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ANIMISM, RECIPROcity AND ENTANGLEMENT

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ABSTRACT

Sir Edward Tylor defined animism as the belief that features of the natural world, such as rock, trees, rivers, and mountains have souls or spirit. Within cultural anthropology animism was eventually abandoned as a useful analytic tool partly because of his condescending description of animistic societies as primitive and childish. As a consequence, the well of animism had been poisoned for several decades. However, ethnography has now shown that indigenous life may be organized around the existence of persons, many of whom are not human. This contemporary understanding of animism involves a belief that communication, cooperation, and reciprocal social obligations may be established between human and features of the material world, who may be animals, plants, rocks, flowing water, and mountains. Often such communication and reciprocity involves the hunter and prey, the fisherman and his catch, cutting the earth such as plowing, requesting water from melting snowfields, carving rocks and shaping the landscape. As a consequence, I consider interactions that involve the land and the rising or setting sun and moon in order to explore animism as a useful analytic tool in our attempts to understand the meaning of ancient skylscapes. I turn to a number of skylscapes test the usefulness of an animistic paradigm: Nabta Playa and its megalithic alignments to stars, India and Darshan, Andean huacas, and horizon events of the Ancestral Pueblos.

KEYWORDS: Darshan, Huacas, Nabta Playa, animism

1. INTRODUCTION

The purpose of this paper is to explore the usefulness of alternate ontologies in our understanding of ancient skylscapes. There may be significant benefits to our interpretations in moving away from the Cartesian dualism of a fundamental separation of mind and matter, people and things, living and dead, animate and inanimate.

The effort is to consider the consequence in our interpretation of the archaeological record in terms of multiple worlds, different ontologies, not just different interpretations of one world. Furthermore, we need to move away from judgements of traditional societies as primitive and mistaken. I turn to a number of skylscapes in which I have personally worked to test the usefulness of an animistic paradigm: Nabta Playa and its megalithic alignments to stars, India and Darshan, Andean huacas, and horizon events of the Ancestral Pueblos.

What did the conjoining of the sun, moon, and stars with the horizon mean for ancient sky watchers? Did the both the sky and landscape share self-awareness, and agency with humans? If we are to understand what ancient people saw and how they experienced the heavens, we must think deeply about the things of their world. Interpretations of features of the archaeological record as observatories, horizon calendars, or alignments often cause the interpretative process to stop prematurely, when probing deeper may reveal about a deeper meaning of these features and experiences in the culture.

Our challenge is to “access worlds that are utterly incommensurable” with our modern conceptions of reality (Alberti and Marshall 2009: 344). Animism, in all its multifarious forms, can provide one such an access. As an anthropological theory, animism was developed by Sir Edward Tylor, sometimes known as the father of cultural anthropology. In Tylor’s understanding animism is a belief that features of the natural world, such as rock, trees, rivers, and mountains have souls or spirit. His concept was presented in his 1871, two volume book *Primitive Culture: Researches into the Development of Mythology, Philosophy, Religion, Language, Art, and Custom*. The book was remarkably influential, republished many times, finally as a fifth edition in 1913, a year after Sir Edward was knighted. Tylor’s idea that objects contain a spirit or soul was in part due to his projection of his Christian concepts. Within cultural anthropology animism was eventually abandoned as a useful analytic tool partly because of his condescending description of animistic societies as primitive, childish, and typical of “cognitive underdevelopment”.

Recently a new animism has been developing rapidly in cultural anthropology and archaeology. The new animism, which departs radically from Tylor’s ideas, involves a recognition that some, if not all aspects of the natural world, have agency and can communicate with each other. Graham Harvey describes animists as “people who recognize that the world is full of persons, only some of whom are human (Harvey 2006: xi), and his “The Handbook of Contemporary Animism” provides examples of animistic thinking in many cultures (Harvey 2013). In particular, people can be involved in reciprocal relationships with “things” that we would normally identify as inanimate: stones, mountain, rivers, mummies, the sun, moon, planets, and stars.

With an emphasis on the animated landscape of the Andes, such as stone *huacas*, Sillar (2009: 374) defines animism as “an ontology which has at its core the simple philosophy that people have an inter-dependent social relationship with the material world”. Mutual respect, reciprocity, and communication can exist between the persons of the indigenous universe, such as between the hunter and prey, the fisherman and his catch, and, as Frank (2005) has been telling us for some time, in Europe, between humans and bears, such as the half-bear half-human Little Bear. “In traditional cultures where humans celebrate their animal ancestry they often trace their genealogy back to bears. Thus, it is not unusual to encounter the belief that animals are humans in disguise or vice versa.” (Frank 2005:13).

