

HANDOUT 1 – Rock Art Studies

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Canyonlands Natural History Association

- 2009 **Moab Area Rock Art.** Canyonlands Natural History Association, Moab, UT. Running time = 50 minutes. "...features footage of 10 Moab area rock art sites with narratives and interpretation by Bureau of Land Management and National Park Service archeologists."

Fort Carson Cultural Resources Management Program

- 1990 **Rock Art at the Pinon Canyon Maneuver Site.** Fort Carson Cultural Resources Management Program, Directorate of Environmental Compliance and Management, Dept. of the Army, Fort Carson. Running time = 30 minutes. "This video documents rock art studies, theories, and knowledge gained from the long tradition of rock art at the PCMS."

USDA Forest Service, Comanche National Grasslands

- 1999 **Vogel Canyon: A Renewed Face, A Renewed Spirit.** Comanche National Grasslands and Pikes Peak chapter of the Colorado Archaeological Society, Colorado Springs, CO. Funded through a grant from the State Historical Fund, Denver. Running time = 21 minutes. Summarizes conservation project south of La Junta including graffiti removal, trail construction, anti-vandalism message.

Useful Web Sites

American Rock Art Research Association (ARARA): www.arara.org

Archnet Virtual Library: ari.asu.edu/archnet/topical/topical.php

Colorado Rock Art Association: www.coloradorockart.org

DStretch – Digital Enhancement of Pictographs: www.dstretch.com

James Q. Jacobs' Rock Art Pages: www.jqjacobs.net/rock_art

Learning About Rock Art: www.angelfire.com/trek/archaeology/index.html

**Rock Art Studies:
A Bibliographic Database:** bancroft.berkeley.edu/collections/rockart.html

Glossary

Abraded: A method of making rock images by lightly rubbing the rock surface with a coarse, durable stone tool; a shallower effect than cupule.

Abstract: Any rock art image of a kind too abstruse, not easily understood, or so stylized as to be unrecognizable as a real object or living thing.

AMS ¹⁴C: Accelerator Mass Spectrometry, a method of radiocarbon dating (i.e., Carbon-14) which directly measures the amount of ¹⁴C in a sample; because microscopic traces can be dated, AMS is used on rock imagery to date both organic binders in pictographs and microbial residues in rock varnish.

Animism: Any belief system whereby natural phenomena and things—both animate and inanimate—are held to possess an innate soul.

Anthropomorph: Any rock art element of human-like form, stylized or realistic.

Archaeoastronomy: The study of ancient cultures' knowledge of, and use of astronomy; such knowledge may be incorporated in rock imagery. Also known as "Astroarchaeology."

Attribute: Any meaningful characteristic about a rock art design, either natural or cultural such as an element, technique of manufacture, type of paint, panel orientation, landscape setting, degree of varnish, etc.

Azimuth: A direction relative to true north defined in one-degree increments, increasing clockwise with 360° around the entire horizon; used to precisely define the direction a rock art panel "faces."

Cation Ratio: A dating method applied to rock varnish, measuring the trace amounts of potassium (K), calcium (Ca) and titanium (Ti) in a sample. The ratio of (K + Ca)/Ti, indicating when varnish began to form, decreases through time; the method works best on panels 1,000 years old or more.

Cupule: A method of making rock images by abrasion, rubbing away enough of the rock surface to create cup-like depressions.

Diachronic: An approach to the study of multiple events occurring sequentially through time, such as a series of rock art styles.

Element: Smallest definable fragment of a design such as a line, dot, circle, amoeba/blob, etc. Some specialists also use the term to refer to identifiable images, in the same sense as “motif” (see below).

Entoptic Forms: Shapes and images seen by the “mind’s eye” while in a trance or other altered state of consciousness.

Epigraphy: The study and interpretation of [ancient] inscriptions.

Epipentology: The study of paintings and engravings on exposed rock outcrops, walls of buildings, mobiliary objects, etc. Suggested as a term to replace the phrase “Rock Art Studies.”

Ethnography: The anthropological study and description of a living culture. Some cultures still make, or have traditional knowledge about rock art; such information sometimes can offer insight into the meaning of ancient images via “*ethnographic analogy*.”

Gaán: A.k.a. Gans; Apache mountain spirits who live in rocks or caves. They may be depicted in rock art as anthropomorphs with distinctive cross-shaped or three-pronged headgear.

Geoglyph: A (usually) large-scale image created on a geographic feature, often by removing a dark surface deposit to reveal lighter subsoil. The Nazca Lines are the most famous example, but geoglyphs also occur in California and other places.

Hematite: The principal ore of iron and one of several iron-based minerals used to make pigments for drawing pictographs; generally a dark red color when oxidized (ferric oxide, $\alpha\text{-Fe}_2\text{O}_3$).

Incised: A method of making rock images by cutting or abrading narrow linear marks into the panel surface; often an outlining technique.

Intaglio: The process of cutting or engraving a design, usually into a precious stone or metal; the artifact made by such a process; “desert intaglio” refers to geoglyphs.

