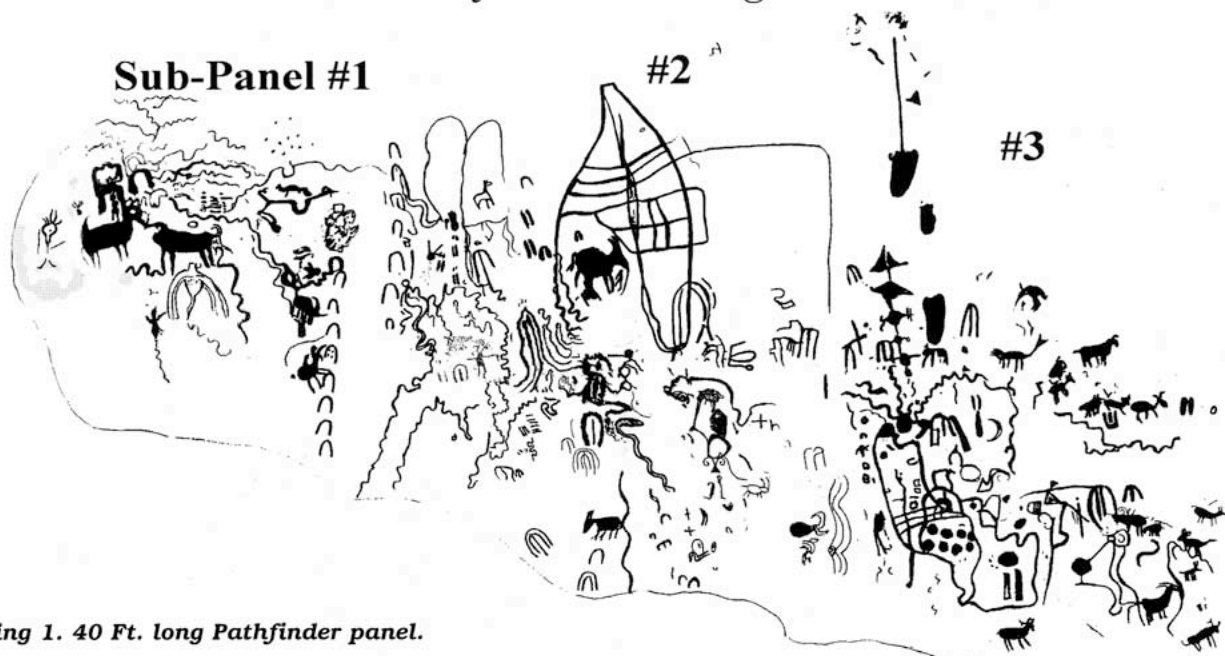


Part II: Pathfinder Petroglyphs and Possible Associations with Native American Mythology

by Carl Lehrburger



Drawing 1. 40 Ft. long Pathfinder panel.

The Pathfinder is a unique ancient petroglyph site where calendrical alignments, calibrated to the spring and fall equinoxes, animate suggestive compositions with light and shadow interplay. In Part I the author introduced the Pathfinder discovery and the workings of the equinox solar alignments. In this Part II conclusion, possible connections to early Native American mythology are highlighted.

Introduction

Petroglyphs at a rock art site in southeastern Colorado have distinct calendrical alignments involving the interplay of light and shadow on target petroglyphs on the equinoxes. Several petroglyph compositions and archaeoastronomical animations are suggestive of common early Native American origin myths. Should connections to Native American mythology be confirmed, the Pathfinder may be one of the earliest and perhaps the most sophisticated representation of pre-Native American ethnography known.

The discovery of Pathfinder by William Tilley of Colorado City, Colorado was first reported by McGlone, Leonard, and Barker. The site is located on private property, in southeastern Colorado in the Purgatory River Canyon. The petroglyph panel is a flat 40 ft. x 12 ft. vertical sandstone rock with a generally southeastern face covered with petroglyphs of a Pecked Representational style. An adjoining

boulder creates a tent-like setting enclosing about half of the rock art in a cave-like structure. In the absence of Pathfinder site-specific tests, the author estimates the age of the petroglyphs to be approximately 2,000 years old based on two methods, (1) comparative age by patina of known glyphs and (2) cation-ratio dating of a nearby site, (1800 - 2500 years ago +/- 250).

