrines are so numerous along the roads, that they are used to predict the presence of other roads. The ceramics found on the roads are characteristic of non-utility type.

One major road, the Ashlislepah Road, which runs from Penasco Blanco in Chaco Canyon, 12 km to the northwest, connects with no other communities. It ends with a group of cisterns, where there is a small, apparently non-utilitarian site, and then appears to terminate at now-dry Black Lake (Marshal and Sofaer, 1988). Another road from Kin Ya'a terminates at

the base of Hosta Butte (Nials et all 1988).

**Ethnography**

The ethnographic data may be considered as an alternative interpretive model, for a cosmological and symbolic perspective on the use of the Great North Road and other roads. There is frequent reference to the mythic and ceremonial journeys along the North road to and from the middle place. Prominent geographic features take on mythic character, names and places. There is reference to the use of parallel roads used for large processions of people in ritual ceremonies.

The Tewa use the metaphor of a road as a channel for the life's breath. They speak of 'life-breath openings' and 'life-giving channels.' Every individual has a road of life that may be 'cut short' at any time" (Ortiz 1989 in Patterson-Rudolph 1990). "Life is a road; important spirits are...keepers of the roads, the life roads. All spirits or sacrosanct persons have a road of cornmeal or pollen sprinkled for them where their presence is requested,"(Parsons, 1939;17-18). These roads can represent the road travelled by the people to the middle place from the Shipapu, the place where they emerged from the worlds below (Parsons 1939,310,363). Sometimes the road is used for the spirits of the dead to return to the Shipapu (White, 1942;177). This is especially apparent in the Keresan culture, where Iyatiku, the mother of all, resides at the Shipapu. The importance of the Great North road and the land of the dead is described by White, **(1960)**.

> When the people came out from the worlds below "They stayed near the opening at the Shipapu for a time, but it was too scary a place for permanent residence, so Iyatiku told them they were to migrate to the south. They moved south and stopped at a place where they lived for a long time. When people died, their bodies were buried, but their souls went back to Shipapu, the place of emergence to return to their mother in the fourfold womb of the earth... So every year, now, the souls of the dead come back to the pueblos for the living and visit their relatives and eat the food that has been placed for them on their graves on the road to the north.

This road to the shipapu is described in another report as "crowded with spirits returning to the lower world, and spirits of unborn infants coming from the lower world' (Stevenson, 1894p.67).

This and other roads are frequently described as "straight" (Stevenson, 1894 p31,41,145). When a person dies in the Keresan and Tanoan pueblos, the officiant takes offerings that represent the person's soul to the north and deposits them in a canyon or a mesa crevice (White,

1973,p.137). Ceramic vessels are frequently broken in rituals related to the dead (Parsons, 1939,p.72,77; Ortiz 1969,p54). The vessel containing food is sometimes called "the last meal of the deceased" and is put on the road to the north. It may be "killed" (broken at the rim) and then thrown by the officiant "out to the north, the direction in which the soul...travels toward the Shipapu "(White, 1942:177).

To the Keresan people especially the re-enactment of the creation and emergence stories are important. Specific geographical sites locate events in the myths. Initiates make the pilgrimage to sacred mountains, and canyons, and lakes that are described in the myths. The Shipapu is represented by geographic sites located to the North. Pilgrimages to the Stone Lions shrine located in Bandelier National Park, are taken by the Keres as far as 200 miles away from the south. Other villages such as Cochiti, Santo Domingo, San Felipe and Laguna participate in these pilgrimages. There are shrines all along the way, where offering are left.

From a Keresan pueblo on the south edge of the prehistoric Chaco region, ceremonialists packed their burros with solar offerings and traveled north, stopping first at Chaco Canyon (Ellis and Hammock, 1968:32). They made offerings at a shrine on the south side of the canyon and; then travelled to a shrine at Jackson Butte and finally to the Shipapu a small lake or spring in the San Juan Mountains.

For Jemez a Tanaoan pueblo, north is "spiritually indicative of the mythical and ancestral homeland" and the place of emergence is in the mountain range to the north of the pueblo. One of their most sacred shrines is located on its prominent peak. Parsons writes (1925:137,138)

> There, the underworld chiefs make a pilgrimage...every June to begin the summer series of rain retreats and ceremonies. In the emergence and migration of this pueblo, the leader Fortease, upon emergence from the Shipapu, choose the direction towards the south and then makes four roads for the people to travel on in search of their place of settlement.

Reference to two parallel roads occurs in Tanoan cosmology (Ortiz, 1969:57).

> True to the underlying message of the origin myth...The Tewa do begin and end life as one people. The term they use for the life cycle is poeh, or "path", after the two different migration paths the moieties followed after emergence. Thus, at the beginning of life there is a single path for all Tewa...it divides into two parallel paths and continues in that way until the end of life. At death the paths rejoin again and become one, just as the moieties rejoined in the myth of origin.

At Zuni Pueblo, a pilgrimage is conducted every four years at summer solstice by 50 religious leaders to a lake, the Zuni 'village of the gods', the place where the spirits of all Zunis go after death (E. Hart,1985, unpublished manuscript). Fires are lit along the route by one of the participants, the Zuni Fire God. Another important pilgrimage, to Zuni Lake, is on roads that have been described as very straight and with shrine-like sites similar to those on the Chaco roads (Kelly,1984). Although for the Zuni, these sacred lakes and the origin place are not located to the north, north is associated with the 'under most' of the below worlds (Stevenson,1904,p.25) and has primacy in the ordering of ceremonial events and religious leadership (Cushing,1979,pp.188-90). In the prayers and chants telling of their emergence and migration to the middle (i.e. Zuni), reference is made to four parallel roads: 'Hither towards *Itiwana* (the middle) I saw four roads going **side by** side.' (Bunzel, 1932:717). One Zuni ceremony includes breakage by the religious leaders of ceramic vessels throughout the pueblo. (Marshal and Sofaer, 1988)

The "Middle Place" is so important in Pueblo cosmology that it is seen as the place of the convergence of the cardinal directions, the nadir and the zenith directions (Ortiz, 1972;142). Where these directions join is the sacred center for Pueblo people. This place is sometimes symbolically conveyed as the joining of ritual roads at the pueblo center. It is interesting to note that the cardinal directions in the Chaco architecture and the north-south axis of the Great North Road, merge at the central ceremonial complex of Pueblo Bonito. Most investigations of the roads at Chaco are from the perspective that they go *OUT* to some place. The ethnographic data refers to travel *IN* to the middle place, to the center. Perhaps the roads start from some place arbritary just to direct energy or movement of processions toward the center. The dead appear in the North and travel in procession on the Great North Road, to the center. The utilitarian purpose of many of the roads may have been to connect the energy from sacred sites and shrines, to the center.

**HOVENWEEP**

Hovenweep National Monument is in Utah and Colorado, about 25 miles north of the Four Corners area. It consists of Anasazi ruins and towers, in groups called Cajon, Square Tower, Holly, Hackberry, Cutthroat Castle and Goodman Point. Hovenweep in Ute means Deserted Valley.

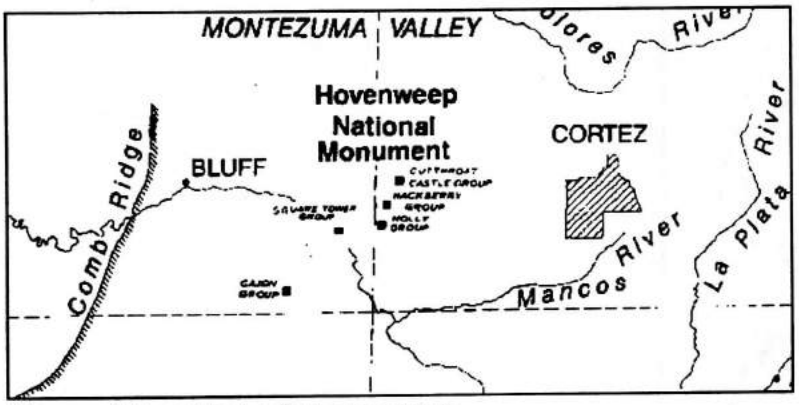


**Figure 4** Location of Hovenweep

The Anasazi inhabited Cajon Mesa until A.D. 1300. After 1150 AD they abandoned many of their mesa top villages and settlements in favor of large communities established around towers at canyon heads. These graceful towers, which were constructed after AD 1230 suggests that the move to the canyon heads occurred near the end of the period in which the Anasazi lived on Cajon Mesa. The Anasazi were also successful with check dam terraces and slick rock reservoirs in the drainage above the towers. Dry farming was possible for corn, squash and beans.

The architecture at Hovenweep consists of circular, square and D shaped towers on the ridge tops. A high percentage of these towers have tunnels that lead to adjacent kivas. Four sites at Hovenweep are thought to have calendric functions. Of these, three are towers with rectangular sun-watching rooms that have been added onto the original structure. Hovenweep Castle contains probable summer and winter solstice sunset portholes and a possible vernal and autumnal equinox doorway. The Unit Type House has sunrise summer and winter solstice as well as equinox portholes and a lunar portal that marks the farthest southern point at which the moon rises.

Archaic sites from about 3000 B.C. to 100 A.D. are found near the spring at Square Tower unit. They reflect a mixed foraging/farming economy in this region. There was an increase in population around 1000 A.D. These Pueblo III people farmed the mesa-tops and surrounding flats supplemented with foraging. The Pueblo III period use of Hovenweep lasted from A.D.1150 to A.D. 1300. Many of the mesa top special-use locations and ridge top small villages were abandoned by late Pueblo III times, as major population clusters developed around the canyon head towers. Relatively large complexes of room blocks, modified springs, rim dams, terraces, irrigated gardens and a talus slope were built in association with these graceful towers.

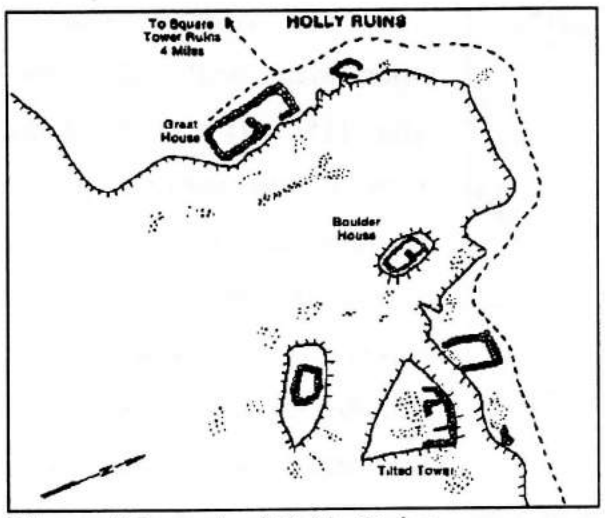



**Figure 5** Layout of Holly Ruins

There are many enigmas associated with the architecture at Hovenweep. Most striking are the buildings that have been placed upon prominate boulders. The openings to each tower are positioned at the bottom and lowest end facing into the canyon. The towers are not accessible from the mesa top. The park is designed so one walks around the perimeter of the ruins along the mesa top. It is very difficult to traverse the canyon floor through sage brush and cacti. But if one is persistent and does traverse along the canyon bottom, as I did, and view the towers from below, one gets an entirely different perspective on their layout and design. Access to these building through their small doorways is possible from the bottom of the canyon going up, rather than from the mesa tops.

**Figure 6** Boulder House at Holly Ruin

At Hovenweep, both Square Tower ruin and Holly ruin have "boulder houses" that conform to the shape and topography of the boulders. The buildings are not freestanding upon flat ground. Rather, they incorporate the surface of existing boulders and cliff tops. At Holly ruin the Boulder House emphasizes the features of the rock by continuing the crevice in the boulder, up the length of the wall creating a lip or second edge; in fact like an echo of the

original boulder. Note that the boulder has *not* been modified to conform to a simple shape that would be easy to build upon. Instead, the structure has been modified to continue the shape and form of the boulder. Figure 6 is a sketch of the boulder house at Holly ruin showing the extent of importance the foundation boulder plays in the overall composition of this building.

Another boulder house at Holly, Tilted Tower, is a narrow building placed upon a slanting boulder top. It follows the contour at the top of the boulder in exact replication. It is apparent that the boulder's importance far outweighs the suitable building space on level ground, which has been ignored.

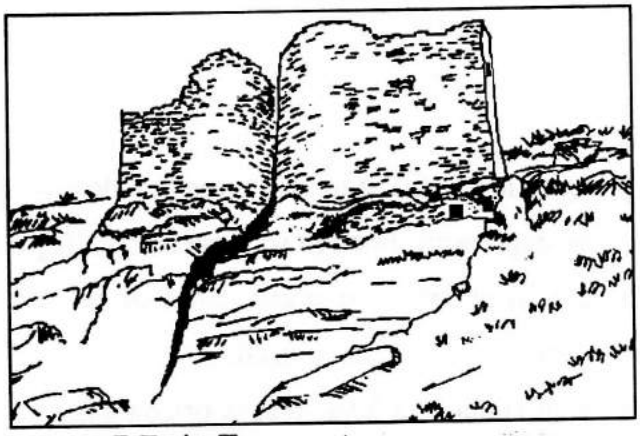


**Figure 7** Twin Towers at Square Tower Ruin

Another feature at Hovenweep National Monument, is the repetitive use of "twin towers". Figure 7 are the twin towers at Square Tower ruin, viewed from below. One can see that the base of this structure consists of a very large boulder that apparently split in two, at the ground level. The separation or "twining" of this foundation boulder has been carried further, by the architecture. The buildings rise upward emphasizing the twinning, or pairing of the boulders. Both the left and right tower have round walls facing each other, while the back sides facing out are straight. This is known as the "D" shape in Anasazi architectue. The use of "square/round" is found in 'D' style kivas in Chaco Canyon as well.

A similar configuration is found at Holly ruin, with one square sided building next to a round sided ruin of a building.

**Figure 8** Twin Towers at Holly Ruin

Another enigma is found in the "Boulder House" at Square Tower ruin. Here, masonary walls have been constructed inside an eroded boulder. The building within a boulder suggests a total emergence within the earth and its elements. There seems to be a fascination with becoming one with the boulder itself.

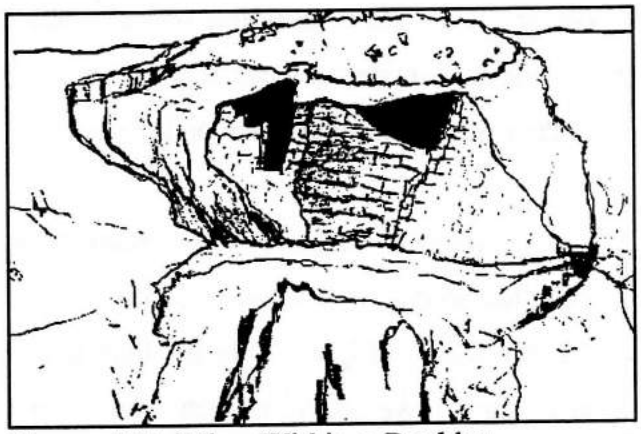


**Figure 9** Building Within a Boulder

Questions arise as to why these boulders were so important! Enough so to merit building on top of these precarious rock formations, with faithful attention to every detail of the rock features. What was the motivation to continue the rock in a manmade fashion.

The Central House Unit at Square Tower ruin contains a kiva, that is oriented directly across the canyon from the twin towers and the boulder house, (house inside the boulder).

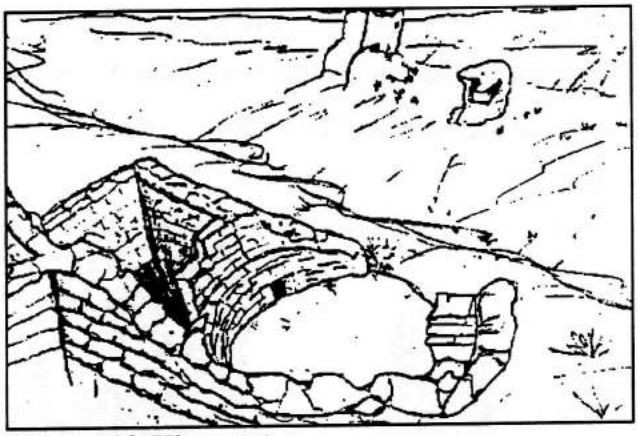


**Figure 10** Kiva at Square Tower Ruin

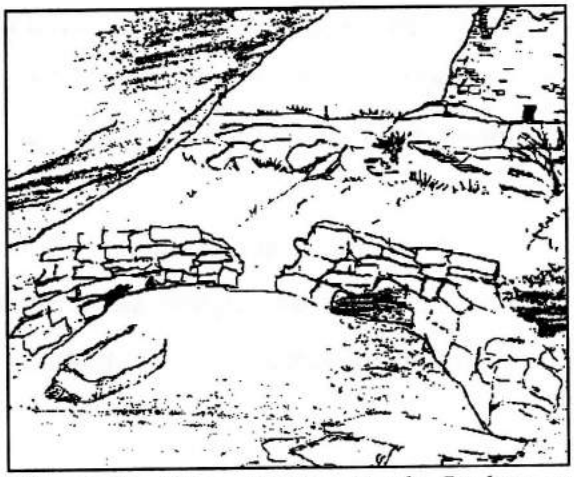


**Figure 11** Kiva Under Rock Ledge at Holly Ruin

At Holly ruin, there is also a central house unit located under a large fallen boulder, below the canyon rim. It consists of a kiva structure. From within the kiva opening, the twin towers can be observed directly across the canyon floor.

## ETHNOGRAPHY

In an attempt to shed some light on the meaning and symbology found at Hovenweep, a few excerpts are given by very prominate specialists in the field of Pueblo ethnography.

Reina Swenzel, a professor of architecture from Santa Clara Pueblo, talks at great length about the Pueblo techniques of building their houses out of the earth. She says her people use the natural materials of the earth to creat dwellings that are complimentary to their world views. Their belief that they emerged from the earth is reflected in their architecture. Where the earth stops and the buildings begin is not defined. They are not separate, but integrated with each other in harmony with nature. (Swenzel, presentation at Sacred Sites conference, Mesa Verde 1990). The Pueblo people emerged from their Mother earth, and are children of the earth. Their homes are sculptured from their mother. Their respect and reverence for their mother is reflected in every ritual and ceremonial **activity.**

Alfonso Ortiz (1988) states that Hovenweep is a giant emergence place where the emergence story is portrayed in the towers climbing out of the earth like the corn plants. Many of the towers are in the canyons and do not stand on the rims. They are not defensive units as many archaeologists have postulated. Instead, they were metaphoric structures associated with Pueblo cosmology.

In viewing the towers at Hovenweep it is clear that the main emphasis of these structures is on continuation of boulders and earth features that are prominent. The buildings are NOT independent from the bases. They are a continuation of one to the other. They do not figure well in astronomic alignments because of their dependence upon existing geologic formations. The consistency in the architectural forms at Hovenweep seem to suggest the insistence in using existing natural formations for foundations and alignments, rather than human contrived foundations and alignments. Even so, at Hovenweep, both Square Tower ruin and Holly ruin have similar lay-out patterns, as much as possilble when dependent upon the natural features of the canyons.

At Hovenweep, as with Chaco, the stage has been set with natural features creating a sacred space. The boulders become the stage for the buildings that are the actors in this cosmological portrayal of emergence. Picture if you will, the initiates running through the canyon floor and entering each building through the tiny door facing into the canyons. The initiate could enter the boulder house, and experience being inside the boulder, as part of the emerging rock from the earth. A ritual performance might incorporate the Twin Towers representing the twin dieties in Pueblo mythology. Perhaps the twin sisters in the Keresan mythology, or twin war gods of Tewa, Hopi or Zuni mythology.

The petroglyphs near Hovenweep depict similar "Twin Sister" figures that are also found associated with the Keresan culture. The configuration of Uretsete and Naotsete, found near Cochiti Pueblo, with the arms and feet gestures along with the maiden hair whorls is strikingly similar to the depiction of these two figures found at Cannon Ball mesa near Hovenweep. Florence Ellis was convinced, along with Jay Miller, that the Keresan culture was responsible for much of the architecture at Chaco and possibly this area.

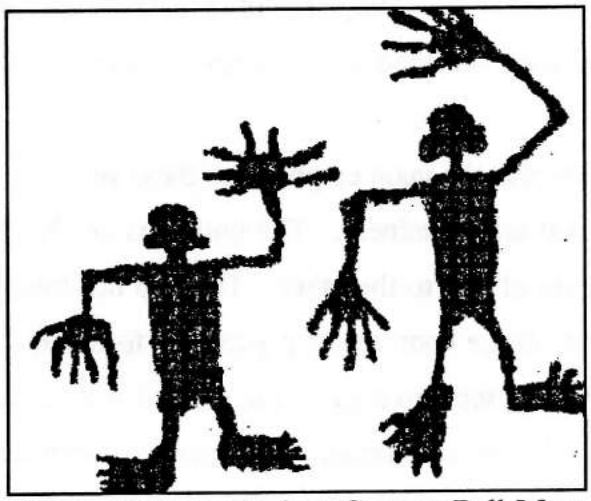


**Figure 12** Petroglyph at Cannon Ball Mesa near Hovenweep

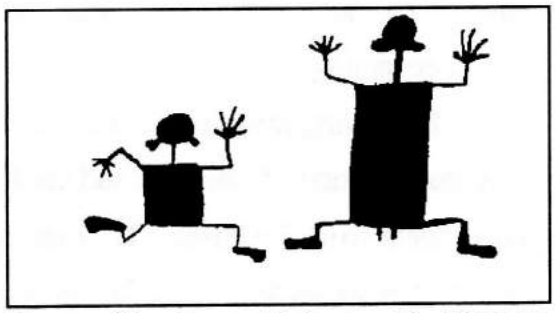


**Figure 13** Two Sisters of Keresan Mythology

**CONCLUSION:**

The roads at Chaco and the buildings at Hovenweep both embody many non-utilitarian aspects. They are ambiguous in their purpose which is not compatible with an assumed utilitarian purpose. They both display high levels of effort in engineering and construction that is far out of proportion to any utilitarian use. For the roads, their direction to the north and south and linkage to the middle place of Chaco Canyon find echoes in much of the tradition of the modern Pueblos mythology. For Hovenweep, the use of "twin towers" and integration with existing rock features echoes the Keresan tradition of emergence myths.

At Hovenweep, the buildings are continued from the boulders that emerge up from the earth. The boulders are natural free standing expressions of emergence. The Pueblo build with the earth materials to blend with the earth. The mud and stone houses blend into the surroundings. The buildings contribute to the statement, adding the human dimension and statement of emergence. The towers are metaphors of people who have emerged from the earth.

Looking at Hovenweep as a stage for the re-enactment of mythology, as the roads of Chaco become stage sets for re-enactment for the spirits to traverse from the north becomes a more plausible explination of these enigmatic structures in my view than the strictly utilitarian or defensive scenarios attributed to them in the past.

# BIBLIOGRAPHY


Akins, N.J. and Schelberg, J.D.
1984 Evidence for organizational complexity as seen from the mortuary practices at Chaco Canyon. *Recent Research on Chaco Prehistory*, Albuquerque: US Department of the Interior, National Park Service.

Benedict, Ruth.
1931. "Tales of the Cochiti Indians." *Bureau of American Ethnology Bulletin 98.* Washington.

Bunzel, Ruth L.
1932. "Zuni origin Myths." *Bureau of American Ethnography, Forty-seven Annual Report, 1926-30.* Washington.

Cordell, Linda.
1984. *Prehistory of the Southwest*. School of American Research. Orlando: Academic Press.

Ellis, Florence (Hawley)
1959 "An Outline of Laguna Pueblo History and Social Organizations." *Southwestern Journal of Anthropology* 15(4): 325-347.
1968 The Inner Sanctum of Feather Cave. *American Antiquity 33*,(1),25-44.
1976 "Where did the Pueblo People Come From?" *El Palacio* 74 (3):35-43.

Fewks, J. Walter.
1925 "The Hovenweep National Monument," from *Smithsonian Report for 1923*, p.465-480, Washington.

Garthier, Rory and David Stuart.
1984. *Prehistoric New Mexico; background for survey.* Albuquerque: University of New Mexico Press.

Grant, David
1985 Exploration Magazine, special issue on *Hovenweep*, School of American Research. Santa Fe. NM

Gunn, John.
1917 *Schat-Chen: History, Traditions, and Narratives of the Queres Indians of Acoma and Laguna.* Albuquerque: Albright and Anderson.

Kincaid, C.
1983 *Chaco Roads Project Phase I, A Reappraisal of Prehistoric Roads in the San Juan Basin.* Albuquerque: US Department of the Interior, Bureau of Land Management.

Lakoff, George and Mark Johnson.
1980. *Metaphors We Live By.* Chicago: University of Chicago Press

Lakoff, George and Mark Turner.
1989. *More Than Cool Reason.* Chicago: University of Chicago Press.

Lange, Charles.
1965 *Cochiti: A New Mexico Pueblo, Past and Present.* Austin: University of Texas Press.

Marshal, M.P and Sofaer, A.
1988 *Report on the Soltice Project Archaeological Investigations in the Chacoan Providence, New Mexico.* (to be published).

Miller, Jay.
1980 "The Matter of the (Thoughtful) Heart: Centrality, Focality, or Overlap." *Journal of Anthropological Research*:338-342.
1989 "Deified Mind Among the Keresan Pueblos." pp. 151-156 in *General and Amerindian Ethnologinstics. In Remembrance of Stanley Newman.* Ed. Mary Ritchie Key and Henry M. Hoeningswald. Berlin: Mouton de Gruyter.

Nials, F.L.
1983 Physical characteristics of Chacoan roads. *Chaco Roads Project Phase I, A Reappraisal of Prehistoric Roads in the San Juan Basin,* Albquerque: US Department of the Interior, Bureau of Land Management.
1988 *Chacoan Roads in the Southern Periphery: Results of Phase II of the Bureau of Land Management Chaco Roads Study.* Albquerque: Department of the Interior, Bureau of Land Management.

Olsen, Nancy.
1985 Hovenweep Rock Art: an Anasazi Visual Communication System. *Occasional Paper 14, Institute of Archaeology.* Los Angles: University of California Press.
1989 Social Roles of Animal Iconography: Implications for Archaeology from Hopi and Zuni Ethnographic Sources. *Animals into Art*,ed. H. Morphy. London: Unwin Hyman.

Ortiz, Alfonso.
1969 *The Tewa World: Space, Time, Being, and Becoming in a Pueblo Society.* University of Chicago Press.
1972 *New Perspectives on the Pueblos.* Albuquerque: University of New Mexico Press.
1989 *The Tribal World as a Mosaic.* Lecture for the Santa Fe Trails Association Conference, Santa Fe.

Parsons, Elsie Clews.
1925 *The Pueblo of Jemez.* Papers of the Phillips Academy Southwestern Expedition, 3. New Haven: Yale University Press.
1939 *Pueblo Religion, Vol. 1 and 2.* Chicago:University of Chicago

Patterson, Carol (Patterson-Rudolph).
1990 *Petroglyphs and Pueblo Myths of the Rio Grande.* Albuquerque: Avanyu.

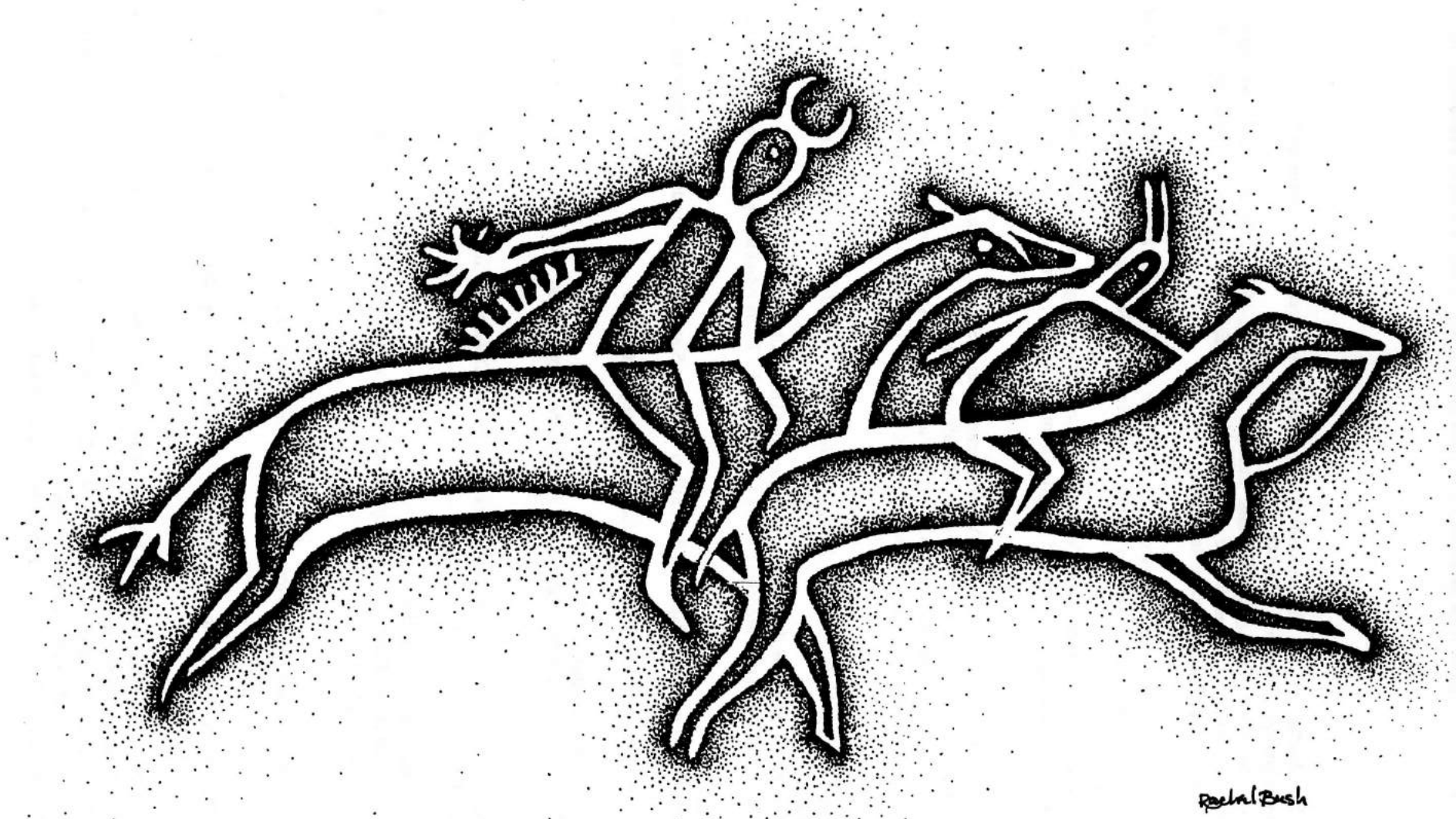
Purley, Anthony.
1974 Keres Pueblo Concepts of Deity. *American Indian Culture and Research Journal.* 1(1) 29-32 LA:UCLA

Sofaer, Ann, Michael Marshal, and Rolf Sinclair.
1988 *The Great North Road: a cosmographic expression of the Chaco culture of New Mexico*, The Solstice Project.

Stevenson, Martha Cox.
1984 "The Sia," *Bureau of American Ethnology Eleventh Annual Report.* 1889-90. Washington

Stirling, Matthew.
1942 "The Origin Myth of Acoma," *Bureau of American Ethnology Bulletin 135.*Washington.

White, L.A.
1942 The Pueblo of Santa Ana, New Mexico, *Memoirs of the American Anthropological Association 60*, Menasha, Wisconsin.
1960 The World of the Keresan Pueblo Indians. *Culture in History: Essays in Honor of Paul Radin,* New York: Columbia University Press.
1973 *The Acoma Indians.* Glorieta, New Mexico: Rio Grande Press.


Rachel Bush

# Using Concept Association To Help Identify The Source For Some Abstract Symbols

By

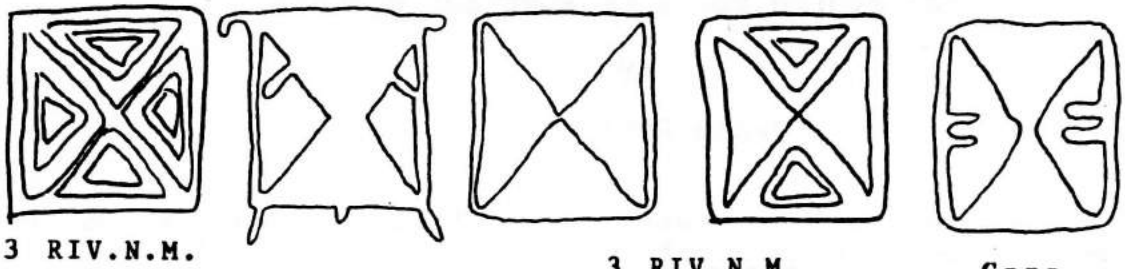
Jesse Earl Warner

All across the Southwest, from Western Texas to Southern California, there is a great variety of geometric designs that pose an interesting puzzle. Most of these designs occur within a border creating a sort of "decorated block," or "shield" (Figure 1). Some of the designs repeat themselves without the outlining border. Others have heads, arms or legs attached so they become the decoration within the torso (Figure 2). Grant, et al (1968), suggest that these glyphs in the Coso range of Southern California may have something to do with a "sheep hunting cult" and may possibly be the emblems of certain individuals.

After an examination of a sampling of these intriguing abstractions from across this wide area, it appears that many of the distinct constructions repeat with only minor variations. Based on their geometrical patterning these abstract designs can be segregated into different categories based on the form of the interior design. Each of these categories ranges from a series of identical repetitions to designs with an extreme amount of variation in any one figure. The most deviant design still maintains a certain relationship to the basic characteristics that distinguish the specific category. Even though the elements within these blocks occur in similar forms and contexts at sites with different "styles" that spread across a considerable amount of time and space, there is a noticeable amount of similarity. This fact supports the idea that many styles shared similar abstract forms that probably represented similar concepts.

From one of the most eastern sites at Alamo Mountain, Texas, to some of the most western in the Coso range of California, there are a few distinctive sites where those who used these symbols seem to have played with what to us seem to appear to be abstract renderings of the upper parts of the human torso. The results of these graphic conventions fall within a certain range of variation, and it is only a few of these that will be examined in this paper. The particular form that this paper will concentrate on will be variations of what look like a capital "I" and a Capital "H."

It is premature to say where the greatest concentration of these types of figures occur. It is obvious that even though sites around Alamo Mountain, Texas, have a large number, so do sites around Three Rivers and Waterflow, New Mexico, and Las Vegas Nevada. Sites in the Coso Range of Southern California also have a considerable number.

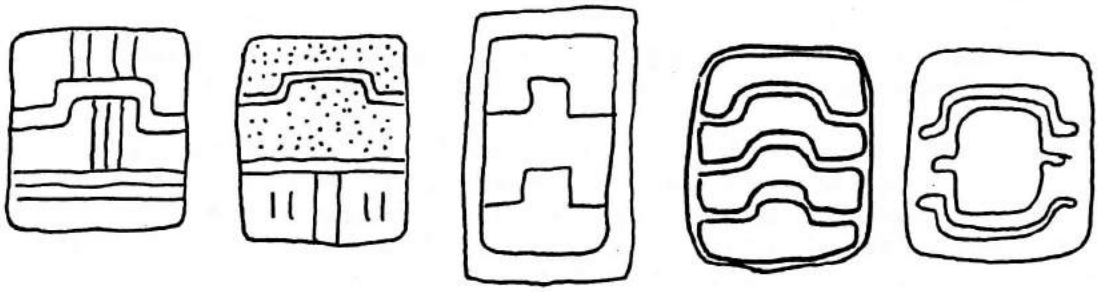


3 RIV.N.M.

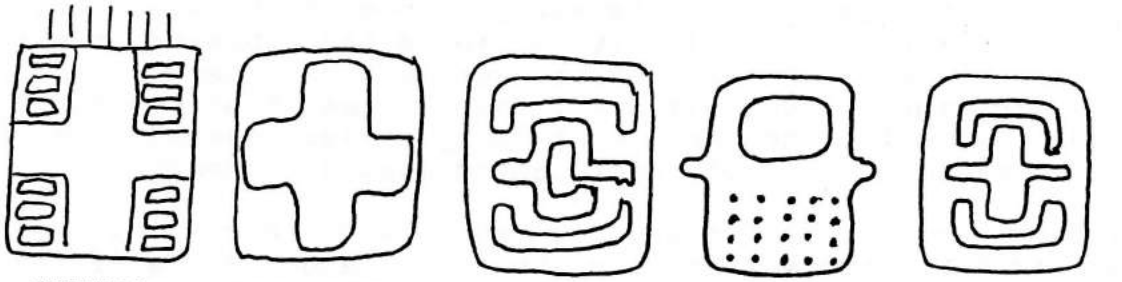
Water Flow, N.M.

3 RIV.N.M.

Coso, Cal.



Coso, Cal.



KEYHOLE

CAN. NEV.

Grapevine Can

Coso Cal.

Grapevine Can

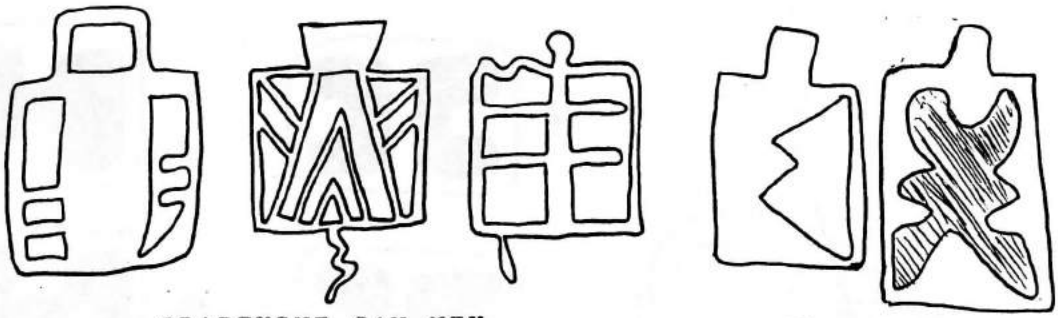
KEYHOLE CAN. NEV.

Coso Cal.

GRAPEVINE CAN. NEV.

KEY HOLE CAN NEV.

FIGURE 1



GRAPEVINE CAN NEV.

Alamo Mt. Tex

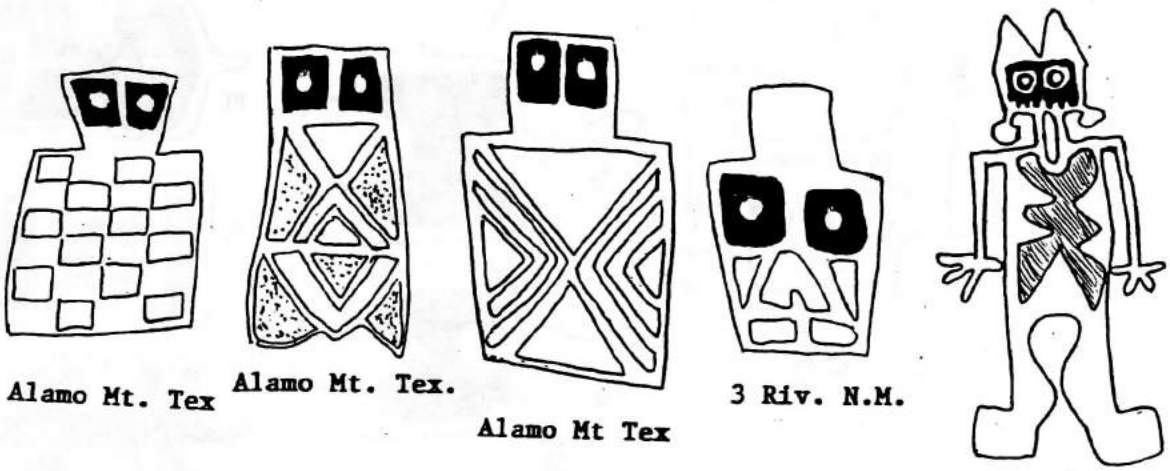
3 Riv. N.M.

