Abstract - Ute rock art maps
Current investigations are underway of possible correlations between Ute Indian petroglyph panels and prehistoric trail networks thought to exist throughout the Uncompahgre Plateau in western Colorado, USA. Ute Indian tribal members believe that certain “abstract” style petroglyphs represent “maps” of their ancestral trail systems and hunting strategies. The criteria of what constitutes a “map” are defined by Ute Elder Clifford Duncan: A composition made up of straight or wavy lines that may link or are accompanied by circles; A line with animals, animal tracks or humans walking on it, constitutes a “trail”. Circles connected by lines are diagrams for hunting strategies. The circle on one end represents the catchment area where game animals congregate. The line represents a ridgeline or trail animals use to move to higher elevations, represented by another circle. Preliminary analysis of several such rock art panels in the project area show possible cognitive correlations between certain petroglyph figures and existing geographic features on the surrounding landscape. This paper illustrates only 3 or 5 so called “map” sites under investigation.

Riassunto - Le mappe nell’arte rupestre degli Ute
 Attualmente sono in corso delle ricerche sulle eventuali correlazioni fra i pannelli incisi dagli indiani Ute e i tracciati dei sentieri preistorici dell’altopiano di Uncompahgre, nel Colorado occidentale (Stati Uniti). Le tribù indiane Ute pensano che alcuni petroglifi in stile astratto rappresentino delle mappe della rete dei sentieri dei loro antenati e le loro strategie di caccia. I criteri di ciò che costituisce una “mappa” sono definiti da Clifford Duncan, un anziano Ute: una composizione di linee diritte o ondate che collegano o sono accompagnate da cerchi; una linea con animali, impronte di animali o esseri umani che camminano può essere interpretato come “sentiero”; i cerchi collegati da linee sono leggibili come diagrammi di strategie di caccia.
 L’analisi preliminare di alcuni pannelli con arte rupestre della zona mostra le possibili relazioni tra i soggetti dei petroglifi e alcune caratteristiche geografiche esistenti sul paesaggio circostante.

Résumé - Les cartes dans l’art rupestre des Utes
 Actuellement, des recherches sont en cours au sujet d’éventuelles corrélation entre les panneaux de pétroglyphes des Indiens Utes et les réseaux de sentiers préhistoriques qui existent partout dans le plateau Uncompahgre, dans l'Ouest du Colorado, aux États-Unis. Les membres des tribus indiennes Utes pensent que certains pétroglyphes de « style abstrait » représentent des « cartes » du réseau de sentiers de leurs ancêtres et de leurs stratégies de chasse. Selon Clifford Duncan, le doyen des Utes, peut être considérée comme une carte « une composition de lignes droites ou ondulées qui peuvent être reliées ou qui sont accompagnées de cercles ». Une ligne avec des animaux, des traces d’animaux ou des humains qui marchent dessus constitue un « sentier ». Des cercles reliés par des lignes peuvent être les schémas de stratégies de chasse. Précédemment, les analyses de quelques panneaux d’art rupestre de ce genre présents dans la région ont montré des corrélations entre les pétroglyphes et les caractéristiques géographiques des environs.

INTRODUCTION

The Uncompahgre Plateau, of western Colorado is rich in game animals and plant resources. Aboriginal occupation of the region is defined in four eras. The first are the Paleoindian occupation from about 11,500 to 6400 B.C. that is represented by a highly mobile lifeway of hunting and gathering big-game animals. Clovis, Goshen and Folsom projectile points and atlatls were diagnostic tool assemblages.
The Paleoindian era was followed by the archaic era of about 6400 to 400 B.C. with a lesser amount of mobility and extensive familiarity and exploitation of the local resources. Following 400 B.C. people began raising corn in portions of Western Colorado and eastern Utah. Cultural traditions such as the Fremont to the north and Anasazi to the south of the study area are found represented. Sites with horticulture and substantial masonry structures, traded pottery are present but outnumbered by contemporaneous sites of highly mobile, hunting and gathering lifeways.

Around A.D 1100 evidence of the Numic traditions (Ute, Paiute and Shoshone) appear as manufacturers of Shoshonean projectiles and relying on bows and arrows for hunting. By A.D. 1300 the horticultural lifeways were abandoned by the Anasazi (Ancestral Pueblo) of this area. The ancestral Ute were fully established by the time of first Spanish contact in 1761 with Juan de Rivera and the Escalante and Dominguez expedition in 1775, 1776. During the 1800’s trappers and traders established trade routes and mapped the area. With the influx of miners and settlers during the 1860s-1880s tensions grew over land disputes. The Euro-Americans pressured the government with “the Utes must go!” resulting in a forced march of the Ute bands out of Colorado to a reservation in Utah in 1887 (Figure 1).