Kachina (also katsina): Masked spirit beings of the Hopi, both depicted in rock art and carved figurines—the latter made to teach Hopi children about their religion.

Limonite: One of several iron-based minerals used to make pigments for drawing pictographs; generally a yellowish color when oxidized (a hydrous ferric oxide, Fe_2O_3).

Mobiliary Art: Portable art of the Ice Age including engravings and carvings on stone, antler, bone, and ivory.

Monochrome: A pictograph executed in a single color.

Motif: A combination of elements or repeating elements forming an identifiable image such as a trapezoidal anthropomorph, sunburst, rake, etc. Some rock art specialists (e.g., Schaafsma) prefer the term “element” for this concept.

Mythogram: The message(s) of a rock art panel built on generative principles; in the “art as mythogram” interpretive approach, one assumes there would be order and patterning in the imagery derived from cosmological principles.

Neuropsychology: Integrated study of neurological and psychological phenomena, in this context referring to neurologically-based mental imagery resulting from the psychological condition of a trance or other altered state.

Ochre: an iron-based paint composed of a pigment such as hematite or limonite mixed with clay, water, and perhaps an organic binder such as a plant extract.

Panel: Any rock face, on bedrock or a free-standing boulder, with one or more rock art motifs in spatial association.

Parietal Art: Art on the walls of caves and shelters, or on huge blocks.

Patina: A thin layer of (usually) mineral accumulation on a rock’s surface, derived either from the surrounding environment or from leaching of the host rock, or from a combination of both.

Percussion: The striking together of two objects, as in making a petroglyph by pecking. In rock art manufacture, percussion can be direct (striking the rock face with a pecking stone or other tool) or indirect (striking a second tool held in contact with the rock face).

Petroglyph: Any pictograph made on a cliff face or boulder; in modern usage generally restricted to unpainted rock images made by pecking, incising, abrading, drilling, etc.

Petrograph: Rock imagery made by a combination of painting and pecking, incising, abrading, drilling, etc.

Petromanteia: Natural rock formations and surfaces which resemble or mimic cultural imagery.

Photogrammetry: The process of taking measurements from paired photographs to produce 2D or 3D images, resulting in a “contour map” of a rock panel.

Pictograph: A sign, symbol or figure made on any substance by any method; in modern usage referring to painted rock imagery.

Polychrome: Painted imagery with more than one color of pigment.

Quadruped: A zoomorph (see below) representing a four-legged animal, usually large game such as deer or bison.

Rupestrian: Of, or pertaining to, rock imagery (e.g., rupestrian studies).

Scaling: A relative dating method which arranges image styles or types into a “scalogram” based on the presence (+) or absence (-) of traits.

Scratched: Method of making images by lightly marring the surface using a sharp-edged tool; a shallower effect than incising.

Seriation: A relative dating method comparing frequencies of styles, types or motifs between sites in a given region. Histogram-like graphs called “battleship curves” may be produced depicting the changing frequencies through time.

Shalako: Zuni deities impersonated by masked dancers, and depicted in Pueblo IV–V period rock art.

Shaman(ism): In societies with animistic beliefs shamans are experts in the sacred, serving in matters of fertility, health, sickness, death & community well-being; studies of shamanism acknowledge that these specialists use rock art in healing and curing, future telling, controlling the elements, controlling animals, love medicine, gambling, etc.

Solid Pecked: A method of making rock images using a “pecking stone” or other sharp, durable tool to completely dimple the surface so that individual peck marks are difficult or impossible to discern.

Spalling: A type of natural erosion of a rock surface resulting in the loss of material in thin layers.

Stipple Pecked: Method of making rock images by dimpling the surface in a non-contiguous pattern, leaving small spaces between individual peck marks.

Style: Repetitious rock art form(s) that can be placed in time or space; often includes consideration of the overall aesthetic quality of expression; Barrier Canyon style is an example.

Synchronic: An approach to the study of multiple events occurring more or less contemporaneously, e.g., examining rock art sites from the perspective of a single point in time.

Therianthrop: Figures combining attributes of humans and animals.

Tradition: Groups of two or more styles that are similar in content and expression, and for which a temporal and cultural continuity can be demonstrated.

Type: Descriptive unit for imagery with distinctive attributes and elements, often defined within broad categories such as anthropomorph, zoomorph, abstract; data on time & space may be available; e.g., a stick figure is a type of anthropomorph.

Varnish: A type of rock patina consisting of a dark, thin accumulation of manganese- and iron-oxides, clay minerals, minor and trace elements which forms in arid and semi-arid environments through the catalyzing action of manganese-oxidizing bacteria.

Ye'i: Navajo holy beings ceremonially depicted by masked dancers and in rock art. Male ye'i are usually drawn with round heads, and female ye'i with square/rectangular or triangular heads. "Yei bi chai" specifically refers to leader or elder ye'i such as Talking God.

Zoomorph: Any rock art motif of animal-like form, whether stylized or realistic.