

SHE SAID HE SAID

A Ute lady in the Four Corners area was asked this question in 2007: *Did the Old Ones think about comets?* The Ute lady said, "Oh, yes! The comets mean 'change'... they [the comets] were like deities ... they [the Old People] weren't afraid of them ... and at the *old* cemetery they used to put images on the graves to show what the stars and the skies were like when they passed on."

"That the meaning of such [design and graphic-art] patterns appears as undecipherable code to outsiders may merely mean that outsiders have not yet understood the important underlying premises of that culture and how they are embedded in pattern."

--Dorothy Washburn 2004

Astronomical observations predate writing. The human integration of events in the night sky into a larger view of human order seems to verify a hard wiring of the brain to confer upon celestial goings-on a pattern and organization. The movements of heavenly bodies have been recorded, noted, or remarked upon in an endless variety of ways, but the continuum of astronomical observation across cultures has been consistent.

--Dick Teresi, Lost Discoveries:

The Ancient Roots of Modern Science—from the Babylonians to the Maya 2002:89

The study of astronomy has become a part of the study of human culture.

--Anthony Aveni 1997:ix

I'm sure if my ancestors had something to communicate [about their visual astronomy experiences] they'd want me to know.

--Navajo receptionist at a Four Corners professional office

That [Indigenous, visual astronomy] knowledge is extinct, so why bother?"

--BLM archaeologist,
Farmington, NM, office.

"The history of a nation is, unfortunately, too easily written as the history of its dominant class."

--Kwame Nkrumah, in Lowen, Lies My Teacher Told Me 1995:201

Galileo didn't discover that the earth went around the sun until 1520 ... er, 1530 [sic], and the Indians didn't know what was in the sky before that [sic].

--Rock art expert/surveyor,
April 2007, Albuquerque, NM

Galileo Galilei (1564-1642)

...That is what I believe you are doing with your Mimbres/comet analogy which I believe is a great waste of time and energy. I have neither the time nor the energy to waste any more of either on this issue....

--Mimbres expert, 14 Oct. 2007,
personal email correspondence

I think we're becoming more aware that [the ancient people of this area] were far more familiar with astronomy, science and possibly math than we give them credit for. --Don Smith, College of Eastern Utah, San Juan Branch, 2006 ARARA tour/lecture

The celestial environment has always played a significant role in the shaping of human culture. Written records spanning thousands of years are replete with examples of the importance of the celestial constants (e.g. the Sun, moon, stars, planets) in the basic ideologies and the everyday lives of peoples around the world. **Of equal or greater importance are transient celestial phenomena (e.g. eclipses, meteor storms, asteroids, comets).** Because of the **infrequency, unpredictability, and often fantastic manifestations** that are presented by these transient events, they have been viewed as having **much greater import** than the much more predictable celestial constants.

--William T. Hartwell, Division of Earth and Ecosystem Sciences, Desert Research Institute, Las Vegas, NV

I agree that with such attention to the heavens and better night time visibility than we enjoy today, comets certainly must have been observed by the prehistoric inhabitants and I would be very surprised if comets were not documented in some fashion.

--James Copeland, BLM archaeologist, Farmington, NM, Field Office, personal email correspondence

I am delighted to learn of your interest in celestial iconography in the petroglyphs in the Taos area....

Identifying petroglyphs with historic astronomical events is at best a speculative enterprise, and even if correct, I am not sure such interpretations tell us much about the motivations and interests of the people who did the rock art and about the function of the rock art. Taken more generally, however, celestial imagery in rock art is, I think, worth cataloging, categorizing, analyzing, and comparing.

--E. C. Krupp, personal email correspondence, 29 Nov. 2005

Objects as spectacular and capricious as comets and their debris must also have left their mark on human art and architecture.... The comet paradigm may offer a new inspiration into the understanding of many forms of folk-art.

--Patrick McCafferty & Mike Baillie, **The Celtic Gods: Comets in Irish Mythology, 2005:177**

In reviewing Ms. Bradford's comet research and her interpretations of comet symbolism on ceramics and rock art, I am intrigued by the level of detail that is made in terms of the observations of naked-eye, cross-cultural descriptions and how naked-eye observations may have been translated and documented as important celestial events. Her work serves to emphasize the potential importance of astronomy to prehistoric peoples and the intensity with which they watched the sky.