The Pathfinder petroglyphs share similarities with the so-called Hoofprint Tradition, considered to have occurred primarily in the Late Prehistoric age, although Hoofprint Tradition sites date to the early Historic period after AD 500. Pathfinder petroglyphs communicate fertility and game animal themes consistent with Hoofprint Tradition rock art sites. Hoof print-style glyphs represent up to 25% of Pathfinder recognizable glyphs appearing in various forms forty times. Following hoof print-shaped glyphs in frequency are zoomorphic images, which account for about 16% of the recognizable glyphs.

The panel cannot be viewed at once due to its size and the constraints of the site, which include the constricted and confined viewing in the cave-like structure. By assembling individual photographs of the petroglyphs, a full composite drawing was achieved. The Pathfinder panel can be divided into three sub-panels (Drawing 1). Sub-panel #1 is most inaccessible, beginning at the back of the enclosure. Sub-panel #2 is positioned in the middle; the two solar align-

ments occur here. The outward section, sub-panel #3, is dominated by a large dog-like petroglyph that is immediately apparent upon approaching the site.

Fertility Themes in Sub-Panel #1

Petroglyphs within sub-panel #1 of the panel include anthropomorphs, animals and other images suggestive of hunting and fertility themes. The upper-half of the sub-panel is the most damaged section of Pathfinder, making interpretations the most difficult and speculative. (Photo 1)

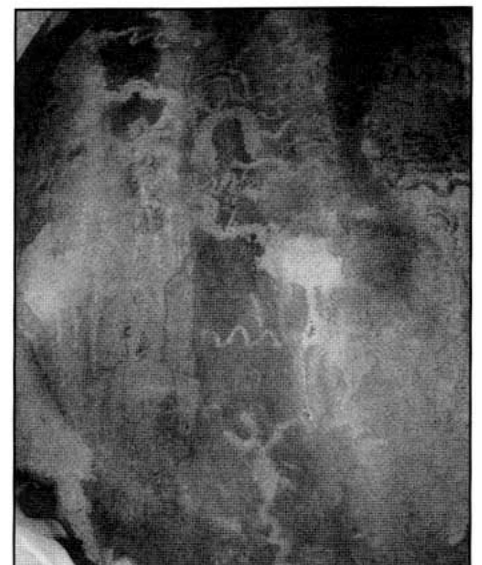


Photo 1: Overexposed photo of sub-panel #1, showing water damage.

Although the lower half of sub-panel #1 is not damaged, the small and delicate glyphs are also difficult to observe and distinguish without enhanced lighting. The author's drawings were created using multiple photos of glyphs taken under varying light conditions, as well as computer enhancement tools. (Drawing #2)



Drawing 2. Petroglyphs within sub-panel #1 suggestive of hunting and fertility themes.

The first glyph that appears at the back of the Pathfinder is a worn anthropomorph with five horns, who holds a staff or spear in one hand (the "Hunter" glyph). The Hunter is pointing to a deer being led by a bison. The feet of the bison rest on a finely pecked glyph referred to as the "Tree of Life" glyph, which depicts a tree enclosed in a double half-circle. Below and to the left of the Hunter is a second anthropomorph appearing to reach that appears to be a snake or perhaps a river.

Unfortunately the upper petroglyphs are heavily damaged by water seepage. Two glyphs in particular are quite faded -- a deer (between the bison and Hunter) and the images above. Relying on several over-exposed photos as well as digital enhancements, the author speculates that the images above the deer are a large anthropomorph giving birth. The newborn is identifiable below and between the legs of the large anthropomorph and above the deer.

To the right of the large anthropomorph are two large hoof print glyphs. A series of nine smaller hoof print glyphs are pecked in a vertical column with adjacent zoomorphic images, including a mountain goat.

