

The Concept of "Power" in Numic and Yuman Epistemology

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Abstract:

This paper is concerned with explaining why American Indians attach cultural significance to things (a gloss used here for objects, places, and resources). Even though individuals may refer to a range of cultural foundations to explain the rationale followed in assigning meaning to things, the general premise is that one of the primordial cultural foundations has to do with the concept of power, how it flows in the world and what humans should do to maintain balance with it. Philosophically, this type of concept is called an epistemological primitive – an idea about the world so basic that few people think of its existence, and if the truth of this existence were challenged they would simply respond by saying, "of course it is true." An epistemological primitive underlies many aspects of culture and explains human behavior and, thus, holds the key to unraveling the roots of meaningfully constituted human landscapes or environments.

Introduction

The existence of an epistemological primitive that underlies interactions among humans, the natural environment, and the supernatural emerged from 20 years of applied ethnographic research among Numic language speakers (Western Shoshone, Southern Paiute, and Owens Valley Paiute)² and Yuman language speakers (Mojave, Hualapai, Havasupai, and Yavapai)³ of the Great Basin, Mohave Desert, and northern Colorado Plateau in the American West (Fig. 1). This research targeted resources and land and resource use practices threatened by federal undertakings, including nuclear weapons testing. Tribes and organizations were willing to participate in this research to increase the U.S. government's awareness of cultural significance and to protect resources and traditional knowledge (Stoffle, Zedeño, and Halmo 2001). Hundreds of field-based interviews conducted with American Indian elders not only rendered detailed information on the use of plants, animals, minerals, geographic features, archaeological sites, and rock art, but have also revealed the presence of a shared world view.

This paper attempts to develop a conceptual framework that furnishes a deeper and more complete understanding of this world view among Numic and Yuman language speakers. First, the concept of "power" as recently defined by several anthropologists for these two linguistic groups is presented and discussed. There are two advantages of looking at power in two groups: 1) Yuman perspectives provide a point of comparison and contrast from which to understand how typical Numic perceptions are of power and vice-versa; and 2) perceptions of power that are shared by Numic and Yuman-speaking peoples may, in turn, explain the sharing of specific cultural phenomena such as the Southern Paiutes' and Hualapais' common

path to the afterlife. Second, this paper discusses connections between power and different kinds of places, objects, and resources that Indian people have identified as culturally significant and provides specific examples derived from ethnographic research.

The Concept of "Power"

The presence of supernatural power is viewed by American Indians in the western United States as the most robust explanation for the cultural significance of things, how these things are related to one another and, ultimately, how they are intellectually integrated. According to Sven Liljeblad (1986, 643-644), supernatural power "was everywhere a source of individual competence, mental and physical ability, health, and success; for this concept the Numic languages use cognate forms of a single term: Mono and Northern Paiute *puha*, Shoshone *puha* and *poha*, Kawaiisu *puhwa*, Southern Paiute *pua-*, Ute *puwavi*." Louise Lamphere (1983, 744) states that many general characteristics of North American shamanic religion were apparent in the practices of the Yuman peoples of the Colorado River. For example, a shaman acquires it through a dream experience. The connection between dreaming and power can be seen in the Maricopa word, *Kwstma*'s: "one who has power" – literally, "the one who dreams." The Maricopa words for *dream* and *spirit* are the same: *sma*'k (Spier 1970, 237-238). The dream is usually one in which the shaman travels to a sacred mountain place where he encounters either a spirit of the mountain, a bird, or an animal who teaches him songs, gives him the opportunity to cure a sick person or, in some other way, gives him the power to cure. Among the Hualapai (Kroeber et al. 1935, 188) a man may actually go to a mountain, build a fire in a cave, and spend four nights during which time he dreams and acquires power from a spirit.

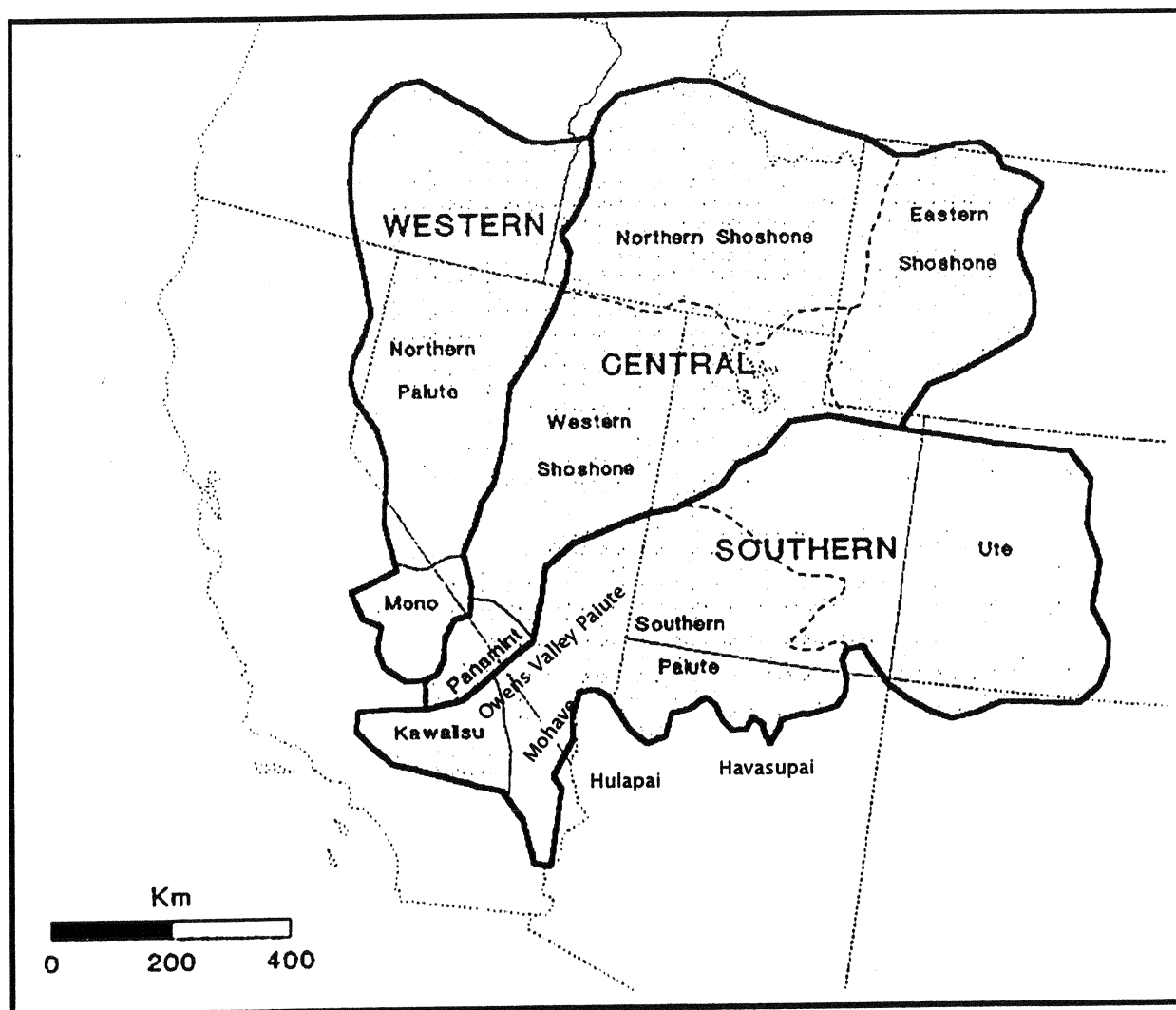


Figure 1: The Great Basin. Source: *Across the West*. University of Utah Press.

Power is a highly abstract concept that has largely been overlooked by scholars of Western American Indian culture. Power is both esoteric (not fully understood by all members of the society) and confidential (not to be explained to outsiders or Indians who may not use or be able to use the knowledge of power in a culturally appropriate way). Jay Miller (1983, 68) estimates that about 20 percent of an Indian ethnic group possesses information about power, and less than five percent has a systematic overview (Stoffle, Halmo, and Evans 1999 regarding the distribution of Numic plant knowledge). Similarly, Christopher Tilley (1994, 26) maintains that places are not equally shared and experienced by all people; in human society the ability to control access to and manipulate particular settings for action, such as places where power resides, is a fundamental feature of power

as domination. In other words, knowledge about power and its whereabouts is shared on a need-to-know basis with those who should have access to it.