Alamo Mt. Tex.

3 RIV.N.M.

3 RIV.N.M.

3 Riv. N.M.



Alamo Mt. Tex

Alamo Mt. Tex.

Alamo Mt Tex

3 Riv. N.M.

Alamo Mt Tex

FIGURE 2

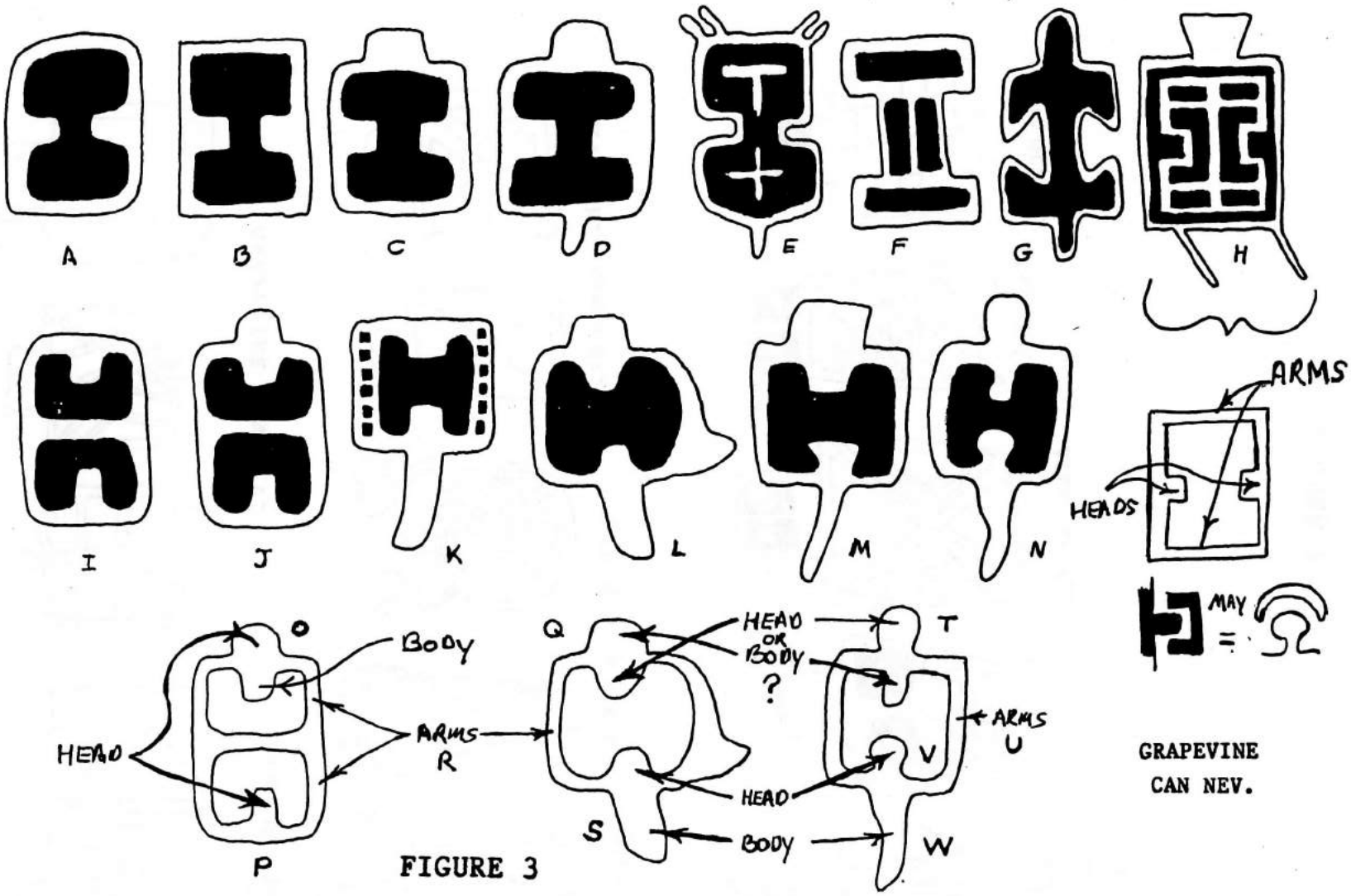



FIGURE 3

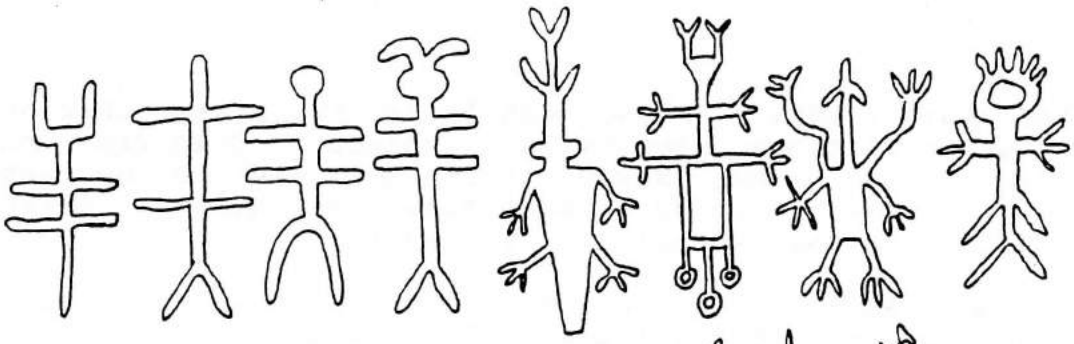
GRAPEVINE
CAN NEV.

For this study, we have considered two sites that divide this massive distance roughly into thirds. Grapevine Canyon, just east of Las Vegas, Nevada, marks the division between the western and central third. Waterflow, New Mexico, marks the division between the central and eastern thirds.

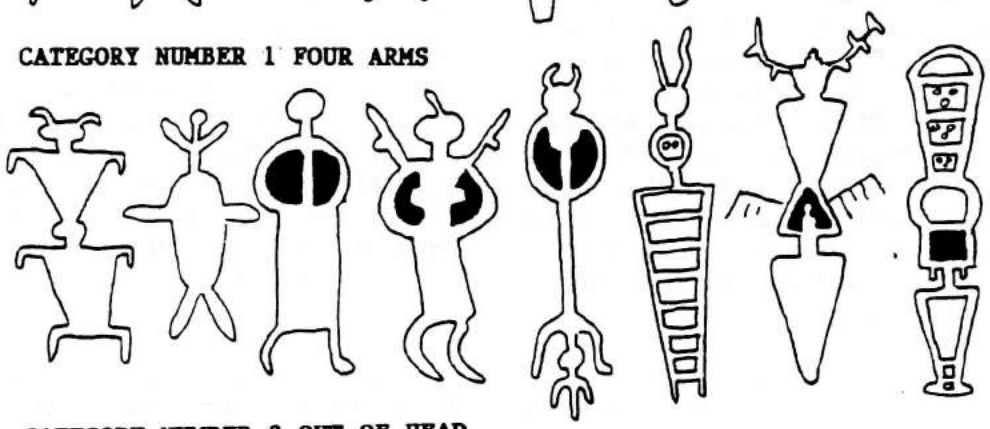
Around Grapevine Canyon the figures that we will consider have been represented in both the upright ("I") and the horizontal ("H") positions. These are probably different orientations of what may express the same or a similar concept (Figure 3). This is similar to the fact that the form of Figure 3 i, from Grapevine Canyon, Nevada, is a vertical form of what has been incorporated horizontally within Figure 11 e from Waterflow, New Mexico. Previous research on somewhat similar forms that occur as different categories of "Double Entities," provide a basis for understanding what may be going on here (c.f. Warner 1987, 1990).

In Figures 4 a and 4 b, notice the differences in the way the human form has been represented. Some have four arms, (Category 1), others have a partial figure emerging out of the head (Cat. 2), or another part of the body (Cat. 3). Some of these figures display a figure within a figure (Cat. 4), represent the torso of another figure created by the upraised arms of the main, lower figure (Cat. 5), or illustrate figures where the bottom half are a mirror image of the upper half (Cat. 6). Categories seven and eight are variations of figures that include a patinated U Bracket or a Bisected Circle. Two recent studies explore the Inverted U-Bracket and the Bisected Circle as two other different but possibly related forms of these mystical expressions (Warner 1991 a,b).

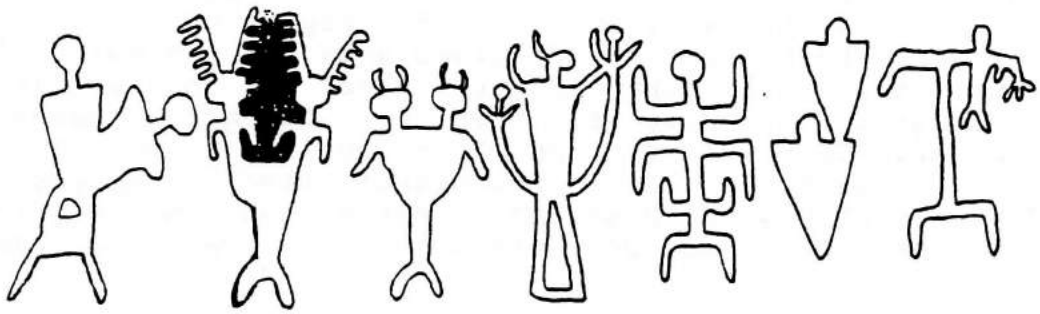
These "Double Entities" create what seem to be very unusual, unnatural and probably mystical combinations of attributes. The intent, it seems may have been to express concepts that would not be able to be represented by more natural, normal looking figures. "Double Entities," are unusual combinations of multiple limbs, torsos, and heads suggesting perhaps a mystical or supernatural association. In previous studies, it was suggested that these unusual forms may be expressions of shamanic quests for the ecstatic experience, or altered states of consciousness. The multiplication of appendages and torsos seems to suggest the out-of-body experience, the separation, disintegration or reunion of both entities, the "body" and the "Spirit" ( ala Eliade 1964:485). These may also be representations of other types of vision quests, possibly those associated with rights of passage by individuals in a non-shamanic context. Somewhat similar, but different "I" and "H" forms may also express these situations (Figures 3, 6).



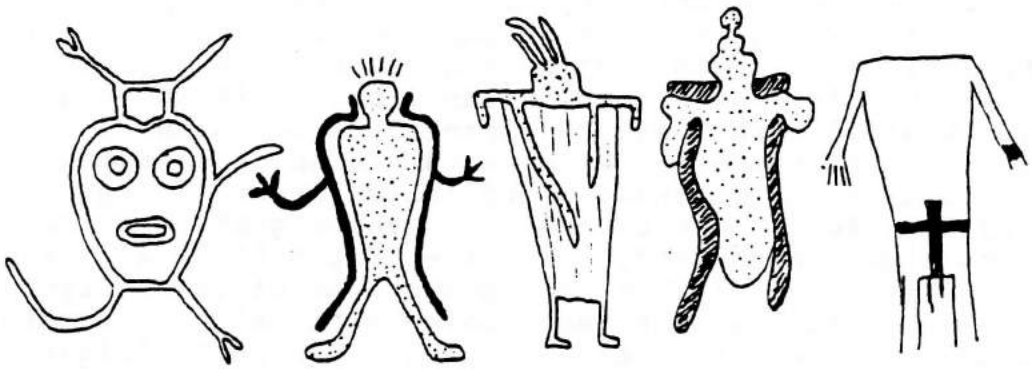
CATEGORY NUMBER 1 FOUR ARMS



CATEGORY NUMBER 2 OUT OF HEAD

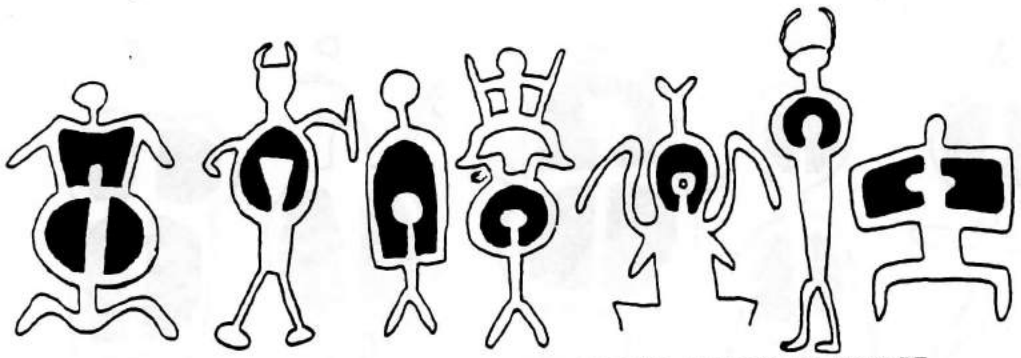


CATEGORY NUMBER 3 OUT OF ANOTHER PART OF THE BODY

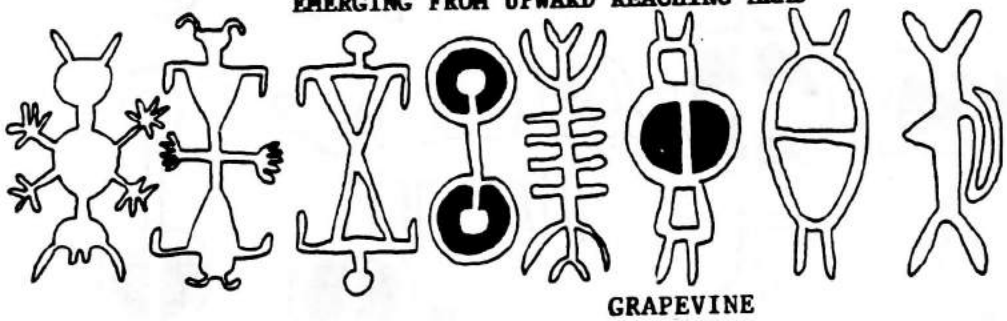


CATEGORY NUMBER 4 A FIGURE WITHIN A FIGURE

FIGURE 4 A

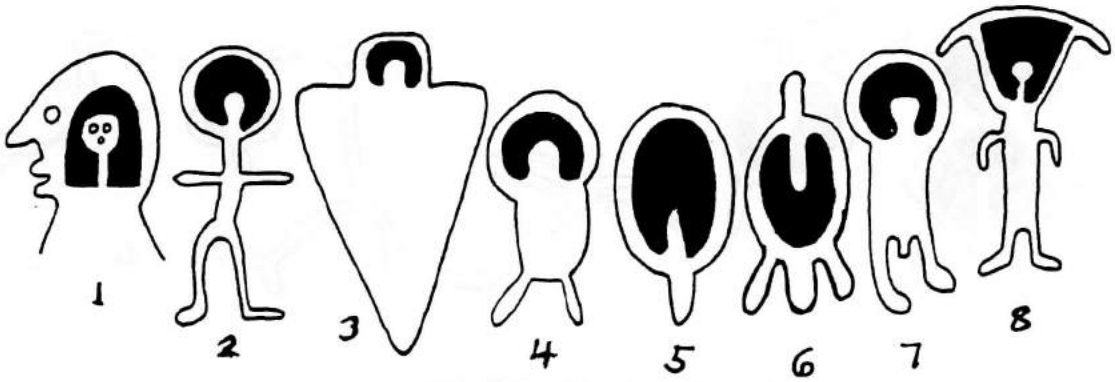


CATEGORY NUMBER 5 HEAD AS CHEST OF EMERGING FIGURE OR FIGURE EMERGING FROM UPWARD REACHING ARMS

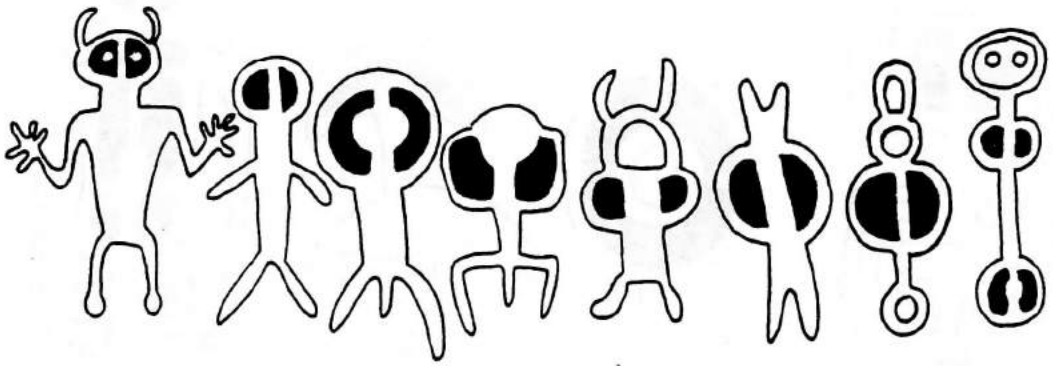


GRAPEVINE
CAN NEV.

CATEGORY NUMBER 6 REVERSIBLE FIGURES



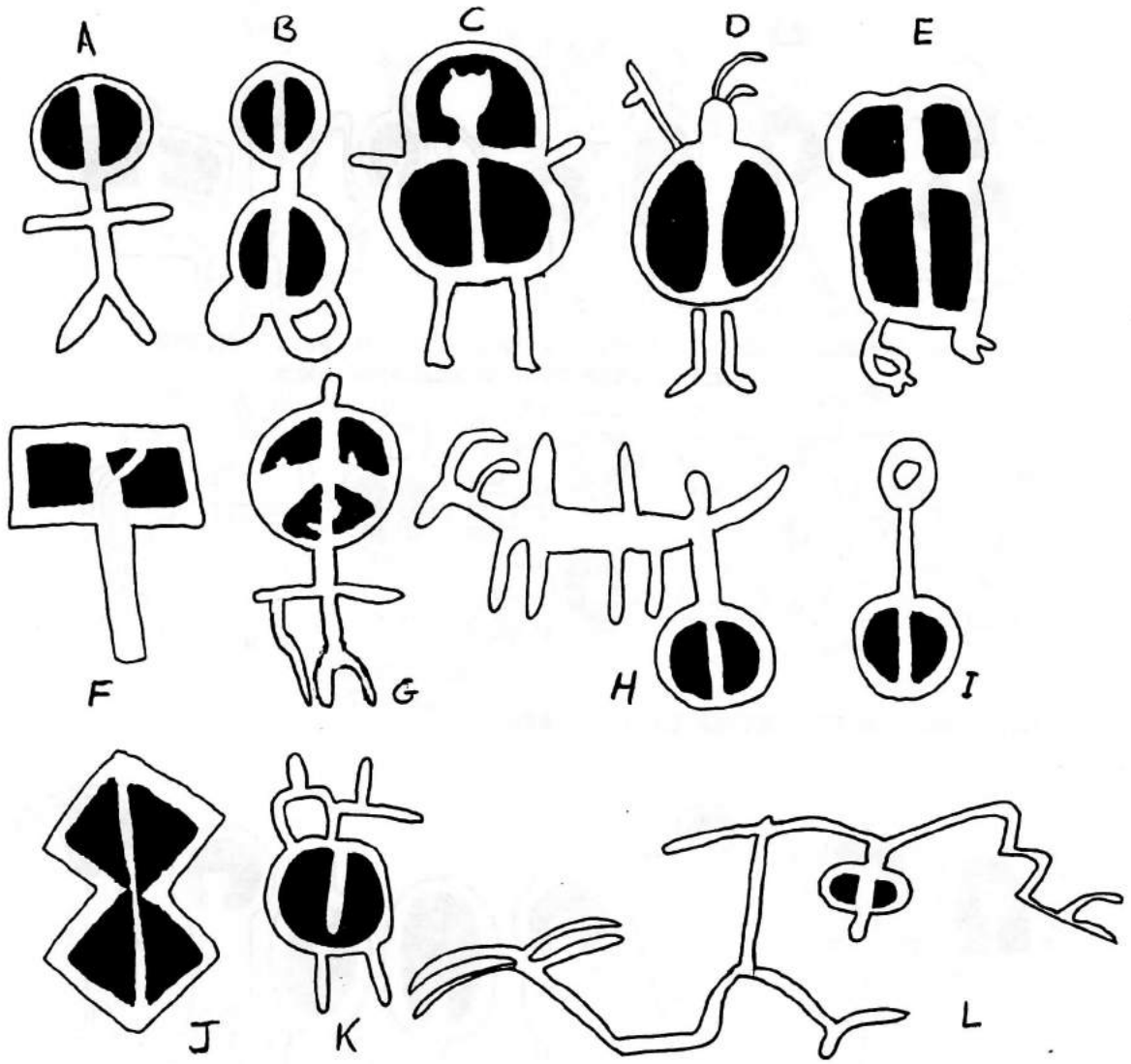

CATEGORY NUMBER 7 U BRACKET FIGURES



CATEGORY NUMBER 8 BISECTED CIRCLE FIGURES



FIGURE 4 B




GRAPEVINE CAN NEV.

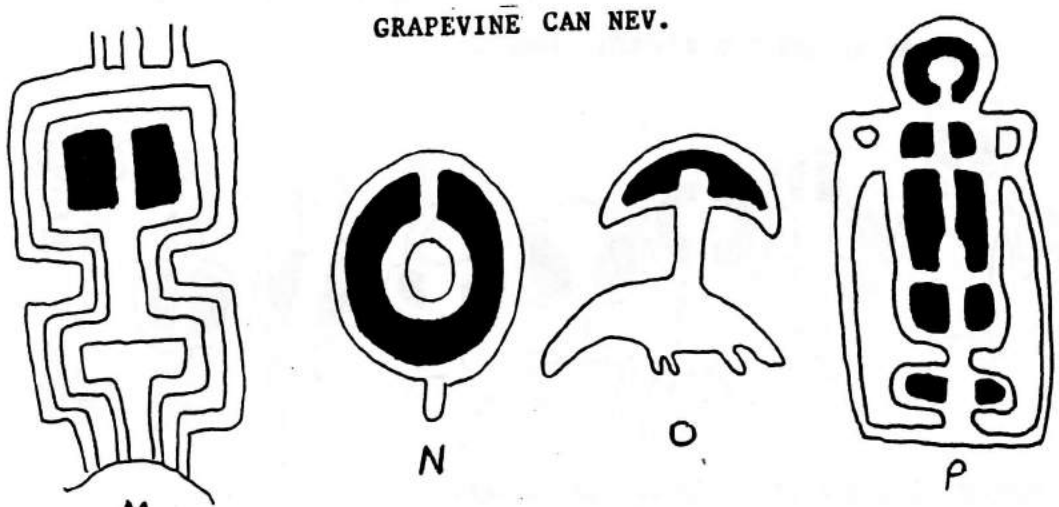
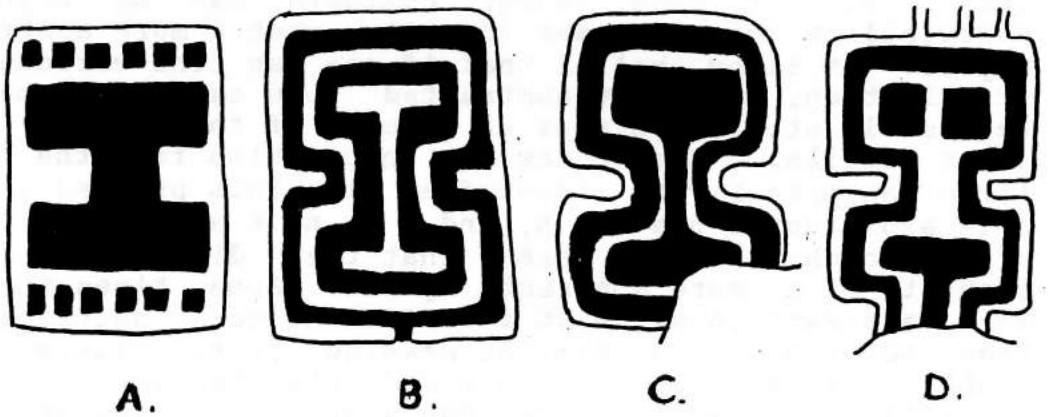


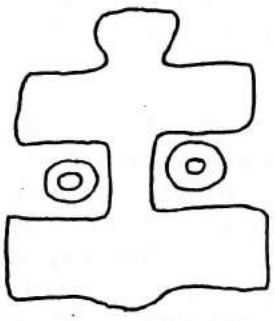



FIGURE 5



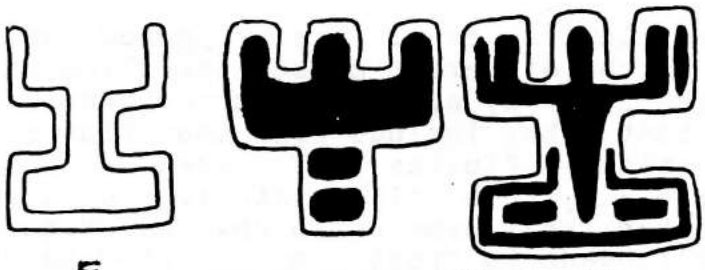
A. B. C. D.

GRAPEVINE CAN. NEV.



E.

JAGO WELL



F. GRAPEVINE CAN NEV. H.

FIGURE 6

Through a process of concept association, where less identifiable glyphs are often placed in a more identifiable context, the association can suggest a concept or a source for its form. If good enough contexts can be found, Concept Associations can sometimes identify what a more abstract element may be. It is my belief that if one can find various stages of styalization, the most abstracted form can often be identified because it still maintains an essence of the natural form without other details. The source or inspiration for the "I" and "H" forms can probably be identified with this process (c.f. Warner 1982 and Figures 3 a to h, and i to n, 6 a to e). This happens often enough that it seems that they did it to clarify the identity of a more abstract symbol. Some times they placed a more abstract form, with a different more naturalistic symbol that may express a similar meaning (c.f. Figure 8 d, lower right). When that can be found the abstraction becomes more identifiable. This process can also be illustrated by finding a less common form incorporated with a more common figure (c.f. Figures 3 h, o to w, and Figure 7). When that can be done, its identity is often more certain (also refer to Figures 11 g-h vs a-f).

Through the process of Concept Association, the more understandable and even the more divergent "I" and "H" forms (Figures 3, 6 ), may also be illustrated to represent concepts similar to those of the other Categories of "Double Entities," and possibly be variations of Bisected Circle, and Inverted U-Bracket Categories 7 and 8 (Figures 4 b bottom two rows). At Grapevine Canyon there is a good presence of the Inverted U-Bracket and the Bisected Circle forms (Figures 3, 5). That presence has enough repetition to add support to the suggested use of these symbols as expressed above.

The forms in Figure 3 are proposed as variations and combinations of the different categories illustrated in Figures 4 a, b. Figures 3 l, m, n, provide three examples that are more complete, in that they include more than Figures 3 a, and i do. The lower portion of Figures 3 l -n seem to depict legless human forms. Figures 3 s, to w, illustrate that possibility. If that is the case then their arms reach upwards (Figures 3 r, u), and join over their heads to create an enclosed negative form of the horizontal "I" or "H" variation. Another bulge that may be another legless torso descends from the upper line (Figures 3 q, t). The upper bulb, perhaps another head, raises above the upper pendent torso (Figure 3 q, t).

The upper and lower bulges may also be a reversal of the lower figure like those in Figure 4 b, Category Number 6, so that the lower bulge (Figures 3 q, t), may be the head and the upper bulge may be the body, to create a mirrored reversal with the arms of the lower and the upper figure joined to create the

symbolism of the "I" or "H." These could then be identified as another distinct variation or combination of a Category Number 5 "Double Entity," (Figure 4 b, top row). These are figures emerging from or are formed by the upward reaching arms of another figure, as well as possibly being a reversible figure, a Category Number 6, or a combination of the two (Figures 4 b, categories 5 and 6). Figure 3 k illustrates a more detailed, but less complete form of 3 l, m, and n, in that it does not have the upper bulge forming the possible head (or body) of the emerging entity. Figure 6 a duplicates the interior pattern of that design without the lower entity's pendent torso. By rotating its orientation to the "I" position it illustrates that orientation appears secondary to form in its identification (Warner 1983 A:16, B:21).

Figure 3 j seems to be a composite figure with two mirrored U-Brackets forming a deformed Bisected Circle as its body decoration, a decoration that may be the horizontal "I" split down the center from top to bottom. Perhaps it has the outside upper "head" of the "emerging entity," with a pendent torso like those at the top of figure 3 l-n. The pecked protrusion that the lower patinated, inverted U-Bracket wraps around is like the heads in Figure 4 b Category Nr. 7 and the lower heads that the horizontal "I" wraps around in Figure l-n (Figure 3 v). But it does not have the lower pendent torso of the lower figure. The splitting of the "H" ( or the horizontal "I") across the horizontal shaft, creating the Bisected Circleness of the two mirrored U-Brackets may represent the arms of the lower figure joined above its head (c.f. Figure 4 b Category Nr. 7, 4th, 5th and 7th figures from the left, and appendix A), and combined with the lowered arms of the upper figure and joined below its pendent torso (c.f. as somewhat similar to Figure 4 b Category Nr. 7, 6th figure from the left, and Figure 8 c.10, and appendix B). This mirroring aspect emphasizes its reversible nature. The upper section of Figure 3 i may then be a less complete, more abstracted or simplified form of Figure 3 j forming a combination of the Double Entity Categories 6 and 7 or 8, a mirrored or reversed U-Bracket and or Bisected Circle Double Entity.

This form was reduced to the bare essentials (like Figures 3 a, b) but still is not quite the most abstracted examples of this concept. It appears, however, to be the limit of this line of styalization before the "I" or "H" concept expression was lost (Lee and Bock 1982:26). Without the more identifiable and what appears to be understandable forms (Figures 3 c-h and j-n) that provide a "Concept Association" for them, their meaning would probably not be identifiable. The possibility that these may be a variation of a Reversible Bisected Circle Double Entity is also based in part on its similarity to Figures 5 b, e, j, and appendix C. Real reversible Double Entities are either the same or just as logical upright as if they were turned upside down. Figures 5 c and p as well as 3 i and j are combinations of the

U-Bracket and the Bisected Circle, emphasizing their compatibility. There is a major difference in the reversible nature of these figures and those in Figure 4 b row 2. Notice that the reversible examples in figure 4 b are more of an outward reflection of the body, while Figures 3 i, j are only partial bodies, almost inward reflections. Compare that with Figures 4 b Categories 7 and 8.

Earlier, it was suggested that the mirrored patinated U-Brackets in Figure 3 i, j may be a deviation of the patinated horizontal "I" form. Additional support for that suspicion lies in the fact that the mirrored U-Brackets are probably a more complicated, or stylized (simplified) forms of the "H" form in Figures 3 k-n. That can also be seen in the mirrored U-Brackets in Figure 3 h that help create or are formed by the capitol I. In this example there is a doubling or combination of forms mentioned earlier in describing Concept Association (page 3, last paragraph, where two forms, one more common and identifiable was often placed in a context with another less common form, each a different form with a similar meaning. The "head" and "joined upraised arms" are represented in the outward darkness of the first inner patinated line and the pecked line adjoining that. By visualizing the forms of Figures 3 a-d as both positive and negative body decorations, then such an interpretation can be applied to Figure 3 h, as a concept association. This symbolism may emphasize a duality of opposition.

The next aspect that we need to look at is the use of the negative, invisible space between the head and arms, the capital "I" and "H," as a variation of the positive space in Figures 3 e to g. Figure 6 a contains a negative "I" that also occurs several times at Grapevine Canyon as a positive form as well (Figures 3 e-g, 6 c-d, and Figure 6 e from Jago Well). Most of the positive forms express multiple combinations or layering of one form within another that finally creates the "I" on the deepest inside level. Notice the similarities between figures 3 h and 6 b,c, then compare Figure 6 d with 7 a, which are both this same type of multi-layered Category Nr. 4 "Double Entity," a figure within a figure. In both Figures 7 a and 7 b there are basically two positive forms and one negative form. In Figure 6 c there are two positive and two negative forms, the final inner positive "I" is the final negative form. Each of these layers repeat and echo the form made by the outer most form - the form that we are not able to identify without a Concept association. That is the figure with its arms raised and joined over its head. Each of the inner layers repeat that pose again and again. In Figure 6 a, the sideways view of the two mirrored heads can again be seen in Figures 6 b, c, and d. Turn the illustration sideways so that the "I" becomes an "H" and visualize what was the sideways positive head and how it forms a negative head, which in turn forms another positive head, which again forms another negative head. Each of these heads have their arms raised and

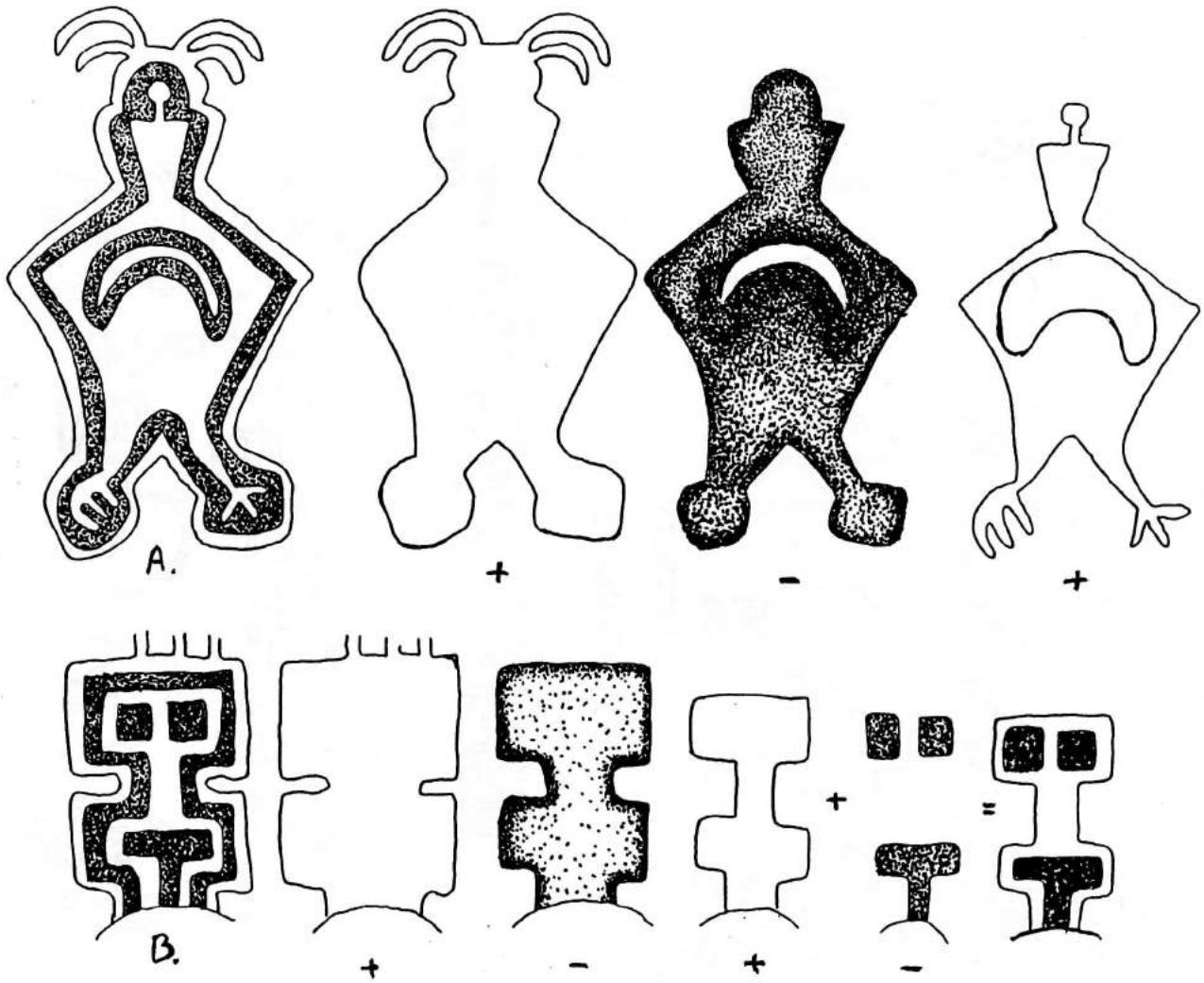
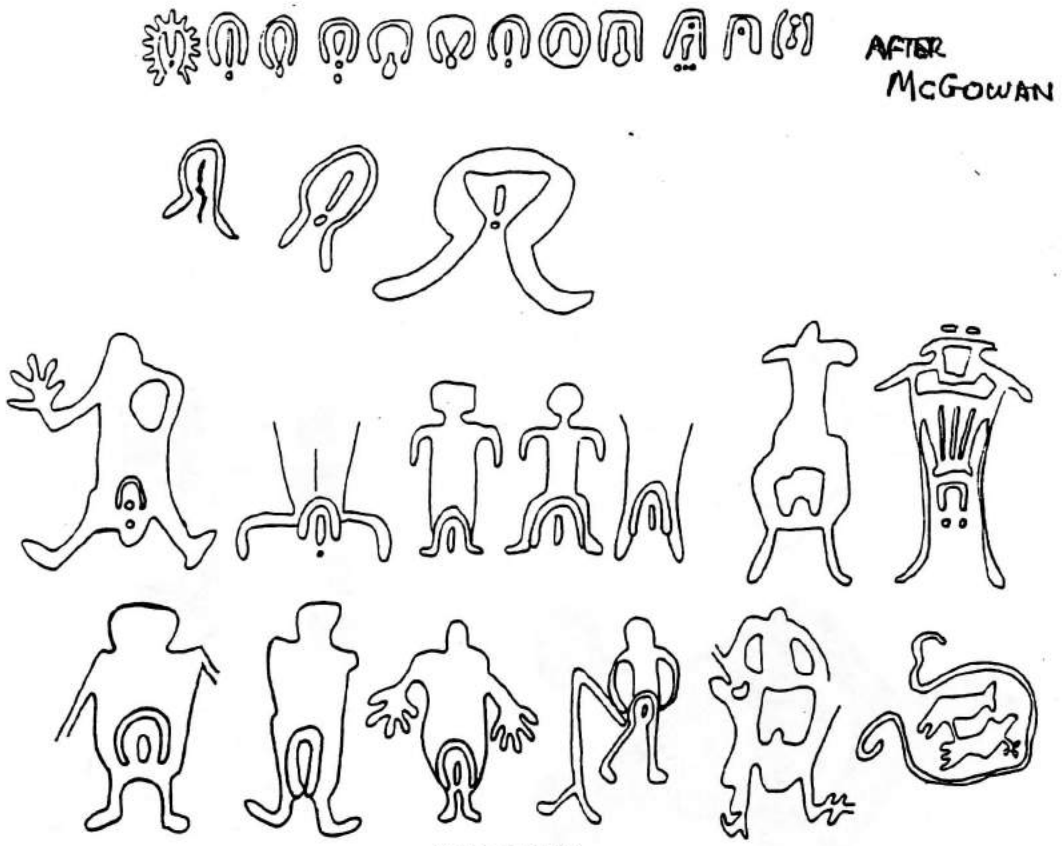