Taken as a whole, the compositional arrangement of sub-panel #1 imparts birth, fertility and game animal themes. The author's interpretation of the Tree of Life glyph being touched by an anthropomorph is supported by the fine

pecking of the lines representing branches inside two hemi-circles. (See Drawings 2 and Photo 2).



Photo 2. Tree of Life glyph detail.

The base of the tree extends downward and forms a wavy line, appearing to be a river that leads around and above to the bison.

Reading the glyphs literally; the Hunter points to the deer and bison that supply sustenance. The abundance of game animals rests on the world supported by Tree of Life, from which water flows. The complement to the Hunter is the Earth Mother, who reaches out to touch the Tree of Life as her realm. Below, a serpent rises from below to her feet. Above, a great birth occurs, accompanied by two large hoof print glyphs.

These fertility symbols appear to be consistent with Hoofprint tradition rock art sites. As noted by Keyser and Klassen (2001), in "Plains Indian Rock Art",

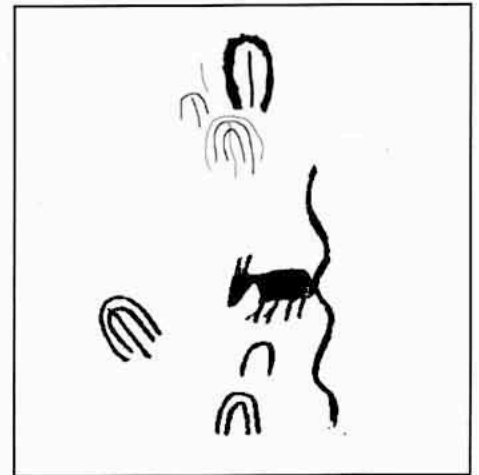
"Considerable rock art evidence shows that this relationship between fertility, femaleness, and bison occurs throughout the Hoofprint tradition...."

The two large hoof print glyphs in sub-panel #1 demonstrate both the variations and consistent elements of the hoof print motif, which account for nearly 25% of recognizable glyphs.

The hoof print glyph is integral to understanding the Pathfinder. Keyser and Klassen (2001) emphasize the relationship between hoof prints and human genitalia above and in the following quote:

"The two functional explanations for Hoofprint tradition rock art -- symbols of fertility and hunting magic -- are actually quite complementary. Clearly, female fertility and game animals (especially bison) are linked at many sites, often by symbolic association between hoof prints and representations of human genitalia. (Page 188)

Given the diverse forms in which the hoof print motif appears at Pathfinder it is probably a mistake to suggest a universal meaning. Speculating on its use at Pathfinder, the hoof print glyph could relate to the female womb. The shape itself suggests this. A series of nine vertical hoof prints in sub-panel #1 may provide additional corroboration. A single hoof print represents one womb period or a lunar month. A row of nine hoof prints represents nine months or the human gestation period, consistent with the birth theme of sub-panel #1. Although no precedent is known in North America for correlating the hoof-print as a lunar count, similarly shaped hoof print petroglyphs engraved on stones at megalithic Knowth (Ireland) have been shown to represent a lunar month.



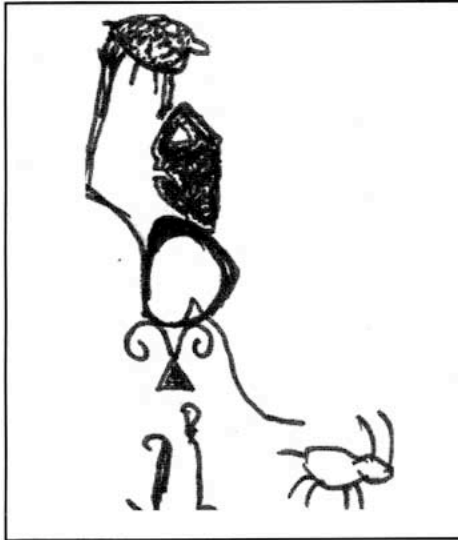
Drawing 3. Split-hoof print glyphs.