Attempts to understand the rationale behind attaching cultural significance to places, resources, and their connections have failed to focus on the epistemological origins of those meanings, attempting instead to understand meanings by looking at the form and function of things. For example, many anthropologists who study interpretations of cultural resources look for cultural meanings in the style of rock art instead of in where it is; in the shape of projectile points instead of in where they were ceremonially retired; in the uses of caves instead of in the mountain where they are located; and in the meaning of rivers instead of in the force inherent in running water. When

studies of meaning isolate an object, a place, or a resource, the research often fails to explore relationships among the phenomena and the systems of power that can better explain them.

Power and Elements in Numic and Yuman Culture

The best way to understand how the world is connected in Numic and Yuman culture is with the concept of a *living universe*, an epistemological foundation of Numic and Yuman culture or what Rappaport (1999, 263-71, 446) calls an *ultimate sacred postulate*. Simply, the concept of a living universe is so basic in Numic and Yuman culture that one cannot understand many other aspects of culture without fully recognizing this concept. A living universe is alive in the same way that humans are alive. It has most of the same characteristics as humans. The universe has physically discrete components that we call *elements* and an energy source that we call *power*. These are a few general statements that we can make about power:

1. Power exists throughout the universe but, like differences in human strength, power will vary in intensity from element to element;
2. Power varies in what it can be used for so it determines what different elements can do.
3. Power is networked so that different elements are connected, disconnected, and reconnected in different ways, and this occurs largely at the will of the elements that have the power;
4. Power originally derives from Creation and permeates the universe like spider webs in a thin scattering and in definite concentrations with currents, generally where life is also clustered;
5. Power exists and can move between the three levels of the universe: upper (where powerful anthropomorphic beings live); middle (where people now live); and lower (where extraordinary beings with reptilian or distorted humanoid appearances live).

There are only two academic articles specifically devoted to the issue of power in Western Indian culture: Lowell J. Bean's *Power and Its Applications in Native California* (1976) and Miller's *Basin Religion and Theology: A Comparative Study of Power* (Puha) (1983). Also insightful is a chapter on "Religion and World View" in Catherine S. Fowler's book, *In The Shadow of Fox Peak* (1992). Together, these essays provide the academic foundations for understanding the concept of power. Interestingly, there is an almost total absence of discussions of power in the standard references on these Indian cultures. There is no specific

essay devoted to a discussion of power in the *California, Southwest, and Great Basin* volumes of the *Handbook of North American Indians*. Only the *Great Basin* volume has an index heading for power. Thus, despite the centrality of this issue for understanding Yuman and Numic culture, few scholars have recorded or discussed information on this topic (Monteleone 1994; Whitley 2000; York et al. 1996). The authoritative discussions by Miller (1983) and Bean (1976) provide some fundamental criteria for examining specific examples of place, object, and resource connections with power.

Numic Power Perceptions

The interview data for Miller's essay were gathered during an extensive study of American Indian religious concerns in the Great Basin regarding the potential impacts of the MX project proposed by the U.S. Air Force. According to Miller (1983, 79-80):

... power is diffused everywhere in continuous flux and flow, which, however, is not haphazard because, as an aspect of memory, power is rational. From all available evidence, the routes of concentrated power within the generalized dispersion are web-like, moving both in radial patterns and in recursive concentric ones, out from the center and back again. ... The web image is reflected in the stories where Coyote assumes the form of a water spider to carry humans to land and Sun takes the form of a spider who is webbing the firmament of the universe. ... The web of power, however, is not static like that of a spider because the webbing actually consists of the flow of power rather than filaments per se. Rather, the web is pulsating and multidimensional, even having aspects of a spiral, some times regular and sometimes erratic, intersection with the radials from the center. This spiral movement is represented most graphically by an in-dwelling soul of a person that can be seen escaping the body at death as a whirlwind.

People in the Basin were most successful when their movements and the arrangements of their lives duplicated those of power. Without recognizing its full significance, many scholars have noted this web- or net-like character.

The attraction of power for life is such that any gathering ... will concentrate it, while a closed dance circle contains it for some time. ... After such a concentration, power apportions itself among the participants, going along with them as each takes

separate trails radiating away from the central location. For this reason, trails in the Basin are sacred.

... the mourning ceremony of the Colorado River Yumans has been spreading in the Basin as the Cry Dance. According to its origin story a council was held in a far western country that resulted in the dance. "That place where they had danced turned to stone, and then from it trails arose in all directions. It is in this way that the Cry has come to be" (Sapir 1930, 347).

Yuman Power Perceptions

Bean's essay is intended to summarize power perceptions and uses among the tribes of California, including the Yuman-speaking groups of southern California. This essay can be extrapolated to Yuman groups in Arizona even though his main expertise is with Yuman-speaking groups in California. He states:

... power in the universe is best understood in terms of four basic philosophical assumptions: 1) power is sentient and the principal causative agent in the universe; 2) power is distributed differentially throughout the three realms of the universe and possessed by anything having "life" or the will "to act"; 3) the universe is in a state of dynamic equilibrium in relation to power; and 4) man is the central figure in an interacting system of power holders.

... individually acquired power (knowledge) and traditionally acquired power (held by priests or shamans) must continually be employed by man to maintain the dynamic equilibrium or harmony of the universe.

... form, space, and time are mutable and malleable under the influence of power. During rituals, when power is being exercised, past, present and future may be fused into one continuous whole. A shaman may use power to bring sacred time into the present so that he can interact with being from that time. He may transcend space, shortening or lengthening distances through the uses of power (1976, 408-13).

Although power operates in a dynamic equilibrium in the universe, one of its major characteristics is that it is entropic (Blackburn 1974; Bean 1972; White 1963). Power has gradually diminished since the beginning of time in quality, quantity, and availability. This has occurred because man has, at various times, treated it or

its conduits improperly, failing in his reciprocal responsibilities with an interdependent system. It is believed that a very rapid loss of power occurred after European contact as knowledge concerning the means of regulating power was lost. Nevertheless, power is always partially retrievable as new rules are established for obtaining and maintaining it.

The rules for handling power and using its conduits function to control the power holder and prevent his misuse of power in two ways. First, power can be used only at proper times and in proper places, and it must be used in accordance with a formal liturgical order (e.g., smoking tobacco, bathing, using ritual paraphernalia, and singing specific songs). Second, persons having power and knowledge may withhold information on procedures for acquiring and maintaining power from unworthy candidates. The diversity and unpredictability of power was consistent with an ecosystem that was equally diverse and unpredictable, although often kind and bountiful in the resources provided by nature.

Fowler's (1992) ethnographic work with the Toidikadi, or Cattail-eater Northern Paiute people who live near Fox Peak, Nevada, revealed observations that are identical to those of Miller and Bean. In her chapter on religion and world view she provides about three pages of details on the nature of power. Briefly, she observes that:

One of the most basic beliefs that guided the interactions of people with the land and its resources was the concept that the Earth was a living being, just as were the Sun and Moon, the Stars, and natural forces such as Water, Wind, and Fire. The life force within all of these, as well as particular geographic features and classes of spirit beings, was power (*puha*) . . . Although power potentially resides anywhere, its association with mountains, caves, springs or other water sources, and the results of past activities by Immortals or humans, was particularly apparent (Fowler 1992, 170-72).

Fowler's special emphasis is on power being the life force in plants, animals, and rocks as well as concentrating in special people who are able to evoke it through prayer and ceremony.

These textual citations from Bean, Miller, and Fowler were chosen to frame the following discussion but are certainly not representative of all the views these authors expressed. There are differences between Numic and Yuman peoples. There are, however, more

similarities than differences in the perception of power. When the three essays are compared on a point-by-point basis they describe very similar ultimate sacred postulates even though these emerge from two quite different linguistic and cultural systems.

Numic and Yuman Elements of the Universe

Since there are few differences in the categories of elements of the universe as they are conceived in Numic and Yuman cultures, they are presented together. The elements of the universe include types of air, water, rocks, minerals, topographic features, plants, and animals. Each element and its various types have different personalities, intensities of power, and networked relationships with people and other elements. Fowler and Liljeblad (1986, 451) note that "the Northern Paiutes believed that power (*puha*) could reside in any natural object, including animals, plants, stones, water, and geographic features, and that it habitually resided in natural phenomena such as the sun and moon, thunder, clouds, and wind." Elements of the universe make their own relationships much like people do and for somewhat similar reasons – purpose and attraction. New relationships between elements result in a shifting and concentrating of the spiderwebs of power.