Based upon her experiences hunter-gatherer Nayaka of South India, Bird-David (1999) uses the term “relational epistemology” to describe the essence of animism as the belief that people, places and things establish relationship with each other and that these relations are more fundamental than the entities themselves. In the spirit of a non-dualistic approach, which I am considering in this paper, Viveiros de Castro (1999: S80) has suggested that “relational ontology” is a more appropriate term. The Cartesian distinction between humans, animals, and things is dissolved in animism and other non-dualistic ontologies.

Further elaboration of relational ontologies has been developed by Ingold (2007: 35) who describes the world as an entanglement of relations involving persons (human and otherwise) objects and the landscape, which have acquired meaning as “bundles of relations.” The microscopic counterpart of Ingold’s idea is quantum mechanical entanglement (Guilder 2008), in which the gap between mind and matter is collapsed. The electron (or photon) does not come with a pre-existing nature or location in space. It is only through the combination of a physicist’s experimental plans, the equipment, and the object that the

electron becomes identified as either a wave or particle and its location becomes known. The physicist builds an experiment and asks the electron if it is a wave not a particle, and the electron responds yes. In another experiment, the electron is asked if it is a particle and not a wave, and the electron again responds yes. As Barad (2007) has pointed out, the nature of the electron is not *a priori* intrinsic to the electron but result from the entanglement with the human mind. The electron, as we think we know it, exists only in relation to us and other things.

An influential voice among the proponents of modern animism as a viable analytical anthropological and ethnographic analytical approach is the French anthropologist Descola, whose book "Beyond Nature and Culture" (2013) provides very detailed analysis of animistic ontologies. In his preface he notes the strange situation in anthropology and archaeology in which nature is seen as "a domain of objects that were subject to autonomous laws that formed a background against which the arbitrariness of human activities could exert its many-faceted fascination." (Descola 2013: xv). This Euro-American ethnocentrism, or as he identifies it as naturalism, is a relatively recent development that was legitimized Newtonian physics. There is a certain irony that quantum physics has de-legitimized the duality of mind and matter. In particular, Descola proposes four ontologies to describe the relation of beings with others based upon their interior and exterior natures: totemism, naturalism, animism, and analogism. The latter two are most related to this discussion. Animism involves beings with interior natures that are similar and recognizable to us but with exteriors (fur, feathers, bark, or scales) that are very different from ours. The second category, analogism, contains beings that are radically different in both interior and exterior from a human observer. They may be "multifaceted cosmocratic deities who can hardly be described as human-like persons since they are perceived as being embodied in the infinitely diverse concrete manifestations of their powerful agency.... It seems to me that Hawaiian deities are no more animist "persons" than other analogist principles of totalization—the Christian God, Pharaoh, the Inka—who, although they may have a human embodiment, are mainly focal points of ontological reverberation, and thus not very amenable to direct intercourse." (Descola 2014: 298-299)

This distinction between animism and analogism may seem to be splitting hairs. Perhaps it is sufficient to include both under the general category of animism, which could be understood as relational nondualism. Sahlins (2014) who wrote a foreword to the English edition of "Beyond Nature and Culture" has indeed recommended that Descola's categories

of animism, totemism, and analogism be considered as three forms of animism.

1.1 Theopanies

Events where gods of the sky interact with a sacred landscape may be viewed as theopanies (Eliade 1958), in which one observes divine beings of both sky and earth. The rising of Surya, the Sun, above the goddess, Ganga may be described as a theophany. The rising of stars above the dark waters of Nabta Playa and its animated stones may have been one also. The appearance of the sacred moon between two sacred rock towers of Chimney Rock, may have been a powerful theophany, to which Ancestral Puebloans in the 11th century were drawn to construct a Great House at the base of the towers.

It is hard for many of us to appreciate the power that such a theophany may have had upon observers in the past. In the modern world powerful theopanies are more rare, although we do have reports of tears come from the eyes of statues of Hanuman and blood from crucifixes. The most notable theophany of the past century was perhaps on July 16 1945 at the Trinity test site in New Mexico. Upon viewing the test of the atomic bomb, J. Robert Oppenheimer recalled the theophany of Arjuna when he beheld the fierce form of Lord Krishna. That event, described in the Bhavadad Gita, has been identified as an archetypal theophany (Hijiya 2000, Malville 2014). On the basis of his interview with Oppenheimer, Jungk (1958) provides the following account of that experiences:

"A passage from the Bhagavad-Gita, the sacred epic of the Hindus, flashed into his mind:

If the radiance of a thousand suns were to burst into the sky, that would be like the splendor of the Mighty One—

When the sinister and gigantic cloud rose up in the far distance over Point Zero, he was reminded of another line from the same source:

I am become Death, the shatterer of worlds."