**Ute Rock Art Maps. (The Numic Tradition – Protohistoric-Historic, 1300-1900 AD)**

The Numic traditions are characteristic of a hunter/gatherer life style that relies heavily on knowledge of game trails, hunting strategies, procurement of wild foods and knowing the location of good water sources. Many petroglyph panels are found to depict maps of the trails that navigate the local and difficult terrains. They may describe game drive strategies, locations of springs and water sources, and resource procurement locals. Examples of petroglyph maps can be found at Shavano Valley Petroglyph site and Map Rock in the Smith Fork of the Gunnison.

The petroglyph found at Shavano Valley petroglyph site, (Figure 2) has been suggested by Clifford Duncan Ute Indian Tribal Elder, that it represents a map of the Uncompahgre Plateau area to the south. He said the Utes are oriented to the south, in contrast with Europeans who orient their maps to the north. The south is where the sun comes from and sun-wise direction from east to west (clockwise) is the preferred direction of travel (Clifford Duncan 2005). When this petroglyph is rotated to orient to the south and placed superimposed over a topographic map of the immediate local, it has a striking correlation to the geographic features. The green areas are basins that game animals migrate to in the winter and are managed today as game reserves. They are located along Roubidoux Canyon and river drainage. The Plateau has a natural ridge running north and south with river drainages running east and west off the ridge line. The “Ridge road” follows older established trails along this line that resembles an upside-down tree. To the far eastern side is the Uncompahgre River.

Figure 2 c, d, is the direct overlay of the petroglyph map over the physical land features. The petroglyph has corresponding circled areas for the highest elevations where game animals naturally congregate when under pressure from hunters. On the west side is Oak Hill, represented by the rock incorporation of an encircled knob on the rock face. Another circle indicates a large high meadow plateau that today is owned by a private hunting ranch because deer and elk congregate here during hunting season. Both areas have a high density of cultural artifacts from prehistoric hunters (Figure 2 c-d).

A second example is a petroglyph known as “Map Rock” found in the Smith Fork of the Gunnison Gorge area. This petroglyph panel was noted by early settlers in the area as a Ute Indian map, and named as such. This panel was photographed in its natural orientation of North/south placement. Notice that the strong engraving from the top to the bottom crosses all of the natural bedding plane cracks. It deliberately avoids using any natural features of the rock face, but instead cuts perpendicular across them. When the drawing is rotated and placed upon a topographic map of the adjacent area there is a strong correspondence with the existing Ute trail systems and the deep canyon of the Gunnison Gorge. The highest elevations are encircled at the top. Most interesting is that two very elaborate petroglyph sites occur within the circled areas, and nowhere else in the canyon or within 20 miles of this area. The “stem” runs down Lawhead Gulch. During a field recording of the petroglyphs at this site (5DT833) called the Gunnison Gorge rock art shelter a herd of deer appeared above the up on this lookout point. It was captured on video and used to demonstrate the use of game trails that still exist from this high lookout point, and travel down Lawhead Gulch, passing in front of the rock art shelter going down to the river (Figure 3).
The lines of the petroglyph map overlay the existing **Ute Trail** that leads from the eastern valley up the ridge into the Gunnison Gorge and crosses the river in the canyon from a place called **Ute Park**. From there it heads east and climbs up the eastern side of the canyon. The rock art map overlay directly aligns with the same north/south angle of the Gunnison Gorge canyon very precisely. This overlay has not been manipulated to fit the topographic map. I welcome anyone to replicate the superimposition and verify the deliberate orientation of the engraving on map rock with the geographic orientation of the Gunnison Gorge.

**Hunting Trails and Strategies**

Many of the lesser known and smaller petroglyph panels that exhibit lines and circles, are thought to be hunting maps. Clifford Duncan, Ute elder has expressed his knowledge that hunters used these diagrams in coordinating successful hunting expeditions. It usually took a team of two or more hunters to drive the game animals gently, from a catchment area, to an ambush area. One hunter would appear in the lower elevation knowing that the animals would naturally gravitate up hill and down wind of the hunter. Scents carry on warm air that rises in elevation. The animals move uphill and naturally follow ridge lines and circle around the highest elevations. (Clifford Duncan 2007)

The Utes know that the animals will usually travel in one or two square mile areas before circling around to see if the predator is still following them. The following panel found within the Uncompahgre Plateau in a small drainage off the Dry Creek basin, represents a very basic diagram of a hunting strategy.

This petroglyph site is located on the wall of a shallow rock shelter. It consists of the characteristic circles and lines, with a few quadrupeds (Figure 4 and Figure 5).

This panel depicts deer or game animals traveling from the large circled area to the smaller one, and up into the isolated circle. The drawing of the panel is rotated to orient to the south and the axis is lined up with the geographic feature of the ridgeline and circled areas encircling the highest elevation points and broad open grassy areas.

Bob McKeever, (U.S. Forest Service Archaeologist and a hunter), says that to him it is a very simple hunting map. Animals always go from lower elevations to higher elevations because scents travel with warm air that rises up in elevation. When pursued, the animals always move up in elevation until they reach the highest point.