Each element of the universe has a human-like personality that varies in disposition and character. Elements are attracted to people and to other elements. They can negotiate relationships, sharing power in some relationships and denying it in others. Crystals, for example, are described as crying stones that represent crystallized thought and memory (Miller 1983, 81). Jerome Meyer Levi (1978) reports that some Yumans regard them as living rocks that are either male or female, depending on their inner tint. People are aware that crystals grow, and some say that each bed of crystals has a large central one that serves as leader. Any human intervention in the arrangement of elements potentially alters these spiderwebs of power; thus, we have an insight into why Numic and Yuman people are so concerned about the impacts of their uses of natural resources on their environments. This ultimate sacred postulate is the foundation for developing and maintaining conservation ethics in both cultures.

Numic and Yuman People and the Universe

The relationship between Numic and Yuman people and the universe was defined at Creation. They were placed in this region, which today we call the Great Basin, Mohave Desert, and northern Colorado Plateau.

It is here the Creator made them, informed them of the elements of the universe, explained power, and taught them how to behave so as to remain in balance and to sustain the balance of the universe. Miller (1983, 78) explains that Numic people (or Basin cultures) trace power to the memory of Ocean Woman in the south and to Wolf or Sun in the north because time is continuous in their minds as memory. The Yuman people believe that a deity and cultural hero, *mastamho*, put the land into the shape it is today. He made the Colorado River and heaped the earth from it into a sacred mountain, *avikwame* (or Spirit Mountain in the Newberry Mountains), where he conferred upon the unborn souls the powers of which they would later dream (Stewart 1983, 65).

A first principle of proper human behavior is that, since all elements of the universe are alive and have power, people need to establish appropriate relations with these elements in order to survive and to help maintain the balance of the universe. Thus, a common admonition heard by every Numic and Yuman child from their parents is that one must explain one's actions before touching, picking, hunting, or otherwise disrupting the balance of any element with which a relationship is about to be established: 'Do not move a stone without asking permission; a plant will not give medicine or nourishment unless one explains why it will be picked; animals killed without their permission will not give themselves to a hunter again; never speak loud on the mountain or throw rocks in the water; and ultimately, think of why things are as they are before one changes them for personal needs'. Rituals accompany all changes in relations between humans and elements of the universe in order to maintain balance.

Making and Using Tools

In Western European thought, tools are almost always secular, just inanimate things to be made, used, bought, sold and, when no longer useful, discarded as trash. Only a few tools, those associated with direct religious ceremony, are sacred. Such tools tend to begin life as secular objects and have to be transformed through ceremony into sacred objects. Such tools are often desanctified so they can become trash and retired accordingly. Numic and Yuman people begin the life cycle of tools by talking to the natural resources from which the tool is to be made. The toolmaker personally selects a raw material for making a tool; in the case of quarries, it may be a stone source that has been visited by his people since the beginning of time. People care for plants by burning, pruning, and replanting in order

to make them happy and more fertile. A stand of plants can be an old friend of those who use it and perhaps have cared for it for generations.

William H. Walker (1999, 384) notes, "Ethnography suggests that, by imbuing life force into inanimate matter, ritual activities conducted during the manufacture, distribution, use, and reuse of certain objects have a direct bearing on whether such objects have afterlives." Indian elders have observed that on numerous occasions ritual initiates the process of making a tool. A toolmaker talks to the plant, animal, stone, or mineral and explains his/her need for help in a life task. When making a bow and arrow, a man must establish a relationship with the stone that provides the arrowhead, the reed that makes the arrow shaft, the tree that makes the bow, the bush that provides the sap for glue, the mineral that adds power to the arrow as paint, the bird that provides feathers for the fletching, and the animal who provides the sinew. All of these elements continue to have power and willfulness after they have agreed to be used in the making of the bow and arrow. In fact, it is the combined power of these elements working together with the hunter that makes for a successful hunt. Thus, the living bow and arrow are partners in acquiring energy for the hunter, his/her family, and their community.

The bow and arrow have a life cycle; they, like humans, wear out and become unable to continue to perform their chosen tasks (Fig. 2). When this occurs, they are respectfully laid to rest as old partners who can no longer function in the tasks for which Indian people made them. As observed by Walker (1999, 385):

Ethnography suggests that the action of ritually discarding an object creates a "gateway" through which objects cross from the everyday to the spiritual realms. This process is analogous to human death. Similar to the animated essences (spirit, soul) released when people die, many objects also have essences that are released in discard rituals.

The process of returning the bow and arrow to the earth completes a cycle that is required in all relationships between humans and elements of the universe. The act of returning the bow and arrow is accompanied by ceremony and completes a covenant (or partnership) that was first negotiated by the toolmaker when each component of the bow and arrow was in its natural state. Balance is achieved if every stage in this life cycle of the tool is moved through in a proper fashion. Tools are returned to the earth in places where they would like to be. Sometimes they go back to the quarry

that was the home of the stone for the arrowhead, the marsh where the bird and cane lived, or the mountain where the hard bow-wood came from. A cave or prominent topographic feature may be the place of return and ceremony to directly thank the central sources of power that provided energy for all elements, including the toolmaker. Whatever place is chosen, the end of the life cycle of a tool is a critical event and the place for disposition or burial is chosen with care. When the same place is used again and again as the place where certain types of tools are returned to the universe, these objects occur there in unusual numbers.

Numic and Yuman people often make new tools and return them to the land as an offering of thanks. A tool may be a perfectly made object that is never used but, instead, is returned to the quarry that has always provided the people with tool stone. Such a knife was found inside a rock crevice near the quarry on the NTS and is now reburied as a Native American Graves Protection and Repatriation Act (NAGPRA) item (Stoffle et al. 1996a, 49). It may be a woman's grinding stone that is shaped and used during her first menses ceremony and returned to the mountain that gives such stones, as was suggested by Indian people who assessed the First Menses petroglyph site on Hot Creek Valley (CNTA) (Arnold et al. 1997, 31-36; Stoffle, Zedeño, and Carroll 2000). Offerings also may be medicine plants, animal parts, or other objects that are given to a cave as ceremonial thanks for the knowledge of how to use resources in curing, or for a wish granted (Zedeño et al. 1999, 110). These offerings of thanks serve to maintain balance but, unlike retired tools, they have never been used.

The archaeological consequence of a place where ceremonial deposition has occurred over long periods is that both used tools and unused tools are intermixed. Bean states (1976, 415) that power might be put, by a person having power, into a place for ritual disposition of tools. A shaman, for example, might protect a sacred place outside his village where ritual paraphernalia are stored by putting power there. Ceremonially produced deposits of objects are recognized in the archaeological literature and are clearly considered as different from other kinds of archaeological deposits. Archaeologists who study ritual deposits have coined the term "ceremonial trash" (Walker 1995).

An unusual concentration of tools found in a special place is a culturally based indicator that the tools were placed there as part of one or more ceremonies. These objects are intended to remain in their final resting place because each object is a part of a life cycle or