William Laurence (1959) may have been the first person to hear any version of the quotation. He interviewed Oppenheimer at Los Alamos just a few hours after the atomic test, and claimed that he would never forget the "shattering impact" of Oppenheimer's words.

1.2 Horizon Calendars

A number of putative horizon calendars found in the archaeological record may alternately be understood as theopanies. The experience of observing sunrise or sunset may have been more complex than simply watching the sun mark a position on the horizon. Both the landscape, which forms the

horizon, and the sun may have been alive, powerful, and sacred.

With an understanding of animism as the development of cooperative and reciprocal social obligations among people and things, I wish to try it out as a useful analytic tool in our exploration of ancient skiescapes in our search for understanding of why people used astronomy in the past. In the spirit of Clifford Geertz (1983) and his approach involving thick description and emic signification, I seek to understand why people in other cultures sometime pay an almost obsessive attention to events in the sky. Does animism help us in any way to understand the meaning of astronomical phenomena in other cultures?

2. NABTA PLAYA

Animism provides a useful set of alternate hypotheses for understanding the meaning of the ceremonial complex built on the western edge of the seasonal lake of Nabta Playa (Malville 2015c). The megaliths of Nabta Playa may have meant more than dead stones that were in line with stars rising on the horizon. The site is the earliest known case of megalithic astronomy. The nomadic pastoralists, who constructed a ceremonial center on the western edge of the playa, appear to have been cattle worshippers. The lines of megaliths are oriented toward the brightest stars of the Neolithic skies: Arcturus, Sirius, and α Centauri. These would have been the objects most useful for the nomads in navigating across the sea of sand of the Sahara.

Placed in the sediments of the playa the megaliths may have been beings animated by the action of water at their feet within the playa. In the Late and Terminal Neolithic (7400–5400 BP), only a few watered refuges such as Gilf Kebir and Nabta Playa remained available to the flocks of the nomadic pastoralists. Water, sun, stars, stones, this world, and the one beneath earth seem to have formed the dominant features of their cosmos and sacred landscape. The lines of megaliths radiated outward from a large tumulus above a 4-m deep pit containing an upright cow sculpture facing north. This cow in the focal point of the five alignments may well have been an animate being, acknowledging the entanglement of cattle, water, megaliths, humans and stars.

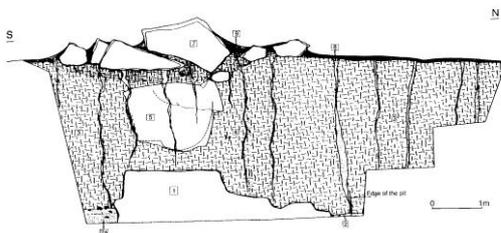


Figure 1. The Buried Cow Sculpture (5)

These stars may have been much more than mute direction markers on the horizon, but living beings with their own personalities, their own stories, and purposes, who established reciprocal and interdependent relationships with the nomads. The standing monoliths, each facing north, have shaped shoulders, appearing as if they are representations of people, perhaps departed nomads. When the playa was flooded following June solstice, the feet of the megaliths would have been in water, which may have brought them to life. No longer would they be representations, but actual people. Water, stones, people, and stars may have been experienced as a network of relationship and reciprocity: in their rain making rituals, people summoned water into the playa, which animated the ancestor stones aligned with the powerful stars. The lives of the nomads depended not only upon water for themselves and their flocks, but also upon the stars that guided them across the Sahara and those stars must have seemed to possess great power.



Figure 2. Nabta Playa Monolith

3. DARŚHAN

The concept of reciprocity between a deity and a human is similar to the Hindu experience of *darśan*, auspicious sight, in which seeing a god and being seen by the god occur simultaneously (Eck 1985). The central act of Hindu worship is to stand in the presence of the deity, viewing the image with one's eyes, to see and be seen by deity. The deity gives *darśhan* and people take *darśan* and receive blessing. *Darshan* is taken of the sun rising over the Ganga or the Sea of Bengal, the exterior of temples, holy places such as *tirthas*, and sacred mountains. All of these are sacred and alive. Hindus may stand on tip-toe to see through a crowd the image of a deity in a temple, or of the sun rising above the waters of the

Bay of Bengal (Malville 1989), they wish to see but also to be seen. A common ritual performed in Varanasi, the *Surya Puja*, is to face the Sun standing in the Ganga, cup water in one's hands and pour it back into the river as a gift to the Sun. One worshipper at the ghats of Varanasi has informed me that although he knew the sun is a hot ball of gas 92 million miles away with a thermonuclear reaction occurring in its interior, he believed that it still deserved to be honored and thanked for all that he does for human kind.