An important variation of the hoof print glyph at the Pathfinder site is a vertical line in the center. These "split-hoof print" glyphs (Drawing 3) appear thirteen times. One of the largest split-hoof print images is positioned below the target anthropomorph for the noontime sundagger in sub-panel #2. This important placement could denote an epigraphic meaning: womb penetrated.

Equinox Light Animations -- Sub-panel #2

Sub-panel #2 is the middle section of the Pathfinder and the placement for the two archaeoastronomical alignments. Sub-panel #2 is dominated by the largest petroglyph at Pathfinder (33 inches high x 22 inches at the widest point) coined a "leaf-shaped" petroglyph by

McGlone, Leonard and Baker (1999). The author chooses to refer to this target glyph as a vulva-form, which is the target for the sunrise equinox alignment. Below the large vulva-form there are two distinctive anthropomorphs as seen in Drawing 4 and Drawing 5. Drawing 7 show the major glyphs in sub-panel #2.



Drawing 4. Unidentified anthropomorph below large vulva-form.

While perhaps controversial, the identification of this glyph as a vulva-form is consistent with hoof print tradition. As noted by Frazer 1993.

Despite the universality of this symbol, rock art vulvas have not always been recognized as such. However, illustrations from several sites leave no doubt about what these symbols actually represent. Vulva symbols can occur in various forms while still referring to the same general concepts. Page 49.

The first archaeoastronomical alignment occurs as the early morning sunrays strike the panel on the equinox. The equinox archaeoastronomical alignment on the vulva-form petroglyph provides clues to its meaning. On equinox, the early morning light strikes the edge of the large vulva-form target glyph and the shadow line follows and fits rather precisely into it, with the notable exception of the top and bottom sections. The irregularity of the fit of the shadow line and glyph outline at the top is puzzling. McGlone, Leonard, Barker (1999) offer several explanations for why on equinox, sunlight penetrates the petroglyph at the top while remaining outside the vulva-form (Drawing 8). The idea that spalling or erosion would affect the shadow is plausible. In the authors view, it is more likely that the creators intended the light to enter the petroglyph at the vulva-form top to create the effect of the sun begin-



Drawing 6. Sundagger Striking Changing Woman, noontime on equinox.

ning to penetrate it on equinox morning. The second area where the sun's shadow does not fit the outline of the vulva-form is at the bottom of the glyph. Here the shadow line follows what might be described as a large version of a split-hoof print glyph (described above). Although



Drawing 5: Sundagger approaching Suncatcher glyph, noontime on equinox

the shadow leaves the outline of the large vulva-form, intentionality continues as the shadow fits into the split-hoof print glyph and continues down the panel following what appears to be the outline of a bison.

The second archaeoastronomical alignment occurs at noontime on the equinox. At about 12:30 pm a small sundagger moves across the panel from the rear and disappears after about ten minutes. This is followed by a much larg-

er sundagger that enters from the back and moves downward across the panel toward the outside. On the equinox, the sundagger strikes three apparent target glyphs over the 45-minute descent across the panel around noon. The first target glyph (referred to as the "Suncatcher") is an elaborate series of lines in the shape of a phallus. This glyph comes to a point, where the tip of the sundagger strikes it on equinox. This first "target" can be seen in Drawing 5 as the sundagger approaches the point of the Suncatcher glyph on the spring equinox.

The second glyph, an anthropomorph, is below the Suncatcher and connected to it at the head. Although the elements of the anthropomorph are difficult to discern, the use of digital photographs and computer enhancements reveals a spread-legged figure with a protrusion inside the body cavity. The left foot rests near the head of the snake. On equinox, the sundagger proceeds from the Suncatcher glyph and strikes the anthropomorph in the area of the genitals.

As the sundagger light engulfs the anthropomorph, the light point proceeds to strike a serpent glyph below the anthropomorph's left foot. The serpent's body appears to be the third target in the series. (Drawing 7)

Based on two observations within 12 hours of true equinox, the sundagger strikes the tip of the Suncatcher, proceeds to strike the anthropomorph, and then moves to envelop the main body of the snake over a period of 27 minutes. Drawing 8 highlights both the morning and noontime equinox alignments.