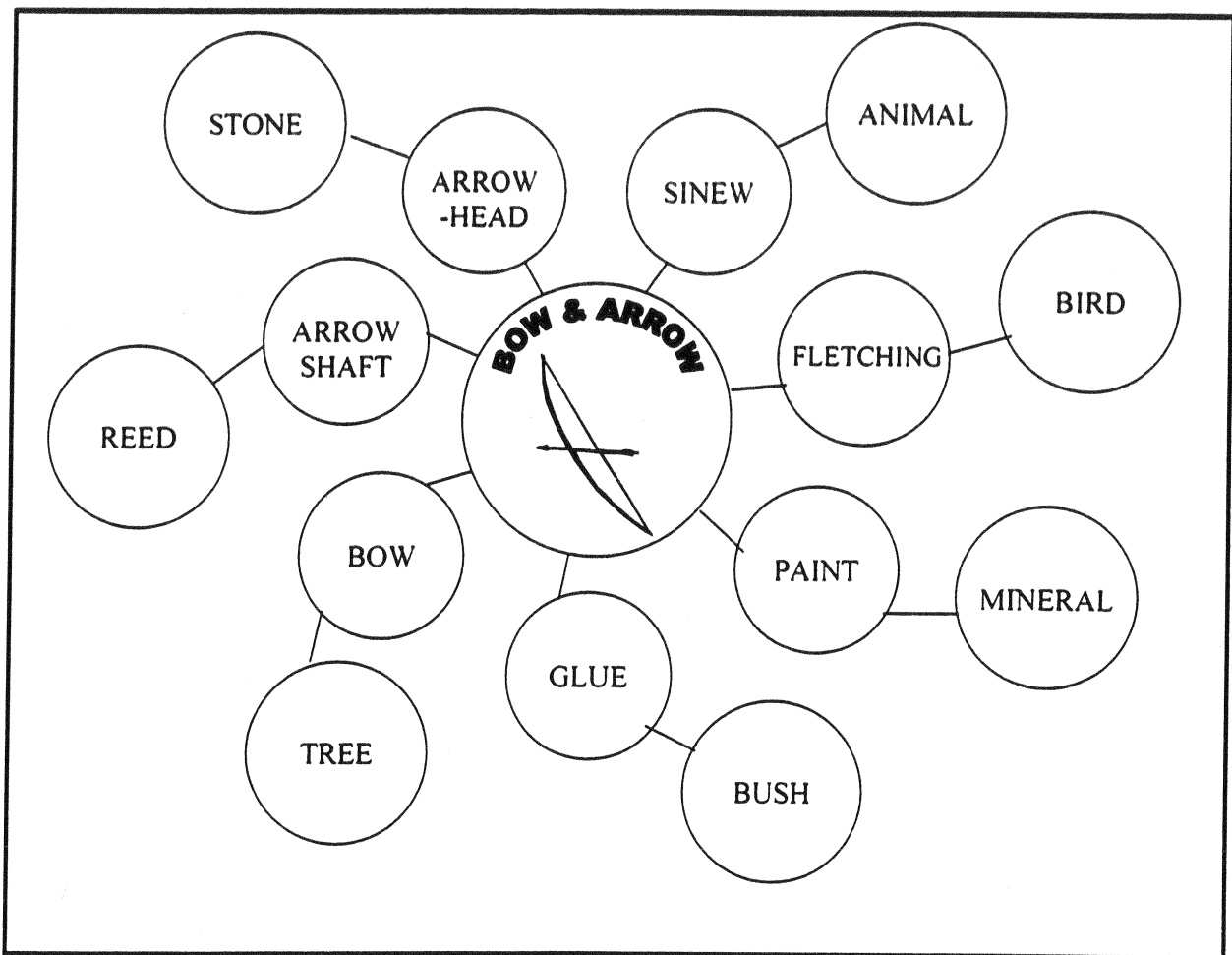


Figure 2. Elements of a Bow and Arrow.

offering of thanks that must be maintained to sustain balance in the world. These are ceremonial objects needed in an ongoing ceremony, as indicated during NAGPRA (1990) consultations with Numic-speaking groups (Stoffle, Zedeño, and Halmo 2001). If one of these ceremonially placed objects is removed from its chosen location, the world is jeopardized. Only by replacing the object where it belongs forever can that ceremony continue and balance be restored.

Power and Place

The academic literature regarding how and why humans attach themselves to specific places has expanded exponentially in the past decade. This reflects a new and worldwide voicing of opinions about place that have been made by cultural minorities who formerly were not heard by the dominant society. These newly voiced peoples emphasize their special attachments to places, the centrality of these places in

their culture, history, and future, and the need to find ways to preserve these places. The academic community has responded by conducting studies that help voice people's concerns about places and formulate new theories of place. Federal agencies have developed special legislation and guidelines for protecting culturally significant places. A key example of this trend is the National Register Bulletin 38, entitled *Guidelines for Evaluating and Documenting Traditional Cultural Properties* (TCPs) by Patricia L. Parker and Thomas F. King (1990). According to Bulletin 38, the cultural significance of TCPs is understood only with reference to the culture and the people who perceive them to be important, not to the inherent archaeological or topographic values of the place.

From this large body of academic literature three pieces deserve special mention. One has become the standard theoretical explanation for why humans

connect themselves with places; the second is the best study of American Indian attachments to places; the third is about the contemporary policy implications of place. *Space and Place*, by Yi-Fu Tuan (1977), describes the role of time and experience in structuring place attachments. Especially important is the movement of these experiences into abstract descriptions of how a people are attached to places and explanations for why they are attached to places – these descriptions are called “myths” but are perceived to be fundamental truths (ultimate sacred postulates) by the people who hold them. *Wisdom Sits in Places*, by Keith Basso (1996), is an in-depth analysis of how the Cibecue Apache of the White Mountain Apache Indian Reservation have attached themselves to places because the places taught them lessons in life. Places and their names recall moral lessons that guide the behavior of Apache people. The study was produced at the request of, and with the support of, the Apache, who wanted to record geographic information on maps that made sense to them culturally. *Culture, Power, Place*, edited by Akhil Gupta and James Ferguson (1999), is an extension of early theories of place combined with an analysis of how places have become focal points of ethnic and national identity. Place making, identity, and resistance are three key themes needed to understand the centrality of places as we move into the next century.

Meaning of Place in Yuman and Numic Culture

This paper argues that the fundamental meaning of a place derives from the power(s) it exhibits. Tilley (1994, 24) describes the process by which places acquire meaning as they become reshaped out of the environment through the production and recognition of meanings in particular places and through events that have taken place. Place names often reflect one or more events associated with them and further determine their character and disposition. The naming and identification of particular topographical features, such as sand dunes, bays and inlets, and mountain peaks, are crucial for the establishment and maintenance of their identity. Through an act of naming, and through the development of human and mythological associations, such places become invested with meaning and significance. Place names are of vital significance because they act so as to transform the sheer physical and geographical into something that is historically and socially experienced. The bestowing of names creates shared existential space out of a blank environment (Basso 1984, 27; Tilley 1994, 18; Weiner 1991, 32).

Tilley (1994, 24) also believes that places are

fashioned out of the landscape through the recognition of significant inherent natural qualities, rather than simply through cultural production. As noted, in Numic and Yuman culture power is dispersed in a network of relationships among the elements of the universe – relationships that most resemble spiderwebs. At various points in this web, power gathers, producing powerful places which are then recognized and commemorated by humans. Zedeño (2000) observes that places are “made” because they are the loci of human interactions with the physical and spiritual worlds. Therefore, power also accrues at a place as people live or relive those experiences; power is cumulative.

Powerful places tend to attract other powerful elements. For example, during studies of rock art sites, Indian people tend to look first at the rock on which the painting and peckings occur, and then look around for medicine plants (Zedeño, Stoffle, and Shaul 2001). The basic assumption of interpretation is that the place had to be powerful before the rock paintings or peckings were made there. Interestingly, Indian tobacco often grows out of the cliff face where the peckings have been placed. Indian tobacco was observed growing out of pecked rocks and other landmarks during our studies at five southern Nevada sites: on the cliff face above Gypsum Cave on the flank of Sunrise Mountain; on the volcanic edge of Buckboard Mesa in the Nevada Test Site; on the volcanic cliffs in the Pahrnagat National Wildlife Refuge; on a rock constriction in Wellington Canyon in Nellis Air Force Base; and, most recently, at a petroglyph site in the Black Mountains near the Hoover Dam. The presence of a medicinal plant growing out of a pecked rock is seen as a sign that the place has power, for why would such a powerful plant choose to grow on the face of a cliff? And why would Indian doctors or the spirit beings called Little People choose the rock face for making peckings? Indian people recognize and respect the power of a place, so they bring objects there for ceremonial disposition. Thus, a powerful place can be identified by its basic form, its proximity to other powerful elements, and the presence of ceremonial offerings or symbols like storied rocks. To illustrate, an Indian elder gave the following definition of place:

Places are designs that certain people experience. These people have the innate gift to bring out the natural design or specific meaning of why the place has these powers. It is similar to a basket weaver who knows the design is waiting to be brought out by the hands that know how to draw it out. Special places lay in waiting for the right spirit or human or

both together to connect and create a fantastic plan (Stoffle and Zedeño 2001, 71).