FIGURE 7




FERTILITY

FIGURE 8 A


HUNTING

FIGURE 8 B

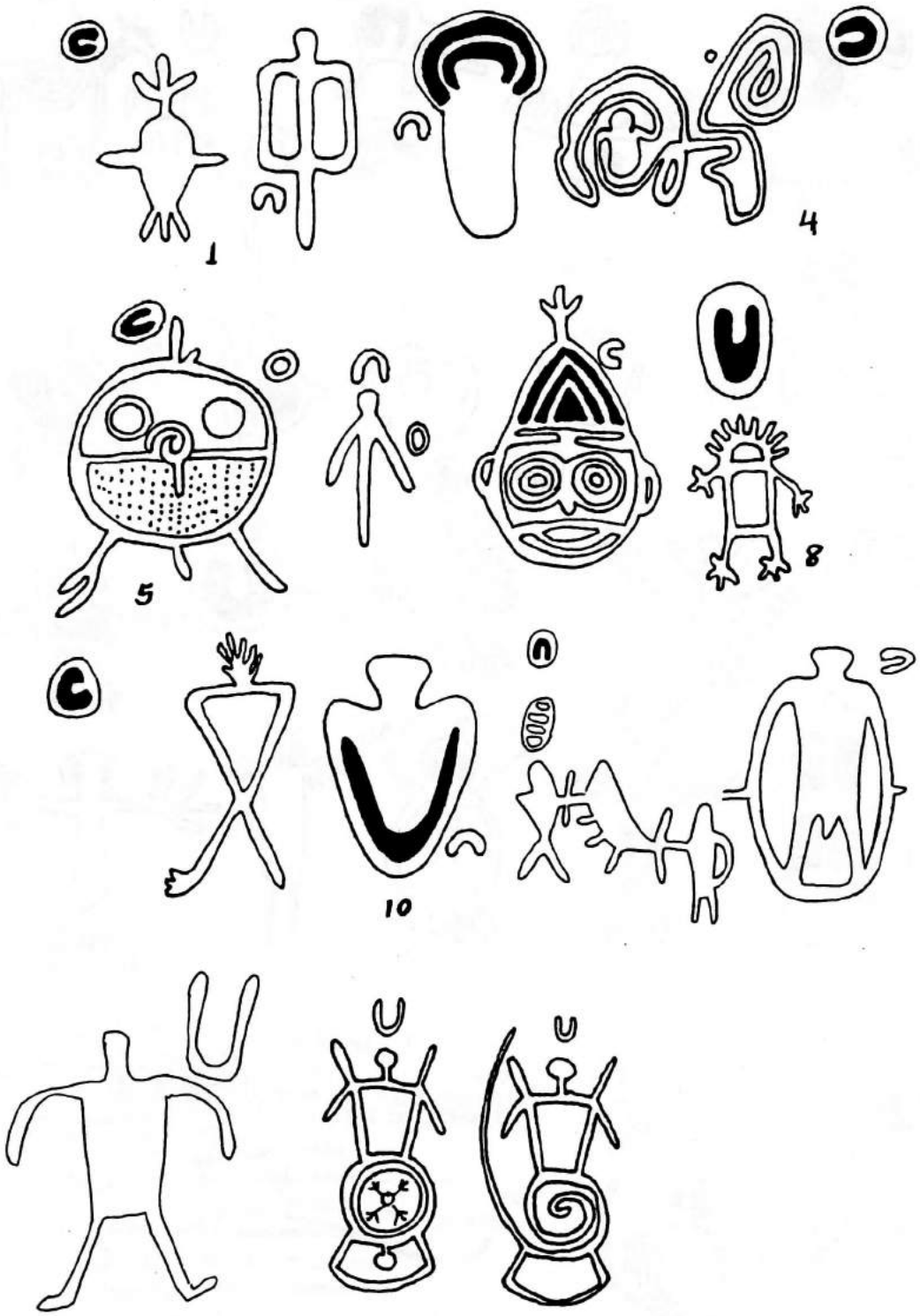



FIGURE 8 C

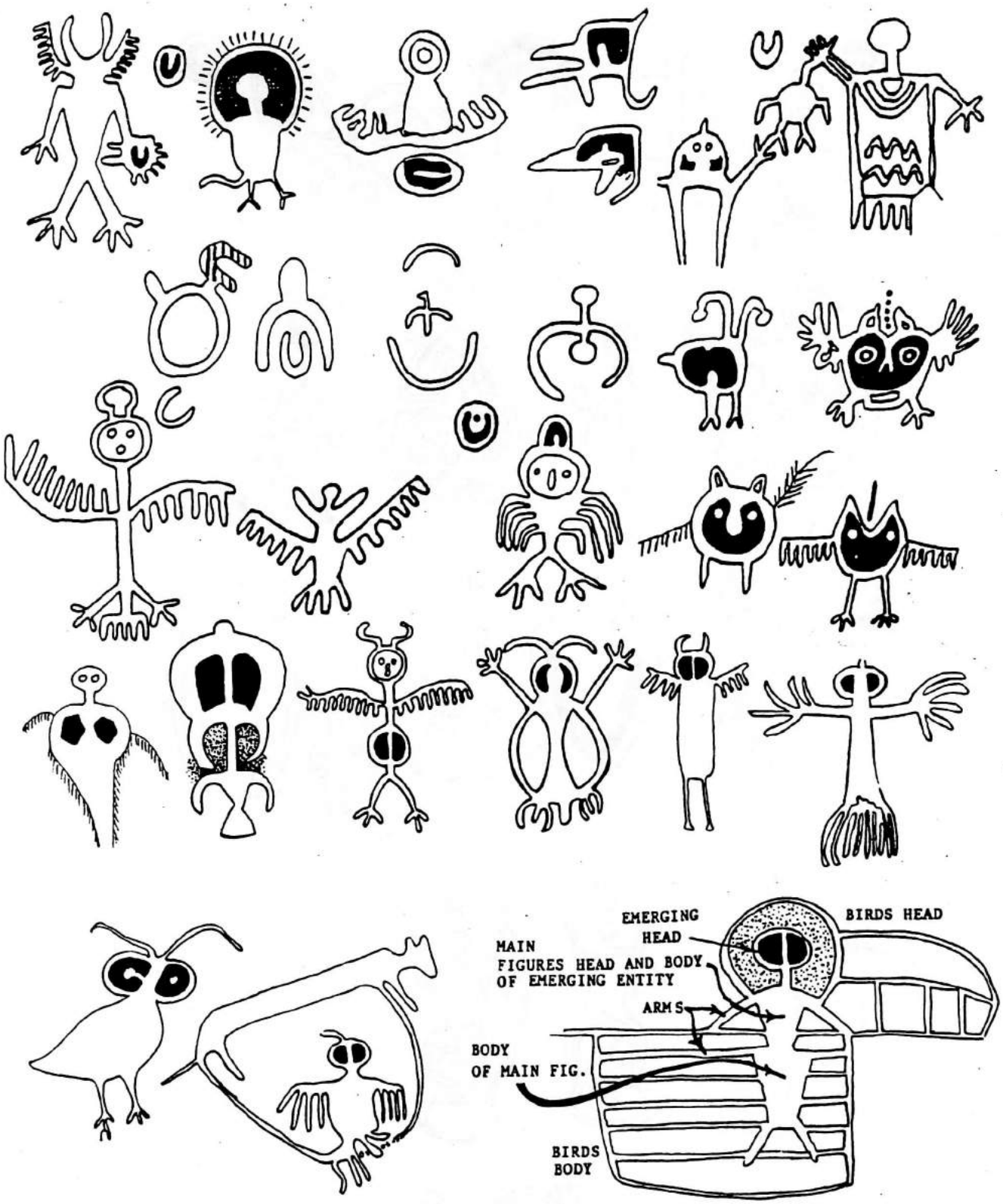

EMERGING
HEAD
BIRDS HEAD
MAIN
FIGURES HEAD AND BODY
OF EMERGING ENTITY
ARMS
BODY
OF MAIN FIG.
BIRDS
BODY

FIGURE 8 D

FIGURE 8 E

joined in a mirror or reversed image of itself (like Fig.s 3 l-m). The penultimate form creates the "I", the encrypted, possible esoteric and maybe even "gnostic" situation behind the "I" or "H" symbol.

In Figure 6 d the inside positive form of the "I" is an abstracted human form like those in Figures 4 b, a Category Number 8 Double Entity and Figures 3 h and 6 b,e. The possible human-like form in Figure 6 d has his hands and arms raised up above and joined to his head to create the Bisected Circle (c.f. Figure 4 b Cat. Nr. 8 bottom row, the 3rd and 4th figures from the left). His legs bow out to form the lower portion to complete the form of the "I" (Figure 7 b). This process of nesting or layering one figure within another alternating between positive and negative creates a feeling of alternations between the mortal and the spiritual and a repetition that leads one deeper within.

In studying various concept applications of the U-Bracket and the Bisected Circle, it has been demonstrated that both forms in possibly their most extended concepts are probably associated with the concept of shamanic sight. In that relationship they both, no doubt, still retain a sense of the concepts of "fertility" or "birth" that they were most likely originally extended from (c.f. Warner 1984a, b, Warner and Rayl 1990). Figures 8 a-e illustrates the process of symbolic extention of concept application of similar forms that have been applied from "fertility" (Figure 8a), to applications in contexts associated with "hunting" (Figure 8b) (c.f. Thomas 1976), to an association with human heads (Figure 8 c), and then bird heads as the eyes, head or body themselves (Figure 8 d). One final application is that they are also represented as the human head, or face forming either a Category Number 7 (Figure 8 e), or a Category Number 8 Double Entity (Figure 8 d lower middle and lower right).

The next step in this line of reasoning is that the posture or positioning of the pecked figures arms were made to produce the inverted U-Bracket and its synonym, the Bisected Circle. These special postures or conventions that draw the attention both creates and sort of "hides" the symbolism of the inverted U-Bracket, the Bisected Circle and now the "I" or "H" variations as well. For example notice that Figure 7 b has a positive outline that forms a negative "I," that in turn forms the positive "I" shaped human form. Probably the best example at Grapevine Canyon, this example illustrates that the capitol "I" is a special form that relates to the concepts behind the forms represented as Double Entities. This is a very complex form of what is also expressed to various degrees by all the other less complex or more simplified examples in Figure 5.

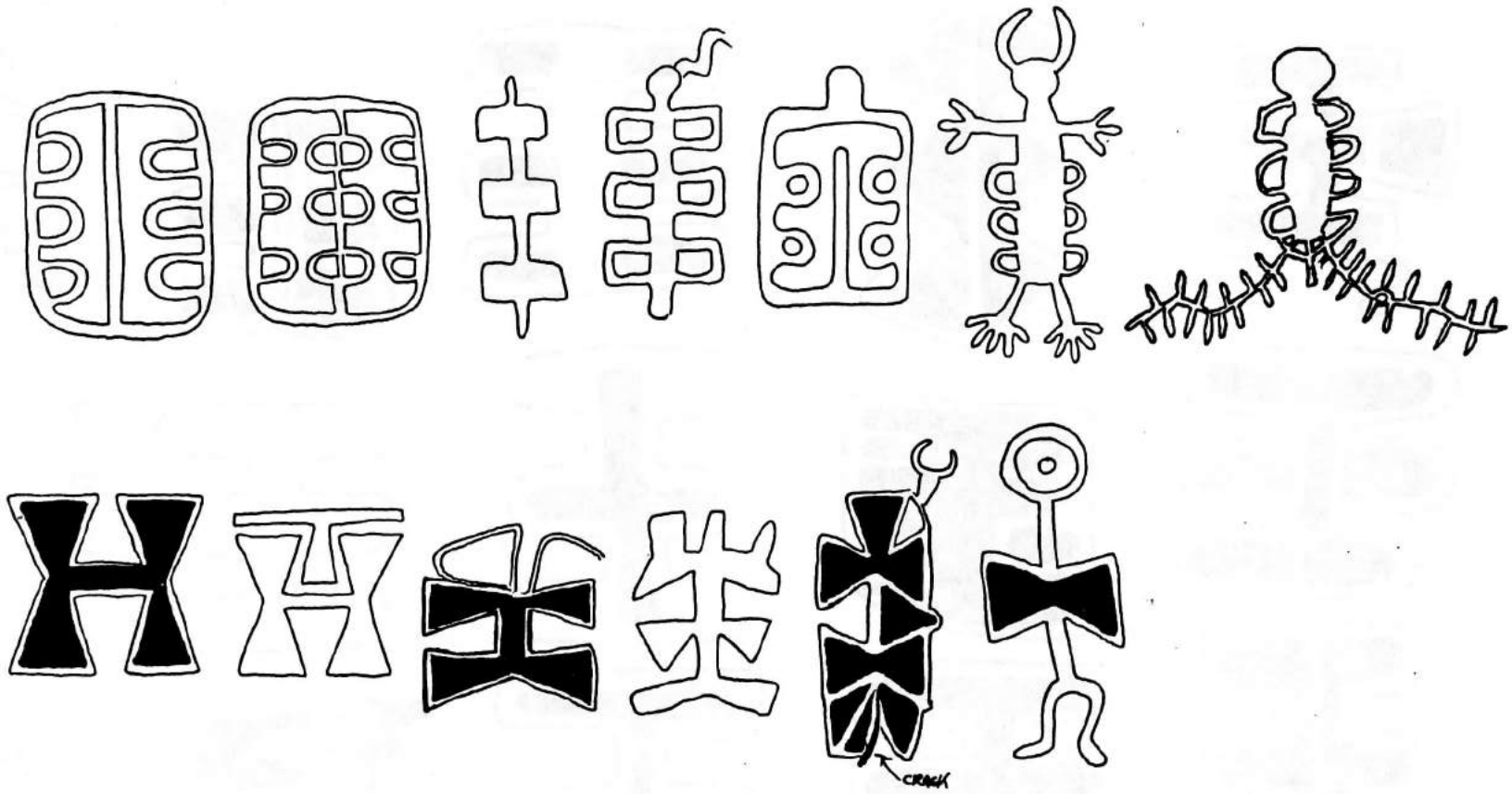



**FIGURE 9**

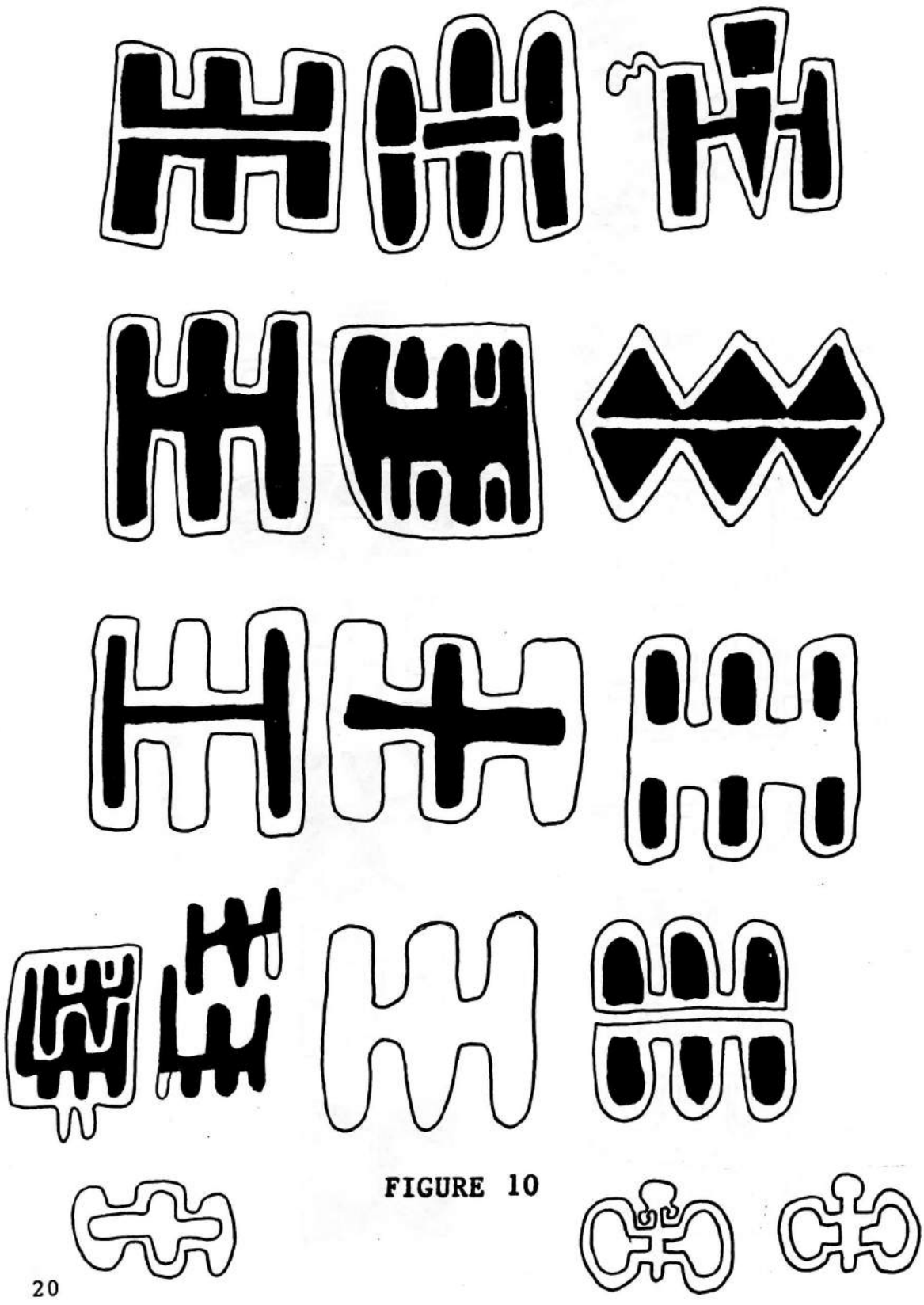


FIGURE 10

Is the positive form of the "I" an abstracted human form? The positive form of the "I" also occurs with heads attached to the top bar like Figures 3 g, and h from Grapevine and 6 e from Jago Well, Arizona. Insert two slots into the upper bar and there is a recessed head (Figures 6 g-h). From this point, this process of logical form extention can perhaps be applied to other forms from Grapevine Canyon and elsewhere, such as those in Figures 9 and 10.

It seems that there is some good evidence to support the conclusions drawn above, but the best test may be to compare these forms with other similar "styles" from other areas. With this as a basis for a new perspective, refer to Figure 11. These examples from Waterflow, New Mexico were actually the first examples that helped to identify this variation. However, it wasn't until the Grapevine Canyon examples were examined that enough evidence was apparent to seriously consider these various forms as possibly representing variations of the Double Entity Concepts.

Figure 11 a provides some other interesting, but confusing patterns. These sprout-like designs are repeated in the blocks in the second row. Look at the patterning of the white curls against the black background. By doing that it creates an odd abstract seeming illogical and random placement. But the sprout-like curls can also be visualized not as the objects intended to be viewed, but as a mask that sort of conceals the more important symbol formed by the patination, similar to the situation with the U-Bracket, the Bisected Circle and the "I" forms. The four positive, pecked curls in Figure 11 a may be sprouts, but the form of the patination they create forms two mirrored patinated heads with pendent "hair bobs," neck, and shoulder lines reversed so that they abutt at the top of their heads. These two heads also create the concept of the Bisected Circle as the main figures body. Figure 11 d divides two heads with up raised arms with a patinated line somewhat like the positive bar in Figure 3 i. It is closer to the vertical bar in Figure 11 e, an almost identical version of the form that creates Figures 3 i and j, except that it is vertical and in patination instead of horizontal and pecked.

Figure 11 g has the heads splayed out in opposite directions abutting at their shoulder lines, instead of joined like Figure 11 f. That same basic form repeats itself with more florescence in Figure 11 j with a little more curl on the probable hair bobs. The positive form in Figure 11 h from Waterflow, New Mexico is duplicated in patination in what was pecked at Three rivers, New Mexico (Fig. 11 l). The more complicated forms from Waterflow (like Figures 11 i,j and k) may represent the concepts behind these forms just described, but they are perhaps abstracted beyond what can be identified without other concept associations.

The conclusions of this presentation is that these forms represent various unobvious configurations of the upper portion of the human torso presented in ways that seem to relate to the concepts expressed by more conventional Double Entities. This is only one small area of a type of expression I refer to as **"Subliminal Symbolism."** These lines of reasoning try to avoid the problems of too much speculation by exploring the possibilities of simply identifying the graphic source behind a repeated and often abstracted symbol's form. This may seem very confusing, but if enough variations in the graphic forms can be found, a source or root from which the less understandable or less identifiable were abstracted from can be identified. This is the process of Concept Association previously defined. Beyond the lower, more responsible levels (i.e. element identification, source of the elements form and possible associated concept) further levels of interpretation often remain too speculative.

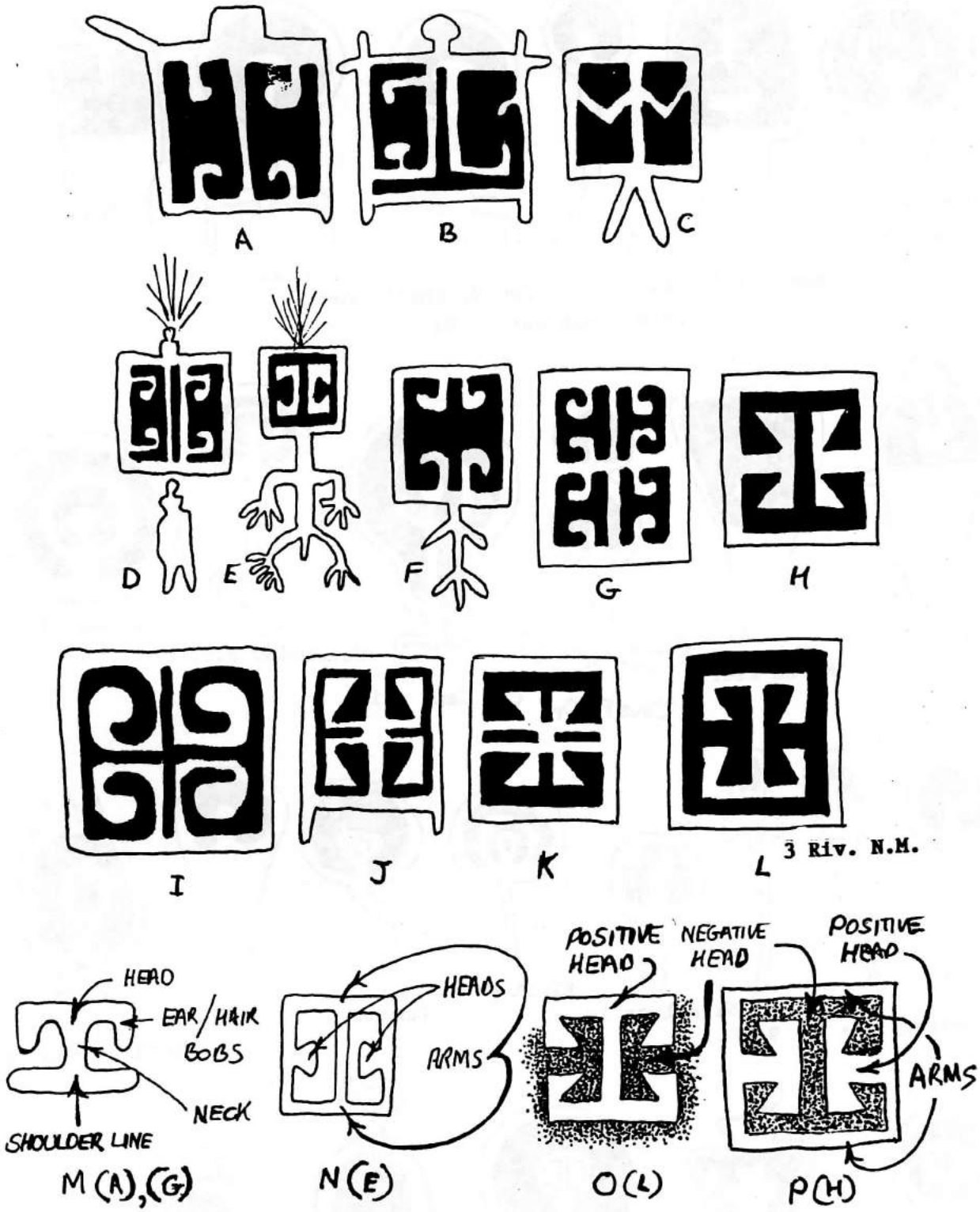
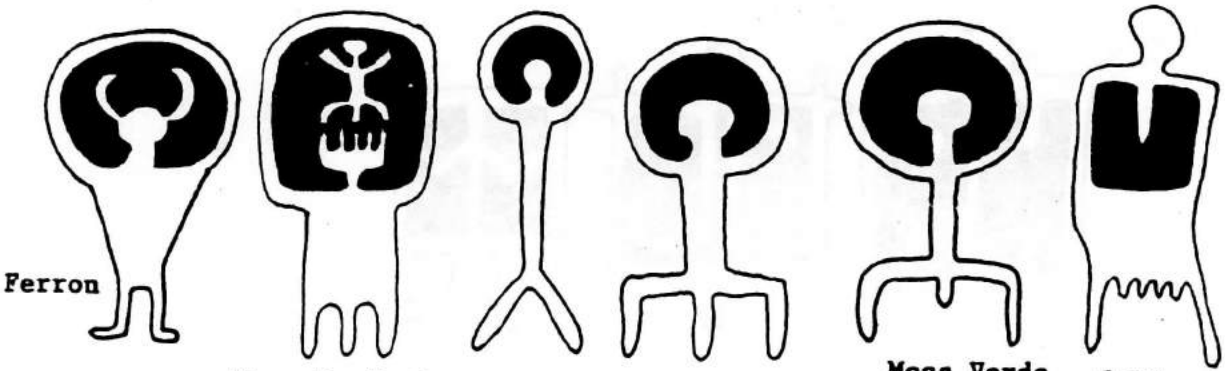
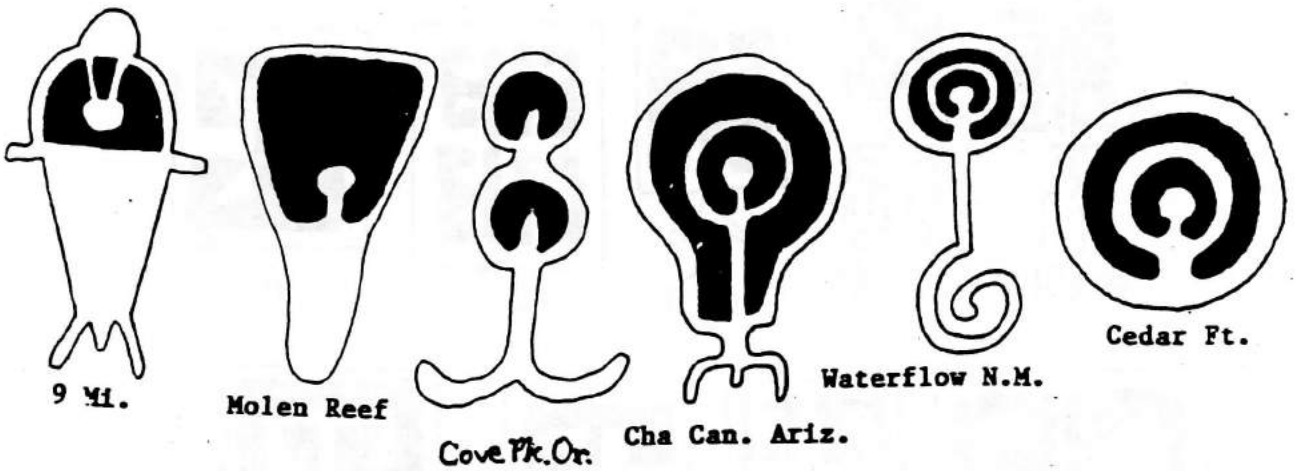
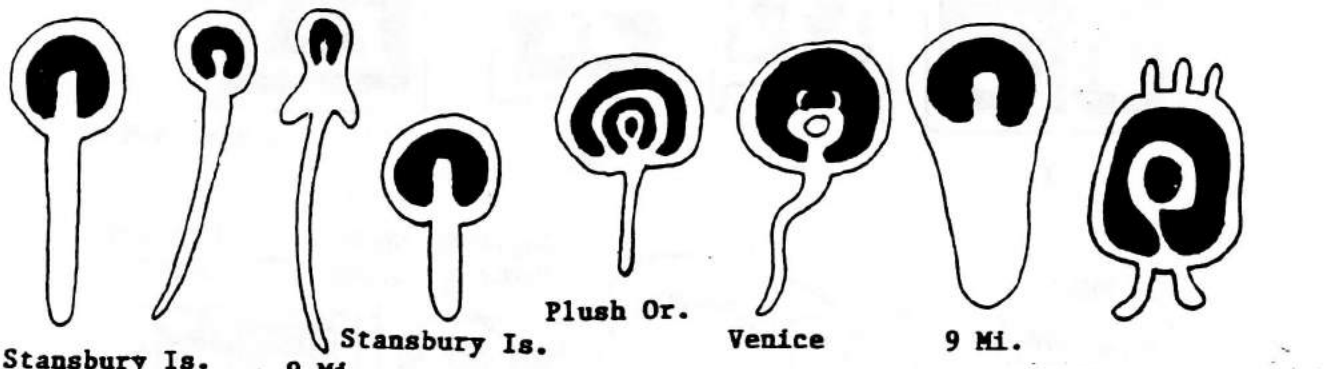
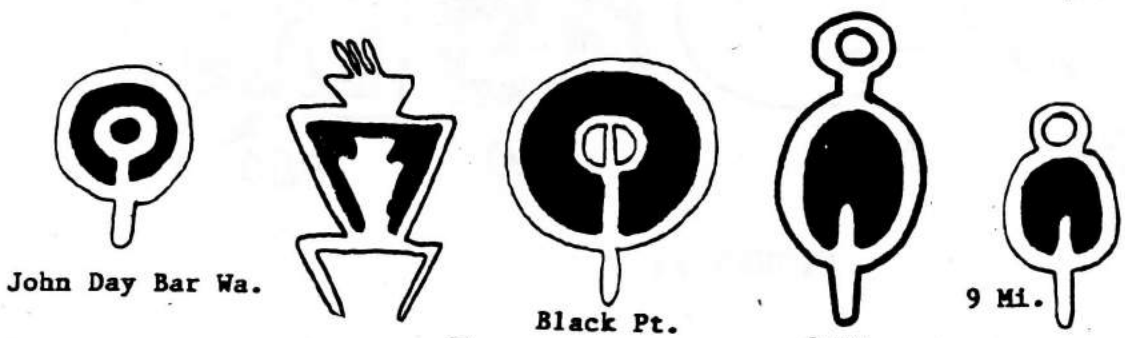

A
B
C
D
E
F
G
H
I
J
K
L
3 Riv. N.M.
HEAD
EAR/HAIR BOBS
NECK
SHOULDER LINE
M (A), (G)
HEADS
ARMS
N (E)
POSITIVE HEAD
NEGATIVE HEAD
O (L)
POSITIVE HEAD
ARMS
P (H)

FIGURE 11


Ferron
Mesa Verde Co.
Can De Chelly Ariz.
Mesa Verde
9 Mi.
4'O Clock Rapids Wa.

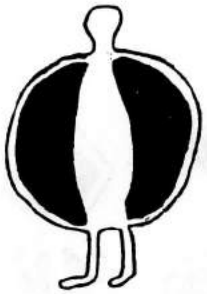

9 Mi.
Molen Reef
Cove Pk. Or.
Cha Can. Ariz.
Waterflow N.M.
Cedar Ft.


Stansbury Is.
9 Mi.
Stansbury Is.
Plush Or.
Venice
9 Mi.
4'O Clock Rapids Wa.


John Day Bar Wa.
Clear Ck.
Black Pt.
9 Mi.
9 Mi.



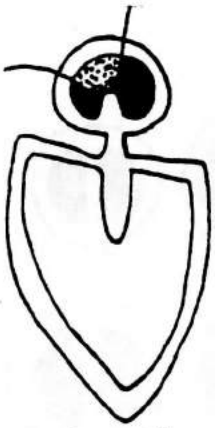
Appendix A.



9 MI

GRAPEVINE CAN. NEV.

Stansbury Is.



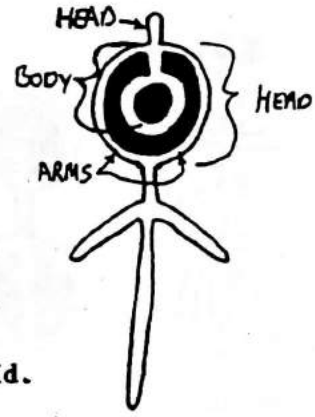
Clear Ck.

Plush Or.

Avery Butte

Cape Horn Wa.

Wees Bar Id.

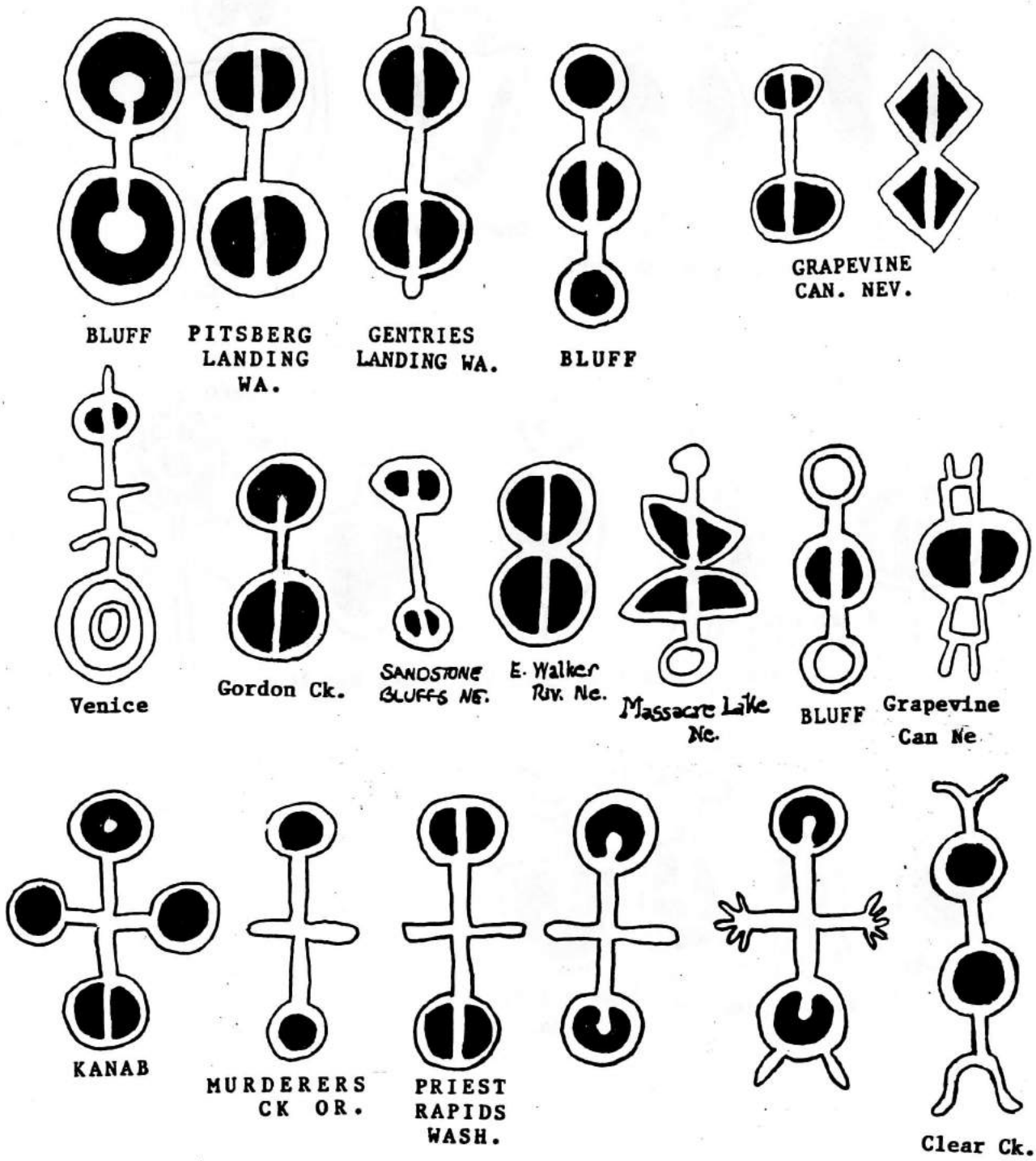



Ut. Lake.

Blalock Rapids

Rosevelt Pk. Wa.

Appendix B.


BLUFF
PITSBERG LANDING WA.
GENTRIES LANDING WA.
BLUFF
GRAPEVINE CAN. NEV.
Venice
Gordon Ck.
SANDSTONE BLUFFS NE.
E. Walker Riv. Ne.
Massacre Lake Ne.
BLUFF
Grapevine Can Ne
KANAB
MURDERERS CK OR.
PRIEST RAPIDS WASH.
Clear Ck.

Appendix C.

## References


Eliade, Mircea
1964 Shamanism: Archaic Techniques Of Ecstacy. Bollingen Series 76. Prinston University Press.

Grant, Campbell, James W. Baird, and J. Kenneth Pringle
1968 Rock Drawings Of The Coso Range. China Lake Maturango Museum Publication 4.

Lee, Georgia, and A.J. Bock
1982 Schematization And Symbolism In American Indian Rock Art. American Indian Rock Art. Vol. VII. San Miguel, California.

Thomas, Trudy
1976 Petroglyph Distribution. Tebiwa, VOl. 18. No. 1.

Warner, Jesse E.
1982 The Enclosure Petroglyph Motif: One Possible Interpretation. American Indian Rock Art. Vol.VII. American Rock Art Research Association.

1983 Concrete Concept Associations. Utah Rock Art. Vol. II. Utah Rock Art Research Association. Salt Lake City, Utah.

1984 A The U-Bracket In A Unique Association. Utah Rock Art. Vol. III. Utah Rock Art Research Association. Salt Lake City, Utah.

1984 B The Enclosure: Another Concept. Utah Rock Art. Vol. III. Utah Rock Art Research Association. Salt Lake City, Utah.

1987 Introductions To Double Entities. A Presentation Given At the 1987 Symposium of the American Rock Art Research Association. To Be Printed In Vol. xx

1990 An Examination Of Double Entities: The Application Of Symbolism. Utah Rock Art. Vol. VII. Utah Rock Art Research Association. Sale Lake City, Utah.

1991 A The Reversed U Bracket: Forms And Contexts That Express An Affiliation to Concepts Involving Double Entities. Utah Rock Art. Vol.8. Utah Rock Art Research Association. Salt Lake City, Utah.

1991 B The Bisected Circle: Forms And Contexts That Express An Affiliation To Concepts Involving Double Entities. Utah Rock Art. Vol. 8. Utah Rock Art Research Association. Salt Lake City, Utah.