The petroglyph imagery in sub-panel #2 is suggestive of the sun penetrating the large vulva-form in the morn-



Drawing 7. Major details of sub-panel #2.



Drawing 8. Sub-panel 2 equinox alignments.

ing and a large sundagger striking the spread-legged anthropomorph at noon-time (see Drawing 6). The earlier morning alignment depicts the sun striking and penetrating the vulva-form, while the noontime sundagger portrays the sun penetrating and entering the anthropomorph in an act of primal copulation and conception. The placement of the split-hoof print glyph below the anthropomorph being struck by the sun offers some credibility to the notion that the

split hoof print petroglyph represents copulation.

Possible connection to Native American Myths

This interpretation may relate to at least one story in Native American Indian mythology. According to the "Dictionary of Native American Mythology" (Gill, 1994) there is a Yavapai story where Widapokwi was penetrated by the sun and conceived twins. A common and rather widespread story has Sun impregnating a woman (Widapokwi) who gives birth to warrior twins "....At sunrise, water from a spring had dripped into her vagina just as the sun ray's touched her.

Other sources report that Widapokwi is called Changing Woman or Mother of Mankind:

She became pregnant when touched by the rays of the sun and drops of water, and gave birth to twin boys... The two Pathfinder alignments appear to be consistent with elements of this story. The petroglyph imagery is suggestive of the sun penetrating the large vulva-form in the morning and striking the spread-legged anthropomorph at noontime (see Drawing 6 and 7). This interaction of sun and petroglyphs on equinox appears to represent the act of primal conception. The fertility themes at Pathfinder, along with their connection to creation mythology, are consistent with the notion that rock art is sacred. As noted by Sliffer (2001) in "The Serpent and the Sacred Fire: Fertility Images in Southwest Rock Art":

Because much rock art is thought to be sacred and connected to religious beliefs of the cultures that made it, notions such as fertility, abundance, and creation are imbued with spiritual potency and universal significance. ...Mother was fertilized by the sun or Father Sky and gave birth to all creatures in the world. (Page 9)

The idea that union of Father Sun and Mother Earth produces the human race is basic to many ancient cosmologies. Martin Brennan describes the union between the masculine sun and female earth at Newgrange, one of the oldest megalithic chambers in Europe as "universally intelligible language." Although the penetration of the chamber by a beam of light occurs on winter solstice (Pathfinder animation occurs on the equinoxes), Brennan's basic idea holds that the interpenetration of two opposing forces – spirit and matter – is fundamental to the structure of the universe of the ancients.

The moment of creation, the sexual union of male and female, heaven and

earth, spirit and matter is depicted on one stroke of the day. This union symbolizes cosmic totality – the harmonizing of opposing forces – in a concrete way. It is a celebration of the marriage of spirit and matter and of the birth of the universe through the fertilization of the cosmic egg.

The story of the sun impregnating a female is known to many cultures, including early Greek mythology (Zeus). The story can also be found in Hindu traditions: an impregnation ritual is still practiced in Hindu marriages, where on the previous day the bride was made to look towards the sun to be exposed to the rays. In North America, the creation myth of the sun impregnating the first mother is common to many Native American Indian tribes of the Southwest U.S., including Pueblo, Apache and Navajo. The specificity of the story in which the sun penetrates Changing Woman (Widapokwi) is evident at Pathfinder. The progression of the sundagger striking the Suncatcher, the spread-legged anthropomorph, and the serpent on the equinox, could be an early version of this myth.

The serpent's appearance in the Pathfinder equinox light animation is not without precedent and can be observed at three other major equinox calendrical sites. Fajada Butte (Chaco Canyon, New Mexico) is perhaps the most well known archaeoastronomy site in North America. Here an Anasazi-built calendrical apparatus constructed circa 1100 A.D. employs a sundagger for multi-purpose readings including equinox, solstice and lunar observations. A serpent is one of the three glyphs pecked at Fajada Butte. A second example is the famous monumental serpent at Chich'en Itza (Mexico). Each year, tens of thousands of visitors observe the equinox and watch the light and shadow cast on the back of a stone serpent give the appearance that the snake is descending down the pyramid. A third equinox light animation involving a snake can be observed at the lesser-known Inyo site (southern California) where a sundagger with the appearance of a forked mouth consumes pecked circles in a basin. Roderick Schmidt has interpreted the pecked circles to be an egg consumed by the sundagger serpent on equinox. The occurrence at Pathfinder of a serpent engulfed by a sun dagger on equinox reinforces the ancient worldwide association of snakes and equinox mythology and cosmology.