Humans derive power from places that have become central through recurring spiritual and physical interactions with people; these places have a pivotal role in Indian culture. According to McGuire (1983, 36), the land plays a critical role in the making of a Hualapai shaman. A key time is at hand when the spirit of a deceased relative alerts a prospective shaman to his calling through a series of dreams. A candidate might then bolster his power by allying himself with the resident spirits of geographical features in Hualapai territory. In Yuman culture there is a complex interplay between dreaming and places, with dreams being the vehicle by which a person (and others) understands that he/she has potential access to power and places where he/she must go to utilize power sources for curing, learning about the world, science, and religious ceremony (Shipek 1999). Liljeblad (1986, 644-645) notes that a person who was convinced that he possessed supernatural power knew where his power (or powers) came from. It revealed its physical character in dreams and visions. In California, west of the Sierra Nevada, sources of spirit power mostly came from animals, whereas east of the Sierra it came often from inanimate objects and natural phenomena: mountains, trees, peculiarly shaped rocks, meteorological forces, and from mythical beings living in nature (Liljeblad 1986, fig. 2 and citations of Steward 1933[b], 308FF; Driver 1937, 143; Park 1938, 15; Stewart 1941, 444).

The brief discussion that follows illustrates selected types of powerful places that have been primarily identified by the universal elements they contain and around which they are centered, such as water, peaks and mountains, caves, storied rocks or rock art, and trails, and how they serve as power locations in Numic and Yuman culture.

Water

Ultimately, water is the most vital component of life in the western deserts. Hence, it is the keystone of desert cultures' religion because power, with its affinity for life, was strongly attracted to water, "a purifying agent . . . spoken of as being like the human breath" (Whiting 1950, 40). All water is sacred, therefore, because power adheres to its reservoirs as clouds, rain, snow, springs, seeps, lakes, streams, or the occasional river in the desert (Miller 1983, 78). Citing Gifford (1932, 243), and Harrison and Williams (1977, 40), Sigrid Khera and Patricia S. Mariella (1983, 51) write

that, for the Yavapais, all humans came from an underground world ascending to this world on the first maize plant. The hole through which they entered this world then filled with water; today it is called Montezuma Well, and to the Yavapai it is one of the most sacred of places. Its water is considered to carry a special blessing. Springs are used for healing and purification before and after conducting ceremonies. Hot springs, in particular, figure in Southern Paiute and Owens Valley Paiute creation stories (Stoffle et al. 2000a, 2000b).

Water is frequently associated with rock art as, for example, are the pictographs found just above the Ammonia Tanks and on Tongue Wash Poh, and the petroglyphs carved beside a spring on upper Fortymile Canyon. In interviews conducted at or near White Rock Spring, Captain Jack Spring, Twin Springs, and upper Fortymile Canyon, Indian people mentioned the presence of powerful – and often malevolent – spirits they often call "water babies." These spirits inhabit streams and waterholes and contribute to water's power (Stoffle et al. 1991; Zedeño, Stoffle, and Shaul 2001; Zedeño and Hamm 2001; Whitley 1994, 81).

Peaks, Mountains, and Elevated Features

Water is associated with peaks. According to Miller (1983, 78-79), water permeates the universe in both a thin scattering and in definite concentrations with currents. It is generally located where life is also clustered. Note that Miller's statement says water can come to people or other places instead of the standard Western interpretation that people come to water, which defines a surprisingly passive role for such a powerful element. In fact, water actively places itself. If a spring is mistreated, it can reduce its flow and even go elsewhere.

Power is distributed in a ways similar to that of water, often following water. Power is diffusely scattered everywhere and flows along waterways. For example, Charleston Peak in the Spring Mountains of southern Nevada is called "Snow-Having" (or "Where Snow Sits") because it concentrates water and power, sending them down along regular routes. While power closely follows the flow of water, they are not identical substances; power is definitely more significant. In an overall pattern, all these waterways are conceptualized as webbing linked to a peak with or without an alpine lake. In this way, the web is centered at the summit of the mountain; its radials move out along slopes and valleys, interlocking the master web of the central world peak. In theory, all of these linked waterways

were considered animate in their own right and are often personified. Similarly, for Yuman people, Spirit Mountain represents the beginning, rising from the desert floor at the Colorado River near what is now Davis Dam. It has a rich legacy of petroglyphs that Indian people interpret as recounting their origins (Hinton and Watahomigie 1984, 3; Shipek 1985).

Caves

Deep caves on mountain slopes are sacred – powerful – because they shelter life and collect water seepage while remaining moist and dark like the initial world; some people believe that caves open into the Self-Chartering Sea below the earth (Miller 1983, 78). Caves are, as noted by Chemehuevi Paiute elder Larry Eddy, the mouth of the mountain. Cave morphology evokes the conceptual nexus, particularly if it consists of a main and a branching chamber. Hence, caves are vital in the flow of power. In the same vein, Miller also suggests that salt is sacred because it was carried by water and deposited in caves and elsewhere, attracting human and animal life. Salt in caves reflects the idea presented earlier that powerful elements often choose to come together in partnership.

According to Fowler and Liljeblad (1986, 452), power could be deliberately sought by visiting specific caves scattered throughout Northern Paiute territory. An individual was required to spend the night in such a location where he would be visited by powers if the powers so chose. Instructions as to paraphernalia and other procedures would be given at this time (Park 1938). Isabel T. Kelly and Catherine S. Fowler (1986, 383) describe how power came in dreams, from one or more tutelaries (spirit helpers), usually in animal form, which provided instructions and songs. Dreams could be obtained by spending the night alone in one of several caves (Laird 1976, 39).

Khera and Mariella (1983, 51) relate that the Yavapai believe that the third time the world was destroyed was by a great flood. One woman survived this flood in a hollow log and landed in the Red Rock Mountains, Arizona, where she lived in a cave in Boynton Canyon. The Red Bluff, where the cave is situated, is the most sacred site to the Yavapai. Her grandson eventually received powers from the sun and clouds. Before he left this world he called all beings together in the cave in the Red Rock Mountains. He taught each the right ways to live and then sent the different groups of humans to different places throughout the world. The Yavapai alone stayed at what they defined as the Center of the World, where

everything had begun. To this day, people who possess the singular qualities necessary to become doctors can sleep in the Red Rock Mountain caves to receive power. At any time Yavapai people go there, especially to the Cave of First Woman in Boynton Canyon, for prayer. In southern Nevada Indian elders have identified a number of wishing caves or caves where individuals leave offerings in the hope of obtaining something they want.

Storied Rocks

According to Shimkin (1986, 325), for the Western Shoshone people in Wyoming the most sacred of places are the sites of pictographs (*poha kahni*: “house of power”), particularly in the vicinity of Dinwoody Canyon on the Wind River Shoshone Reservation in Wyoming. At this site there are hundreds of pictographs which were clearly accumulated over a long period (Gebhard and Cahn 1950; Gebhard 1951). The more recent representations are peculiarly important to the Shoshone people. These are large panels representing the feared Water Ghost Beings and Rock Ghost Beings. Shimkin (1947, 334) says that the Water Ghost Being is known by obsidian flakes, which represent broken fragments of her body, that are found on the ground in front of the rock pane. Lawrence Loendorf’s (1993) analysis of this site suggests that shamans who wanted to help their people used it. A shaman using the site must be brave enough to venture into this supernatural world, to encounter the spirits that will devour him, and be reborn with new knowledge and understanding. One common reason for a shaman to brave such a journey is to find the cause of a malady or illness. The latter could be caused by a person losing his *poho*, or power, which the shaman needs to find and return to make its owner whole again. Loendorf’s analysis of the Water Ghost Being site is comparable with interpretations of Wellington Canyon and Pintwater Cave, Nevada (Stoffle et al. 2000b).

Trails

In Indian culture, trails are sacred because they lead to places of power or spiritual importance and because the act of traveling a trail changes a person, often resulting in a restoration of balance or curing.⁴ Indian people travel trails physically and also through song, prayer, and dream (Henningson, Durham and Richardson 1980, 81). The academic literature recognizes the importance of Native American trails and describes them as the most enduring evidence of native land use (Norris and Carrico 1978, 5-11). Specifically, Norris and Carrico (1978) discuss the

Mojave, the Cocomaricopa, the Yuma-Needles trails, and other shorter trails. These land features possess significance to American Indians and represent native land use methods and landscape funds of knowledge. The Salt Song Trail, for instance, was and still is a landmark and sacred area to Southern Paiutes and Hualapais. Trails are not just physical entities; they are also repositories of prayers, songs, and thoughts. The life records of transhumant peoples are found along trails (Zedeño and Stoffle 2001).