Warner, Jesse Earl, and Clifford Rayl
1990 Solar Observations And Symbolism At A Barrier Canyon Style Site In Pleasant Creek, Utah. Utah Rock Art. Vol.VII. Utah Rock Art Research Association. Salt Lake City, Utah.

# WHEN THE BODY SEES: EYES, BODIES AND BISECTED CIRCLES.

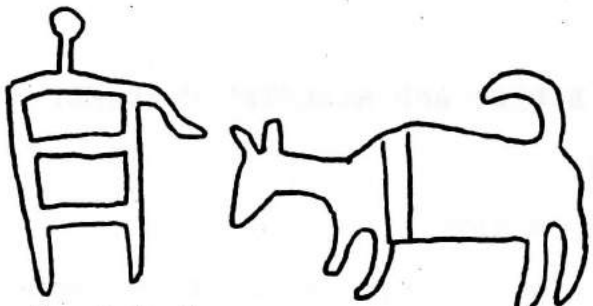
BY

JESSE EARL WARNER

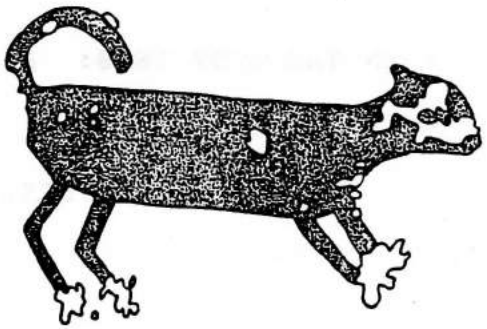
This paper is an addendum to a previous study on Bisected Circles (hereafter B C) (Warner 1991.A, Sec. 7:41,42). Like the main emphasis of that study, the main emphasis here is to demonstrate, that while we may not be able to interpret these enigmatic glyphs to any great detail, we may be able to identify an associated concept. The important thing to remember, is that this examination suggests, that the basic concept of the symbols and contexts being considered, seems to be shamanic sight. By that, it is meant the sight of the shaman in a transformed state or an altered state of consciousness. Even though the B C means many different things, in that first study, examples illustrated what seemed to be contexts that may or at least seem to relate to the basic concept of ecstatic vision. One context, however, was only lightly touched on by describing it as variations of animals that have the B C as the body or which have the B C within the body and reduced to resemble what look like eyes.

At that time, it wasn't certain if all of the different variations in the form of this area of expression dispersed a crossed such a wide area of the western United States could share the exact same or even a similar concept. As has been mentioned before, since we don't know the exact intent of the symbol or the limit of variation that will maintain any one concept, any examples that seem to fit the mold have been included. Some of these may not relate to the main concept of this symbol, and others may relate to it, but in an extended context (Warner,1982:104,105). These examples are no exception to the problems encountered when trying to determine where one motif starts and another stops.

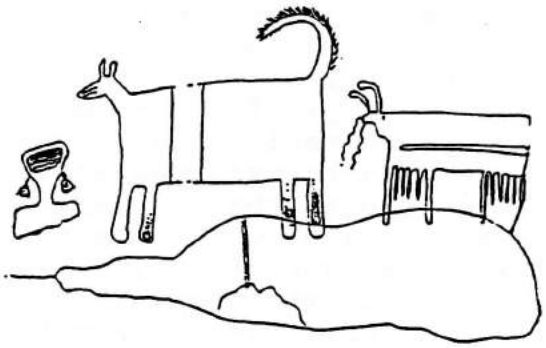
The curved tailed animals in the Barrier Canyon style often called "Companion Animals" are often divided, bisecting the body in two halves (Fig. 1 A). Except the Bisected Body and associated cracks and natural conduits, there is no graphic or physical evidence of any meaning beyond being associated with and facing towards a larger Barrier Canyon style figure. Forms similar to these fit the definition of what has been called the "Shamans Familiar" (Eliade 1964:90,101) or "Spirit Helpers" (Ewing:1992:19,22). The same basic form occurs in New Mexico, without any context or association. Even though, the bisectedness is duplicated, the context of the association is not. Is it possible they could represent the same basic idea? Possibly, maybe even probably, but it is also possible that they may represent something else (Fig. 2 A).



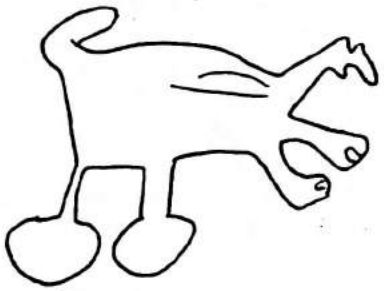
San Rafael



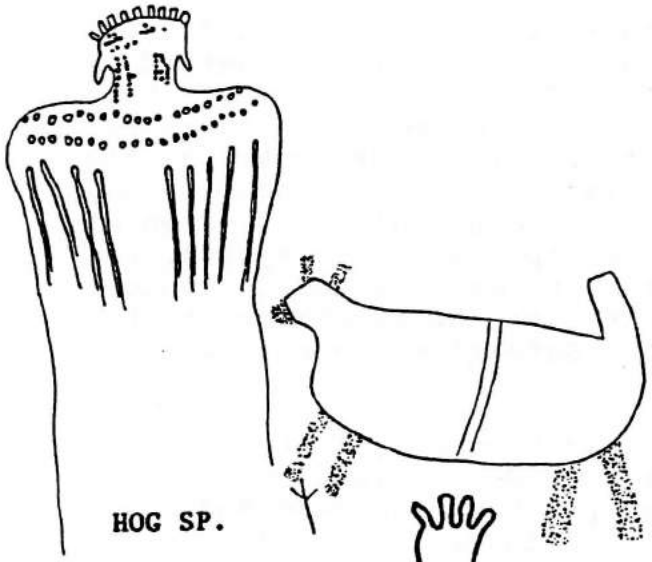
Barrier Can.



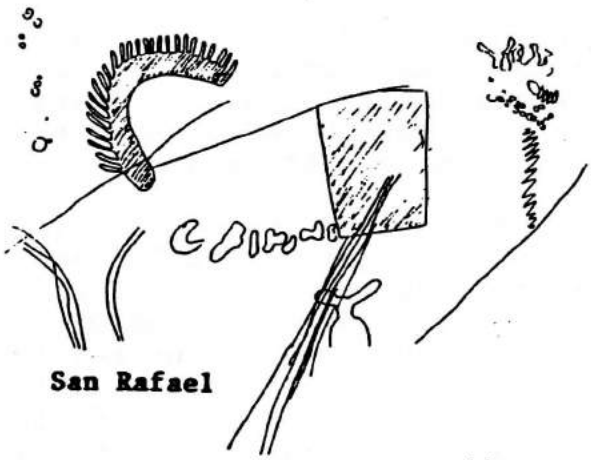
San Rafael



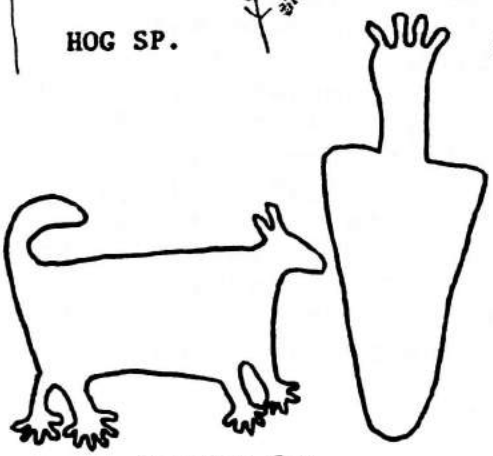
Barrier Can.



HOG SP.

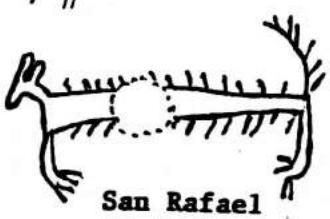


San Rafael



Barrier Can.

San Rafael

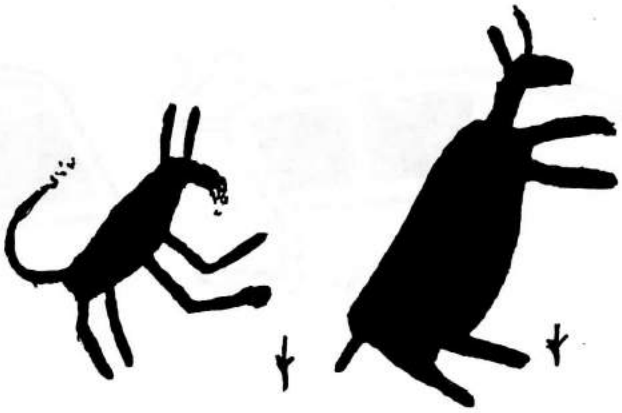


San Rafael

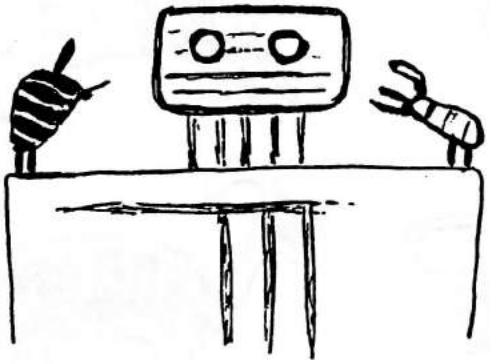


FIGURE 1 A.

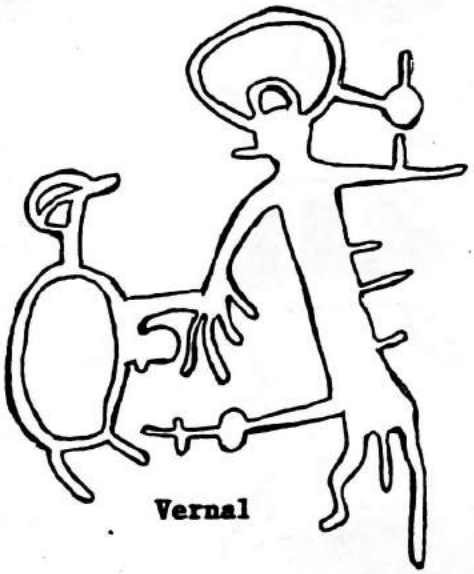
San Rafael



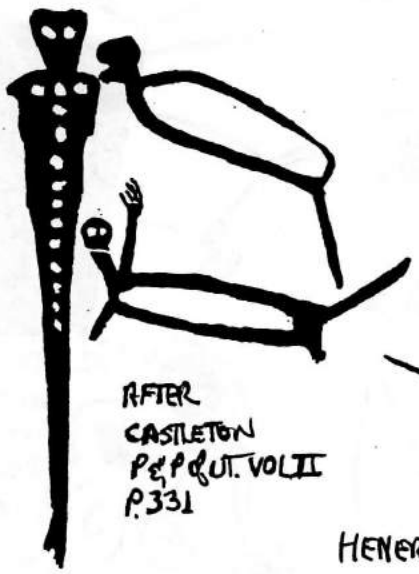
Barrier Can.



Barrier Can.



Vernal



AFTER CASTLETON PETRGLYPHS VOL II P.331

HENERY MTS

AFTER MANNING URARA VESTIGES VOL 12:3 1991

FIGURE 1 B.

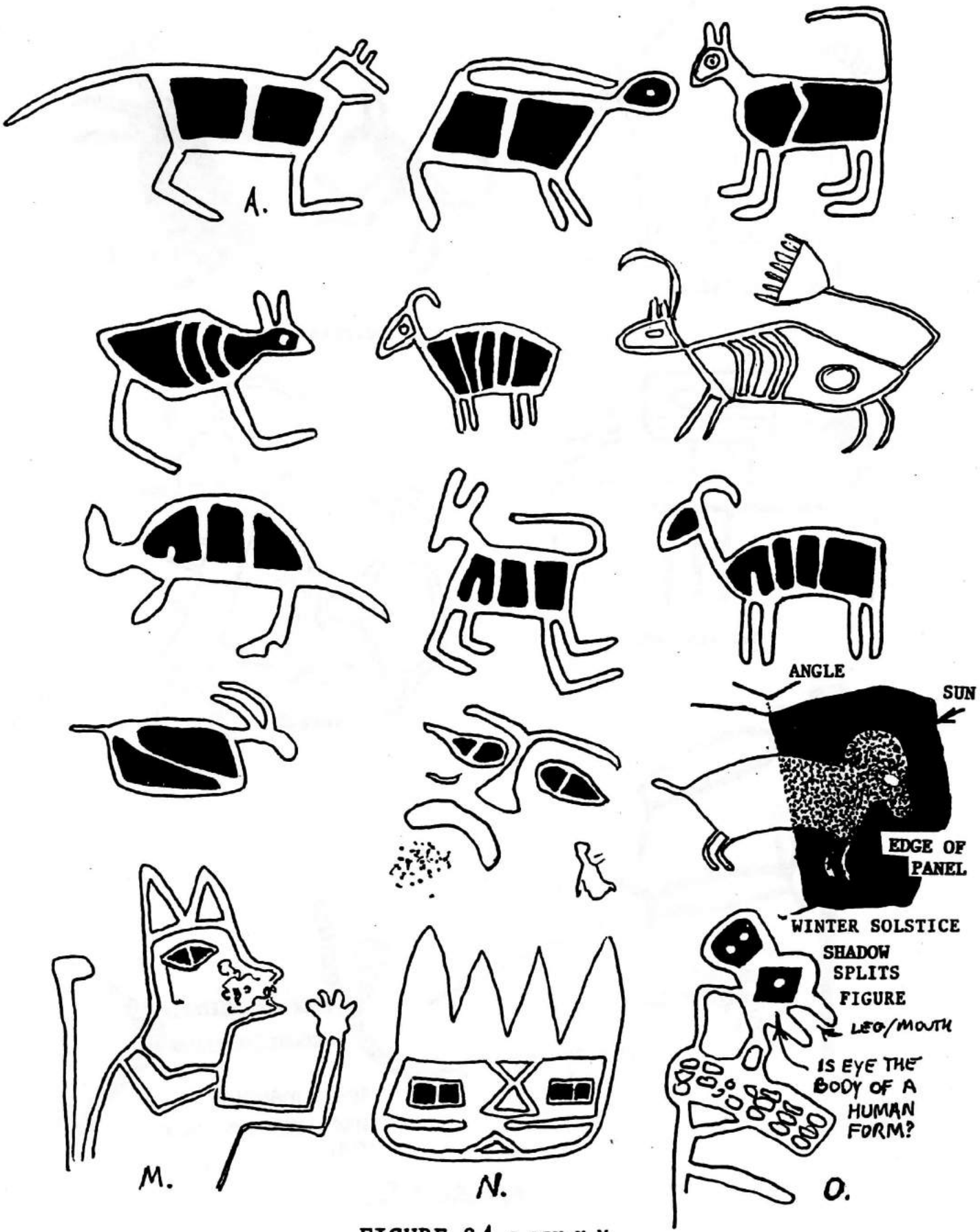



FIGURE 2A. 3 RIV.N.M.

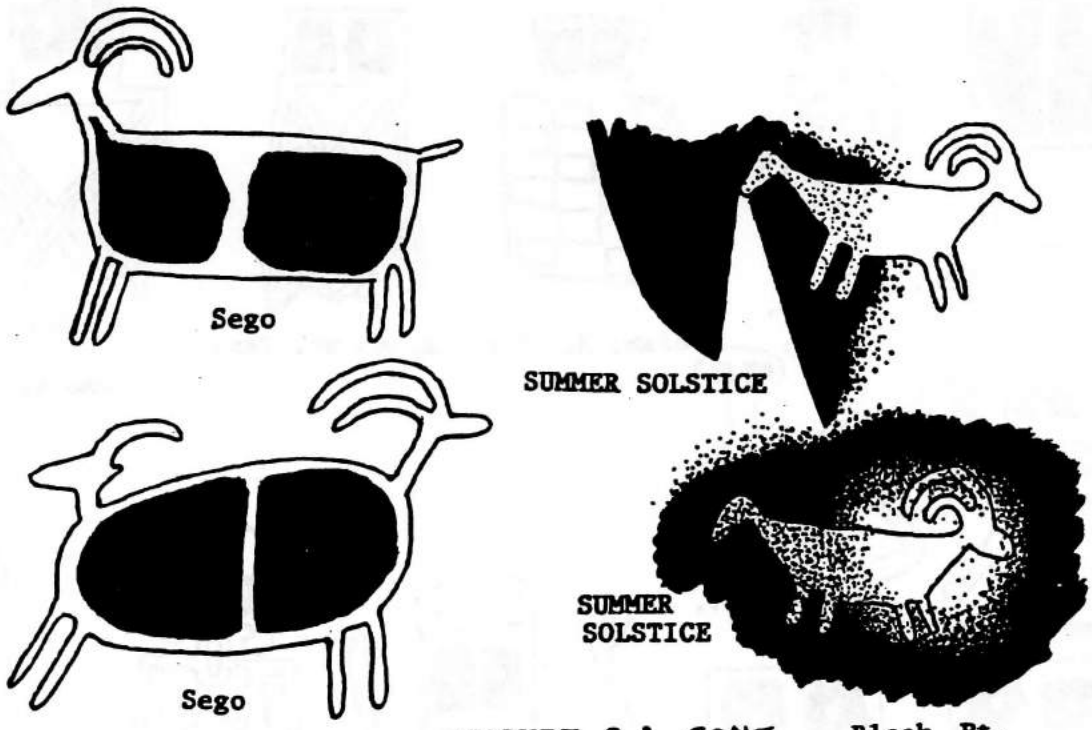



FIGURE 2 A. CONT.

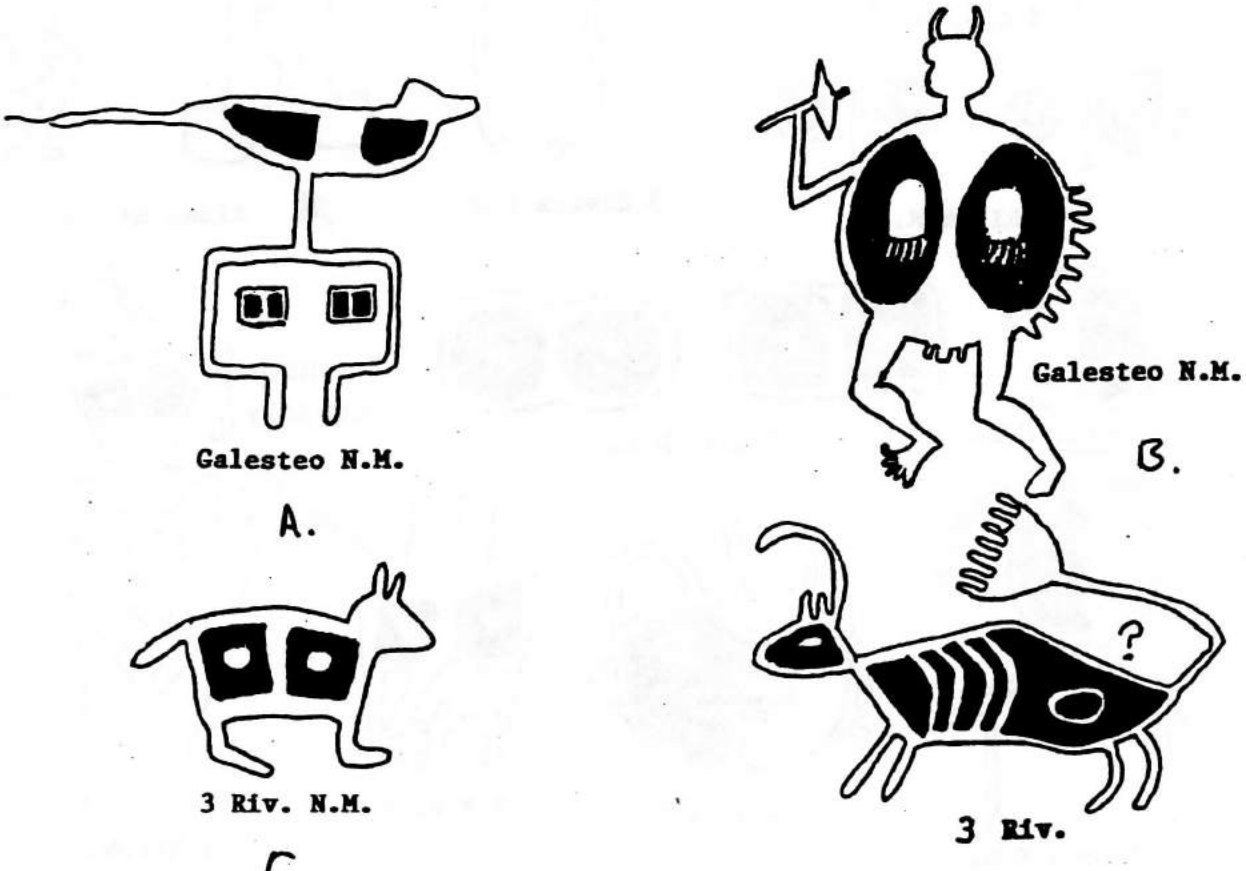



FIGURE 2 B

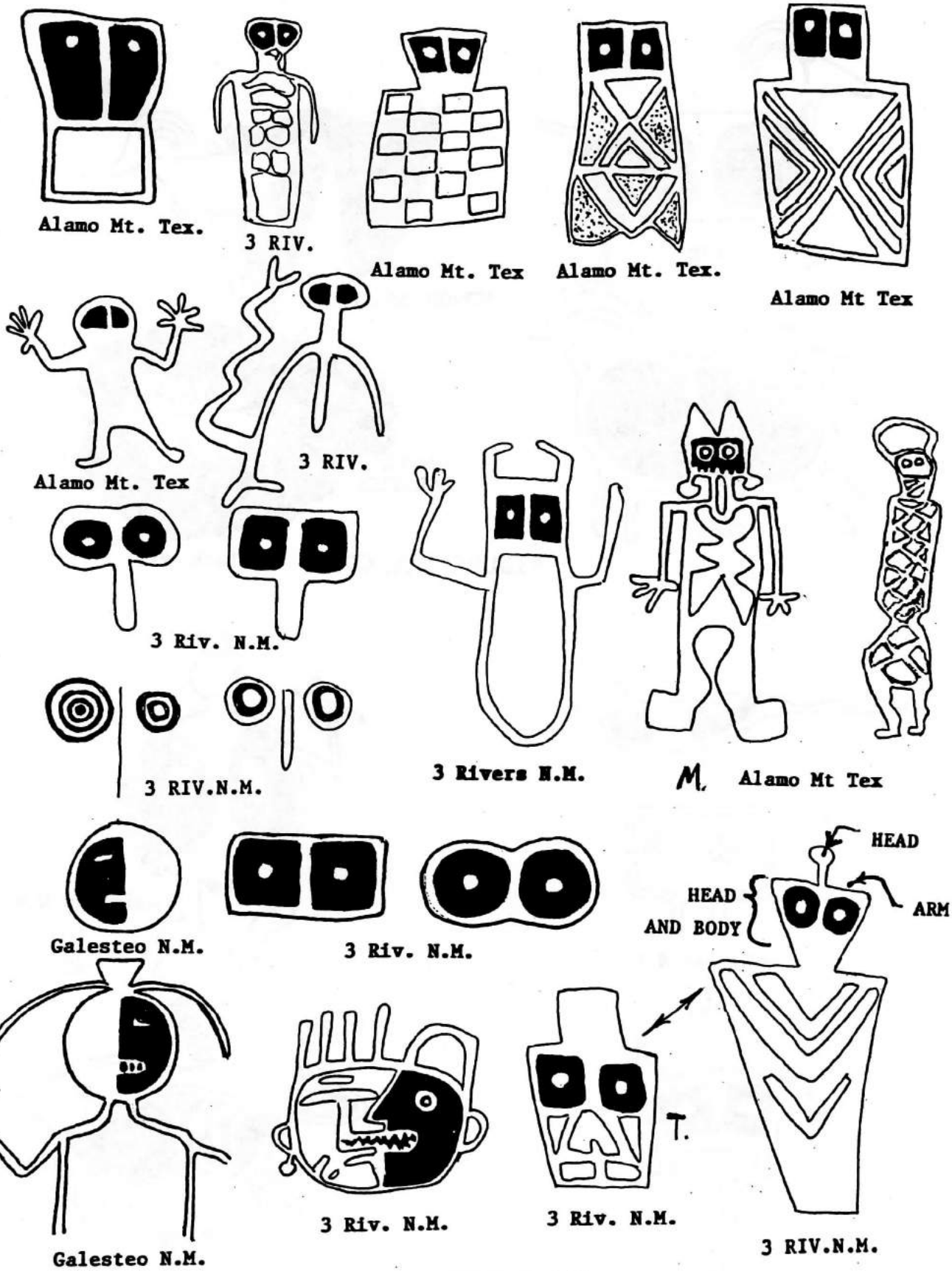
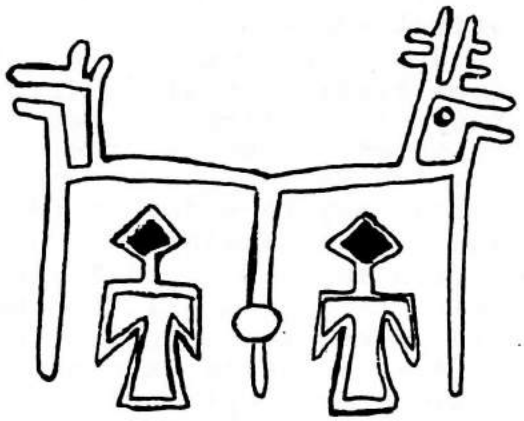

Alamo Mt. Tex.
3 RIV.
Alamo Mt. Tex
Alamo Mt. Tex.
Alamo Mt Tex
Alamo Mt. Tex
3 RIV.
3 Riv. N.M.
3 RIV.N.M.
3 Rivers N.M.
M.
Alamo Mt Tex
HEAD
HEAD
AND BODY
ARM
Galesteo N.M.
3 Riv. N.M.
3 Riv. N.M.
T.
3 RIV.N.M.
Galesteo N.M.
R.

FIGURE 2C.

Since Figure 2 B.c (similar to Figs. 6 A, 9.a, 10 A.b, 13.a,b,d, 14, and 16), illustrates a variant where dots have been introduced within each section of the body, providing a similar expression to the faces of "Tlaloc" type figures that occur at the same sites (Fig. 2 C), could the body of the simple bisected animals be the face of the "Tlaloc" figures? Notice the Two eared form on the head of Figure 2 C.m which is very similar to the eared cat in Figure 2 A.m, and n which may be a double face like Figure 2 C.r. Or could the figures with a similar face represent a concept other than what has been assumed to be Tlaloc (c.f. Figures 2 A.m,n,o, 2 B.e,f, 2 C.m)? That idea will be the subject of another study. It would seem to support the possibility that those without eyes may also represent a concept related to the idea of what the Tlaloc images may represent. One possibly for those types of figures that has not been suggested as far as I know, may be ecstatic vision or shamanic sight. That possibility was implied by the B C as the eye of the cat-like animals (Figs. 2 A.m,n, and possibly 2 C.m), creating an out of the head Double Entity in Figure 2 C.r, and the eyes on the body of Figure 2 C.t. "Felines are..viewed as creatures of transformation throughout much of the Americas," (Ewing 1992:19), and would thus be a symbol of their special sight.

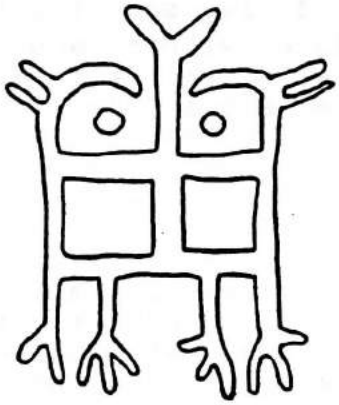
Since the examples in Figure 3 express such a widely dispersed distance, it raises the same questions of similarity of intent, concept, or source behind these more complex type of constructions. Because of the differences in their associated style groups, it would have been impossible for the extreme similarities in their forms, to indicate that they could have all been made by the same group, to mean the same thing. No authors that I know of at this point have suggested a relationship between the more simple Bisected Faces, Bodies and these type figures. Even though some of these are not as complete and naturalistic or identifiable as others, they all share enough traits that they seem to represent the same basic concept. They may just be an extension or more complete, expanded form of those represented in Figures 1 and 2.

These examples have completed the flow from more or less stylized to more abstract. The least abstracted are not as naturalistic as would be necessary to be 100% sure or convincing of their intent, but an examination of each individual part helps to suggest the source behind the idea of the construction and thus the possible concept behind the form. The bipolarcephalic symbolism (a head on each end), combined with the idea of the B C Double Entity, and transformation as a type of shamanic influence in examples similar to Figure 3.a creates a mask-like form, of two possible "butt-joined" animals, creating the body of the bipolarcephalic animal. The head of each bird provides the eyes (the dots in the B C's), for the mask-like form creating the same pattern as the two dots on the bodies in Figure 2 B. The rest of Figure 3 also suggests that the dots on divided bodies as well as



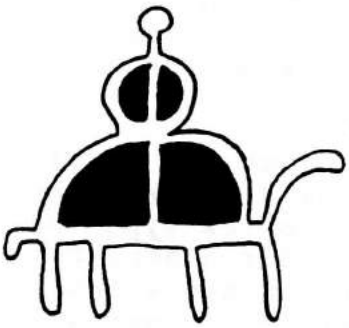
Chise, N.M.

A.



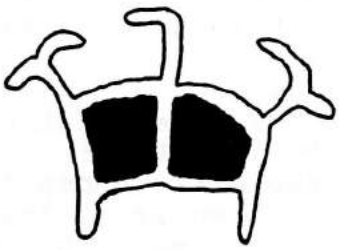
Blalock Rapids, Oregon

B.



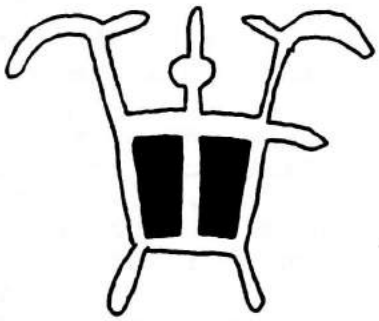
CAREY RANCH CAL.

C.



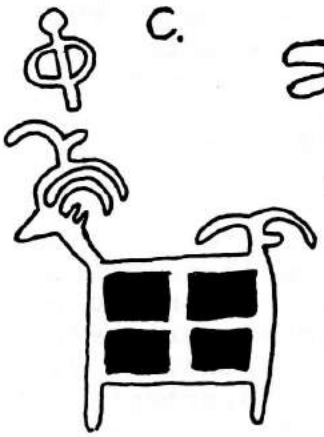
W. CK. CAN.

D.



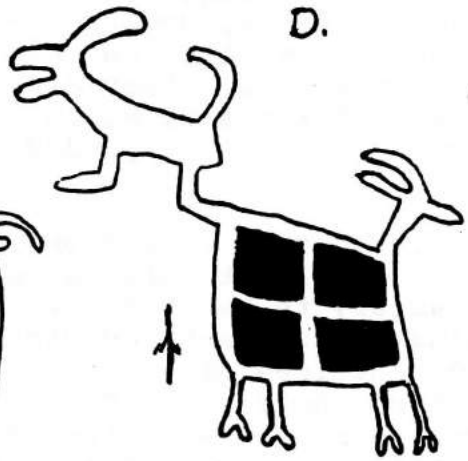
San Rafael

E.



San Rafael

F.



Long House Valley

G.

Pleasant Creek

H.



FIGURE 3

the two patinated blocks could be eyes based on the logic on page 34, 42, of the study on B C's (Warner 1991 A).

Figure 3.b, is still identifiable as a bipolarcephalic sheep. It has a bisected body like those in Figures 1 and 2, except that the dividing line through the middle of each half seems to represent a stick figure body of a human form incorporated as part of the sheep. This suggests a consanguineous relationship between the man and the sheep. His head extends up beyond the back of the animal between the two opposed horned heads. His legs are the second and third legs (the two middle legs), of the animal. This subliminal symbolism is common in the use of the B C and a related form, the reversed U bracket (c.f. Warner 1991 A, B). The manner in which that incorporation was formed is broken down in Figure 4 along with some other similar examples, possibly relating to transformation. Notice that they duplicate the incorporation of a human form within the body of the animal, even though some do not use the B C body format. Some do, however, use the B C and the Inverted U Bracket with the arms, horn and arm, or head.

Notice that the Bipolar head construction created a situation where the human figure has animal heads for hands. That is not all that improbable. Not far away, at Buffalo Eddy, between Washington and Idaho, several figures have animals for hands. Again, because the limits of concept extension are not known, that situation was included in a study of possibilities of animal transformations (Warner 1990 A:23,24) (Fig. 5 A). Other figures also have similar odd shaped hands that seem to represent a type of hand symbol system relating to horns or sheep. Some hands form the shape of an animals head, with open mouth and ear or horn in a sort of a "Mono Cornuta." (Figs. 5 B.a,b). These hand forms are similar to what one would use to create animal shadow silhouettes on a wall. Figures 5 B.c, were suggested to be hands with antler qualities similar to some in Baja, California (Ewing 1992 personal communication).

The figures in Figure 5 B, row two (d-g), have forked hands or hold Y shaped objects used in association with individuals emerging out of another figures head. These were described as having concepts associated with Hunting Shaman (Warner 1990 B). The bottom row of figures (h-k), also seem to have distinctively shaped hands on human figures (or feet on sheep), associated with sheep, sheep-like symbols, or out of head Double Entities. Figure 5 B.h created a consanguineous relationship between a man and a sheep with the "cross hand"-like symbol as feet. The possible female in 5 B.i, with a sheeps foot, cross hand, and sheep in her belly, seems to provide a context for her being the possible mother of the sheep. Figure 5 B.j, had an individual with two cross hands on an entity emerging form the main figures

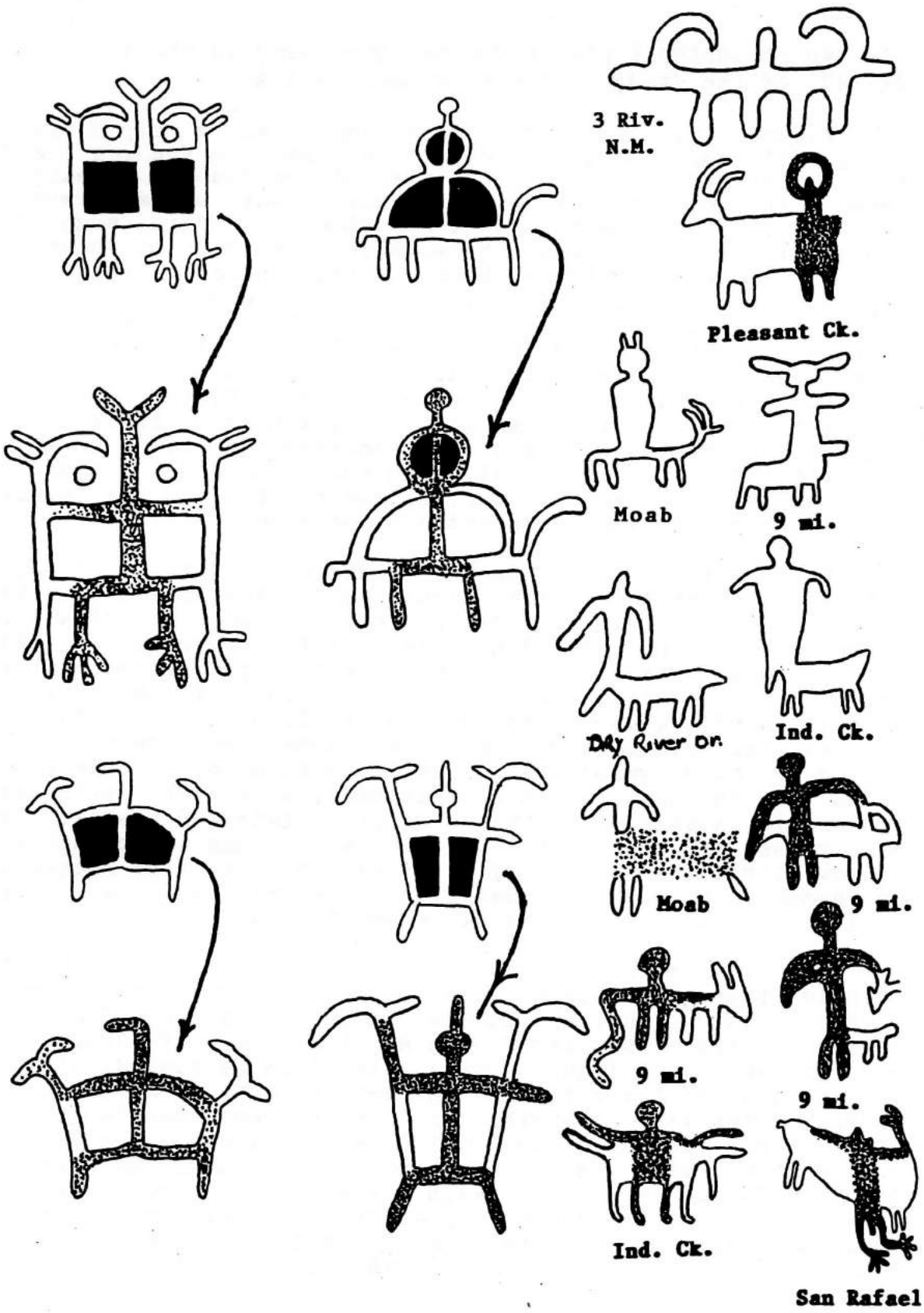
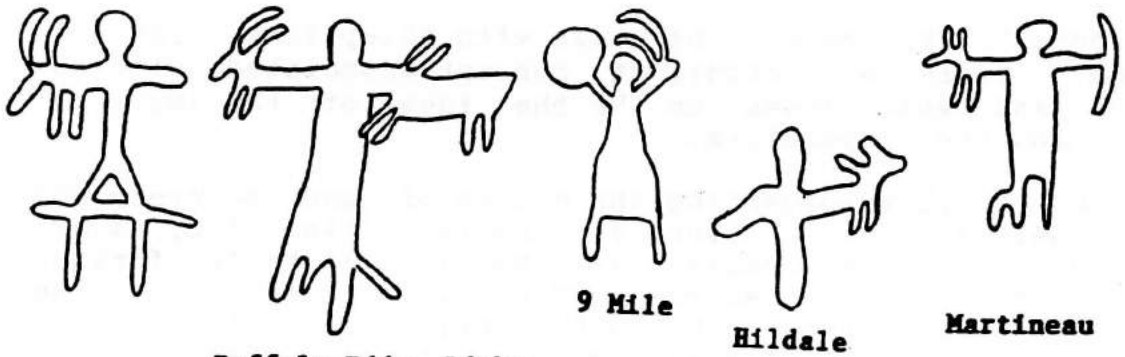
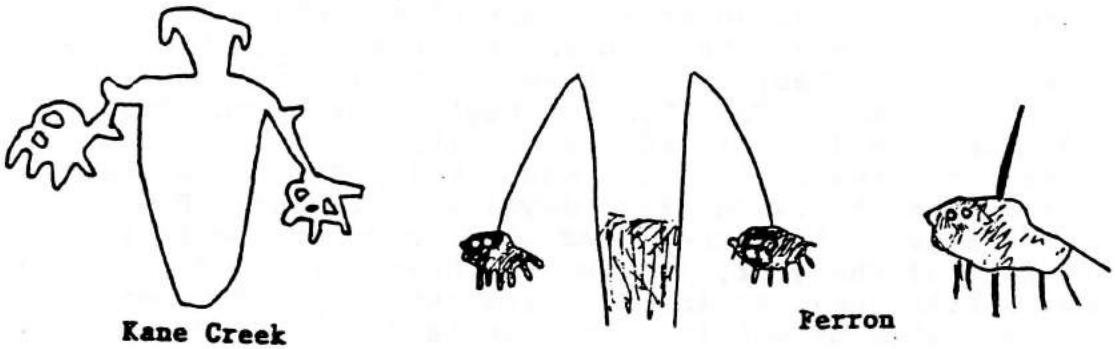
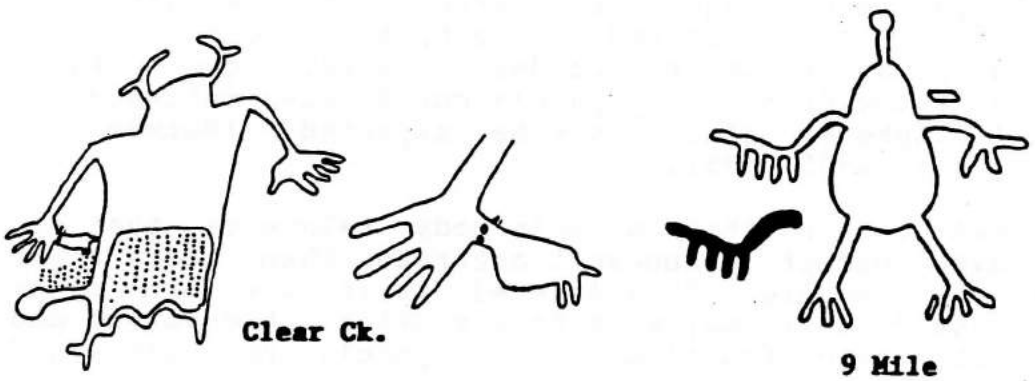

3 Riv.
N.M.
Pleasant Ck.
Moab
9 mi.
Dry River Dr.
Ind. Ck.
Moab
9 mi.
9 mi.
9 mi.
Ind. Ck.
San Rafael



FIGURE 4


Buffalo Eddy, Idaho
9 Mile
Hildale
Martineau


Kane Creek
Ferron


Clear Ck.
9 Mile

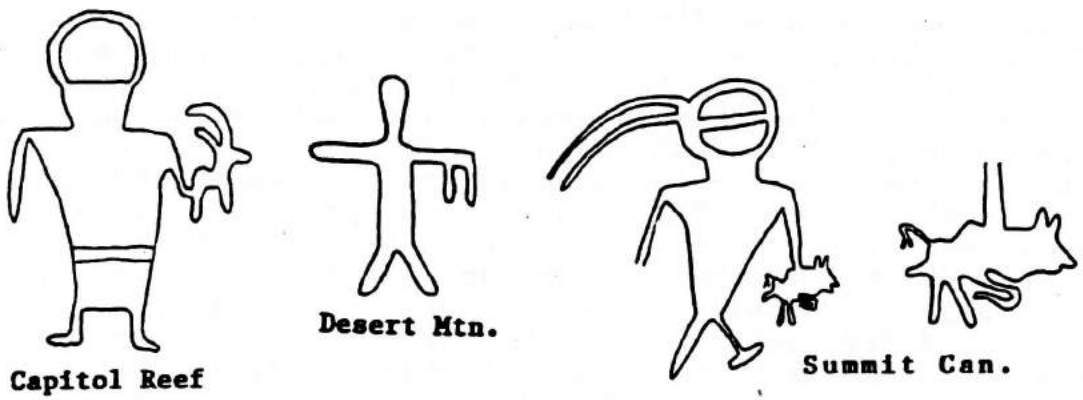

Capitol Reef
Desert Mtn.
Summit Can.