--Larry L. Baker, Executive Director and archaeologist, San Juan County Archaeological Research Center and Library, Bloomfield, NM

Each constellation formed the pattern of a symbol, and established some law for the earth people. They truly believed that their rules for living were written in the stars. Also every form of life mentioned in the old legends had its symbol in the stars. Men, the snake, the lizard, the Gila monster, the butterfly, the turkey, the eagle, the swallow, the bear, the coyote, the porcupine, the badger, and even the measuring [inch] worm had its own group of stars.

--Newcomb, Franc J., "A Study of Navajo Symbolism," Peabody Museum, 1956, Vol. XXXII, No.3, Hadlock Collection, Salmon Ruins, Bloomfield, NM.

"Given the general premise that people in Europe were cognizant of comets and supernovae; and that people in this country must also have seen the objects, then where are their depictions of such objects? They must be here, and it is up to us to recognize such things!"

--Albert Copley, email note, 2007, retired professor, Truman State University, Missouri

I was in agreement with most of your broad assumptions (the ancients spent a lot of time looking at the night sky; they would have noticed unusual celestial events; it is probable they would have recorded at least some of these events as rock art; etc.).

--Mike Hill, Sandia Park, NM, personal email correspondence, 30 Jan. 2008

Although I know of a lot of comet petroglyphs, none of them display characteristics of a close approach to Earth, just long tails that are more indicative of comets passing well inside of Earth's orbit. However, now that you mention it, **the majority of the close approach comets in history, tend to display an exceptionally large coma (between 1 and 3 degrees across) and little trace of a tail.** It makes me wonder if such depictions might have been **misinterpreted as something other than a comet?**

--Gary Kronk, personal email correspondence, 21 Mar. 2006, author of Cometography, Vol. I, 1999.

Modern astronomical evidence does not support the common supposition that the night sky has been unchanging for 5,000 years. There are likely to have been epochs when the sky contained one or more visible, periodic comets, associated with annual fireball storms of huge intensity, and perhaps also with devastating impact. Such phenomena, enduring for centuries, surely had a profound effect on the minds of early peoples. At a minimum, traces of this ancient sky should still **be detectable in the artefacts and belief systems of the earliest cultures.**

--Bill Napier, prominent UK astronomer at the Armagh Observatory, Northern Ireland

This [ancient visual astronomy line of research is] certainly interesting, although I think there's always going to be an element of speculation in any precise association of such [petroglyphic] images [with cometary and celestial phenomenon]. Personally, since I study comets, I'm keen to see cometary explanations for such [ancient] carvings, although this would [result in being] at the level of being plausible rather than beyond doubt. --David Asher, prominent UK astronomer interested in the actions of comets

Indeed, it is likely that in the lengthy period before the development of formal writing systems, *visual forms of representation* were the most important vehicles for the recording of information and the spread of ideas. --Dorothy K. Washburn [2004:51]

... ‘geometry’ yielded ‘representation’..., geometry evoked health, symmetry, and control, bringing spiritual health into peoples’ homes

“[I]t is interesting to note [the juxtapositioning:] *spiritual contagion=asymmetry* [and] *health=symmetry* in current lowland South Amerindian shamanism (Roe 2004).

“...[A]ll images of chaos and disorder [are] by definition asymmetric [emphasis added]. In contrast, their lattice-based body and face painting is rigidly symmetrical and constitutes a ‘design armor’ that protects the body from invasion.”

“Thus in everything from incised designs on pots and stools to the hut plans of communal residences, **‘geometry’ yielded ‘representation’** in Island Arawak culture (Roe 2004).” [Washburn 2004:126, 116]

[Editor’s note: This might speak to ancient Southwestern Mimbrenño and Ancestral Puebloan need for and appreciation of *rotational symmetry* in their superb ceramic designs. A simple asymmetrical landscape complete with a comet on one side and a tree on the other would have seemed unbalanced and spiritually unclean, whereas a representational object, such as a comet, rendered as a geometric metaphor and then rotated and repeated 2, 3, 4, or more times, would add *human dominion over Nature and evoke a feeling of health and symmetry*. In addition, this artistic control would have been sometimes easier to render on pottery (and in the earlier basketry designs) than on petroglyphic outcrops and would have brought this spiritual health into the personal space of people’s homes.-SB]