Trails can be disrupted and even broken by developments that remove a key place along a trail or present some barrier as, for example, a site for radioactive waste storage. If some point of a trail is disrupted or polluted, the power at either end of it may not accept a traveler when he or she arrives or ever again accept anyone. Pollution and disruption of trails threaten the integrity and integration of cultural resources and places and, ultimately, the spiderweb of power that holds the universe together.

Power and Cultural Landscapes

Finally, it must be noted that the web or network formed by physical and spiritual interactions among people, places, and resources is more than a sum of parts; in the cultural perception of American Indians (and of many other cultures) these interactions give birth to a phenomenon which contemporary anthropologists call *cultural landscape*. The concept of cultural landscape provides both a temporally and spatially larger framework for understanding the breath of the spiderweb of power than other concepts offer and a way of visually representing the interconnection of objects, places, and resources (Fig. 3).

Although Indian people have regularly explained why interconnections among all things and beings constitute the fabric of their world view, the implications of such cultural perceptions were not well understood and, thus, not fully incorporated into applied ethnographic studies in western North America until very recently. We believe this occurred either because we could not use such information in projects that were narrowly limited to evaluating places, resources, and objects, or because as anthropologists we simply did not possess a concept appropriate for framing in scientific words what the elders were trying to tell us. An environmental study team working for the Navajo Nation (Kelley and Francis 1993, 151-69) pointed out this oversight. Thereafter, we began to develop a systematic method for eliciting information on interconnected cultural phenomena and for

analyzing and graphically representing the phenomena known as cultural landscapes (BARA 1998; Dewey-Hefley et al. 1998; Stoffle, Halmo, and Austin 1997; Stoffle et al. 2000b; Stoffle et al. 2000c; Zedeño 1997, 2000; Zedeño, Austin, and Stoffle 1997).

The Landscape Concept

The concept of cultural landscape derives from the notion that people, through repeated interactions with their surroundings, develop an image or cognition of the land they hold and a shared understanding of its form and content. This cognition of land and the interactions that structure it are shared among the people and transferred over generations. All human groups develop and come to share cultural landscapes. The concept implies that many cultural groups (ethnic groups) can hold different, even conflicting, images of the same land. Elsewhere, we have explained how the legal and political history of U.S.-American Indian relations is rooted in conflicting landscape cognitions (Zedeño, Austin, and Stoffle 1997, 124).

There are two oppositional concepts of landscape. The naturalist concept of landscape is that the physical environment itself somehow determines the way humans view it and live in it. The culturalist view suggests that only human cognitions of a physical environment are important, to such an extent that the characteristics of the environment itself are largely irrelevant in influencing how humans view it and live in it. We have taken for our concept the middle ground, or a synthesis of these two views. As expressed by Tilley, the term *landscape* refers to:

The physical and visual form of the earth as an environment and as a setting in which locales occur and in dialectical relations to which meanings are created, reproduced and transformed. The appearance of a landscape is something that is substantial and capable of being described in terms of relief, topography, the flows of contours and rivers, coasts, rocks and soils. It is most usually clearly defined features, such as mountain peaks, ridges, bogs and plains, which occur in geographic descriptions. The locales in a landscape may be natural features such as bays or inlets on a coastline or high points, or humanly created places such as monuments or settlements. Human-created locales draw on qualities of landscape to create part of their significance for those who use them, and the perception of the landscape itself may be fundamentally affected by how these locales are situated (1994, 25).

Wellington Canyon Study: All Connections

⊙ Landmark identified with an explicit connection in one or more survey interviews.

○ Landmark identified, but without an explicit connection, in one or more survey interviews.

— Rivers □ States — Latitude / longitude - - - Landmark Connections

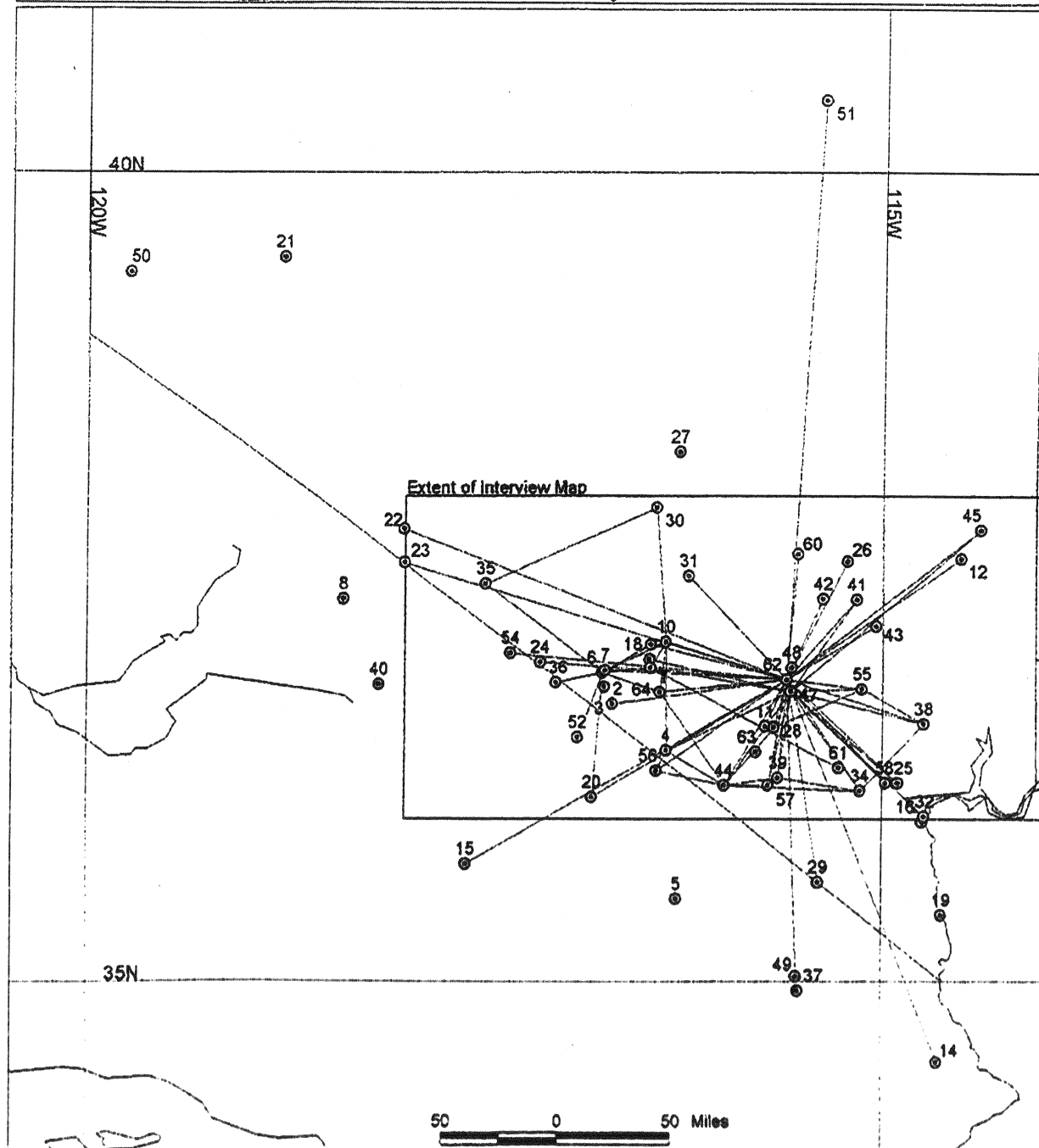


Figure 3. Wellington Canyon Study.

Cultural landscapes are nested (Stoffle, Halmo, and Austin 1997). They exist at different scales but are integrated into a whole. For many American Indians there are six nested levels including, from broadest to narrowest spatial scale: eventscales, Holy Lands, songscapes, regional landscapes, ecoscapes, and landmarks. The topographic criteria for defining these categories of landscapes range from a close fit with the natural terrain (e.g., an ecoscape) to a spiritual landscape that exists in terms of its own criteria but is at least minimally anchored in the topography (i.e., a songscape). Each of these levels, in turn, has at least three basic dimensions that are amenable to description and measurement: 1) formal, or the physical characteristics and properties of the landscape; 2) relational, or the interactive (behavioral, social, spiritual) links that connect people to the land and resources; and 3) historical, or the sequences of evolving connections that result from repeated, intergenerational uses of land and resources (Zedeño, Austin, and Stoffle 1997, 126).