FIGURE 5 A.

head. Figure 5 B.k, seems to be a man with sheep-like horns or a sheep man. There is a cognizant concept associated with the cross hand and what seems to be the idea of the mystical experience and sheep symbolism.

Besides possibly suggesting the Mother of Game (McCreery and McCreery 1986:3,4), the Blalock combination (Fig. 3.b, 4.a), seems to support the next variant as a possible mask-like form or a representation of the animal, originally suggested by the "Tlaloc" mask-like bodies, as being the invisible or "transformed shaman," seeing in a sense with the two patinated blocks or the dots on the sides of the animals bodies. In the Barrier Canyon style there are only a few examples currently identified that have the double dot or eye-like representations within the body (Figs. 6.a and b). Each of these have a very special relationship to the sun. The "Praying Dog" from Black Dragon Canyon, bends unnaturally forward, bends its head back, mouth open and reaches out toward the sun when it appears on a small nipple of rock on the otherwise flat skyline on Equinox (Fig. 6 C). We do not suggest that they used that observation to tell that specific date of the year, (As Von Del Chamberlain, director of the Hansen Planetarium, so ineptly, inaccurately and severely criticized us for, when he publicly congratulated us for "Slaying the Dragon," then condemned us for "Resurrecting the panel into the form of another Dragon, an Archaeoastronomical one." Chamberlain 1987). As we stated in 1985, We believe that "It seems more logical after knowing the date of a solar event, those related to the Black Dragon ... panels could have returned to witness the 'thiophene' that would be expected." (Warner and Warner 1985 A, also 1985 B:99).

If the two dots on that animals body relate to that eye concept and that concept is somewhat accurate, then today their devotions to the sun are still offered it in the form of an animal that "Sees." That may seem to tie solar observation and worship into the use or function of this symbol. And what would that be?

First let us consider if this really is a dog, or did it make a difference as to the specific type of animal represented by the makers of the Barrier Canyon style in this supplicating motif? Figure 7 A, illustrates other supposed supplicating humans, animals and snakes. The animals demonstrate what is assumed to be a wide variety of animal types, and some seem to be a combination of several different animals and or humans, posed to express human attributes. For instance the pose itself is not animal-like. One figure has wings on a quadruped, an unnatural combination. Smith describes a similar spread winged pose for vultures in Baja as spreading their wings to the sun, to heat their bodies and dry their wings. An outward attitude and pose of supplication, each sitting atop tall cacti, facing the sun with outstretched arms (Smith 1985:41). The vulture is also a

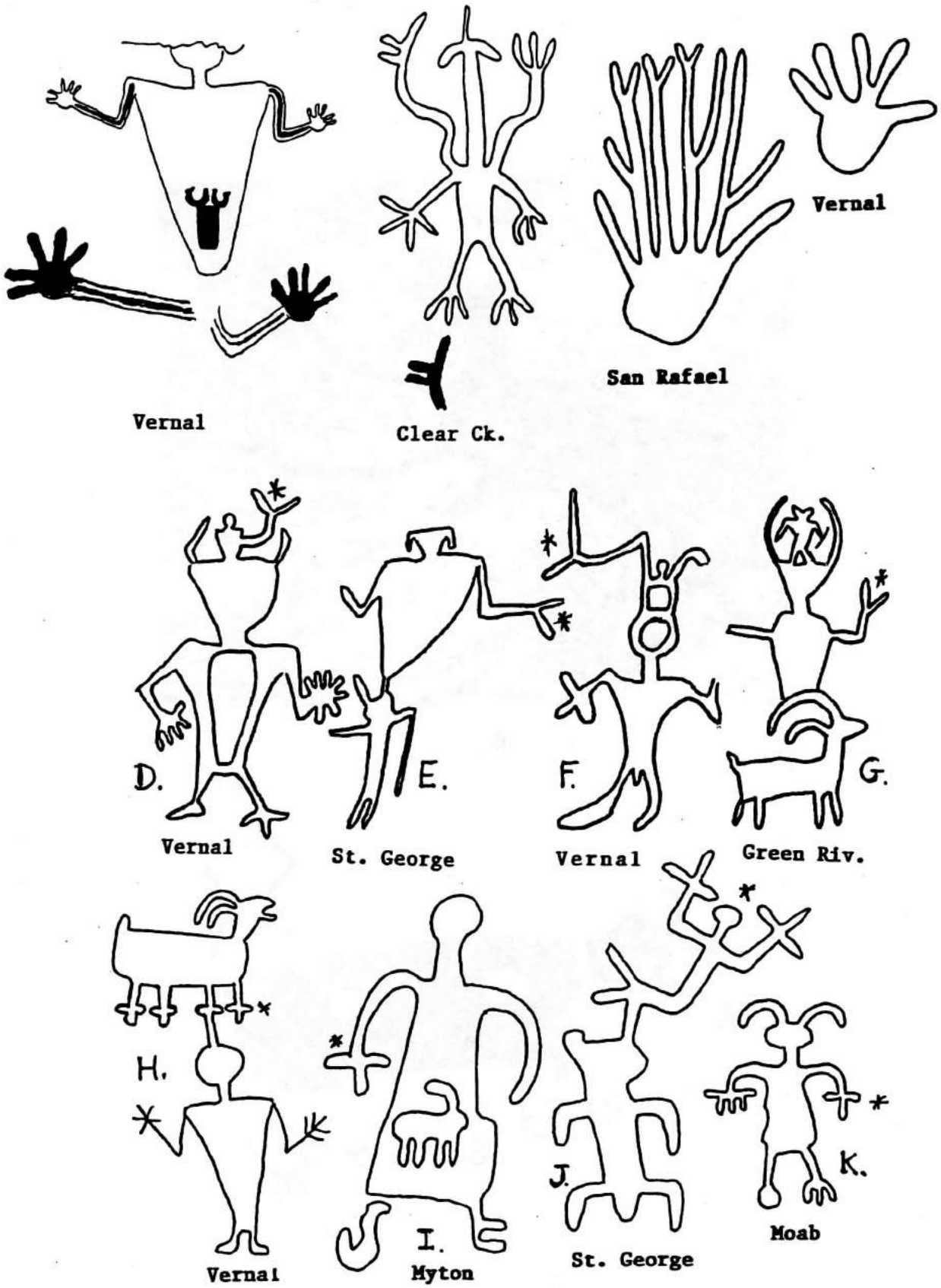
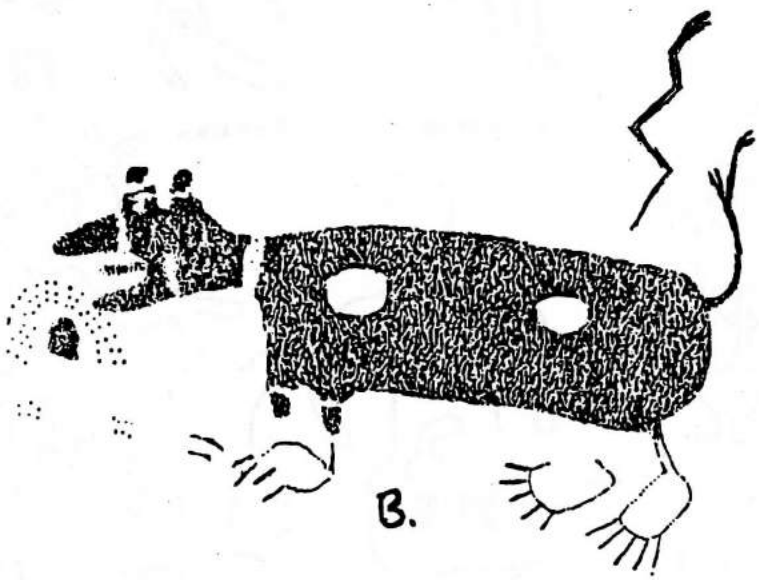

Vernal
Clear Ck.
San Rafael
Vernal
D.
Vernal
E.
St. George
F.
Vernal
G.
Green Riv.
H.
Vernal
I.
Myton
J.
St. George
K.
Moab



FIGURE 5 B.

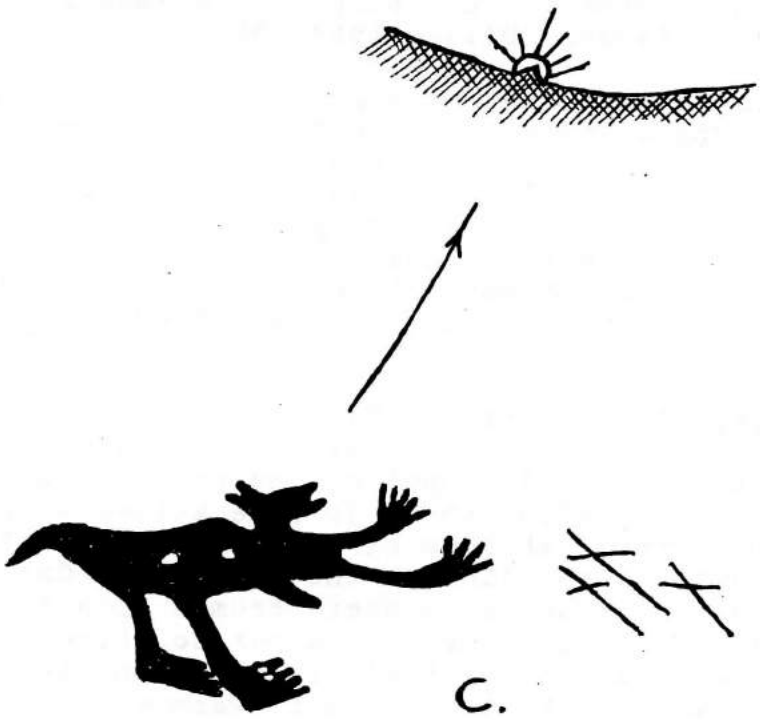
A.



B.



FIGURE 6 A-B.



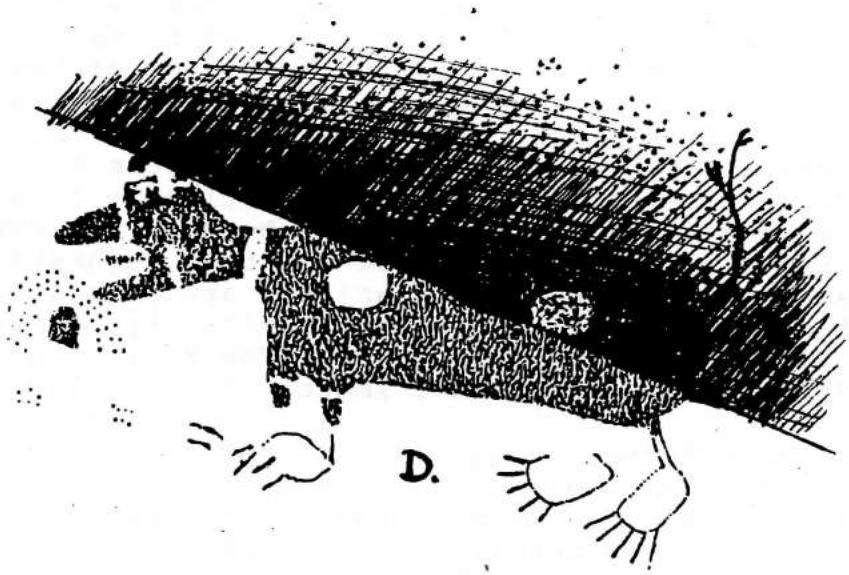






**FIGURE 6 C-D.**

symbol of death and transformation, one who was used to locate slain warriors, and hunt deer, because of his sight. He is often associated with the deer, a symbol of fertility and regeneration (Ewing 1992:13,14). "The vulture helps the shaman reach the sky by means of a spiral ladder (Eliade 1964:128).

That animal also has a set of arms or legs positioned in the conventionalized supplicating pose that reach out to the sun as it appears above it. The figure with hands and cloven hooves has very interesting Symbolic Solar Interactions that portray him as probably being more than simply supplicating (Warner 1992). Those concepts support Ewings argument that some of the figures in this pose may be the shamans benefactor (Ewing 1992:8,22). Whatever the situation, it is obvious that they all contain a mystical quality.

Even though, the Barrier Canyon cat-like "Companion Animals," or "attendants," do not usually occur with their front legs raised in the typical supplicating posture when in the context of being a companion, there is some evidence that there may be an overlap in the symbolism of a few of these animals and those posed to express devotion to the sun. The Cat in Figure 6.b,d is also looking out to sunset from a position between Equinox and Summer Cross Quarter to Summer Solstice. I expect that after more observations of their interaction with light and shadow, we will know more about them (c.f. Warner 1992 A).

Similar forms that also offer what seems to be devotion to the sun and or transformed shaman (Turpin 1990:111), are illustrated in Figure 7 B to E. In many cases, in the Pecos style, supplicating animals also take the form of "panthers." Some are referred to as leaping panthers that flank the shaman in his magical state. Turpin suggests these are the shaman in his animal form (Turpin 1990:111). The panther in Panther Cave is a prime example of one that is calculated to reach out toward the sun (or moon) as it sets at the left end of the overhang, much like Figure 6B does at sunset and the Black Dragon Canyon "Dog" does at sunrise. Some of the examples in the Barrier Canyon style considered in Figures 1 A,B also seem to have that feline quality. At several sites, the bristled tail seems to provide evidence that at least some, are members of the cat family. Even though the Black Dragon example has been suggested to have more K-9 qualities, many of their animals are as mystical looking as realistic (Fig. 7 A). Notice the similarity of the Panthers from Baja (Fig. 7 C), and others from New Mexico and Western Texas (Fig. 7 D), and as far as the Amazon (Fig. 7 D).

So far evidence suggests that there are two basic contexts or types of expressions that relate to the basic concept of shamanic sight. The more obvious Supplicating context has been presented for consideration as an offering of devotion to or posed to be a benefactor (Ewing 1992, Warner 1992 A), in

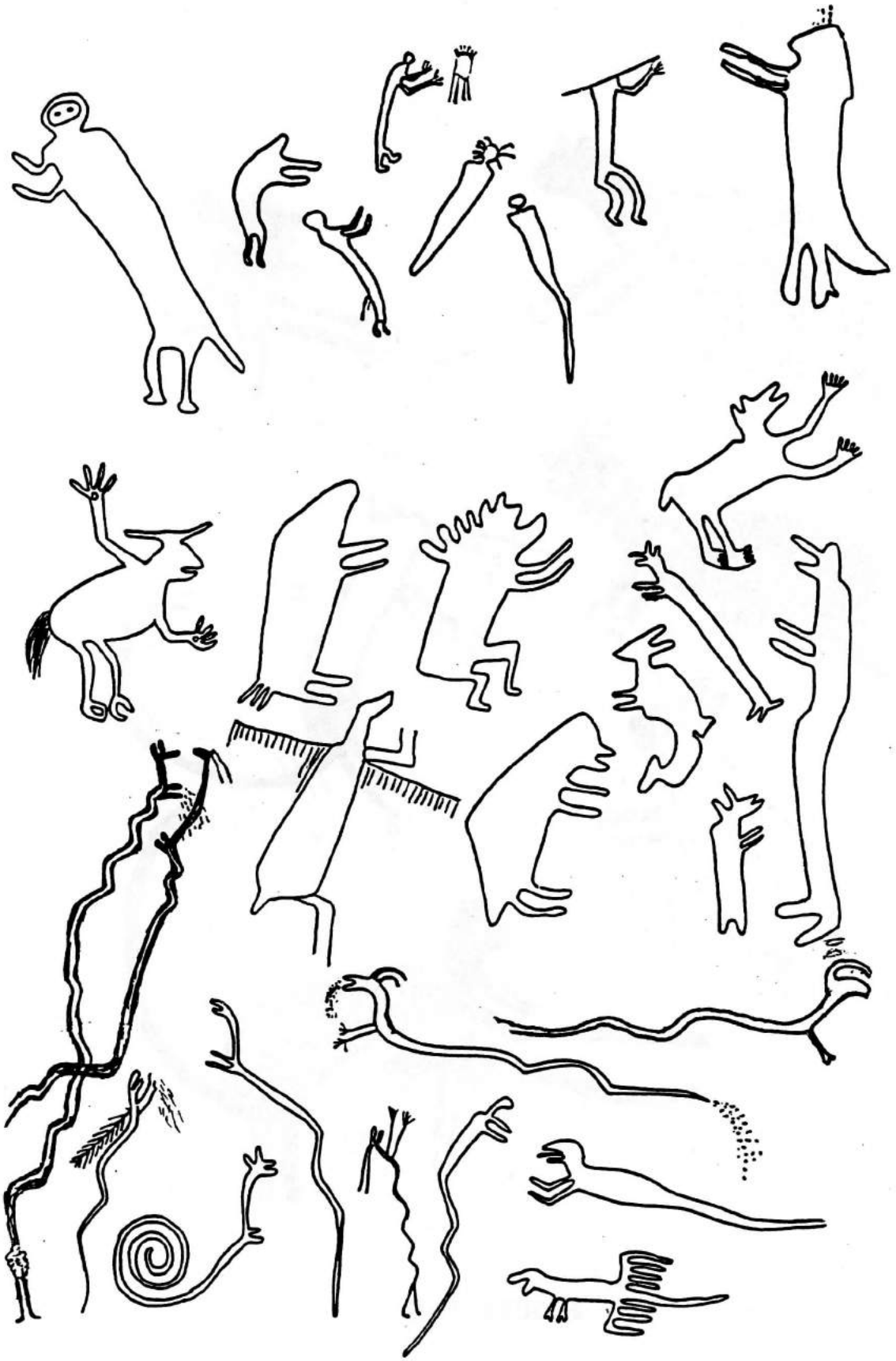




FIGURE 7 A.

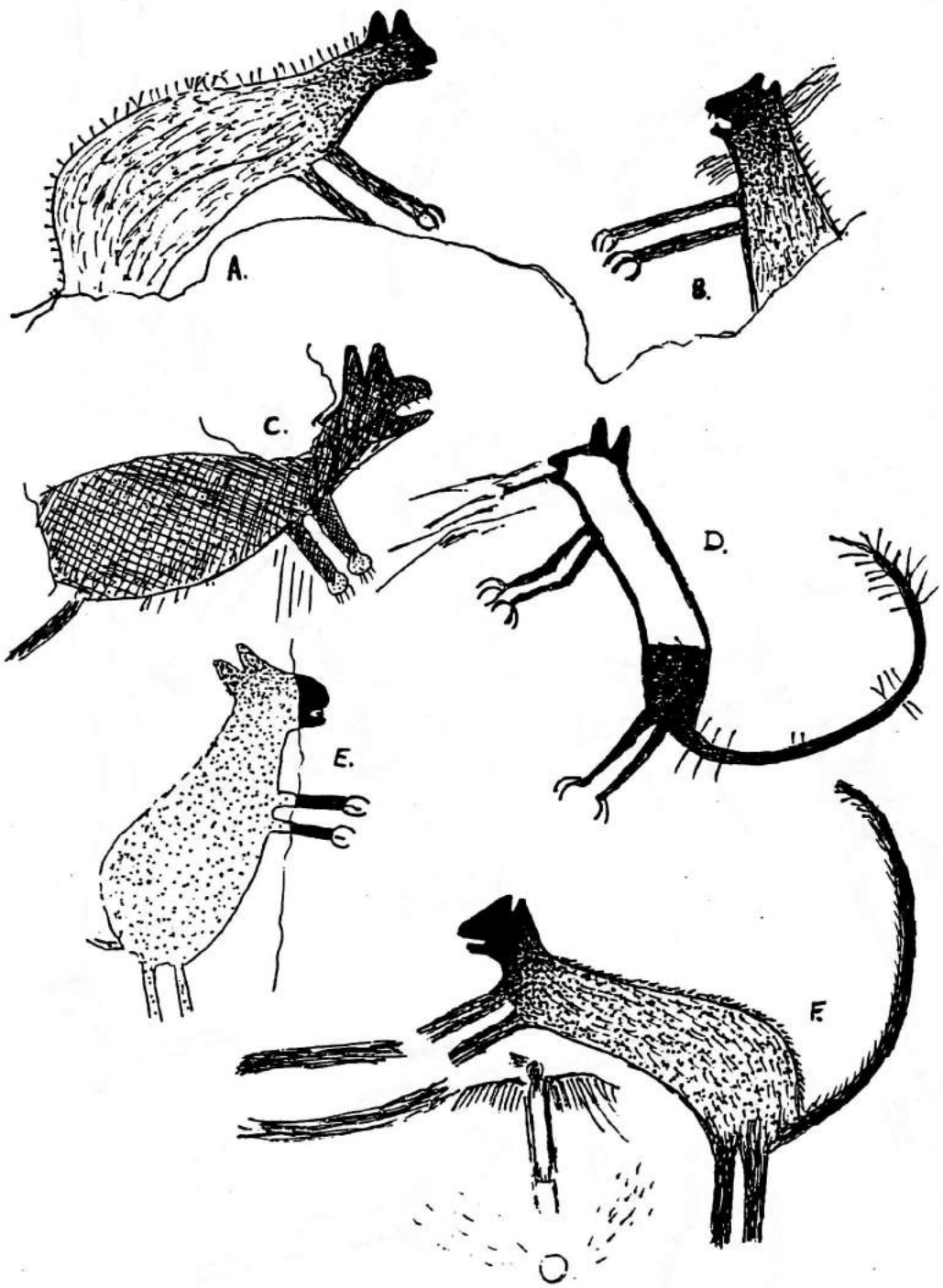



**FIGURE 7 B.**

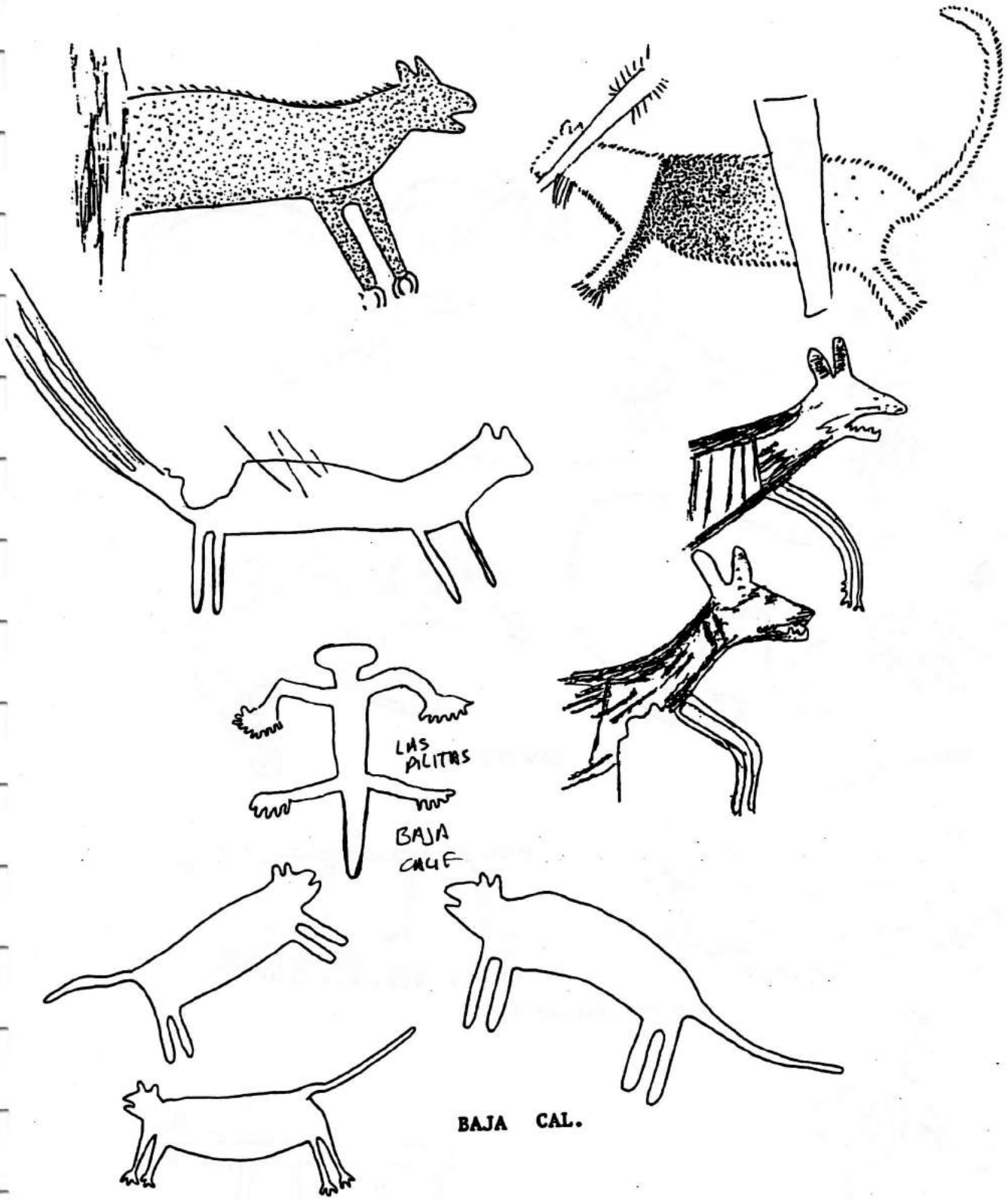
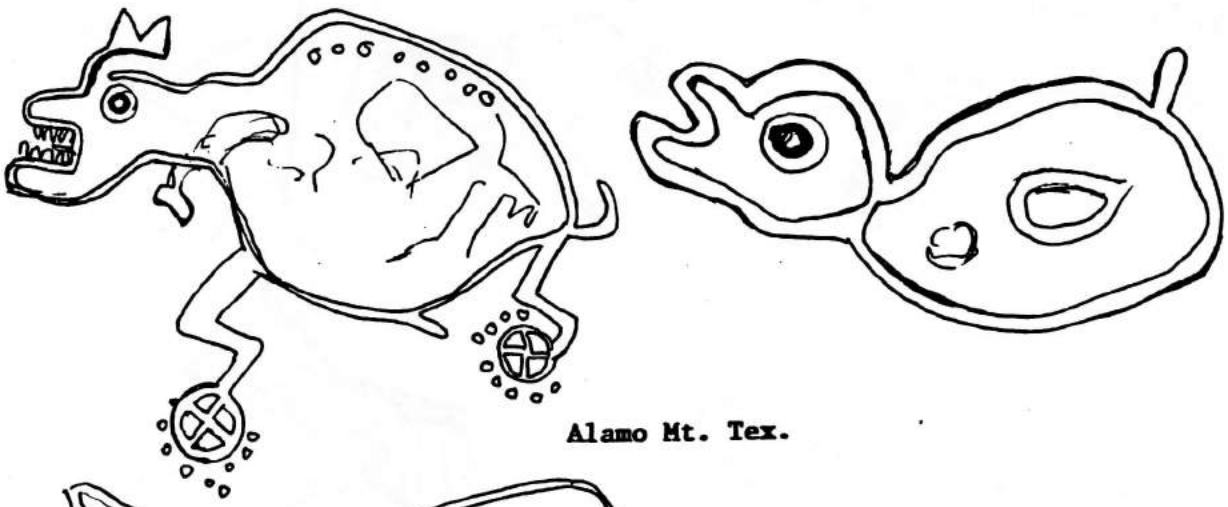
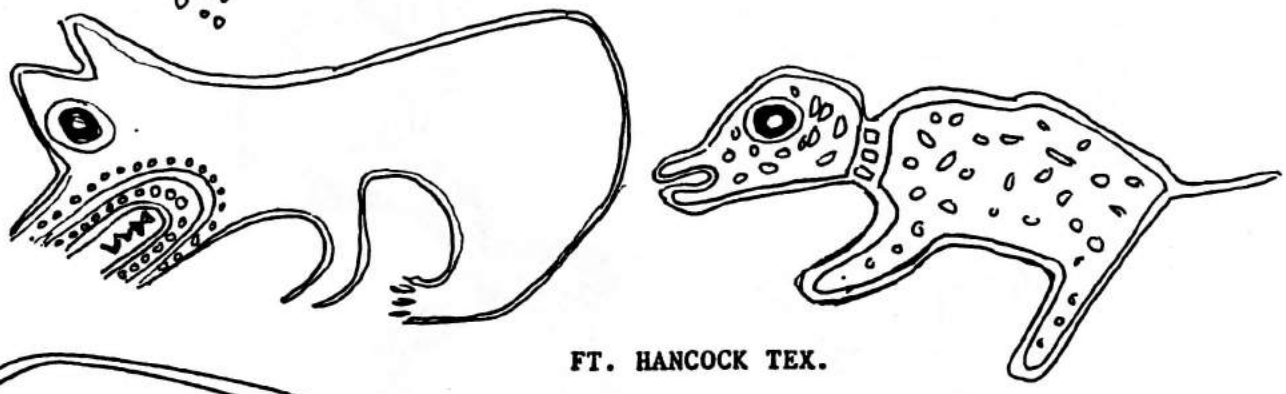


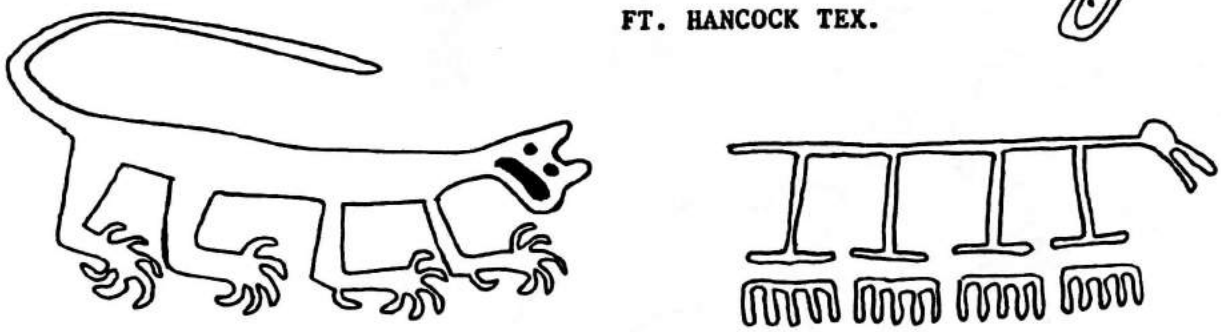

FIGURE 7 C.



Alamo Mt. Tex.

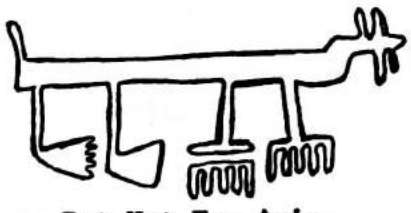


FT. HANCOCK TEX.



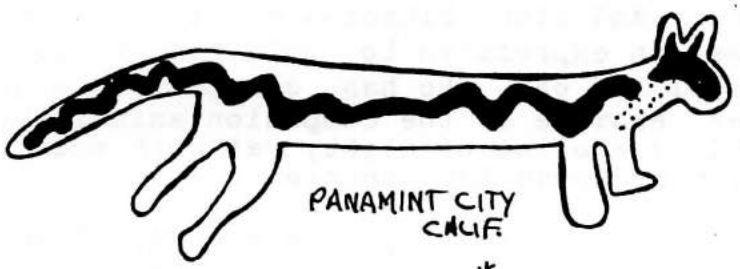
Pet.Nat.For.Ariz.

3 Riv. N.M.

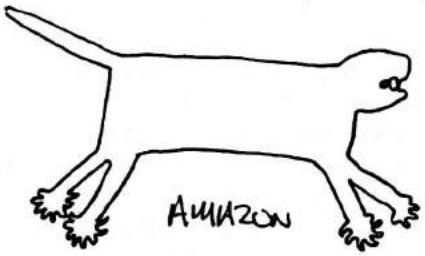


Pet.Nat.For.Ariz.

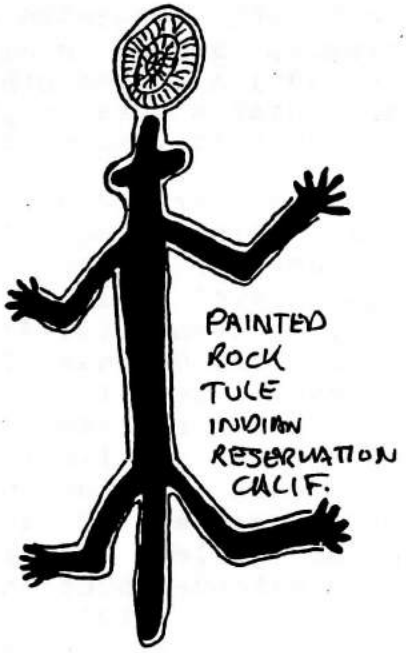
FIGURE 7 D




*

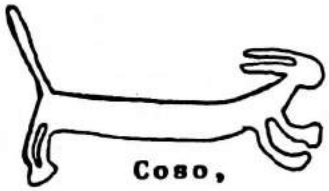



*





*




Water Flow, N.M.

* AFTER KEN HEDGES
1976
SOUTHERN CALIFORNIA
ROCK ART AS SHAMANTIC ART
AMERICAN INDIAN ROCK ART
VOL. 2. ARARA.



FIGURE 7 E.

transformation situations. And with bisected bodies or eyes, they are both suggested as an expression to gain the esoteric experience, and as a symbol of one who has gained the sight (Warner 1991 A). The other example is the Companion animal that often contains more graphic symbolism of sight, yet both seem to overlap in form, association and possibly function.

If these are members of the cat family, like mountain lions, consider this analogy of how complex an ideology can become, and since these are so far removed in time, we may never be able to totally unravel all of their more in depth mysteries. In one account, Neumann (1974:183), states that the Aztec Goddess Ilamatecuhtli, Goddess of Death, bears the deaths head, and the female sacrifice offered up to her is beheaded. As a wintery aspect, she represents the deathly earth, and stands in opposition to the fertile childbearing earth that is bound up with the east and the spring (the vernal Equinox?). She is the primordial goddess of matter, who is represented with "eyes and voracious gullets bursting from all her joints" (c.f. eyes on body and extended section from stomach of the Black Dragon Dog, also c.f. Allen 1992). She is clad in snakes, a symbol of the underworld, (notice the snake-like tail of fig. 6.b), and has the claws of the jaguar (another symbol of the underworld). He adds that the jaguar as a beast of prey, is the god of the cavern and the earth and of the devouring darkness and of the night sky. And that the jaguar as a power of darkness was an enemy of the eagle, the sun symbol and the mythical struggles between light and darkness. Struggles which form the center of the battles between the Eagle and Jaguar knights.

He also describes the terrible nature of this figure as taking two forms. One, may be that the Goddess takes the form of a terrifying animal or her terrible aspect may become the animal that accompanies and dominates her. Is that the idea behind the Barrier Canyon style "Companion Animal" with the Bisected Body. Companion animal is a term that he also uses, as a universal motif. In Egypt it is a lion, in India it is a tigress, as Artemis it is a bear that may be her 'companion animal.' What ever the case, the nocturnal cat, an animal that has an acute ability to see in the world of darkness (the world of the supernatural and of the shaman), has eyes that are believed to become roundest at the full moon (Neumann 1974:183,220). Notice the feet of many cats in Figure 7 D.

