

Mesa Prieta Petroglyph Project

Docent Resources

WHY WAS THE EQUINOX IMPORTANT FOR THE PUEBLO PEOPLE WHO MADE THE PETROGLYPHS ON MESA PRIETA?

by John Kincheloe

It is well known that positions of the sun during the course of the year were, and continue to be, important to Pueblo people. The movement of the sun is inherently tied to larger indigenous values and practices. Traditionally for the Tewa the sun was regarded as a principal deity (*T'ansendo*, Old Man Sun) that made an annual journey from south to north then back again. At the extreme positions of the journey, the Sun Being pauses then reverses the direction of his travel. We call the three December days when the sun appears not to move, winter solstice. Following that significant time, when nights are the longest and the days quite cold, the Sun Being resumes his journey. For the next six months the sun travels in a reversed direction, heading northward. Days lengthen and the earth grows warmer. In June the sun halts its northern movement, pauses for the time we know as summer solstice, then begins its return journey toward the south and toward winter. Pueblo ceremonies and social activities mark the beginnings of summer and winter at the solstice times. Marking time and seasons serves as guiding compass for Pueblo traditions and customs.

Another position of the sun holds great significance for the Pueblo people. The mid-way point of the Sun Being's journeys north and south is regarded as a propitious time for multiple reasons – philosophical, political, social, and agricultural. We know the middle point of the sun's northern journey as spring equinox. The middle-point of the sun's movement southward is fall equinox. Only at the equinox times are days and nights equal in duration. In the annual circle of the seasons, the equinox times usher in the beginning of spring and the beginning of fall. Philosophically for the Pueblo people, equinox marks a unique time of cosmic balance. There is a balance of time -- night is equal to the day. From the perspective of traditional Pueblo belief, at equinox the Sun Being's sunrise-to-sunset journey across the Upper World is in perfect balance with his nightly journey underground through the Below World. There is also a spatial balance along the horizon – at both spring and fall equinox the sun rises at a location that is exactly at the center point between the winter and summer solstice sunrise points. Beyond this, mid-day equinox times are especially significant, as ceremony at the middle of the day further embraces the idea of a balanced middle time. When taken together these aspects of the equinoxes define for Pueblo people two times of the year that are metaphysically unique. In multiple ways the equinoxes are moments that stand at the center of time.

Anna Sofaer, the well-known expert on petroglyphs and architecture at Chaco Canyon, observed at that site numerous petroglyphs that are equinox solar markers. Many of these were recognized as heralding equinox at mid-day. In describing petroglyphs at one of Chaco's most important landforms, Sofaer said, "Mid-day equinox is like fireworks at Fajada Butte." The importance of equinox at Chaco was also embodied in architecture. She documented that the long east-west wall of Pueblo Bonito, the largest of all Ancestral Puebloan architectural structures, was aligned precisely with equinox sunrise and sunset. The evidence at Chaco Canyon indicates that for Pueblo people the importance of equinox goes back for centuries.

The significance of equinox for present-day Pueblo people sheds further light on its likely ancient meaning. Alfonso Ortiz, in his classic book *The Tewa World*, makes it clear that at Ohkay Owingeh Pueblo the public and private ceremony cycle begins to intensify with the fall equinox. The intensity of ceremonies trails off at the time of the spring equinox. Because equinox times were traditionally understood as times of balance and stability, those times have been regarded as appropriate and safe times for Pueblo ceremonies related to transitions and changes in social roles. From a political perspective, we know that the Summer and Winter Chiefs exchange their authority roles at the equinoxes. Related to political and social transitions at the equinox times, are the associated natural changes in agricultural activity. These are marked at the fall equinox by the Harvest Dance, a ceremony that is addressed to the sun. The Squash Dance and the Yellow Corn Dance follow on the heels of the spring equinox, celebrating the time of planting.

As celestial events, the fall equinox and spring equinox are visually unremarkable. Unlike the sun's obvious halt and change in direction at solstice times, the equinox sun continues overhead in full stride toward its destination. The two times in the year when the duration of day equals that of the night are subtle things to observe. But equinox manifests itself most visibly in the lives and institutions of the people of the Pueblo, much as it must have for the Ancestral Puebloans who were intent on marking their times of cosmic balance.

Knowledge of the time of equinox was certainly something owned by specialists among the Pueblo people – select individuals who were not only watchers of the sun but who also marked the shadows of movements as equally significant. They were keen observers of how light and shadow fell across the land as Old Man Sun made his journey. On Mesa Prieta we are fortunate to have identified several impressive equinox marker petroglyphs. They are witness to those ancient skywatchers who helped their people know the movement and powers of the Sun Being, so they could best determine times for planting, harvesting, the proper days for political transitions, and ceremony. In our day, light from the sun and shadows on stone still mark the equinoxes – the times of balance, the times at the center of time.

Examples of Equinox Markers at Mesa Prieta



The shadow aligns with the line of the flute player's back only at mid-day on the equinox.



At sunrise on the equinox, a shadow bisects the figure.

Further reading:

Cajete, Greg. *Native Science*.

Harrington, John Peabody. *The Ethnogeography of the Tewa Indians in the 29th Annual Report of the Bureau of American Ethnology, 1907-1908, pp. 29-636.*

Malville, J. McKim and Claudia Putnam. *Prehistoric Astronomy in the Southwest (Rev. Ed.)*

Ortiz, Alfonso. *The Tewa World: Space, Time, Being and Becoming in a Pueblo Society.*

Sweet, Jill D. *Dances of the Tewa Pueblo Indians: Expressions of a New Life (Second Ed.)*

Williamson, Ray A. *Living the Sky: the Cosmos of the American Indian.*