They naturally circle around a high point. Hunters all know this. Game animals circle a high point that allows them to survey everything and it calms them. (Cattle also circle and it calms them down). Clifford Duncan explains, “The circle on one end represents the catchment area where game animals congregate. The line represents a ridgeline or trail animals use to move to higher elevations, represented by another circle.” (Duncan 2009).

This map shows the grazing area at one end (the large circle) and the line of travel towards the smaller circle. A team of hunters could stage themselves, one at the far end to drive the animals up the slope, and the other at any of the higher elevations, Coal Hill, and wait for game to circle around that, or near the over look of Dry Creek at the highest elevation.

**Dominguez Canyon within the Uncompahgre Plateau.**

The following are two suspected “maps” on adjacent sides of a large boulder that occur in Dominguez Canyon, within the Uncompahgre Plateau. Preliminary investigations of this panel with the characteristic circles and lines are underway. Clifford Duncan, Ute elder believes these are ‘maps’ of the adjacent area to the south. (Figure 6; Figure 7; Figure 8; Figure 9).

This area shows great promise for further exploration as to how the circle and line diagrams might relate to hunting strategies and game movement from the lower elevations to the higher ones. With further research and Ute consultation the proper alignments of the petroglyph of the landscape will be implemented.

**Conclusion**

This study of petroglyphs representing maps has potentially significant research for expanding understanding of the distribution patterns of archaeological sites, historic and prehistoric trails, and associated ethnographic landscapes within Western Colorado. It may provide important information for understanding some of the landscape-level cultural values and practices of indigenous people who formerly inhabited the region.
BIBLIOGRAPHY

2003 Historic Ute Archaeology: Interpreting the Last Hour Wickiup. Southwest Lore. 69(4), I-34.


1987 An Analysis of the Prehistoric and Historic Rock Art of West-Central Colorado. BLM Cultural Resource Series Number 21. Crane, Cathy Janet

Duncan, Clifford
2005 Conversations at Shavano Rock Art Site
2009 Conversations at Shavano Rock Art site.

Densmore, Frances

Gleichman, Peter J., Susan Steel and Douglas Scott
1982 The Archaeology of the West End. The Department of Interior, Bureau of Land Management, Montrose District Office.

Patterson, Carol
2008 Paliisades Rock Art Documentation and re-evaluation for Site 5ME.4947, documentation for the Trailways Project. Funded by the Town of Paliisades, Colorado. BLM, GJFO. 28 pgs.
2008a Cross Mountain Petroglyph Site 5MF.2691 Re-Evaluation, documenting of rock art panels at the Cross Mountain site, BLM Little Snake Field Office, Craig, CO. 61 pgs.
2008b McDonald Creek Interpretive Signage, River Heritage, Rock Art of the Canyons. BLM Project No. 2008-MI-035. Trail guide for the McInnis Canyons National Conservation Area in Mesa County, Colorado, BLM GJFO. 36 pgs.
Patterson, Carol and Greg Williams
2007 Escalante Bridge Rock Art Site 5DT4, Petroglyph and Pictograph Documentation. BLM Uncompahgre Field Office, Montrose, CO. 108 pgs. Patterson, Carol and Clifford Duncan
2007 Deer Creek, Dominguez Canyon Rock Art Documentation and Interpretive Signage for The River Heritage Project, BLM Uncompahgre Field Office, Montrose CO. 105 pgs. Patterson, Carol, Clifford Duncan and Alan Watchman
2006 Gunnison Gorge Rock Art Documentation, 5DT.813 Re-evaluation. BLM UFO, Montrose, CO. 80 pgs.
2005 Shavano Valley Petroglyph Signage and Interpretive Project. Montrose Youth and Community Foundation, Montrose, Colorado.60 pgs.

Reed, Alan D., and Rachel Smith Gebauer
Reed, Alan D. (compiler)
2001 The TransColorado Natural Gas Pipeline Archaeological Data Recovery project Reed, Alan and Michael D. Metcalf

Smith, Anne M.
1975 Site Report of 5MN#43, University of Colorado for Bureau of Land Management Antiquities Site Inventory.
Figure 1. Map of the Uncompahgre Plateau study area in green outline, on the western slope of Colorado, USA.

Figure 2. Petroglyph at Shavano Valley and Uncompahgre Plateau with Shavano Valley overlay.
Figure 3. Map Rock at Smith Fork of the Gunnison and with the petroglyph overlay on a topo map.

Figure 4 a-b. Photographs of the cave and petroglyph panel.
Figure 4 c-d. Drawing of the petroglyph and drawing rotated to a southern orientation.

Figure 5. Petroglyph drawing overlaid on topo map of the adjacent terrain.

Figure 6. Petroglyph panel 1, and drawing

Figure 7. Drawing superimposed over the topo map.

Figure 8 a. Petroglyph Panel 2
Figure 8 b. Petroglyph Panel 2, drawing.

Figure 9. Petroglyph drawing superimposed over the landscape.