The other, more cat-like example, from the San Rafael Swell, has a very unique solar interaction with its two dot, "eyes" from Summer Solstice, through Winter Cross Quarter. Those types of interactions are illustrated in Figure 6.d. The ancient authors of this figure found a place where nearly all year, the shadow from the edge of the overhang rises to touch each eye in an identical manner for such an extended period of time. The fact that the roof of the overhang spreads out from the point of a

wedge to a wider angle allows that to happen. It is very seldom that we have seen shadows that will maintain the same type of performance for such a long period, and knowing that, they probably used that location for a place where there was a presence of unusual power. The type of interaction seems to relate to one that I have defined as Double Vision. Figure 8 illustrates human forms that are included in that category. Notice Figure 8.a has that same type of interaction as the shadow moves across the cliff, while it ends up in that position between the eyes at last light on another figure that also has Double Vision at another time of the year (Fig. 8.e). At the most poignant moment in the interaction the eyes are marked with light or shadow at the same moment or in an immediate sequence, to suggest the ability of the shaman to see into the world of light and the world of darkness. The interaction on this cat-like animal is no different.

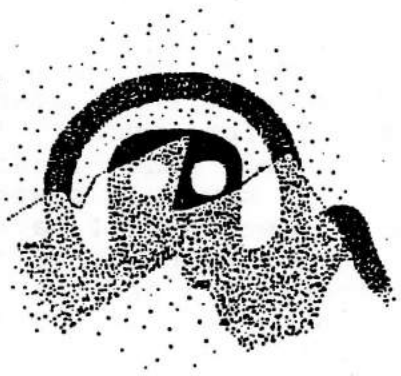
Since both of these animals seem to provide the concept of sight by either looking at or seeing with the Double Vision of the Shaman, it seems that these dots could very well represent the concept of esoteric sight. That is believed to be the same concept that is expressed by the examples in Figures 1 to 3.

To provide additional support for the significance and mysticism in the concept of sight, look at an animal caught half way in between a B C body and the reduced eye variant, if I may call it that. The animal with the two black squares was included in an illustration of animals that were connected to the heads or feet of another animal in the study on animal transformation (Fig. 9). Notice the human forms emerging from the back of the sheep in Figure 9.b, and d. The lower figure on the back of the lower animal in 9.d could be a four armed Double Entity. Notice the connected animals in the rest of Figure 9. Likewise the ear or horn of Figure 9.a is attached to the foot of a sheep above it. That type of attachment is fairly common. The leg treatment of having what seems to be several sets of forked feet are not, however. Even without the patinated squares, this animal would have been included with those suspected of representing transformation and "shamanic vision." By the addition of the patinated squares it seems that there may have been an attempt at creating a Concept Association, with the use of another (or an additional) symbol, to suggest the relationship between the two concepts of transformation and shamanic sight.

On the Summer Cross Quarter date, half way in between Summer Solstice and Equinox, observations were made on that panel, in 9 Mile Canyon. What happened reinforces the concept of sight (Figs. 10 A,B). As the sun came around the corner and the panel began to come into light, first light on the panel is caught by a protrusion to the left. Notice the pattern in the growth and movement of the light on the panel. From position one to position 13, the light moves up to the top of the head of the

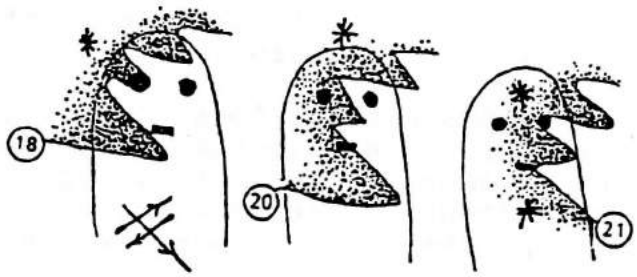
San Rafael

A.



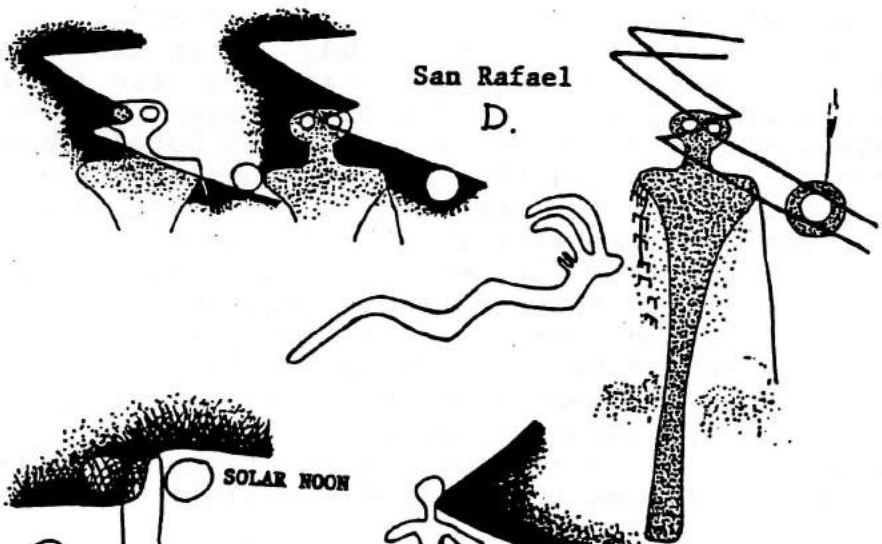
Quitchupa

B.




W. Water

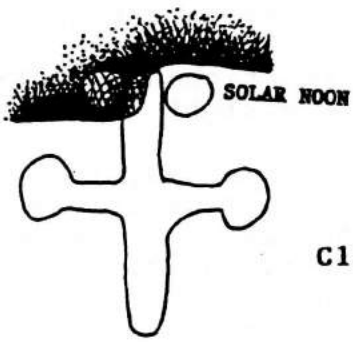
C.



San Rafael

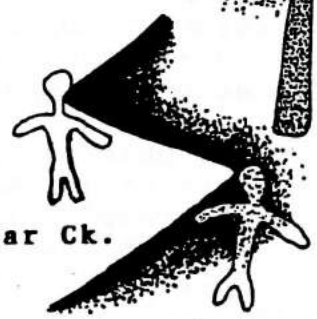
D.


E.



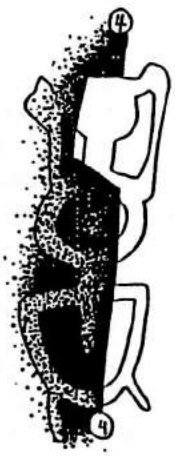

W. Water

F.



Clear Ck.

G.

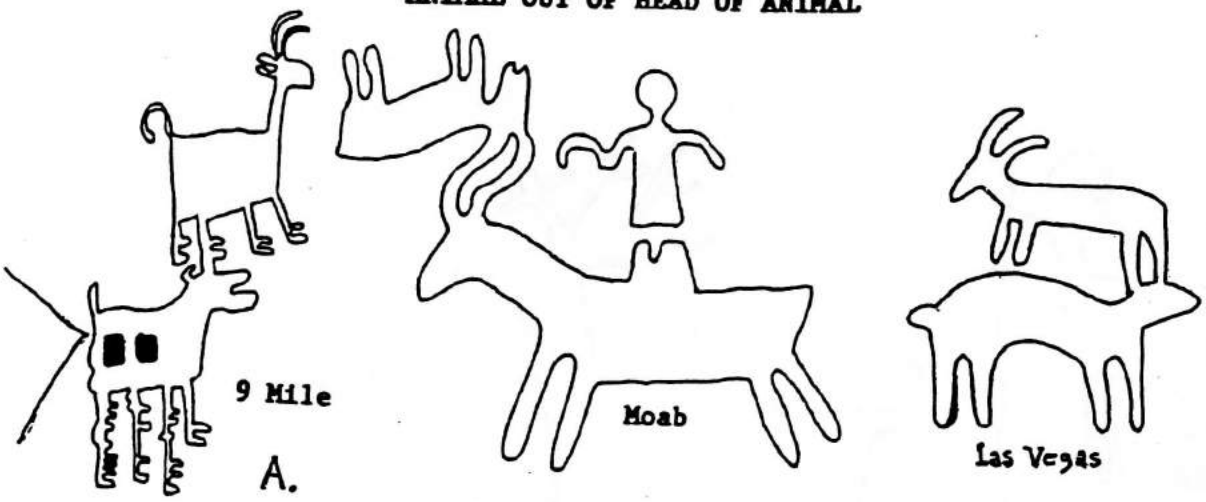


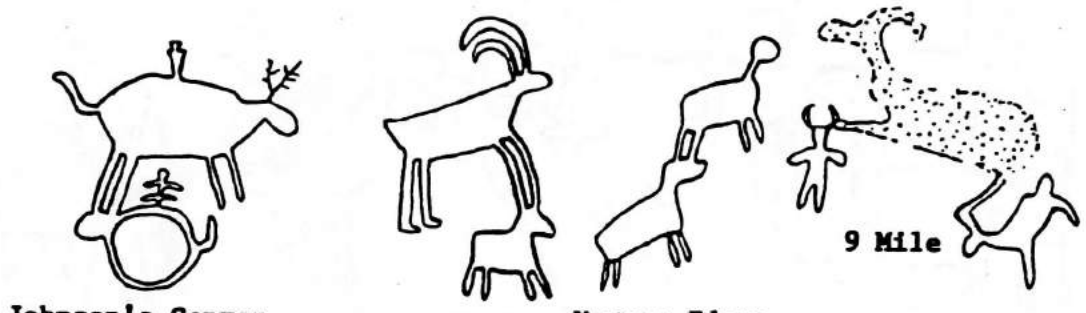

Clear Creek

H.

FIGURE 8

ANIMAL OUT OF HEAD OF ANIMAL



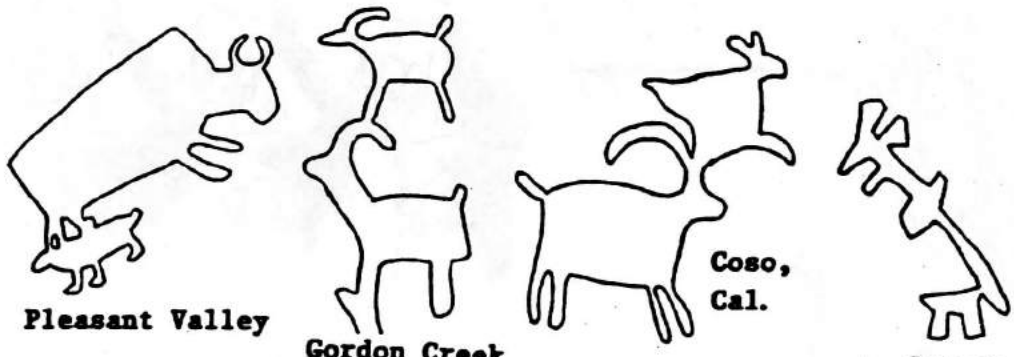





FIGURE 9

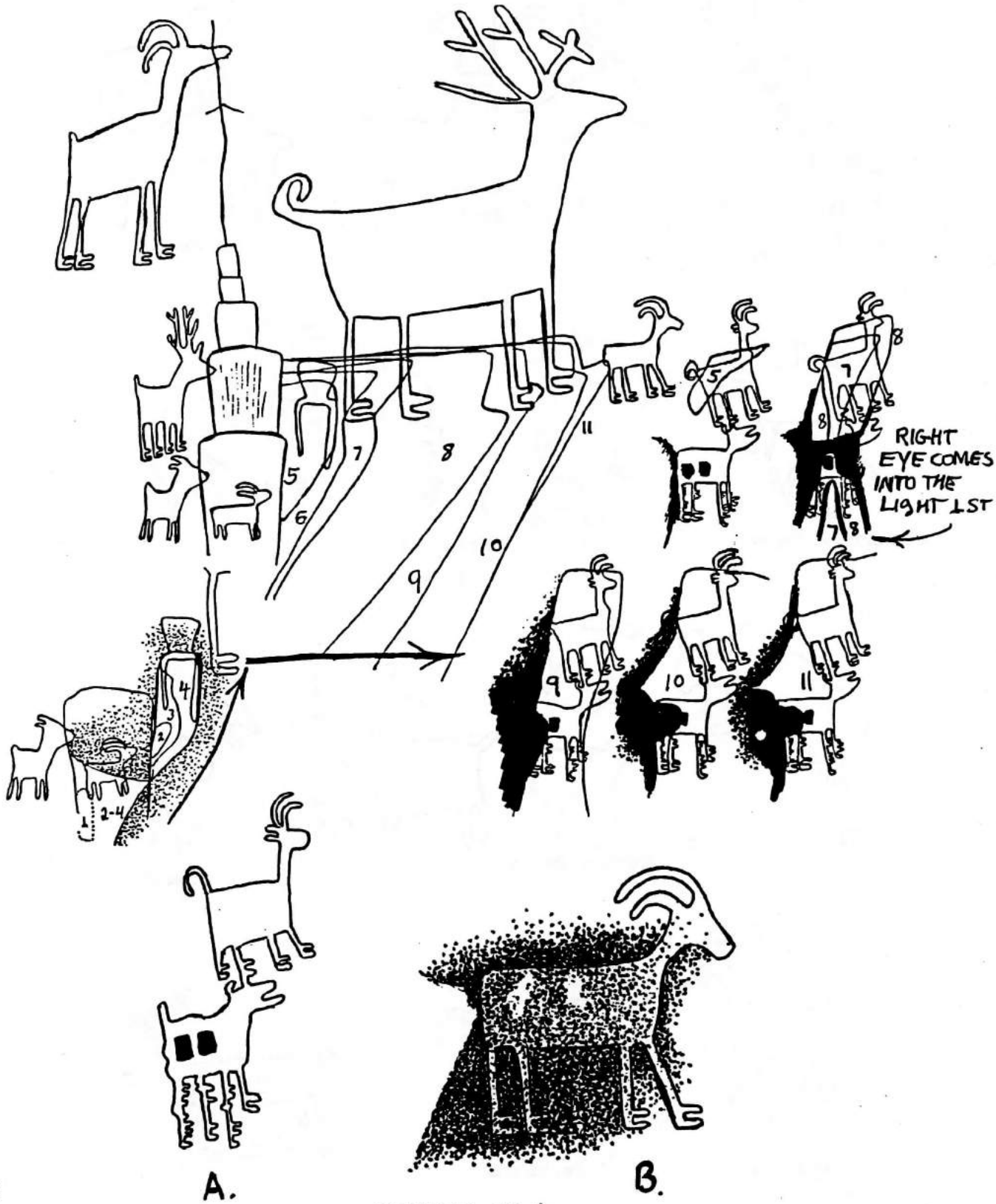





**FIGURE 10 A.**

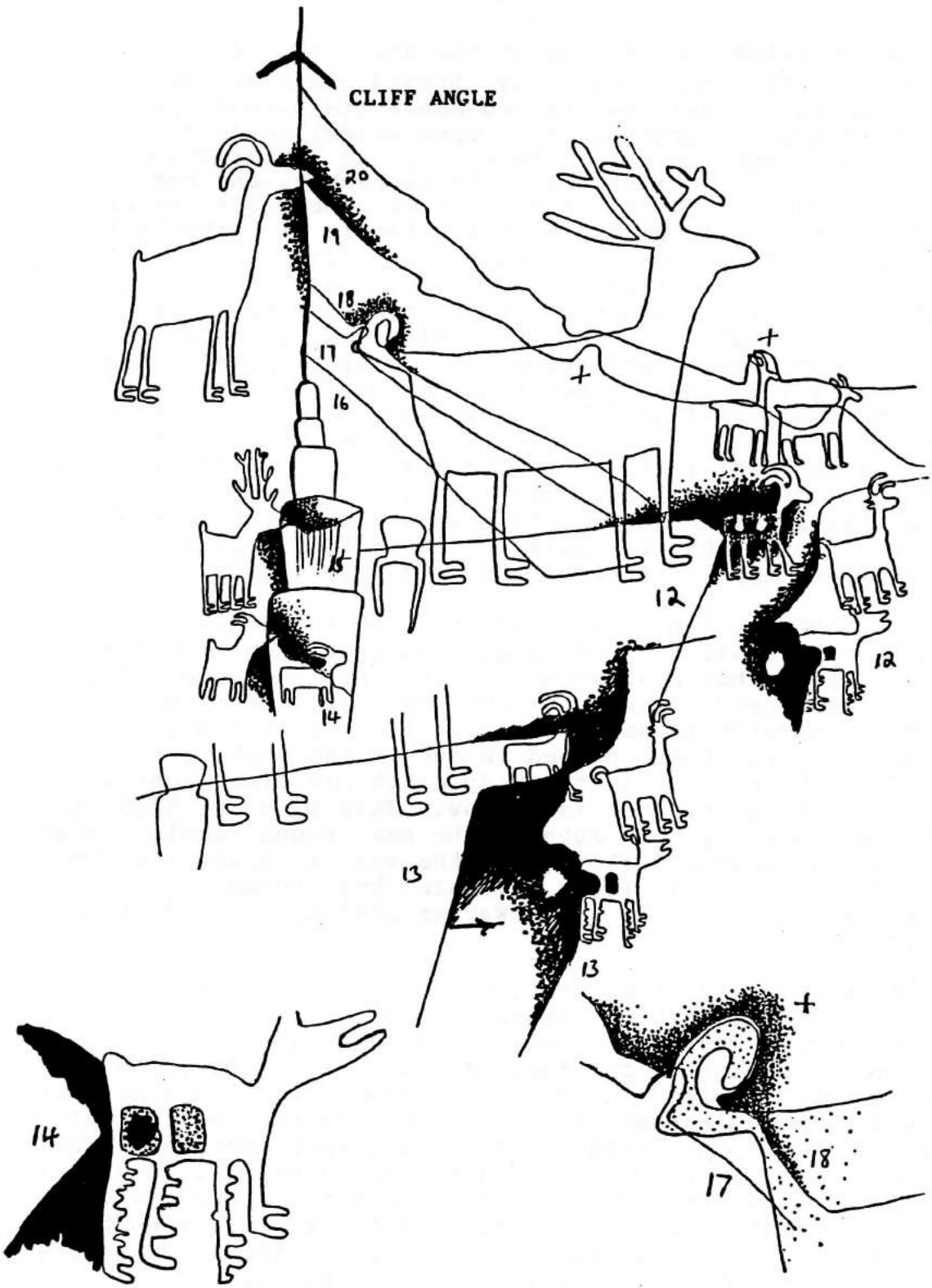



FIGURE 10 B.

figurine form marking the change in the direction of the shadow that turns and then moves directly toward the rear end of the animal to the right that was placed above the joined pair. As the context seems to portray, the upper animal seems to have a shaft of light come from its buttocks, an interaction that repeats very often in 9 Mile Canyon and elsewhere, and has become a prominent variation of the light out of the groin context of what we have identified as a distinct category of Symbolic Solar Interactions. What would that symbolize? Fertility, regeneration, and all that is concerned with the power of reproduction? Ewing suggests that the arrows drawn that penetrate the genital areas in Cueva Fletchas, Baja California, suggest the possible mutilation or castration of shamanic initiates (Ewing 1992:16). Since these situations also no doubt deal with those situations that is also a valid interpretation. Clay Johnson suggests the term for such long pointed shafts of light as "Sun Arrows" (Harris 1992:23) (Johnson 1992:42). That is a fairly good possibility, but I have refrained from using terms like that and sun daggers, because of interpretive problems (c.f. Warner 1982 B:185, 1983:114). Figure 11 illustrates a few animals with that type of interaction in 9 Mile Canyon.

As the point of light moves up to touch the genital area of the animal, two small dots of light appear within the body of that animal. Does that mean when its groin has been pierced with light it can then see? Those dots echo the eye-like symbolism of the patinated squares (Figs. 10 A.a,b, 10 B position 12). The body of the sheep has been pecked in such a way that two raised portions, "sculptured" within the body catch the side light while the rest of the body remains in shadow. This type of technique was given that name by Clay Johnson who has found "sculpturing" to be almost a common feature in the Vernal area (Personal Communications). Eyes of light have also been found in several other observations (Fig. 12 A,B) (Warner 1991 B, 1992 B, Warner and Rayl 1990).

As the eyes of light are taking place on the 9 Mile sheep, there is also an interesting interaction on the animal with the patinated blocks. The right block comes into light as the sun moves around to enlighten the face of the cliff. But, the left patinated square remains in perfect shadow for a considerable amount of time. That happens because it has taken advantage of a recess in the cliff that turns to face away from the sun. That is not coincidental. The visual image created by that is one of Double Vision, where one eye is in light and the other eye is in shadow like those in Figure 8. Notice how the right (front block comes into light first, leaving the other eye to remain in shadow (Fig. 10 A, positions 7 and 8). The animals in Figure 3, I believe, portray that same concept. The fascinating thing is that at position 11 in Figure 10.a, a dot of light appears behind the rump of the animal with the two patinated blocks (at the same time the shaft of light touches the rump of the upper animal and

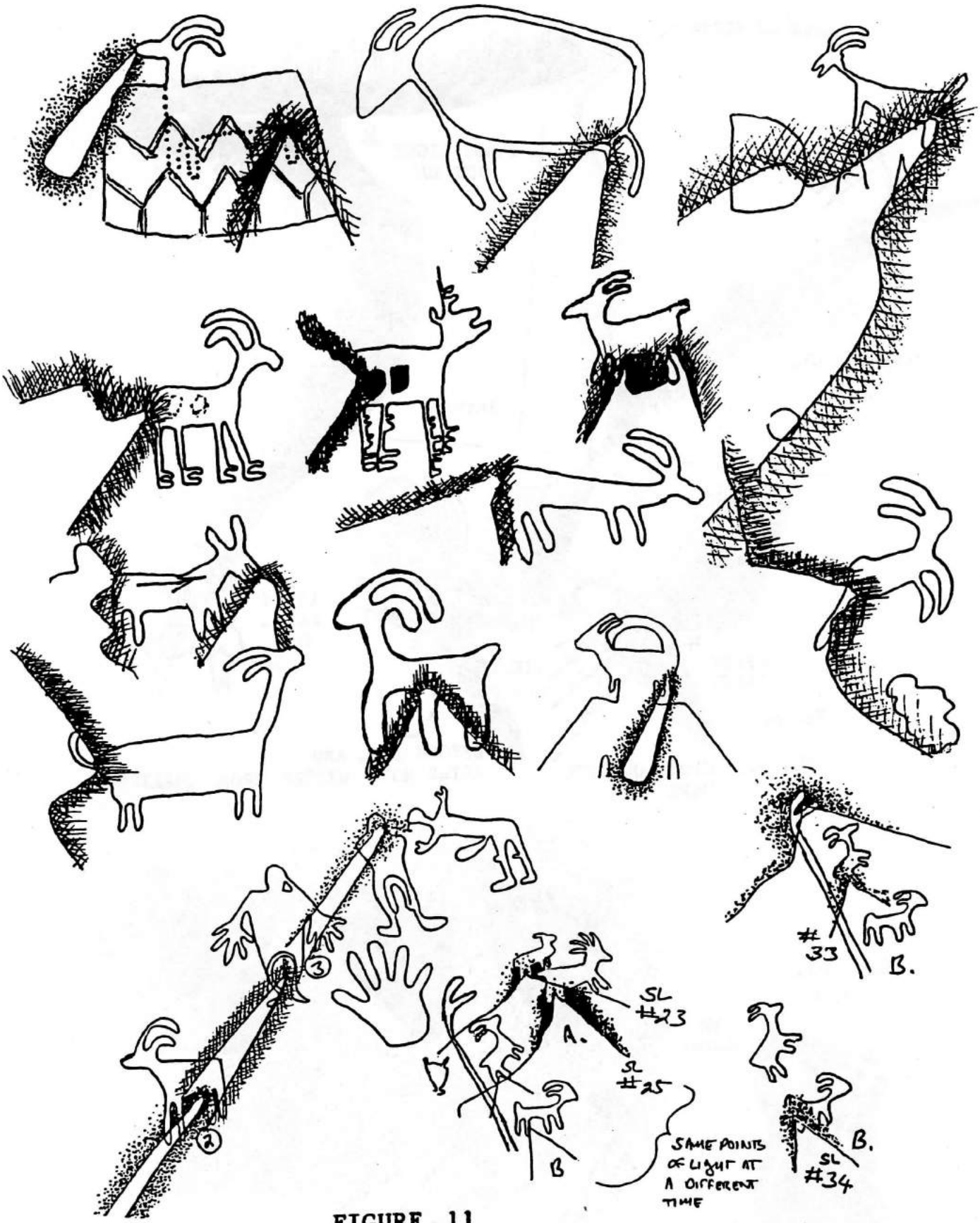
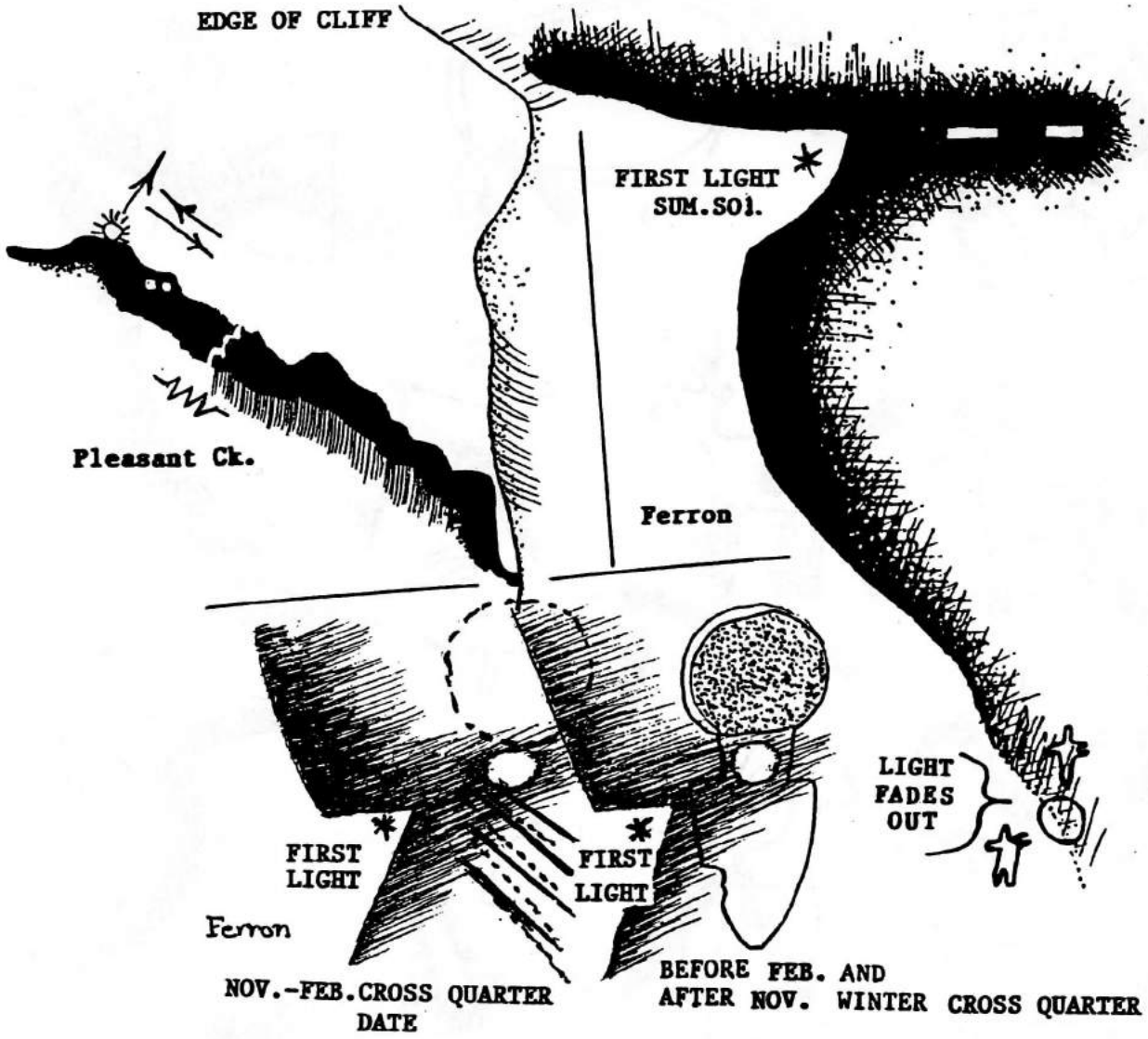

#33
B.
SL #23
A.
SL #25
B
SAME POINTS OF LIGHT AT A DIFFERENT TIME
B.
SL #34

FIGURE 11


EDGE OF CLIFF
FIRST LIGHT
SUM. SOL.
Pleasant Ck.
Ferron
LIGHT
FADES
OUT
FIRST
LIGHT
FIRST
LIGHT
Ferron
NOV.-FEB. CROSS QUARTER
DATE
BEFORE FEB. AND
AFTER NOV. WINTER CROSS QUARTER

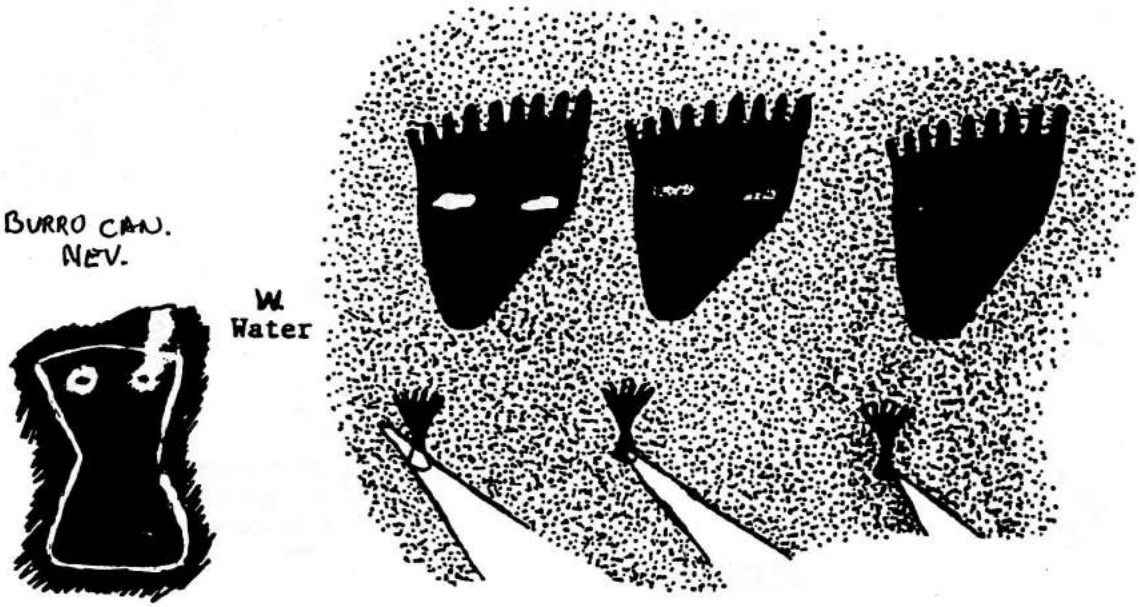

BURRO CAN.
NEV.
W.
Water



FIGURE 12 A.

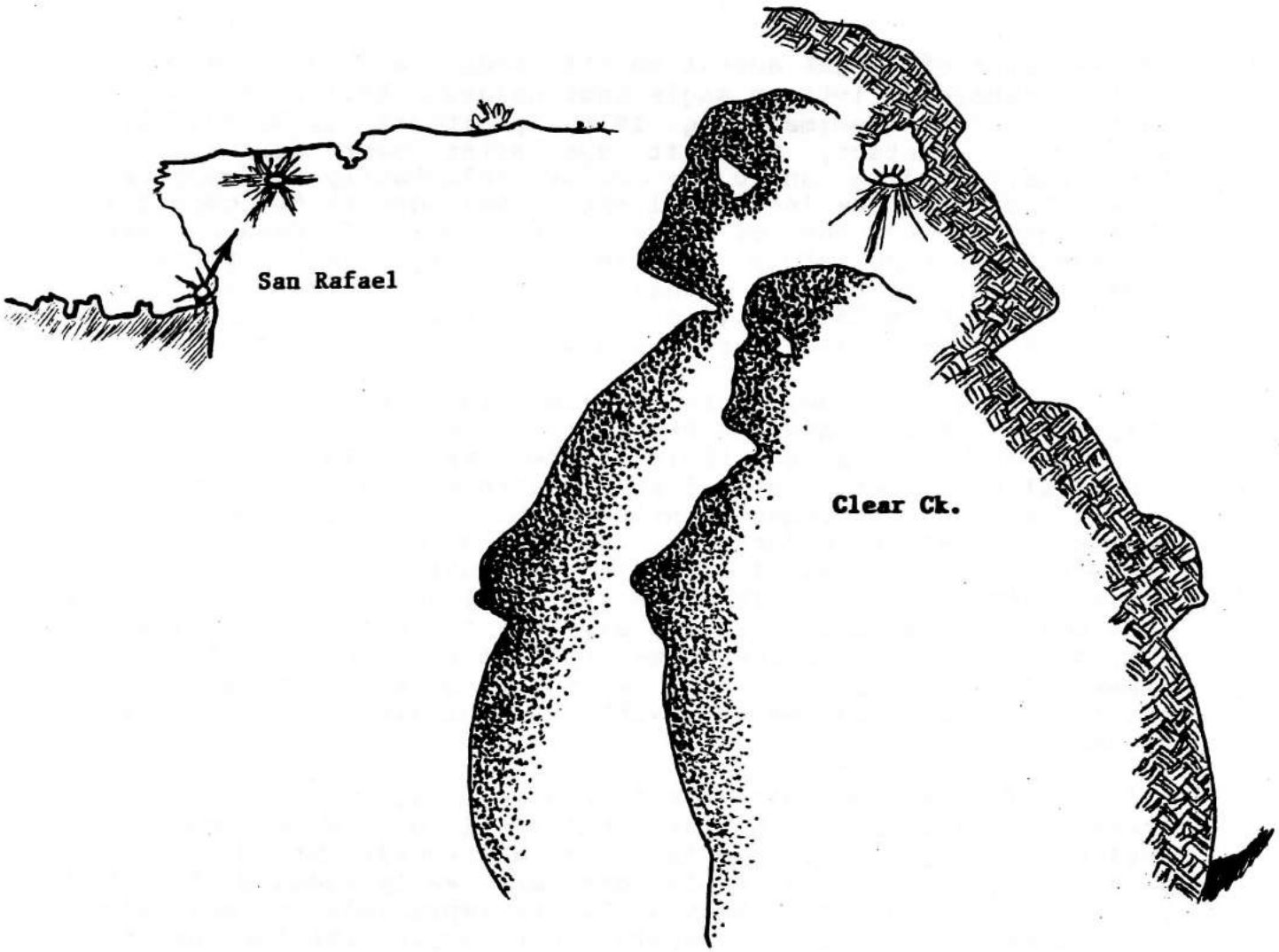



FIGURE 12 B.

the two eyes of light appear on its body), and then the dot of light transforms into an angle that enlarges till it touches the buttocks of that animal (Fig. 10 B, positions 12,13,14). As it makes that contact, the left eye after over four hours of tenaciously holding on to the shadow reluctantly and mystically gives it up to come into the light. That adds to the conviction that this is not one of those coincidences of random element placement in haphazardly doodling, as they ideally passed the time of day. Notice the other interactions on that panel that are also not coincidental (3 sheep that speak with light and the tail of the large deer or elk, positions 14,15,19 and 18).

In southern Utah, there are some interesting variations on this theme. From Montezuma Creek, there are two older Ute horses with eye-like dots on their bodies (Fig. 13.a,b). Their unnatural or different body form illustrates what I have referred to as a type of thumb printing, that defines a personal or stylistic preference for form. Notice the same odd shape of the horse from west of Bluff (compare those with figs. 13.c). Those horses were not made with the two eye-like dots, illustrating that the dots on the first two may have a special significance. Yet, the animals have the same stylized body shape. It almost makes one wonder if the shape of the horse with the dots don't provide a mask like quality, with the animals body as the face behind the eyes.

The interesting thing about Figure 13.a, is the dot at the front of the animal. Notice that it is a B C enclosed in a patinated ring. Could that be a reverification of the possibility that these double dots are really reduced from B C bodies as suggested? That would be impossible to determine. What is exciting is finding another Ute horse with the same type of dot configuration, west of Bluff. This time it occurs on a much more recent horse, indicating that the concept of these dots not only persisted over time from an archaic era till proto-historic or historic times, but even down till today. Notice that the front dot on that horse is also a B C (Fig. 13.d). On both animals the bisected dot occurs on the front quarter of the horse. Mike Owen found a similar horse with just a bisected rectangle on its front quarter in southwestern Colorado (Fig. 13.e).