In Darśhan direct eye to eye communication takes place between the deity and the devotee. Eyes of the deity and of the viewer are all important. When a new image of a deity is made, the eyes are the final stage in the creation of the anthropomorphic figure. They finally are ritually opened with a golden needle or the final painting of the eyes, and the image comes alive. Sometimes the coating of honey and gee covering the eyes are removed at the time of consecration of the image. Sometime when the temple containing the sacred image of the deity is itself consecrated the priest or architect will climb to the top and open the eyes of the temple also with a golden needle, thereby animating the temple.



Figure 3. *Surya Puja in Varanasi*

4. ANIMISM IN THE ANDEAN WORLD

In the Andean world, stone huacas were more than carved or uncarved rocks. (Figures 4-7) Many were sentient beings with extraordinary powers, sometimes representing ancestors, highly revered, clothed, fed, married, consulted for advice, and sometimes kidnapped (Bray 2009). In his discussion of animism in the Andean world, Sillar (2009) shows that a variety of material objects, mountains, and

landscape features continue to be viewed as animate and responsive to human attention, engage in reciprocal relationship with human through offerings, annual pilgrimages, and evocations. Many if not most of the stone huacas of the Inca world were associated with water, which together with the sun, would bring them to life and maintain them as living beings (Salmon 1991, Salmon and Urioste 1991, Malville 2009). Huacas depended upon humans for water, the sun for light, and, in turn, humans depended upon huacas for protection, connections with ancestors, and advice.



Figure 4. *Huaca Piedra Cansada*

Descola (2013:207) suggests that Andean cultures provide examples of analogism which co-existed with examples of animism. Pachamama, the powerful "earth mother" sustains life but can also kill with devastating earthquakes and lightning strikes. The mountain spirits, the Apus, are custodians of ice, snow and life-giving water but they also can send wind that can kill (Bolin1998). They are indeed different from us and fit into Descola's category of analogism. These two ontologies are not mutually exclusive. There are many huacas that appear consistent with his classification of animism, with interior natures similar to those of humans. They were sometimes identified as lithified ancestors, mythological figures, or as deities that had retained their original animate interior natures. (Bauer 1998) Stones could transform themselves into human warriors as did fifteen Pururaucas who famously assisted Pachacuti in his battle against the Chanca invaders and then returned as stone huacas in the Cusco ceque system.

Other well-known huacas include Piedra Cansada, the tired rock, who attempted to become part of the fortress of Sacsahuaman but grew exhausted and wept blood in its sorrow. (Figure 4) Kenko is an elaborately carved huaca, which contains a zig-zag channel through which animating fluids may have

flowed. (Figure 5) The large palace, Quespiwanka, of Huana Picchu contained a large plaza with a large white, uncarved stone in its center, watered by a stone-lined channel. (Figure 6) From that huaca the sun can be seen rising at June solstice between stone pillars on the distant horizon.



Figure 5. *Huaca Kenko*



Figure 6. *Huaca in the Palace of Huayna Capac, Urubamba*

The Torreón of Machu Picchu is an example of a huaca animated by the sun and by water flowing in the adjacent stone-lined channel (Malville 2015a) (Figure 7). A window in the tower allows sunlight on June Solstice to touch to top of the rock around which the huaca has been built. The cave at its base, the Royal Mausoleum, symbolic of the lower world, containing large niches and non-functional steps is also illuminated by June Solstice sunrise. Multiple interpretations of this prominent feature may all apply: a powerful huaca, a miniature version of Huayna Picchu, and a solar observatory.