The cultural landscape concept has stimulated many federal agencies to have their administrative units design, conduct, and respond to cultural landscape studies (Evans, Roberts, and Nelson 2001; Nickens and Wright 1998). At this early date, one may say that current landscape studies tend to be bounded by previous studies of places at federal facilities and, thus, are often narrow, both conceptually and spatially.

Landscapes and Places

A cultural landscape differs from a special place (Traditional Cultural Property [TCP]) to which one or more human groups have attached specific cultural meanings. Central to the concept of a cultural landscape is the notion that not all places within it have the same significance in terms of their formal, relational, or historic dimensions. The places within a landscape may derive their value from the type of experiences or interactions between people and the natural phenomena. Tilley (1994, 34) distinguishes between the concepts of place and of landscape, with the former emphasizing difference and singularity and the latter encompassing commonalities or relationships among singular locales and events. Viewed in its entirety and from the perspective of a human group, a cultural landscape should make sense as a kind of area whose place and resource components are connected according to a common logic.

It is also important to remember that a place may be attached to more than one cultural landscape. We call

this *cultural landscape layering*. Layered cultural landscapes may have very different cultural meanings. One landscape layer may be composed of places visited by a spiritual being; together, they tell a story of the life and spoils of that being. Another landscape layer may involve an event such as the Trail of Tears for the Cherokees, the march to Bosque Redondo for the Navajos, or the march to Fort Independence for the Owens Valley Paiutes and Shoshones.

Non-Indians often calculate the value of cultural landscapes as the sum of the significant places within it. This is much like the procedure for establishing an archaeological or historic district. Federal guidelines permit the value of a district to be greater than the sum of its parts, but few districts actually include sites of little or no scientific significance (Cassity 1993). It is probably a valid assumption that the more space (or less spatial continuity) there is between significant places, the more difficult it will be to successfully nominate it as either an archaeological district or a cultural landscape. From an American Indian perspective, however, the space between places is a formal attribute that directly contributes to the value of the places and the overall value of the cultural landscape.

The Meaning of Space Between Places

A cultural landscape has meaning because it contains valued places and because the valued places within it are mutually connected. In addition, the spaces between the places can have culturally specified meanings without which the structural logic of a landscape would fail.

Some specialists in this area do not believe there is meaning attached to such spaces. Basso (1996, 54), the foremost scholar of Apache places, cites Martin Heidegger (1977, 332) to suggest that the essential nature of cultural space derives from particular localities rather than being intrinsic to "space" as a dimension of the material world. This is an epistemological stand taken by Basso who was really explaining the importance of individual places in a people's historical and cultural memory; it is unclear whether he, therefore, conceived of a cultural landscape as culturally significant places separated by meaningless space.

Tilley (1994, 9-11, 15), in contrast, suggests that space is critical for understanding place and landscape. Instead of being neutral and divorced from humanity and society, space is socially produced; different societies, groups, and individuals act out their lives in

different spaces. A social space, rather than being uniform and forever the same, is constituted by differential densities of human experience, attachment, and involvement. It is, above all, contextually constituted, providing particular settings for involvement and the creation of meanings. He further states that space and place are interrelated but different. Space provides a situational context for places, but still derives its meanings from particular places (Relph 1976, 8; Whittlesey 1998). Without places there can be no spaces, and the former have primary ontological significance as centers of bodily activity, human significance, and emotional attachment. The meaning of place is grounded in the existential or lived consciousness of it. Personal and cultural identities are bound to place; a "topo-analysis" is one which explores the creation of self-identity through place. Maria Nieves Zedeño (2000, 106) suggests a more direct and causative role for this topography when she concludes that, for humans, space is not a *tabula rasa* that is progressively filled with locations as they accumulate perceptions and experiences through interactions, but vice versa. Place is what defines people's relations to one another and to the material world – the proverbial widening of horizons starts at one place (e.g., the creation or birth place) and extends from there. Thus, for example, when Southern Paiutes stand on a culturally significant place, such as Yucca Mountain in Nevada, they look south toward their origin place, Mount Charleston, and are able to articulate the multifarious formal, relational, and historical meanings of what space lies between them and their creation.

Line-of-Sight Space

The spaces between important places may contribute to the overall cultural significance of the cultural landscape. Numic people believe that large sacred mountains "stand up" so they can see one another, and that the mountains find joy and power in that experience. While the mountains are themselves places of power, they continue to have power in part because they are surrounded by unobstructed space. The O'odham people of southern Arizona and northern Mexico, for example, believe that powerful forces connect the mountains in their area. These are the forces that hold the earth together. If anything breaks the connection between these forces, such as electrical power lines built on the mountain, the forces will be disrupted and the earth will fall apart.

Vista Space

Vista space is somewhat different than line-of-sight

space. *Vista* is a term used to explain the power a place derives because of its view. When a person sits at a certain place he or she can see for great distances and observe many things. Indian people often use such vista places as sites of vision quests and spiritual renewal. Clearly, the space surrounding such places contributes to its power. Scrugham Peak, which is the volcano that formed the basalt-capped Buckboard Mesa, is one of the elevated places in Nevada that provides a culturally important vista space. It sits in the middle of the enormous Timber Mountain caldera; the peak is important for its view of this caldera and of the surrounding high mountains. The vistas from and to Scrugham Peak are credited by Indian people with a number of vision quest sites that literally line the high rim of Buckboard Mesa and are marked by storied rocks (Zedeño, Stoffle, and Halmo 2001). These vistas are combined with the power of volcanic activity that is manifested in large basalt boulders used for individual ceremonial activities and in small obsidian nodules that are used for making stone tools and arrowheads.

Narrow and Wide Space

Space can also contribute to the meaning of spiritual and physical trails and to the significance people associate with traveling those trails. A trail that passes over a great open space or through a tightly enclosed space may acquire value owing to the environmental aesthetics derived from the journey. The Iditarod dogsled trail in Alaska derives value because it passes over seemingly impossible expanses of high mountains, snow-covered, wind-blown tundra, and even frozen rivers and ocean. The Colorado River, which is a combination water/land trail for Yuman and Numic peoples, derives additional value in those places where it passes through steep-sided canyons like the Grand Canyon and Black Canyon.

Space can be celebrated by being identified as a part of the origin of a place. Origin stories often identify the meaning of specific places by where they exist in culturally significant space. Thus, while most rivers have great significance to Indian people, they derive more significance when they pass through volcanic narrows. There are Numic and Yuman origin stories for the relationship between the river and the canyon for both Grand and Black Canyons. Similarly, for the Ojibway the cultural significance of a body of water increases when it pours over a rapid or waterfall into a Great Lake (Zedeño et al. 2001). In fact, for all flowing water, it is almost a given that where it makes transitions, it has special powers.

In southern Nevada, a major narrow area is upper Fortymile Canyon or *Tohwahonupi* – Snake, in Western Shoshone (Stoffle et al. 1990b, 114). The wash that flows through the canyon is itself a trail marked by petroglyph sites that leads, through a constriction, to the box canyon containing numerous ceremonial areas. Its cultural importance is reflected in its name, *Tohwahonupi*, after a religious being associated with water and curing. Indian people interviewed at the canyon noted that the places within it were powerful because of their location down inside of a big canyon along a trail to places. The head of *Tohwahonupi* is Scrugham Peak and Buckboard Mesa. Together, these places are all related by forces of power flowing down from the peak, into the canyon, out into the open flats and oasis springs of Ash Meadows. Here is a case where the flow of power is viewed as corresponding with the flow of the hydrological system.

Less is known about the impacts of open space or confined space on other major forces of nature. Wind, for example, is perceived as a living being by most Indian peoples. Numic people have different names for kinds of wind that blow across open spaces and through narrow canyons. Wind, like water, is influenced in special ways by being fully released in open space as opposed to being confined in narrow space. A special wind comes from Pintwater Cave and blows to the west across southern Nevada. This wind is known to bring special information to all Indian people, whether a family living on their farm in Oasis Valley or a vision seeker camping on the edge of Buckboard Mesa.

Spaces and Trails

Culturally significant space may exist where people or spiritual beings passed along trails from place to place. Sometimes these trails are still visible on the ground, such as Mohave and Paiute trails in the Mohave Desert. At other times, the trails exist today only in the minds of the people. This may occur because the trails became the paved roads of later time and society. Sometimes trails physically never existed. Water trails, for example, were often established as the shortest points between islands on big lakes, along shorelines, and along interior rivers and streams. Water trails leave no material mark, but they exist in the minds of people, like the Ojibway, who navigated them (Zedeño and Stoffle 2001).