We can take that historical association beyond the Ute horses, to the face of the URARA owl in 9 Mile Canyon. That owl is also historic, as evidenced by the fact that most of it was made or redone with a metal tool. As everyone comes to that panel and stands there in awe of its symbolism, no one has noticed yet that the ear or horn on the right of the "cross eyed" owl is really a small head with two small ears (Fig. 14.a). Thus the face is composed or framed within a line that joins the animals front leg to its back leg, if the thicker pecked line at the top of the owls head is its body. If the line forming the

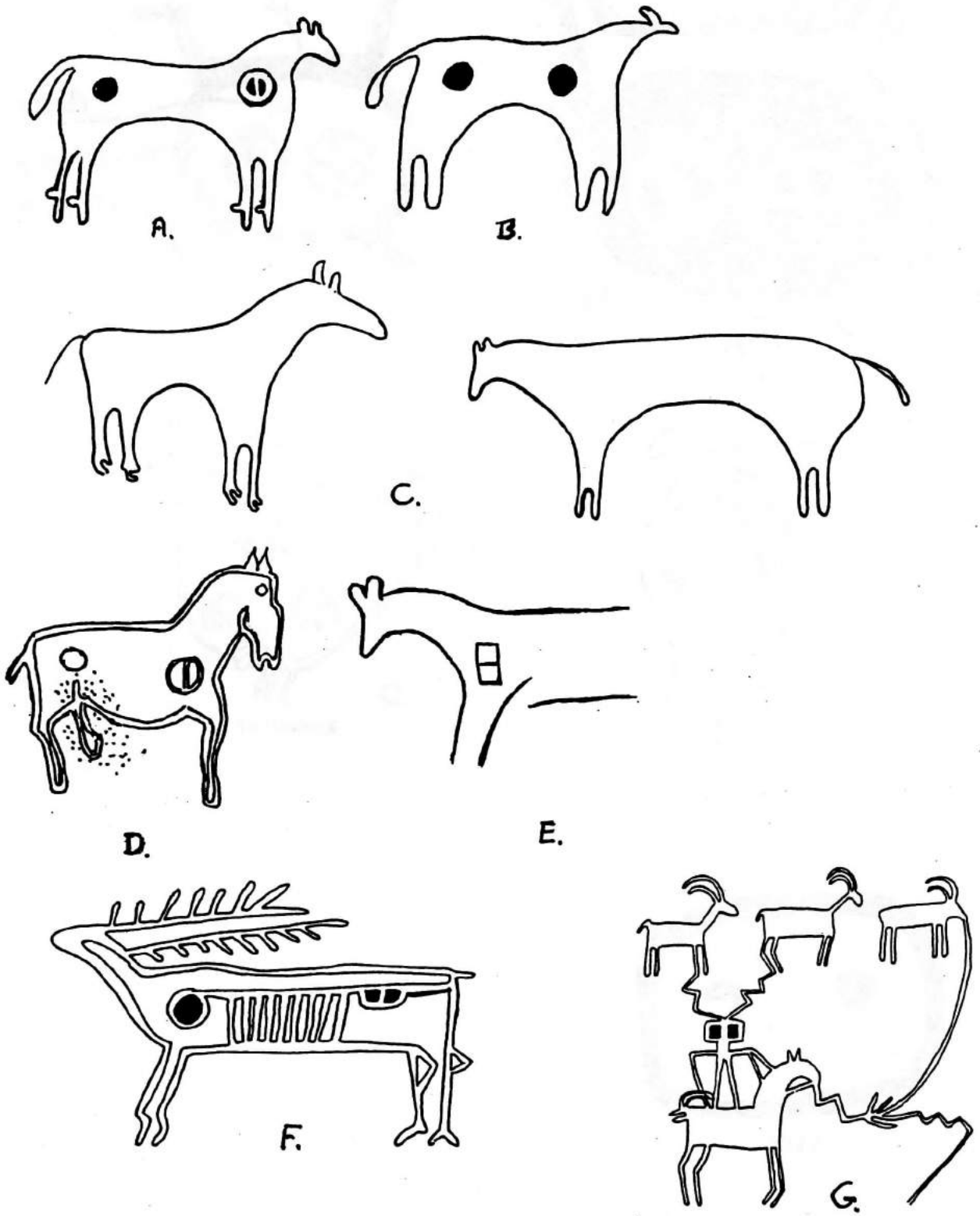



FIGURE 13

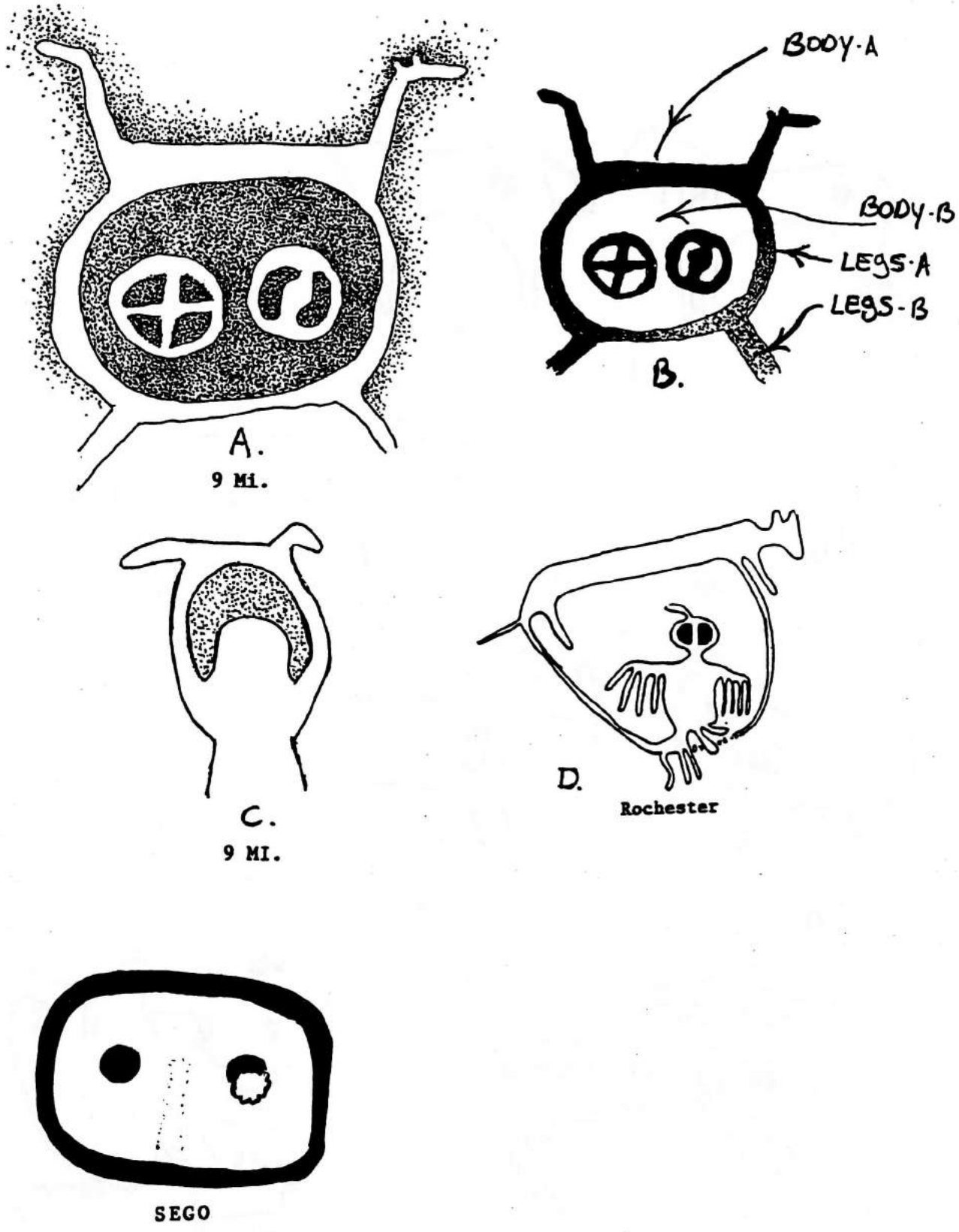



FIGURE 14

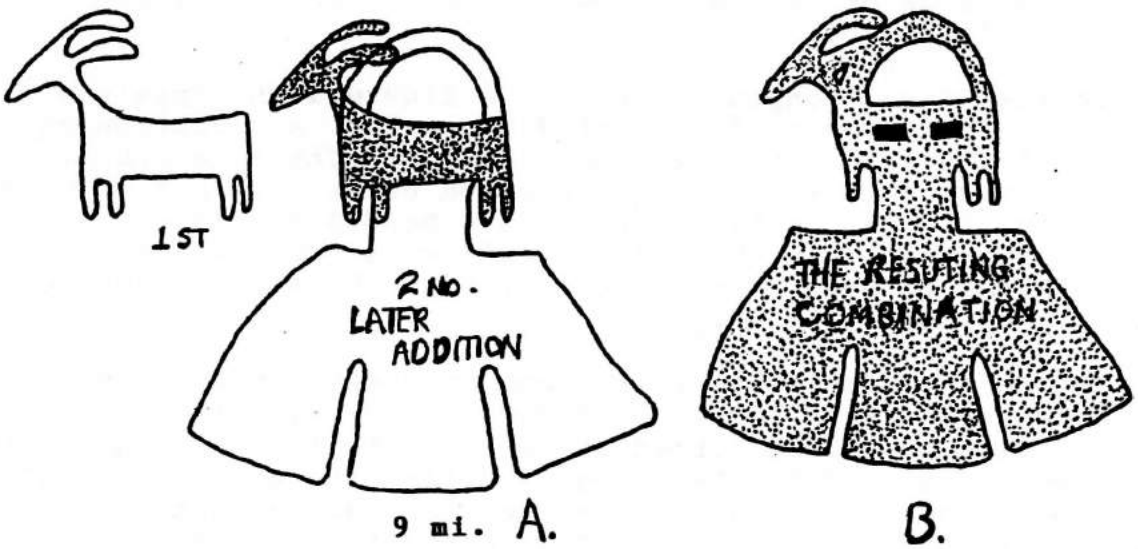
ring around the owls face is the animals body, then it has two eyes on the side of its body, and the one on the front quarter is Bisected (Fig. 14.b).

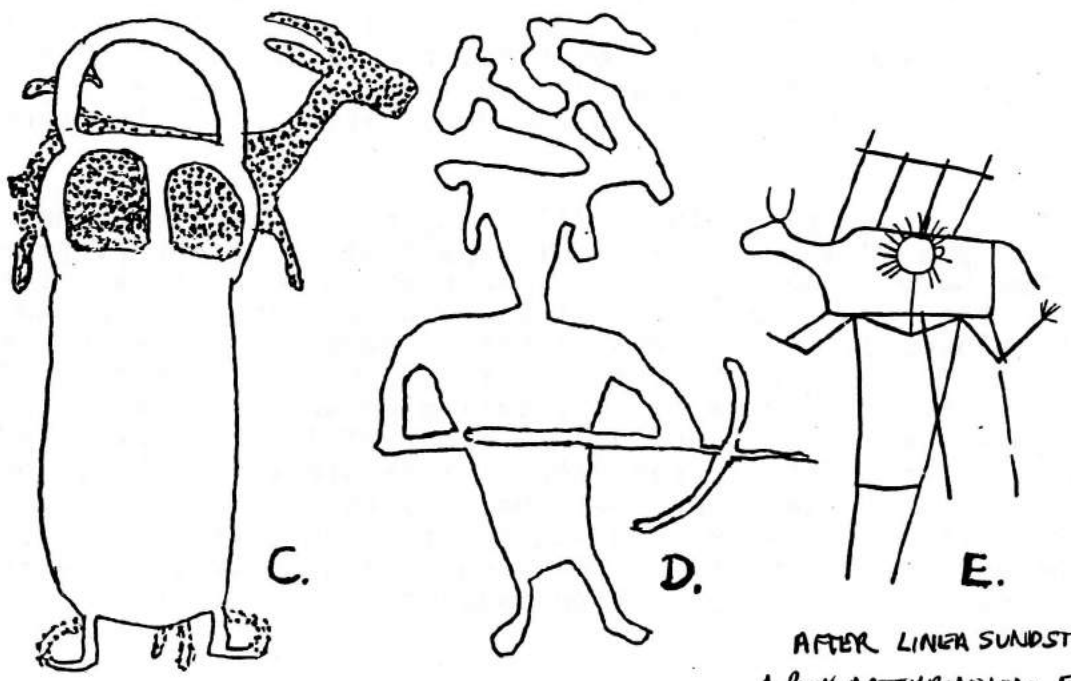
Farther down canyon, there is a figure with upraised arms that create the inverted patinated U bracket, a variation of the concept of esoteric vision (Warner 1991 C). The arms reaching up over its head have what look like a rod or staff, but on closer inspection, it seems that it too has a head and a tail. If that is also the case, then the humans head looks out like the head of the URARA owl between joined legs or from the side of the hollow body, almost mask-like (Fig. 14.c).

The best example of that compound construction comes from the Rochester Creek Panel. Figure 14.d illustrates an owl sitting within a loop formed by a line that joins one of the front legs to one of the back legs. Notice the use of the owl in both instances. The owl, like the Cat has exceptional night vision. This example is the most complete, naturalistic, and identifiable form of that type of composition. If that example is as ancient as we think it is (older than Fremont and about as old as the Barrier Canyon Style) then either the Utes must have seen that example and then produced the URARA owl. If not, the philosophy behind that construction persisted over a long period of time, or it could have, by its very nature, been independently invented.

On another panel in 9 Mile Canyon, a Classic Vernal Style Fremont placed a human head of a partial figure very precisely over the body of an older Basketmaker sheep (Fig. 15.a), like the one in the San Rafael and similar to the one in Indian Creek (Figs. 15.c,d). That was probably done for a very specific reason. The concept behind that reason was described in another treatise (Warner 1991 A,C). By taking advantage of a sheep that both spoke with light and had a shaft of light enter its groin (Fig. 11 right center), the Fremont made his face out of the body of a mystical animal and one that may have had Shamanic Sight. On two different dates, two angles of light move up to come out of the area of the mouth of the Fremont figure or moves across in the area of its eyes, thus adding more to this esoteric symbolism.

If the Fremont had put eyes on this face (it would look like fig. 15.b), there would literally be eyes on the side of the sheep like the sheep from 9 Mile, etc., in Figure 16. That again confirms the head as the body of an animal, that had mystical abilities. Other examples exist that express similarities and differences in this concept and the contexts in which they occur, and seem to add additional confirmation to the fact that the human form functions with the body of an animal as his head. Even without considering bird headed forms, altogether, the examples seem to strengthen the validity of the concepts that




AFTER LINEA SUNDSTROM
A ROCK ART CHRONOLOGY FOR
THE BLACK HILLS
IN AMERICAN INDIAN ROCK ART
VOL VIII 1982



**FIGURE 15**

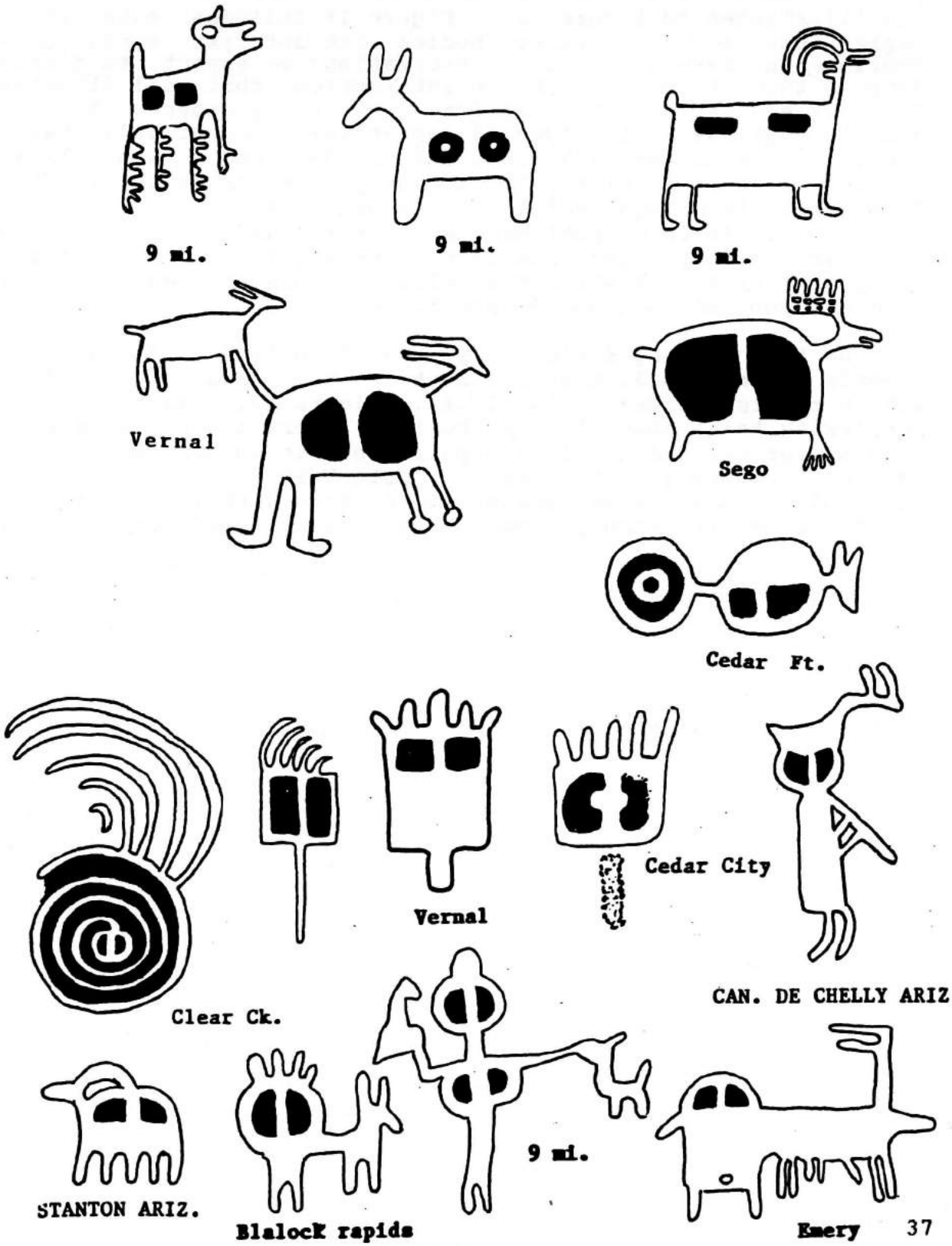

9 mi.
9 mi.
9 mi.
Vernal
Sego
Cedar Ft.
Vernal
Cedar City
Clear Ck.
CAN. DE CHELLY ARIZ.
9 mi.
STANTON ARIZ.
Blalock rapids
Emery

FIGURE 16

have been identified for this motif in these contexts. A few other examples that seem to have animals for heads (or bodies) are illustrated in Figure 17. Figure 18 includes other related expressions of B C faces or bodies with dot-like eyes. As we continue to make more solar observations we expect to discover more of these types of symbolic interactions that will illustrate the concept of esoteric vision. We fully expect that every animal that has this type of symbolism present will have a similar interaction with light and shadow, and I would like to invite anyone who wishes to, to help make those observations. When there is enough additional information I will submit them for another interim publication on this same subject. Since there are so many sites that need watching, I will never be able, in my life time, to watch them all. If this interests you watch them and publish what you discover.

On the Wyoming field trip, the Bush family found another example of an animal, that has both the B C and a regular circle, but in reversed order (Fig. 13.f). Figure 13.g illustrates the perplexing thing about this symbolism. Here a Ute stands on the back of (or emerges from) a bipolarcephalic animal combining the head of a sheep with the horse. Both horse and rider have very powerful symbolic lines emerge, and he sees with the symbolism of the B C face with each patinated block as his eyes, or as a mask.

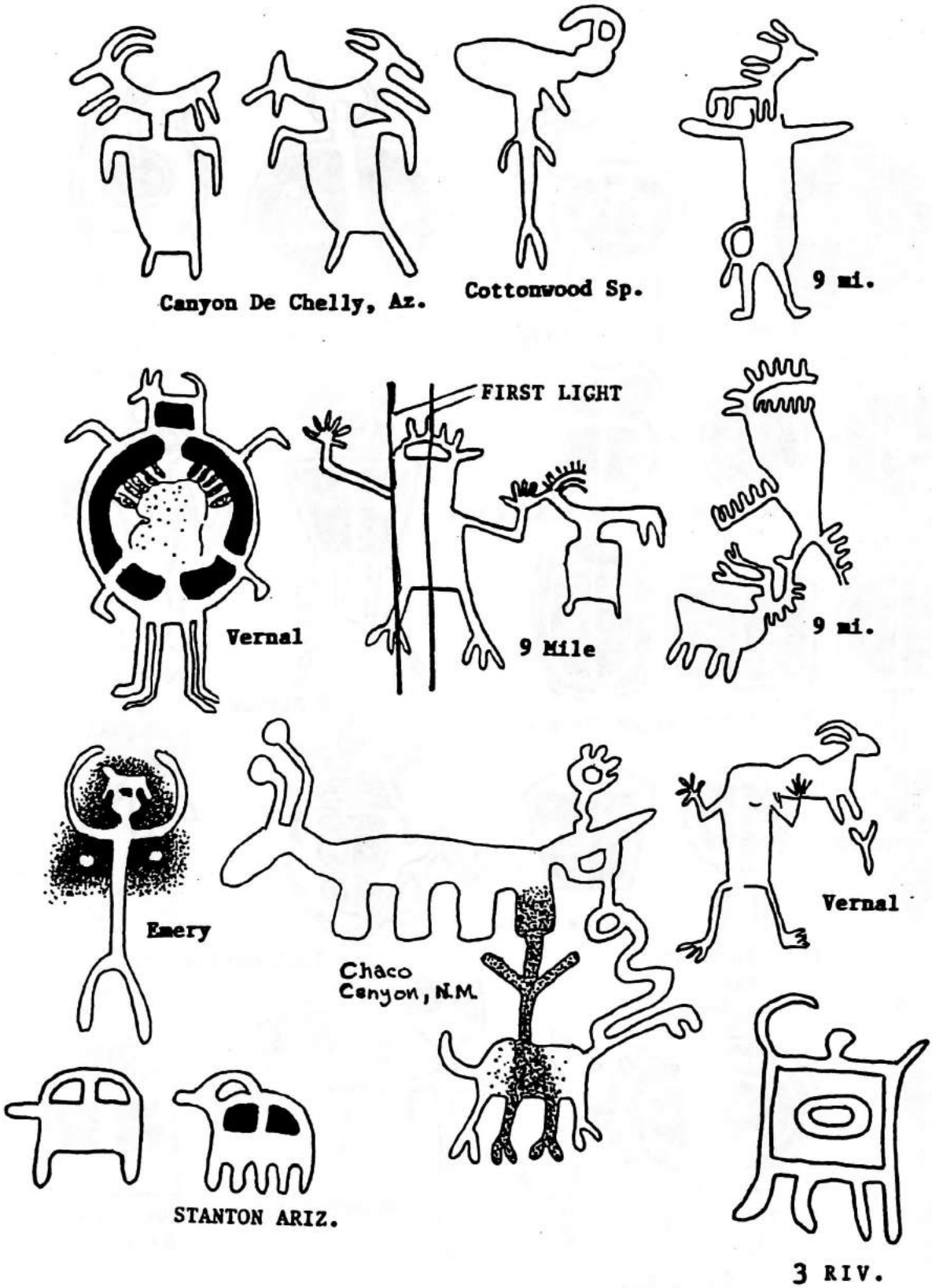

Canyon De Chelly, Az.
Cottonwood Sp.
9 mi.
Vernal
FIRST LIGHT
9 Mile
9 mi.
Emery
Chaco
Canyon, N.M.
Vernal
STANTON ARIZ.
3 RIV.

FIGURE 17

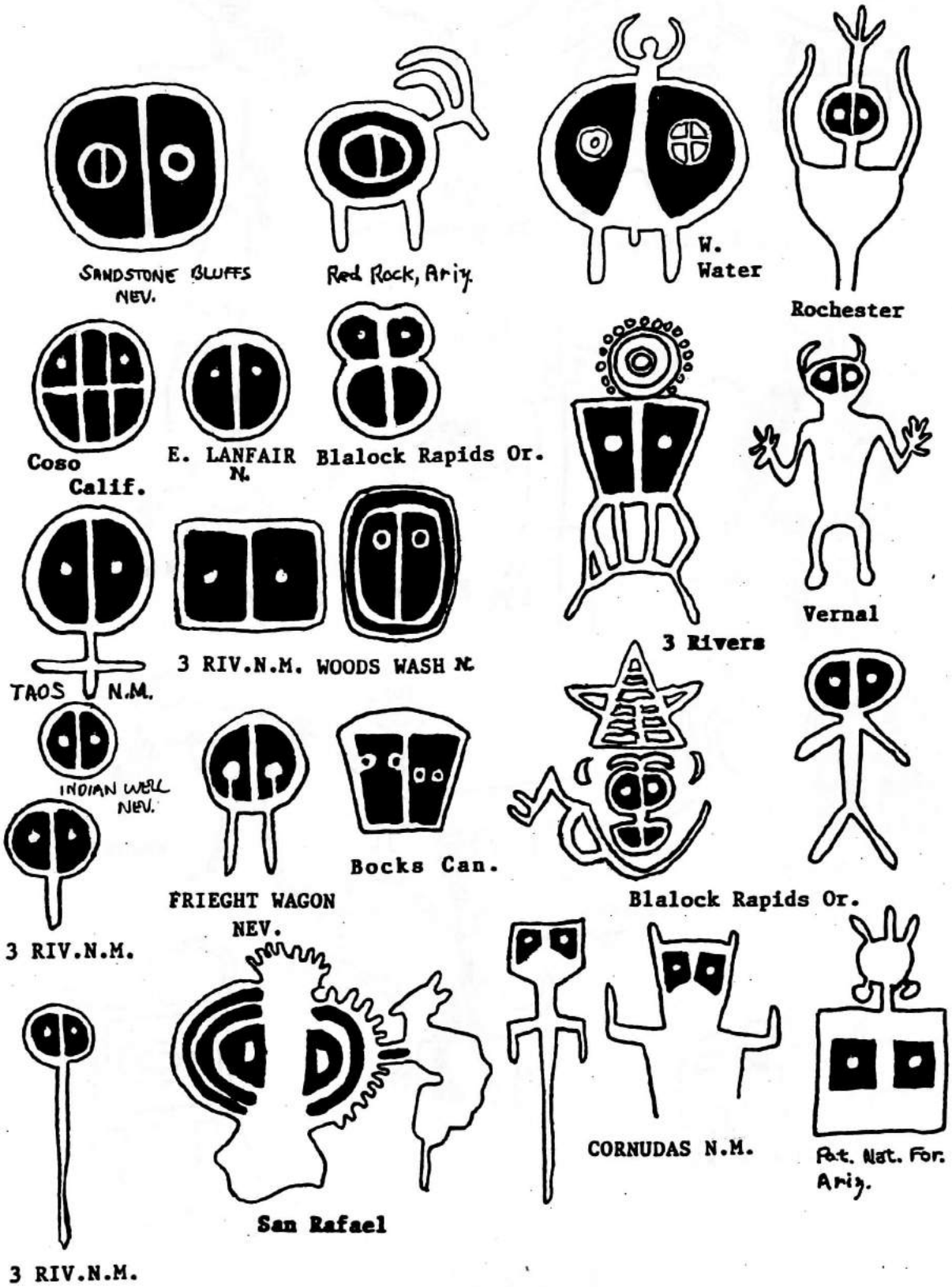

SANDSTONE BLUFFS NEV.
Red Rock, Ariz.
W. Water
Rochester
Coso Calif.
E. LANFAIR N.
Blalock Rapids Or.
3 Rivers
Vernal
TAOS N.M.
3 RIV.N.M. WOODS WASH N.
INDIAN WELL NEV.
FRIEGHT WAGON NEV.
Bocks Can.
Blalock Rapids Or.
3 RIV.N.M.
CORNUDAS N.M.
Pet. Nat. For. Ariz.
San Rafael
3 RIV.N.M.



FIGURE 18

## References


Allen, Mary
1992 An Update Of The Grand Canyon Polychrome Style. Presented at the 12th, 1992 Annual URARA Symposium at Green River, Utah.

Chamberlain, Von Del
1987 Comments On Rock Art And Astronomy. A paper presented at the 1987, St. George, ARARA Symposium.

Eliade, Mircea
1964 Archaic Techniques Of Ecstacy. Bollingin Series 76. Princeton Univ. Press.

Ewing, Eve C.
1992 Cueva Fletchas: A Shamanic Initiation Site In Baja California. Rock Art Papers. Vol.9. San Diego Museum Papers, No. 28

Harris, Frankie
1992 An Illustrated Dictionary Of Rock Art Terms. Utah Rock Art Research Association. Salt Lake City, Utah.

Johnson, Clay
1992 Establishing A Uniform Terminology For Descriptions Of Solar Interactions With Rock Art Panels. Utah Rock Art. Vol. X. Utah Rock Art Research Assoc. Salt Lake City, Utah.

Manning, Steven
1992 A Archaeoastronomical Observations in Westwater Canyon Utah. Utah Rock Art. Vol X. Utah Rock Art Research Association. Salt Lake City, Utah.

McCreery, Pat, and Jack McCreery
1986 A Petroglyph Site With Possible Hopi Ceremonial Associations. American Indian Rock Art. Vol. Xl.

Neumann, Erich
1974 The Great Mother An Analysis Of The Archetype. Bollingen Series XLVII. Princeton Univ. Press.

Smith, Ron
1985 The Rock Art Of The Sierra De San Francisco: An Interpretive Analysis. Rock Art Papers. Vol. 2. San Diego Museum Papers. Nr. 18

Turpin, Solvig A.
1990 Speculations On The Age And Origin Of The Pecos River Style, Southwest Texas. American Indian Rock Art. Vol. 16. American Rock Art Research Association. El Torro Calif.

Warner, Jesse Earl
1982 A The Enclosure Petroglyph Motif: One Possible Interpretation. American Indian Rock Art. Vol. VII. American Rock Art Research Association.

1982 B Problems With Element Lists. American Indian Rock Art. Vol. 8. American Rack Art Research Association.

1983 A Practical Application For Nomenclature. American Indian Rock Art. Vol. 9. American Rock Art Research Association.

1990 A Transformations I: Man To Animal, Animal To Animal. Utah Rock Art. Vol.IX. Utah Rock Art Research Assoc. Salt Lake City, Utah.

1990 B A New Look At Hunting Shaman. Utah Rock Art. Vol.VII. Utah Rock Art Research Assoc. Salt Lake City, Utah.

1991 A The Bisected Circle: Forms And Contexts That Express An Affiliation To Concepts Involving Double Entities. Utah Rock Art. Vol. 8. Utah Rock Art Research Assoc. Salt Lake City, Utah.

1991 B Solar Observations At The Red Ledges. Utah Rock Art. Vol. 8. Utah Rock Art Research Assoc. Salt Lake City, Utah.

1991 C The Reversed U Bracket: Forms And Contexts That Express An Affiliation To Concepts Involving Double Entities. Utah Rock Art. Vol. 8. Utah Rock Art Research Assoc. Salt Lake City, Utah.

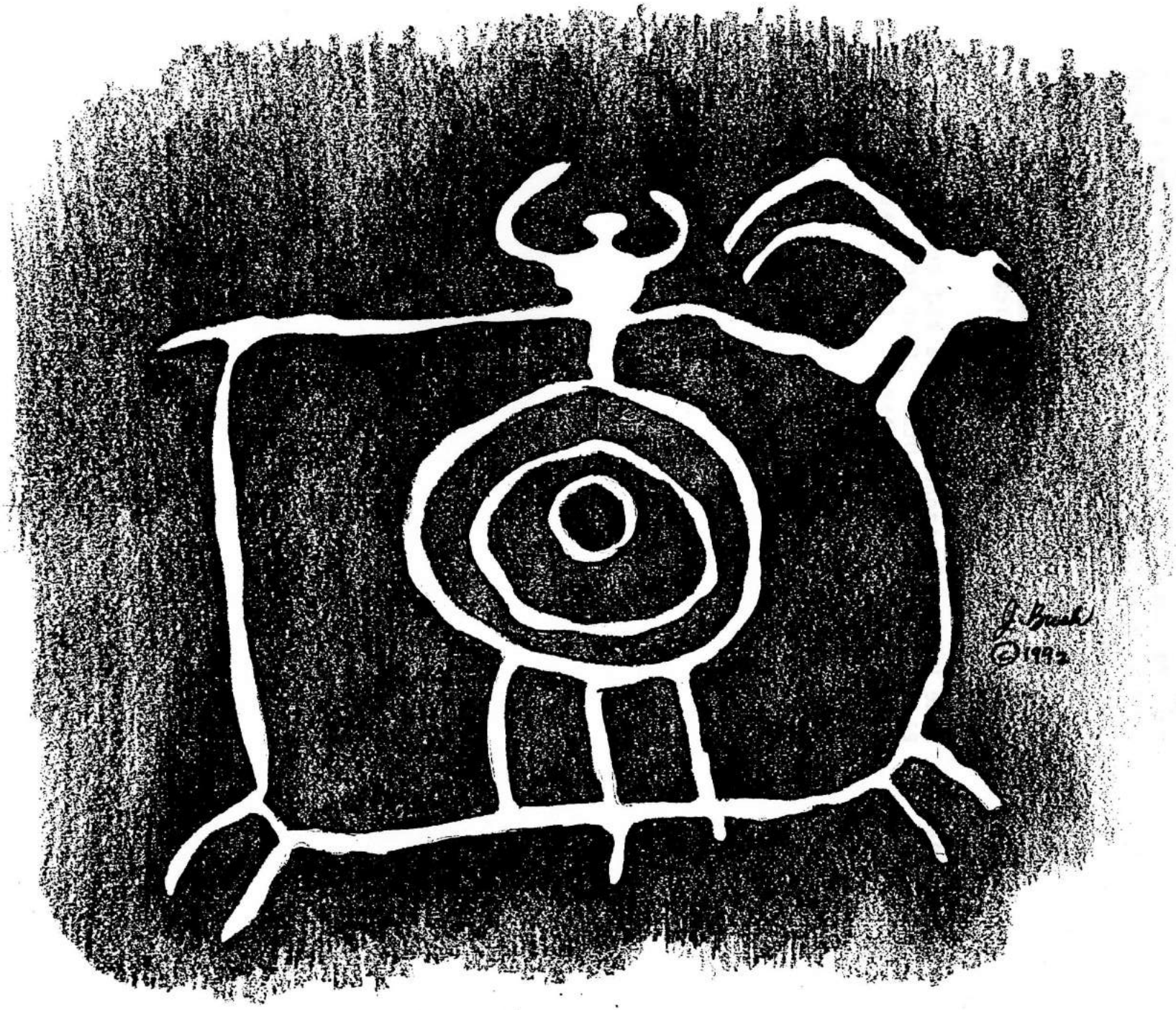
1992 A Sun, Mystery, And Places Of Power: Solar Observations And Symbolism At The Head Of Sinbad. To be published in Utah Rock Art. Vol. 12. Utah Rock Art Research Assoc. Salt Lake City. Utah.

1992 B Solar Observations And Symbolism At A Well Known Site In The Book Cliffs. Utah Rock Art. Vol. XI. Utah Rock Art Research Asso. Salt Lake City, Utah.

Warner, Jesse Earl, And Clifford Rayl
1990 Summer Solstice Observations and Symbolism At A Barrier Canyon Style Site In Pleasant Creek, Utah. Utah Rock Art. Vol. VII. Utah Rock Art Research Association. Salt Lake City, Utah.

Warner, Judith S. and Jesse E. Warner
1985 A To Slay A Dragon. Presented at the 12th ann. Symposium of the American Rock Art Research Assoc. To Be Published in Vol. 9. American Indian Rock Art.

1985 B Some Unique Horizonal Sunrise And Sunset Markers In Black Dragon Canyon, Utah. Utah Rock Art Vol. IV. Utah Rock Art Research Assoc. Salt Lake City, Utah.


©1992

# THE SYMBOLISM OR ITS AUTHOR, THE NARRATION OR THE NARRATOR, AND THE RESEARCH OR THE RESEARCHER

BY

JESSE EARL WARNER

The Thoughts presented in this paper are the results of many years of conversations with different researchers out on the desert on long winter nights. They Come from as much an attitude as from fact. The degree of how profound or how significant they may be to you, will vary, depending on how much you have seen or thought about similar situations in the rock art, and in the process of assimilating the research that you have been exposed to. The gist of what will be said about what the title implies deals with an appropriate or an inappropriate shift of balance in attitudes. To those of you who have not noticed these things or have not spent any time thinking about them, may wonder why even choose such a subject for consideration.

The value of these thoughts will, I believe help us to understand a much broader perspective about what we are faced with, both on the cliff and from the printed page. According to what I have been taught and heard by the Native Americans who both look at the writings on the rocks and the research, they feel that there is a "stewardship" that one receives, whether or not, but especially when "one is drawn to it." There are a few, I understand that have not had those feelings, but many others have. In general, some Native Americans feel, and I have come to agree, that some do not choose to work with "rock art." These ancient symbols, many believe, choose you to work with them. Talk to those who are heavily involved in the study of these symbols and see if they are conscious of that underlying belief. Some may not be wiling to admit it, if they are aware of it. If they are, I believe that they will agree, if they do not and they think about it, I believe that they will come to agree. I believe that most will agree with the idea that through every turn of events, they have been brought through many different cross roads where every decision that was made brought them just one step closer to the point where they became more heavily involved.

Sure, it is easy to say that, because you just look back and find each of the turning points and the decisions that were made to take you to the point were you became heavily involved in this field. Look at the types of things that happened that made you make the decisions that were made. What I am saying is that there are many that I believe that were meant to work with this field. That is the stewardship. The why, I feel I can not formally say, but if asked, I would be glad to explain (c.f. Strange 1992 A:20, 1st paragraph).

The efficacy of that answer actually lies in several different areas. One, for those of us who simply want to enjoy these very special and impressive inscriptions, who either find them emotionally or intellectually stimulating will not be quite the same as those who have been involved in rock art for a longer period. And Two, for those of us who not only enjoy the symbols, but who enjoy the research, the discovery process and the process of presenting our research, who have the experience as a combination of an intellectual and emotional experience, who feel it with every fiber of their being. Yes, there are many "Rock Art" researchers who haven't gotten to the emotional stage yet, because I believe they are afraid to let themselves go. Their work is often described as dry and very point of fact, superficial and sometimes critical of others. They have the traditional archaeological statistical skeleton of the site, but ignore the human factor. The real meat on the bones. Not that everyone's work can't be dry sometimes, but I believe that if you are totally into it, there is no dry research.

Bill Strange, (personal communication), summed it up beautifully when he expressed his feelings about the life of a Native American who had just become what seemed to be an insignificant statistic of research, instead of a living vibrant source, or repository of living traditions, contexts for stories, techniques of learning, the personification of the human factor. Some one who you couldn't help become emotionally involved with, that is now gone (Strange 1992 B). That information is no longer available, except through those that recorded it. And according to Anthropology, if it hasn't been recorded, it hasn't been preserved. As a graduate anthropology student, I was taught to remain "detached," do not get "emotionally" involved. That is what produces the statistics. What Strange learned is what the context and the manners in which the statistics functioned. After living on the Navajo reservation for a couple of years, I can see the need for a harmonious balance of both. Being only intellectually involved is also being out of balance.

On the other hand of the lower level, there are also those who are just emotionally involved with the symbols and haven't had the exposure to become more intellectually involved. They are in the other cup of the scales and are equally out of balance. Then there are those who are totally involved with "Rock Art." The final points of this presentation will be about and to those who are more heavily involved.

For those who are not actively involved in research, a word of caution. May I quote the most appropriate attitude about research that I have ever heard. That statement was expressed by URARAs 1992 President Vernon Bush, "I don't believe everything that I hear." This is not to be taken as advice to be cynical, but to be cautious in that we should not believe everything that anyone says. No matter who they are, we all make mistakes. The reason we shouldn't believe everything is because most of what is said, is said in an interpretive sense, on one level or another. That to a degree is the emotional side of the

research. And the reason that the intellectual scholastic can't let himself get involved is that he can't allow himself to get emotional (more interpretive) about it.

For those who are actively involved in research, a word of caution. We must remember that we have taken upon our selves by the very nature of attempting to relate our research and our personal views of what we are attempting to share, a stewardship. That responsibility lies in several areas that have deep and profound ramifications. To fulfill that responsibility honorably, we must do three things we don't often think about. We must fully understand our motives, responsibilities and obligations (Strange 1992 A:21). We must realize that we either consciously or subconsciously bring others along, not only to join us in sharing their views, but to prepare them to replace us when we are no longer in the picture. Is our efforts to create clones of ourselves, or to create the individual minds that will go far beyond what we have done? We don't need clones, we need individuals who have learned to look, see, feel, and think freely. That idea was expressed beautifully in the "Dead Poets Society."

That stewardship also extends to the rightful heirs of this ancient symbolism, the Native Americans, and to the rocks and sites that hold these symbols and shared what we were given from the beginning. More about that, as well as these other aspects will be enlarged upon as we continue.

Let's look again at the title and examine why it was phrased like that. First, the "Rock Art." In Utah Rock Art, Volume 8, 1991, section 6, page 23, the question I meant to ask is, what is more important, the symbol of the man (pecked on the cliff), or the symbol that the man pecked on the cliff forms as he puts his hands over his head to create the patinated space that represented the negative U bracket? That is, the man as the vehicle of the symbol. The answer to that question is based on an interpretation, and depending on what the answer is, is a part of that shadowy quick sand that both shaman and the "rock art" researcher tread across. The glory, or prestige improperly shifts back and forth between (a) the symbol and (b) its author; (a) the narration, and (b) the narrator as well as; (a) the research, and (b) the researcher. The shaman, like the researcher all too often it seems, do what they do to receive the power of prestige, rather than the individualistic pursuit of the esoteric knowledge or advancement of science.