Figure 7. *The Royal Mausoleum at Machu Picchu*

5. AMERICAN SOUTHWEST

During the Classic Bonito Phase of Chaco Canyon (AD 1140-1100) Great Houses became the most monumental prehistoric structures in the Americas north of Mexico. The largest of these great houses, Pueblo Bonito, Chetro Ketl, Pueblo Alto, Pueblo del Arroyo, and Kin Kletso, are contained in a 2 km wide area known as downtown Chaco. The largest, Pueblo Bonito was constructed over a 300 year period, contained nearly 700 rooms, stacked 4 or 5 stories high, of which the inner rooms were in perpetual darkness. It appears that only a few families lived in this huge structure. These Great Houses had multiple functions and multiple meanings: residences, shrines, sacred structures, and places for pilgrimage and trade festivals occurring around winter solstice. For the Pueblos a shrine is a passageway between the profane and sacred realms, a liminal place of access to the underworld from which the Pueblo people emerged. According to Swentzel (2011), in addition to the landscape, buildings are alive, experiencing birth and death. Houses as well as human bodies and plant forms are all temporary abodes through which life flows.

The first explicit evidence of visual astronomy appears in the Great Kiva of Marcia's Rincon in Chaco Canyon. Predating the Classic Bonito Period which saw construction of most of the Great Kivas, this Great Kiva was associated with the Fajada Gap Community occupied in the 900s, for which the Fajada Butte was probably the central feature of their sacred landscape. As viewed from the Great Kiva, the sun on the morning of December solstice rises out of the summit of Fajada Butte. Judging from the traditions of modern Pueblos, we can assume that the sun was a sky god and features of the land, especially unusual geological forms, were also sacred. This conjunction of the sun with Fajada Butte may been understood to be a theophany.

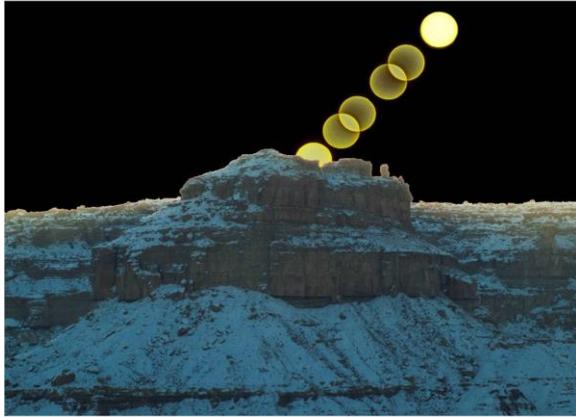


Figure 8. December Solstice Sunrise from the Great Kiva of Marcia's Rincon (photo by John Ninnemann)



Figure 9. Major Standstill Moon Rising Between the Spires of Chimney Rock (Photo by Ron Sutcliff)

The great drought of AD 1090-1100 appears to have changed the character of Chacoan society. After AD 1100 in the Late Bonito Period the majority of newly constructed Great Houses were located at sites that provide exceptional views of solstice sunrise or sunset (Malville and Munro 2016). It is appropriate to ask what visitors to these Great Houses actually saw on the mornings or evenings of solstice. The meaning and function of Great Houses may have evolved over time as the accumulation of memories of rituals, ceremonies, important events, and burials transformed residential structures into sacred realms. These post Bonito Great Houses may have combined elements of shrines for observing the

sacred skyscape, monasteries, temples, tombs, and cathedrals of other cultures, but probably none encapsulates the fullness of their meaning.

In the ethnography of the historic Puebloans it is clear that the sun and moon are considered to be sentient beings who play roles in everyone's lives (Tyler 1964; Young 2005). The sun is the most important because it is the giver of light, warmth, and life itself. The skyscape of Chimney Rock, some 150 km north of Chaco Canyon, contains gods of both sky and earth (Malville 2015b). During 3-4 years around major lunar standstill the moon rises between the double rock towers of Chimney Rock, are recognized as a shrine to the Twin War Gods by the Day People of the Taos Pueblo. Natural stone pillars are often shrines to these gods, or perhaps were the gods themselves. We do not know for certain, of course, but these towers may also have been worshipped as deities by the Ancestral Pueblos in the eleventh century. The rising of the Moon between the sacred towers could be a powerful sight for residents and pilgrims.

6. CONCLUDING REMARKS

These animist interpretations may be viewed as alternative hypotheses, which can deepen our understanding of what ancient people experienced when viewing astronomical phenomena. It is possible that alternate ontologies were experienced simultaneously. Sunrises may have been timepieces, darshan-like encounters, and animist theophanies. Most of the modern world, consciously or unconsciously, accepts the Newtonian ideas of force, time, space, and mass as fundamentally true. These concepts still possess ontic significance for most people living today, yet they are not valid based upon our understanding of Relativity and Quantum Mechanics. Considering that in today's world we are living in a culture in which incommensurable ontologies are existing side by side, it is not unreasonable to consider that parallel ontologies co-existed in ancient cultures.

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