A Second Story

There appears to be another possible connection between Pathfinder petroglyphs and Native American stories. Also according to Gill, all the people live in the

underworld. A tree grows to pierce the sky of the underworld. And the people emerge into this world."

The so-called Tree of Life glyph resembles elements of this story. Inside the earth a tree grows, penetrating the earth's surface (Photo 2). Notice how the inner circle of the glyph is penetrated by the tree and is broken. Also notice the notch at the top of the outer circle: it could be a doorway to the world above. The finely pecked branches are illustrative of a tree, whose roots become a wavy line or river that leads to the mouth of the buffalo whose feet rest on the outer circle.



Photo 2. Tree of Life glyph detail.

The canyons of the Purgatory River served as habitation sites for peoples over thousands of years. During winter months the canyons provided shelter and game. With the coming of spring, some of these peoples migrated, following the buffalo. It is reasonable to assume that these same peoples took with them the stories they learned from engraved stones, like those found at Pathfinder. The transmission of stories like that of Changing Woman may be traced back to protective canyons along the Purgatory and other rivers in the region.

The appearance of vulva-forms at Pathfinder and other sites throughout the American Southwest and Central Plains may be yet another connection between the Pathfinder and later peoples. As noted by Keyser (2001), "vulva forms are clearly associated with hoofprints as in many as twenty sites across the Northwestern Plains."

Conclusion to Part II

The archaeoastronomical calibration of a known mythology with ethnographical evidence can be observed at the Anubis Cave (Oklahoma) another site relatively close to Pathfinder.) As reported by Barry Fell and documented by McGlone, Leonard et. al (1993), Mithraic mythological images from the early first millennium are recognizable at the Anubis Cave. These images are accompanied by legible Ogam inscriptions that have been translated into Gaelic and other old world scripts. At equinox sunset, a light animation can be observed in which the shadow created by the setting sun on the petroglyph panel engulfs Mithras (the sun god) as Anubis (the Egyptian god of the night) is illuminated by the setting rays of the sun.

A possible explanation of the origins of the Pathfinder equinox light animation emerges from the proximity to the Anubis Cave site, less than 100 miles from away in another river drainage region. We can speculate that the creators of Pathfinder observed the light animation at the Anubis Cave, and upon their return to the Purgatory Valley, applied the techniques to their own mythologies and world view.

The Pathfinder may be another example of North American light animations connected to ancient myths. The interaction of light and shadow on target petroglyphs tell a story using light animation on the stationary individual pecked images. Thus, the ancient story, imbedded in rock art, unfolds with the movement of the sun. An unnarrated video of the Pathfinder equinox alignments filmed and edited by Scott Monahan can be viewed via the internet.

Only a handful of ancient sites employ comparable intentional interplay of light and petroglyphs. Additional investigations of the Pathfinder may lead to new insights into early Native American cultures of the Great Plains and the southwest United States and possible connections with old world travelers in ancient America. ■

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- Scott Monahan, creator or www.archaeoastronomy.com, includes valuable information on his site including the availability of videos of many alignments. Visit <http://www.archaeoastronomy.com/>. The video of the Pathfinder equinox alignments can be viewed at: <http://homepage.mac.com/transvision/iMovieTheater8.html>
- Other examples of archaeoastronomical light animations on petroglyphs: New Grange (Ireland), Fajada Butte (Chaco Canyon, New Mexico), the Anubis Cave site (Oklahoma) and the Inyo site (California). At Chich'en Itza (Mexico) equinox light interplay involves monumental architecture.