In looking at these symbols and how they were used in their social contexts, it seems obvious that sometimes there is an inappropriate shift in balance of what the Navajo call "Hozho." That word can mean harmony, peace, pretty or beautiful. To say Hozhoo'ogo nanina, can mean to walk in beauty, or peace. Hozho'o nanina, can mean to be careful. Just by the style and the manner and the types of things depicted there is sometimes an inappropriate shift in the prestige factor. That shift turns the feeling that one receives from a panel or figure from the simple, humble, everyday, acceptable range

or types of expressions to what may be expressed as the profane. On one extreme, there is what may be described as expressions of those with "open hearts," those are the ones that hove nothing to hide. Their minds and thus their actions (as depicted on the cliff) are pure and holy. On the other side, the expression or feeling is one of egotism, of superiority, an antithesis of the first group according to several Native Americans (c.f. Warner 1984 A, 1984 B). Remember what Pres. Bush (our URARA Pres.), said about not believing everything.

Is what I just said the truth? That was printed in 84, so it is over eight years old. Hugh Nibley and ancient historian (and a historian of ancient history) once said that he could not be held responsible for anything over 5 years old. Was that true then, and is it true now? If not, how can you tell? That will be dealt with a little later. But, what I want you to be very much aware of right now, is that after just reading what I said, many probably forgot and automatically assumed what I said was fact. No. What I said was based on an opinion, an educated guess - both mine an Native American, but none the less a guess. How educated? As educated as I could make it through a comparison with all the years spent cutting my teeth on the Great Basin and western Fragment sites from Salt Lake to Parowan. Each of those areas have a predominate Style Profile. Schaafsma used that type of discrimination in the Rock Art Of Utah in 1971, but the categories were too broad (c.f. Warner 1982:160). But, she could only do what she could, based on the information she had, and the thinking of the time. But with the consistency of whatever she defined her terms as, such as "other representational," (the current way of looking at this, is that every thing that was made represented something, whatever was in the mind of its author, at that time representational was used to mean naturalistic or identifiable vs abstract). After looking at her style profiles one can see that about 50% of the elements that the Classic Vernal style used were anthropomorphs. In contrast to that, the human form is only about 20 % for the Northern San Rafael style Fragment and about 10% for the Sevier style. But, in the Barrier Canyon style, she illustrates about 75% of all the figures are human forms.

If the percentage of occurrence of any particular motif stresses the amount of importance that form had to the topic of discussion, then the Barrier Canyon style, according to the statistics, would have the greatest amount off concern with the human form. But how much reliance can we place on such cold, unelaborated archaeological statistics. Remember what was said about belief. Schaafsma at that time hadn't visited very many of the representative types of sites of the Barrier Canyon style. All she had to go on were the photos in the Donald Scott files. Those photos were taken from the most popular types of sites, what we call the "Gallery type." There, figures are predominately anthropomorphs with many being heroic and more than life size, but that is not the most commòn or typical type of Barrier Canyon style context, size or form. They would be analogous to saying that Cliff Palace or Pueblo Bonito are "typical" of the most common, over all type of Anasazi habitation site. In both cases, they are

only one type of habitation site, and not typical over all. Typical was small family sized ranchieras. And along with that, she only included the painted "style" panels and not the pecked, scratched or abraded "styles" of what variations of the Barrier Canyon style was produced in. At that time, she was probably not even aware of other styles or variations based on types of technique of production. Each Barrier Canyon style based on technique alone would have a varyingly different style profile. Why? Because they each generally contain different or wider realms of subject matter. So the bottom line is that I do not agree with the types of things that she gathered for what is supposed to be a fair representation of that style or any of the others for that matter.

But let's say that she was right, just for arguments sake. If the more "humble" people would represent their figures within "hozho," would the Barrier Canyon style fall within or outside of hozho. Even though the percentage of anthropomorphs are higher percentage wise than the Classic Vernal style, I would say that they were within hozho. Why? Because of two things. One, is that many of the anthropomorphs are felt by many to represent figures other than themselves. These may well be Deities, anthropomorphic, in nature or personifications of natural forces, -- Gods of various types, like the harvest or of vegetation or animals, like the one in the Harvest scene. These could be placations to spirits personifying those natural forces rather than portraitures. There are many, however, that I believe that do represent their author. But that differentiation is a fine line. Is it even that important? In the long run, I believe that it is.

We must also consider how these types of human forms were treated. The Barrier Canyon Style did not provide vestments beyond what may be considered the overall norm for that style. At least not to the degree that the Classic Vernal style did for what was probably the norm for the overall Fragment Style. In some cases, detail is not at a minimum, but it is not excessive either. The impressiveness comes form two factors, size and the etherial nature that manipulating the techniques produced. That also adds more weight to the fact that they may represent the non mortal side of their world view. That is an expression of an area of their concern.

The Classic Vernal style on the other hand, with 55% being human figures, often have the concern of those figures as an extremely elaborated, almost over detailed and very large, almost arrogant, egotistical attitude, relatively speaking. Even though that is an over simplification, they often come across as a portrait of superiority. Out of all the Fragment styles, they have chosen what seem to be "Portraiture" as their number one element, the most important thing to depict. The other Fragment styles without question chose other subjects over the human form for the main topic of their presentations. In other words, in the Classic Vernal style, the human form seems to be the end, while in the other styles, the human form is only one of many other means to their ends.

And what is the expression of the concern on the panels of the other Fremont styles? On the average, it is very small figures. Little detail if any. Few have any facial features or head treatments, etc. etc.. Many more contexts deal with themes in a narrative sense rather than simple portraiture. Does the idea that I am trying to get across make sense now? When an author (a member-carrier of a style) produces a form of himself, as a simple, small, unelaborated figure, they come across as a corresponding attitude about themselves. The biased opinion, is that they are humble, not self assuming and in a more appropriate relationship to the other figures that populate the universe around them. These cultural attitudes come across as a backdrop within the productions of what we call style. And until this is considered and understood, we will never fully understand style. These are the manifestations of what was "appropriate" and done in the most "appropriate" manner of production. That appropriateness seems to shift between one extreme and the other of what is hozho. The one, to the Navajo is in violation of hozho. Is this line of thinking out in left field. If it is, then I was lead there by the Native Americans with which I consulted.

To the older Navajo, they were offended if one even asked them their names. Because in doing so, they were placed on the spot to brag, so to speak. Their names are more than the identification of themselves. Their name is the ramifications of their total persona. I have heard several say, "Who am I to tell you who I am, ask that one (pointing to another with their lips), they can tell you better than I." Instead we were taught to say, "What is it that they say to you?" "Haa'at'ish da bil ni?" If I was J.F.K., L.B.J., J.R. Hitler, Manson, or Mother Terresa, my name, like every one else's, would tell you much more than just who I am in a crowd. It tells you what I am. Answering, Haat'iish da bil ni, is within hozho. Answering Haish yanilya (what is your name, what whites usually ask) is not within hozho. The latter is not staying within the balance. To the Navajo, the Classic Vernal is in violation of the laws of balance. And if they were head hunters that would fit their mold. Another biased opinion. Did the Classic Vernal even have the same concept of hozho that the Navajo did. After all why should they. To a large degree I believe that's what made them what they were.

That is what I mean by the "Rock Art" in the title. There are those times when symbols fall out of harmony, when they are used inappropriately to the traditional norms (again a biased opinion). When it does, it steps across the line and who has the right to say that it does? That is a relative consideration and those that I knew on the reservation would not be as bold to say.

The Second point is "Its Author." It is obvious that when the "rock art" is out of balance it is the authors fault. It is out of balance because he is the one that is out of balance. We have already mentioned the inappropriate use of symbolism, but consider this. There are those that by what they did seem to be "flipping their

suspenders" so to speak. That is an observation of URARAs past President Clifford Rayl. That attitude is also a violation of stewardship, of being one who knows, and they are out of hozho.

In many of our observations of light and shadow, it is interesting to observe and think about the human factor and the minds that were able to discover the situations that allowed them to do what they did. Again, many seem to just use these situations in the "humble" types of expressions, to have their esoteric experience. While others go so far beyond that in constructing such a complicated and unbelievably complex situation it seems to be a "one-up-manship." "My panel and interaction is better than yours," so to speak, or mine is best. Is that an accurate assessment of reality? I'm not sure, but in some situations, it seems to be. If it is the case, then that would also seem to be an inappropriate shift in the prestige.

Harold Tuchins and my grandfather both believed and taught that truth is what we are faced with, that it exists forever, and we must be able to identify it from what isn't, as we pass through it. Each said it differently, but in the end it was the same. The **Narration** is an expression of their view of the truth. And it is the **Narrator** (who may or may not be the author), that provides the narration based on this cultural influence. The narrator, much like the author of the symbols, also may not be with in hozho. It is like what Lord Chesterfield said to his son. Knowledge (or intelligence), is like a pocket watch, not to be taken out to count the hours, but to be given when one asks the time.

That same inappropriate shift of prestige, shifts back and forth among us today, between the **Research** and the attitudes of the Researcher. I have only seen this in URARA and ARARA to a small degree. Where I have seen it the most is in the attitudes of some of the professors in various departments in both BYU and the UofU. When the research itself, becomes more important than the objects that are being studied, there is an out of balance. To paraphrase what Baun stated, we can always learn something form a site or a panel (Baun 1992). And to think that the research is more important, is to believe that there is no more to learn. I have not actually heard anyone say this but that idea does come across with some -- "It is alright if the panel gets destroyed now, because I have recorded and researched the site." type of attitude. That is egotistic, and way out of hozho. Those that even hint of that attitude, it seems believe that they alone, all by themselves, discovered every possible facet, every fact about the site or the panel or figure, and no one else will ever be able to discover anything else. These situations provide the freedom to choose that Strange talks about (1992:21, 2nd paragraph). One can't be free (to know the truth), or which contains more of the truth, unless he has the right to choose which seems to be the most logical and or truthful to them. That means there needs to be different points of view.

Some authors are so hung up on methodologies and proper and acceptable procedures, creating thee appropriate hypothesis, they miss what is really going on. Yes, it is good to be question oriented and use research as a process for problem salving, but when individuals can't see beyond lithic, potsherds or concentric circles or never try to figure out all the possible times (site specific) for all possible solar involvements to visualize other possibilities. They will never really learn anymore than what a beautiful sunset or sunrise will tell them. In other words, only try to make observations on the four primary quarters (c.f. Strange 1992 Sec. 9,p. 1, last half of the 2nd paragraph of third page, and page 2, last part of 1st paragraph) (C.f. Morris 1992:105 and top of p.106).

Recently, one individual told another researcher that the second, did not need to do any more research or submit a report on a specific motif, because he (the 1st), had thoroughly studied it out and done a paper on it. In my opinion, after reading both papers, I felt that the later (the one that didn't need doing), was superior in several ways, and more of a scientific quality in others. In another situation, a researcher put out a plea for any information on a particular motif in a grand and spectacular effort that has the potential to be one of the greatest research projects I have ever seen. Everyone he contacted but one, shared generously, but one. Remember what Strange said in the Archaeoastronomical section of his 1992 A paper. There are places were the habits of the heart and mind of the conventional scientific researcher get in his way.

That one individual claimed to have 1000's of examples, but never shared any of them. The one making the inquiry replied, "then why don't you do a paper on it so that we can quote it." The reluctant individual then said that he would. Think about that.

He would have been given credit for his contributions which would have been a great coup on his part, (which may have also been done for the prestige that would bring). Sharing that information does not really steal his thunder for anything that he may want to do later. And if he did he could still have done what he claims that he will do. But, I bet that whatever it is that he does, will not be as great because it was produced out of HOZHO. If he really does have that many examples, how can he as one individual come up with all the different points of view that are needed to do justice to the subject. He can't. Now think about all of the information that could have been extrapolated out of all of those examples if they had been given to this great project that is a master mind effort of many good researchers. That's real sad.

A new member on a field trip over heard a couple of more involved researchers talking about a panel they had just seen and mentioned a Glen Canyon style 5 sheep. She asked what a Glen Canyon style 5 sheep was. The answer would have only taken a few seconds and would have won him the respect of the people there, but the response was more or less go look it up. As a result he lost a lot of respect.

At the last ARARA symposium an individual asked me to please meet with him to give him some information. I suggested lunch. He said that he was eating at a certain restaurant. I told him that we were already meeting with some friends at McDonalds and invited him to join us. His response was that he didn't eat at McDonalds, as a result we never got together. The point is, was the information more important, or me? I felt like the information was. Why these examples? They illustrate that thin line that separates the difference between what is in and what is out of balance. I don't want to leave the impression that I am perfect. Quite the contrary, what I am saying, I have had to learn the hard way.

What does all this have to do with? It has to do with helping you and me to become the best that we can be. So that when the professional looks elsewhere, it can be the amateur who rides in to save there ass (Strange 1992 A:2). I heard a quote once, that "the craftsman is immaterial in comparison to what he created." I can not believe that. I do not believe that ceiling in the Sistine Chapel is greater than the Master who painted it, and man is not greater than God (it is also said that a worker works with his hands, a craftsman works with his hands and his mind, but an artist works with his hands, his mind, and his heart).

It is my (biased) opinion that information gathered and processed out of hozho can not and will not be as good as that done within that balance. I feel deeply about that and believe it to be one of the great universal truths. A great man that I have learned to follow, once said that no one can create anything greater than himself, by the mirror fact that since he created it, he can always do better.

We as open minded individuals have no right to criticize the work of another researcher, unless that researcher chooses to first "wrongly" criticize yours. When I was asked by Asa Nielson to do a critique of the Clear Creek Canyon Project of Levan Martineau, because the professionals were either afraid or refused to touch it, I was asked to provide a bridge for them to assess if his work was "feasible, reliable and accurate." After that, I received a letter from Martineau, and one from the Piute tribe questioning the reason for such an effort, and my qualifications (c.f. Warner nd:introduction, 1991:Sec.7,page 45). After thinking about the problems that involved, I decided what I had been asked to do, was not justified. Through the advise of Clifford Rayl, who's advise I have often found to be very wise, sound and extremely useful, I was advised to just do what I do. The advise went something like this. Clifford asked me to answer this, who am I to take Martineau down. What in his work is good, will stand as good and all I do is make myself a fool. What in his work is bad will eventually be known, if it is bad. And why should I have to be the one to point it out.

What makes the Utah Rock Art Research Association, so great is that it is our motto that "NO ONE KNOWS EVERYTHING, EVERYBODY KNOWS SOMETHING, SO LET'S GET TOGETHER AND SHARE WITH EACH OTHER WHAT WE

KNOW. RIGHT OR WRONG IT BROADENS OUR PERSPECTIVE." Whether every one complies with that or not is another matter. We are all professionals in our various fields, and we are all amateurs in "rock art." Credentials mean nothing, and experience (field time) is the only thing that counts. On that bases, most of us know more than many of the professional archaeologists in those areas. It has also been brought home very strongly that there is no such thing in rock art as a right or a wrong, as much as there is more often a better, or a not as good. It is by this unselfish sharing, networking, or masterminding that each of us grows. And it is the best way to grow. At the site, on the best field trips, there is often a free flow of intelligence, and I often learn more there from an individual, than from reading what they may have written. Not that what they wrote was not good, I believe that it has a lot to do with the way we write, which is not always the way we think and talk.

When values improperly shift from the research to the researcher, the researcher often becomes too critical of the methods, conclusions and research of others. In discussing why this is, it seems to be the common consensus that he is trying to protect his own work. Not all "researchers" are <u>leaders</u> in the field. But to any one not doing research, any researcher is a leader. The real <u>leaders</u>, are those who gratefully share, not those who are critical and do not share. Leaders do not say I have already researched this out, and done a paper on it, so don't bother with it. They say, yes, I looked into that and this is what I found. You look into it and see what you can come up with. The real leaders are the ones who encourage others to pursue their own ideas rather than the ideas of the one who is the leader. They do not say I have researched this out and you don't need to do a paper on it.

This more appropriate way is how I was treated, by some of the greatest minds in the field that I know. We have a stewardship. We by our examples need to show a reverence to the "rock art" and the shrines that it was placed in and to the research and the mental shrines that research came from. Whether good or bad, it may be their best at that point in time. If you think my work is bad now, you should have seen it in the beginning. There was one that almost stifled my growth, because of criticism and the way it was given. But, I was very fortunate to have another that took me aside and encouraged me. I feel that every one who becomes involved in this field can contribute something great.

Look at how much Clay Johnson has done, and after only being in the field such a relatively short period of time. He has come up with some great ideas and continues to come up with idea after idea, after idea. He is now teaching us things that we never thought about before. Clifford Rayl and I went back out to Vernal to do a presentation for their USAS Chapter, to stir up the interest that our first Vernal Symposium created, to see if any cream would float to the top. Several had already taken the initiative. Both Clay Johnson and Tom Freestone had taken the initiative to start. Neither waited to

find out what to do or how to do it. And Tom has also made several very important discoveries.

On a recent field trip with Miles Prescott, another new member, it was exciting to see his enthusiasm in a discovery that he made on a panel that we have all probably seen half a dozen times, but never saw what he saw. I think that the criticism would have to be pretty sevier to deter these individuals from further research, but I know of a few where it has. What great discoveries could they have made, but we won't know because of unjust criticism, or just, constructive criticism given unjustly.

While I was on the reservation, I learned more about two laws that I had already been taught as a child. The first law is the law of compensation. The second law is the law of increase. The law of compensation states that what you give is what you get back. The law of increase states that what you get back is greater than what you give.

If you plant a kernel of corn, you don't get back beans or squash, you get back corn. But you get back more than one kernel. You get back several ears full. That is seven Biblical. I have found that to be very true in my research. When ever one has given, I have seen them receive 10 fold, but with those that I see who will not so much as divulge the location of a site, I have seen them receive little or nothing in comparison. Once at a restaurant, another great mind asked me the location of a site. Another at the table, in front of everybody, shook his finger in my face and said that if I told him the location of that site he'd never speak to me again. As it turned out, the one who asked has made some very significant discoveries at that site, while the one who tried to keep it secret from a colleague hasn't really done anything. I also believe in the parable of the talents. To those who do the most, get the most. And for those who hide it, it gets taken away.

The last part of the title implies the question, the research or the researcher, which is the most important? That decision may be impossible to make till one realizes that neither are, yet both seem to be, depending on the point of view.

Each researcher must learn to prioritize, and maximize their time. Even though all the different facets of involvement with symbol systems are exciting, you can't be a great conservator, or a top notch recorder, and do total justice to other types of research, without spreading ones self too thin (Rayl, per. comm.). A house divided against itself is not in the shadow of hozho. There is only so much that we as individuals with our allotted time and finances can do. Everything else is wasted if we have great ideas and never bring them to fruition. Others are out there that could do something but don't have the experience or exposure to know what to do. Share with them, encourage them and nurture them. One can co-author, guide,

council, or advise. Whether we do it or someone else does it, is not as important as whether or not it gets done.

I would rather get the information on a hundred different projects that I haven't got the time to work on my self, because I have fifty that I want to do, than waist my time on 150 and get nowhere. Sure some one will say that the other would not have done it as good as I would have. But, who's to say that they would not have done it better, or just plain as good, but differently than you would have. Who ever does it the first time, if they didn't do it as good as it could have been done, if they are not helped to do it again, be assured that some one will do it again. Whether you like it or not. Every one of us have gone through this with our learning experiences, and the great thing is that we never stop learning. If ten researchers worked on the same subject or topic, there would be ten different papers. Not one would exactly duplicate the work of the others. Why? Because each comes from a different back ground with different perspectives, and has different examples of similar figures that will give a great variety to their research. And that doesn't even consider different points of approaching the subject. Look at the Four Gospels. What is amusing is if you got another ten different researchers to each do another paper on the same subject, you would have a total of 20 different projects.

Sure there would be some duplication, but those areas would all be handled in a way that each would be slightly different and probably very informative. And each area that duplicates what you'd have done would probably only verify the validity of what you thought. That would be a better approximation of reality, of the truth of the thing, than if only one did it and no one else ever made their contributions. That's why I am looking forward to the work of Jim Duffield who is doing an independent study on the same masterminded project mentioned earlier. Is he wasting his time? In some ways maybe, but not really. It is beyond foolish, it is childish to think that I or anyone else can know or find out all there is to know about anyone subject, and nothing else needs to be said. And we should never think that we are the only one to have had that thought or even the first, we for sure will not be the last (c.f. Warner 1990, Norman 1991, Norman ND, Prescott 1992). An example of that just happened on one of our last field trips. Jim Olive discovered a site as having tremendous potential for some pretty impressive solar observations. It was discovered that night that John Rafter (19 ), had already published three different papers on observations of that site, supporting many of Jim Olives conclusions. But Jim still made at least one observation that John hadn't mentioned. That information will be given to John to pursue.

I have heard of criticism of my work because it was felt to contain too many errors. I was never told what those errors were, and it really doesn't make any difference. I will still stand by 90% of everything that I have ever written. A certain number of errors that I have found are problems with editors that have changed

meanings, and others are situations where individuals have misunderstood what I was saying. I guess the situation is this, if you wait for the perfect person to preach to you, you may never get preached to. Or if you wait for the perfect church to join, don't, cause as soon as you join then it won't be perfect any more. Even though that isn't true it illustrates my point.

Each of us have a good percentage of ideas on any one subject and we all have a few that are off the wall. Many believe that the areas of consistency between a collective view , have a greater chance of being the most accurate view. One against one is an equal balance, both in part are to a degree right and both are to a degree wrong. Better, is the idea that were one is better the other is not as good, and vise versa. With that view, an idea that what may not be as good, may become better with a little more research, better examples and polish. Six against one is a different story, but I have seen where the one eventually proved to be the right one.

Now for the problem of how to determine when someone is out of balance and when he is right (better) or wrong (not as good). This is the test -- the process that Harold Tuchins, the Navajo Hataalii (singer) at Coppermine, Arizona was First, before one wants to learn, or even can learn, he must first find out what he does not know. You can't draw water from an empty well, or information from an empty mind. And if you are given water you have to have something (a framework ) to put it in to, for it to function within. There is another side to that, and that is to find out what we do not understand about what we know, because there is a very important difference there. After doing that, we should center our focus on what exactly it is that we want to know. Another way he stated that was that if you can't put into words what you want to know, you are not ready to know it. In other words, if you don't know enough to ask the right questions you don't know enough to understand the answer. His analogy was that gaining knowledge was like climbing a mountain. You can't learn and understand the knowledge half way up or higher if you don't understand what is at the bottom. That's understandable. You will have a hard time learning to multiply or divide if you can't add or subtract.

Someone can't fully understand subliminal symbolism, if they don't fully understand the symbolism that is obvious. Before one can delve deeper into the obvious one must first read as much ethnographic and scientific information on the subject as possible. When one has a problem with their research, Harold, would have said that they jumped a ledge into an area "over their head" (his pun). Most all of us have done that once or twice, and will probably do it again.

One subject that has always caused problems is style identification. And the reason is that the ones who do it "badly" have not sufficiently familiarized themselves with all the different particulars of what can be legitimately used to help identify one style from another. They have difficulty answering the questions,

"what is it that makes style a style" -- "Why is it consistent? Or is it?" -- Or "is it consistent in a way that we just don't understand?" For additional insights into the problems of the analytical and statistical approach see pages 105,106 of Morris 1992, especially the second paragraph third sentence.

Few have actually spent any great effort in the field and done nothing but study techniques of production. That includes such things as dint characteristics, which includes size, impact type, depth, shape, relative placement, average width of line, depth of line, type of line. It includes such things as amount of exposure, solar bearing, types of weathering, types of mineral content, surface condition, surface tempering, or rind depth, element placement, and repagination. When are they the same techniques on one stone, different looking when placed on another type of stone? Ever consider that one? I bet there is only three people in URARA that could tell, if that many. When is techniques different in the same style, and the same between different styles, and why? What are the diagnostics or atypical types of techniques for the style in a certain area that do not occur in another area in the same "style?" And then repeat that with forms of elements, and types of elements (and other criteria) present (subject matter), and absent. Then you can go on to types of element placements, types of detail, relative sizes, and then produce a "style profile" and compare it with those in existence and determine why there is any differences. When you have exhausted that and considered every ramification of enough different sites and types of examples then there will be X amount of expertise. Until you have done that, you will never know whether a statement of another is good, or valid or not. And then you will be the **authority.** Then that is only one area of many different subjects that need to be studied to gain a minimum competence. There are many, many other areas that one can study next. And no one, I repeat, no one has gained that much expertise in all the necessary areas. There are emphatically no **EXPERTS** in "rock art," as a whole.

When you think that you have a sufficient amount of knowledge on a particular problem, like Miles Prescott did, He studied it out, did his literature search and sent out requests for assistance, guidance or suggestions (c.f. Vestiges, March 1992 nr3 page 4-5). He presented a paper on it not only to share those ideas that he was able to figure out, but to get back some pier review. Through that, he discovered that Garth Norman had also been working on that same project. Garth very unselfishly provided Miles with additional information, but will publish his own research later, which is more involved.

That is where great ideas become even greater. If there are any questions (and often there will never be any, because not very often anyone knows any more than you). And if you listen to them, you have just improved your outlook on the subject, whether you act on it or not. At least now you know the weak points that you couldn't see before. That was Harolds practice of giving you just a small piece of information, make you think about it and then having you answer your

own question, coming back with the answers so he could tell you if you were close or not.

On the next field trip look at who is asking the questions. What kind of questions are they asking? What kinds of answers are they getting? Did you learn anything from the process? Start asking your own questions. Duplicate the learning habits and attitudes of those that you feel know something. The group really doesn't learn more my seeing more, they learn more by really looking at less, but looking harder at what they look at. Take the time to really suck out everything that a panel or a figure has to offer. You should be able to get to the point that a panel will never teach you something new every time you go back and look at it. Learn to have a mini seminar at each site. When you have beaten one subject to death, go on to the next. If there is no one there to talk with, have the discussion with yourself.

Then you can handle the more complicated things like superimpositions, kill marks, shamanic symbolism, and then higher philosophical things like Nal Morris does with arch types, like the great mother, year end glyphs, and dots, and the types of things he did with Parawan Gap, and the same situation in 9 Mile etc. Pick a bunch of motifs that fascinate you. Get as many examples as you can. Study out all the similarities. At what point is it where another similar glyph doesn't teach you anything else, and then you will understand what Tuchins said next. It will be the differences that teach you the most. Like Asa Nielson stated. What will another pot, hand full of arrow heads, or pit house teach us about who the Fragment were that we don't already know. Or at what point will just another sunrise or sunset teach us that we don't already know, or even just another shaft of light out of a mouth, hand or groin. After you have gone through all the similarities, tackle all the differences and try to categorize them a half a dozen different ways. That is one area where seeing more panels will teach you something more than really looking at what you see. Every once in a while if you pay attention, you will see another motif in a context that will open up your eyes to a new concept.

Until you have done that, you will not be able to tell whether what some one says is "Right" or "Not as good." That is the rational, intelligent approach. There is also the emotional, spiritual approach that really can't be dealt with here. The bottom line is that you can't draw water from an empty bucket, get heat from an empty fire place, or get water from a pump without first priming it, and pumping it. And it's you that has to pump the handle. To know something is "Better," or "Wrong," is not a judgement of the depth of the authors logic or the height of his conviction, it's a comparison with the information that you know, whether you understand it or not. It is a comparison with the information that you have stored in your mental computer with the all of your past input. Part of that boils down to body knowing (Pierce 1974). But one major problem is what if what you know is "Not as good" or just plain "Wrong?"

If "Rock Art" research is like the growth and evolution of Geology, then a certain degree of the old information will probably be out dated, "Not as good," (For some reason, I have come to the conclusion that we will have to retract much less of our statements, if we are very careful, than those made in the traditional field of archaeology). Hopefully, the situation will be that we will just be able to add to what we have already discovered, rather than relearn something because it has been found to be totally wrong. It will be the case that we will better understand what we already know more and more as we go along. My old Geology professor said burn the text books, and get yourself a good set of hiking boots, and get out into the field. If you do, one day, you'll be writing texts that will out date these. Remember what Nibley said about anything over 5 years old. Hopefully, if we have done our homework, and did it in an appropriate manner, what we did will stand for a long time, and we can just go on to add more and different perspectives to it which in essence does not change it. That will just broaden our understanding of it. I have seen that in the work of many of my hero's in the field.

Now to finish answering the question, why a consideration of this subject. Because I see too many, that are too lazy, that simply take the word of another as fact. What we are really doing is playing a game of cards with our research. When it comes time to show our hand, we bet or we fold based on the confidence of what we have at the time. If we bet on our hand, we can only make that bet based on what we know. We don't know what else is out there or who has seen more exceptions to the rules (that don't really exist in "rock art"). One thing that we shouldn't do is trust the research of others. Several recent papers have pointed that out (Strange 1992, Warner, Warner 1985, 1992). Too many, see too little at a site, when they think that they've seen it all. Others sit there, and suck the marrow out of every little scratch in one trip. It takes others 10 or 20 trips to see and suck out as much. But that's alright, IF they finally learn how to see it. When you trust the research of others, that is what produces statements like -- "The Barrier Canyon style is one of paintings exclusively," (Wellmann 1979:107). "Geographically, the second major rock art style of eastern Utah (the Barrier Canyon style), is entirely confined to the Southern San Rafael zone," (ibid :107). "The largest number of panels (of the Barrier Canyon style), had been recorded in Barrier Canyon," (ibid:107).

Another such statement, is that the Fremont figurine forms that occur on the rocks, were a specific Fremont "style," meaning that those who made those figures never made any other types of human figures. The reality of the situation is probably the fact that on one panel, one individual could have made several different types of body forms at one sequence of time. Why? Because each different body form has something different to say. Stick figures, more naturalistic body forms, the traditional trapezoidal Fremont body shape and the Fremont figurine form can all occur side by side, with the exact same techniques, repatination, complementary contexts, etc. etc. and were

not all different styles of "rock art." How many of you would bet on that? If you don't, be careful.

There is not limit to the amount of work to be done. One thing that I hear some of the new people that come into both ARARA and URARA say, is that they were too late, all the good things have been done. Baloney! That is like the US patent office figuring that they should shut down at one point in time because all of the inventions that could be, had been made. There are more in one day right now than there were in some whole years before. There is plenty to do and several great things have your names on them.

## REFERENCES


Baun, Paul G.
1992 Alice in Wonderland, or Through the Looking Glass. American Indian Rock Art. Vol. 17, El Torro CA.

Morris, Nowell
1992 The Philosophy Of Ernst Cassirer As Applied TO Rock Art At Parowan Gap, Utah. Utah Rock Art. Vol. 10. Utah Rock Art Research Association. S.L.C. Utah.

Norman, Garth
1991 A paper presented at the 11th URARA Symposium Green River , Utah.

Schaafsma, Poly
1971 The Rock Art Of Utah. Papers of the Peabody Museum of Archaeology and Ethnology, Harvard University, Cambridge, Mass. Vol. 65.

Strange, Bill
1992 A A Budget Of Ignorance, Yours And Mine, Professionals And Amateurs In Rock Art. Utah Rock Art. Vol. XI. Utah Rock Art Research Association. S.L.C. Utah.

1992 B Myth, Metaphor And The Privileged Interpreter: Fred Pine And Agawa Bay. A paper presented at the 1992 Australian Rock Art Research Associations Conference on Rock Art. To be published by The San Diego Museum of Man.

Warner, Jesse Earl

ND The Rock Art And Symbolism of Clear Creek Canyon On file with Author

1982 Problems With Current Element Lists. American Indian Rock Art. Vol. 7. American Rock Art Research Association.

1984 A An Analysis Of Head Form And Head Gear Of The Inverted Bucket Head Head Hunters. Utah Rock Art. Vol. 3. Utah Rock Art Research Association. S.L.C. Utah.

1984 B The Eared Variant Of The Inverted Bucket Head And Their Association With Bear-Like Elements. Utah Rock Art. Vol. 3. Utah Rock Art Research Association. S.L.C. Utah.

1990 The Hillman Drive Site. Vestiges. June, No. 6: 1

1991 The Bisected Circle: Forms And Contexts That Express An Affiliation To Concepts Involving Double Entities. Utah Rock Art. Vol. 8. Utah Rock Art Research Association. S.L.C. Utah.

1992 Solar Observations At A Well Known Site In The Book Cliffs. Utah Rock Art. Vol. XI. Utah Rock Art Research Association. S.L.C. Utah.

Warner, Judith S. and Jesse Earl Warner

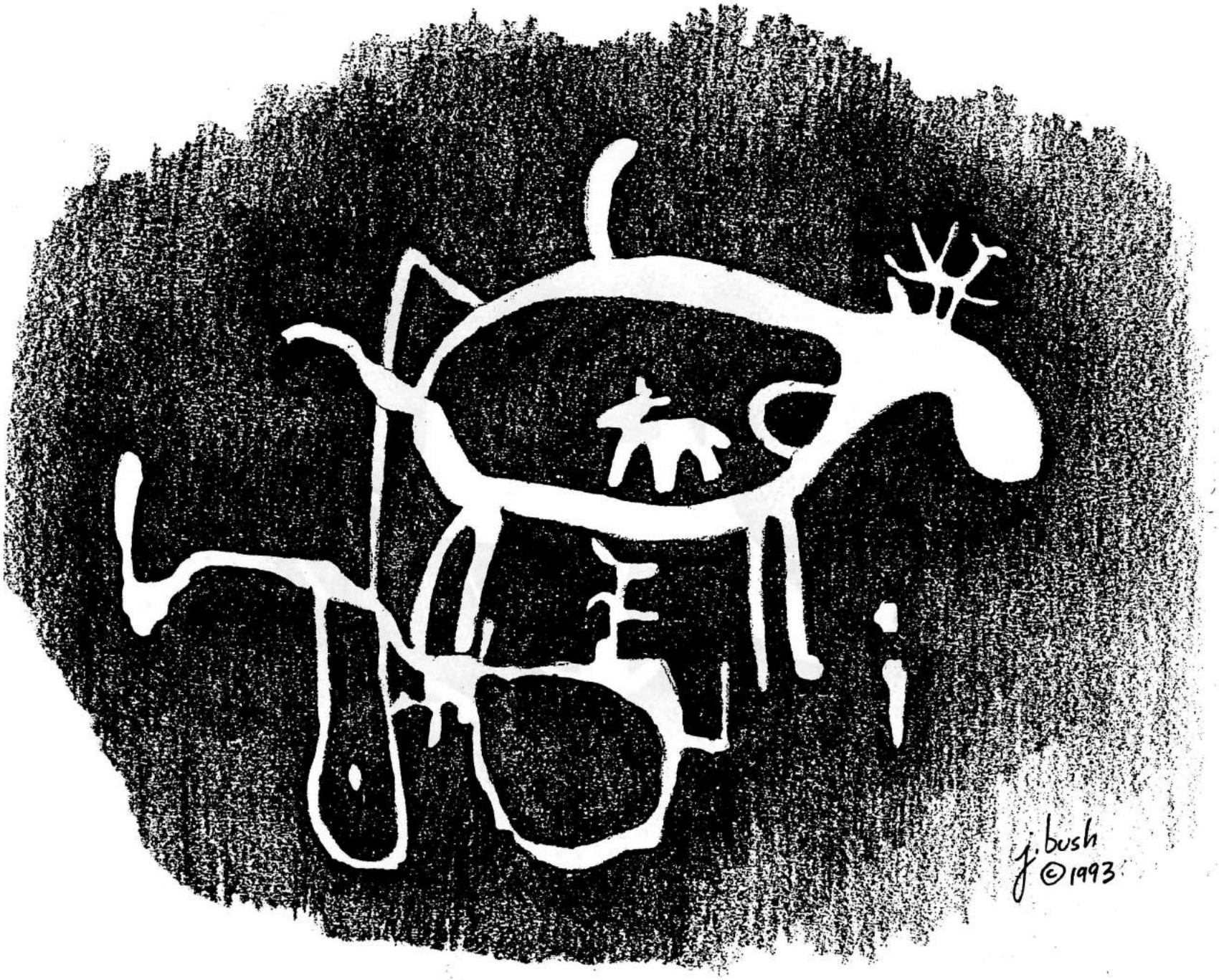
1985 To Slay A Dragon. A paper presented at the 1985 ARARA Symposium. Yet to be published in that years proceedings.

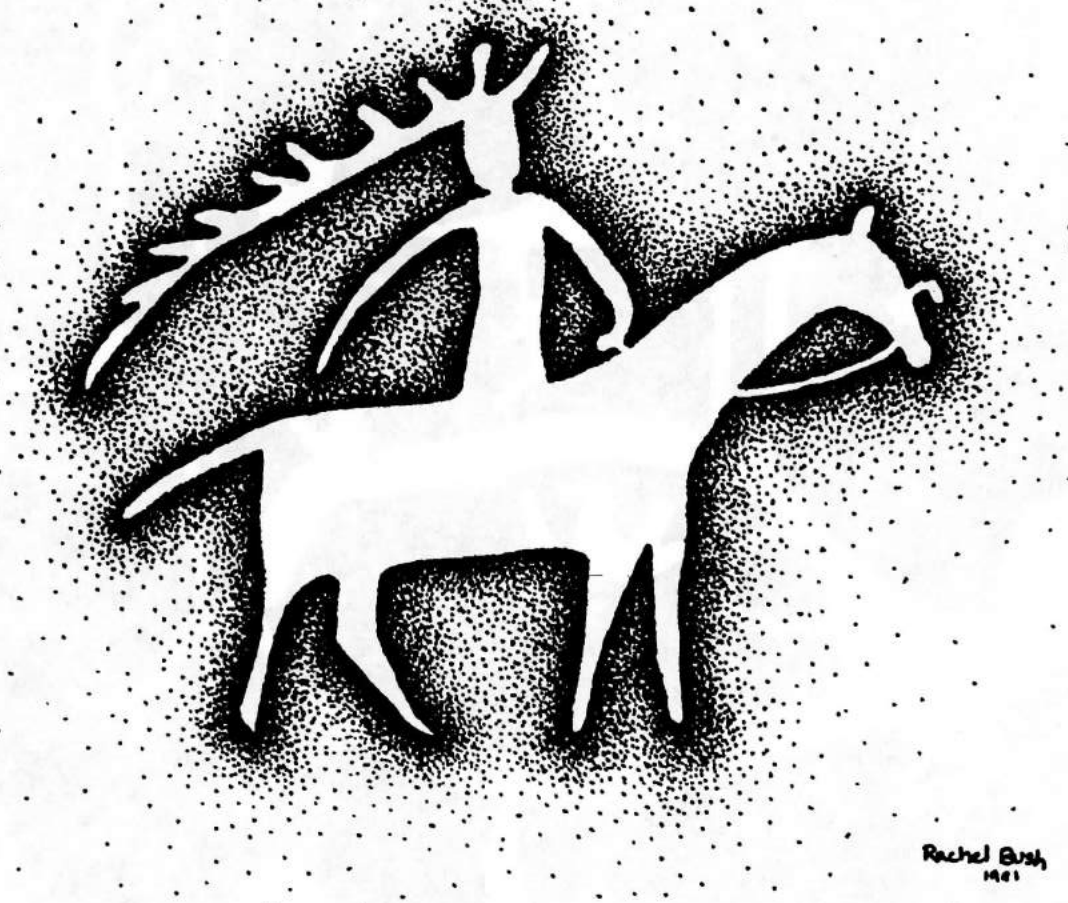
Warner, Jesse Earl and Judith S. Warner

1992 Fish Creek Cove, Utah. A paper originally presented at the 1998, 15th Annual ARARA Symposium. To be printed in Vol. 2 of URARAs Interim Publication series.

Wellmann, Klaus

1979 A Survey Of North American Rock Art. Akademische Druck uns Verlagsanstalt, Graz, Austria.


j. bush
©1993


Rachel Bush
1981