Northwest Arizona, southern Nevada, and southeast California are crisscrossed with trails. Some of these are physical, like trails connecting hunting and gathering areas on Pahute Mesa with farming areas in

Oasis Valley. Other trails are spiritual, like the Fox Song trail. Still other trails are both utilitarian and sacred, being at one time a physical path to hunting areas and at another time a trail traversed by religious specialists on their way to a major ceremonial area like Buckboard Mesa.

Trails to the Afterlife

Many American Indian peoples have a trail to the afterlife. These trails are primarily spiritual in nature but still have physical and grounded representations of all or portions of the trail. For example, the Chatino of Oaxaca, Mexico, identify what they call a trail of the dead along which the spirits of the departed travel to reach the underworld (Greenberg 1981, 107). Most native Mesoamerican groups share this belief in a physical trail traveled by spirits to reach the next world. The Chatino path of the dead covers a track of about 60 kilometers and is marked by a series of nine physical places that the departed spirit visits. The physical body of the departed spirit is taken by the living to the first couple of sites as part of burial rituals. At later stops on the trail the departed spirits are said to perform various acts and rituals. Eventually, they arrive at a cave which is the entrance to the underworld and leave the geography of this world behind.

The Chatino and other native Mesoamerican groups also have other sets of trails that mark the ritual boundaries of their territory (Greenberg 1999). Among the Chatino, the house of the rain god is located on a mountaintop. At the beginning and end of the rainy season, the Chatino go en masse to the house of the rain god to “bring” the rain, and from there the procession descends to a spring said to be the door to the rain god’s house, to “open” it. At the end of the rainy season, to “leave” the rains, this order is reversed (Greenberg 1981, 120). At the new year and prior to fiestas, ritual treks are made to the sites, marking the boundaries of the territory by those sponsoring rituals. At births, marriages, and deaths, crosses marking kinship relationships are erected at various sacred sites. These crosses and sites are visited at least once a year, and officers of the civil-religious hierarchy responsible for the ceremonial cycle will visit these places more than once a year. As well, *curanderos*, or medicine people, will visit these sacred and powerful springs, mountaintops, and caves as part of their curing ceremonies to treat the sick. These places define houses, which are metaphors for bodies. They are nested in increasingly larger houses or bodies. The house of the rain god is a mountain that is the body of the rain god itself. There is a metalogic that organizes

all of these places and gives each one of them meaning relative to the others. These cultural landscapes are organized in terms of increasingly larger and nested metaphors (Greenberg 1999).

Songscape: The Salt Song Trail

The Paiute and Hualapai trail to the afterlife, called the Salt Song Trail, runs across southern Nevada from the Las Vegas Valley. Traveling along the Spring Mountains, it arrives on the northeast side of the mountains near Indian Springs. It then goes through Pahrump to Ash Meadows, comes back south near Eagle Mountain, travels down the Amargosa River past Shoshone, and turns at Dumont Dunes. It goes up through Baker and Soda Lake, then passes south to the Providence Mountains. From there, it goes to Twenty-nine Palms, to the San Bernardino Mountains, and turns east toward the Colorado River, crossing into Arizona south of Blythe. After a number of stops in Arizona the soul traveling the Salt Song Trail jumps into the afterlife at a location along the Colorado River near the Grand Canyon (Laird 1976).

All along this songscape are places of great cultural significance to Indian people. The medicine cane in the museum at Mitchell Caverns is so important that Indian people today make religious pilgrimages to see it and Mitchell Caverns. Indian Springs is a stop where the soul takes a fork north to Pintwater Cave. Pintwater Cave is seen as connected with Buckboard Mesa, but it is yet unclear whether the Salt Song Trail itself or a side-journey path goes to Buckboard Mesa (Stoffle et al. 2000b, 119). Currently, the Indian people who sing the Salt Song in order to send their people to heaven are retracing the route and stopping at special places along the route of the song. The whole Salt Song Trail is highly culturally significant, and places alongside are totally interconnected.

The Fox Trail

The Fox Trail is another spiritual trail that comes across southern Nevada. It moves in leaps from spring to spring, traveling south from the Whipple Mountains. To the north, past the Chemehuevi Mountains, past the Dead Mountains, it moves over the Paiute Mountains, behind the Spring Mountains toward Shoshone territory bounded by the Funeral Range. The Funeral Range sits high above Death Valley and serves as a gateway to the valley and as a transition from Paiute to Shoshone lands. If one looks really carefully, the Funeral Range floats in the air. That was Fox's journey down to the southern end (Laird 1976). He made the water holes

with his arrow; they are in a straight line. Indians travel this route in ceremony through song to check on the water and bless the water and give thanks for the springs, and this keeps the springs alive. Indian people go to these springs for special purposes because of their special cosmological meanings.

Movements within Landscapes

Up to this point we have discussed the cultural importance of trails to Yuman and Numic peoples. Missing from this analysis is why these trails are important in landscapes. Simply, they connect places and, at some level, integrate landscapes by defining the physical and spiritual relationships between places and the spaces that are traversed in order to move from place to place. So, why are trails important? Tilley (1994, 31) provides a very philosophical interpretation of trails and movement along them. He maintains that *paths* (his term for trails), for peoples who have lived on the land for many generations, are interpreted as being both real and symbolic linkages between places and people. These linkages can come to be spoken of as metaphors for these relationships and viewed as the creations of the supernatural. Walking these paths, according to Tilley, is like saying a religious text in a ritual; if ritual text is not said, it really is not called, and if a path is not walked, it really is not enacted. The act of walking or spiritually moving along a path is a personal enactment of the relationships between the places and peoples that the path represents. Because trails have been walked again and again, often since Creation, they represent what Tilley (1994, 31) calls *Spatiotemporal Linkages* and are obvious templates for future movements and for the maintenance of relationships. Therefore, when Indian people say trails are sacred, they are reflecting deep philosophical understandings about the meaning of paths. Trails take an even deeper dimension for transhumant people, like the Numic-speaking groups or the Western Ojibway, whose life-history record may be contained within a trail system (Zedeño and Stoffle 2001).

Numic and Yuman-speaking people interviewed over the years have talked about the ceremonial or medicinal aspects of travel along certain trails. Just the act of traveling constitutes a ceremony and produces a powerful event. When a person travels, he or she may receive a song that, thereafter, is sung along the remainder of the journey and every time that trail is used. That song often becomes central in the life of the person, for not everyone may receive a song, and only a few are spiritually prepared to remember and sing it. Along most trails are places where a person going to a

ceremony will prepare him- or herself. These locales for ceremonial preparation are often marked by the knotted string sign in either rock peckings or paintings. The sites tend not to be near camping places, being more isolated because they are used to prepare for ceremony. Once the designated ceremony is completed, these spots are revisited on the return trip to the major settlement.

Narratives

Narrating stories about landscapes furnishes a way to understand their structural logic. When combined with physical travel along paths in a landscape, narrative serves to make them real. According to Tilley (1994, 31), to understand a landscape truly it must be felt, but to convey some of this feeling to others landscape has to be talked and written about, recounted, and depicted. He believes that movement is as key in stories about landscapes as it is in walking paths. The importance of a place can be appreciated only as part of an act of moving from and to it in relation to other places and peoples, and the act of arriving may be as important as the act of leaving. If naming is an act of construction of landscape – constituting an origin point for it – then narratives introduce temporality, making locales (places) markers of individual and group experience. Indian stories and songs about travel constitute a critical dimension of landscape – both informing the listener about place, space, and interactive links, and confirming the historical relationships between these in the past, present, and future.

Conclusion

This paper has attempted to bring together American Indian places, objects, and resources by applying the concept of cultural landscape to explain how power, or *puha*, connects all things in the American Indian world view. Power moves from place to place and across spaces, often following systems of surface and underground water flow. *Puha* can be concentrated by the will of both humans and of the natural elements. Indian tobacco goes to live on the face of volcanic walls because a powerful plant likes to associate with a powerful place. When humans or Little People recognize the power of a place and associated medicine plants, they peck and paint the walls as a sign that this is a very powerful place. Powerful rock and crystals are both produced and attracted to powerful places like volcanic lava flows and narrow canyons. People visit such places to conduct ceremonies and acquire power in songs and stories. Objects, places, natural resources,

and trails are united in a complex web of power and power relationships whose logic may be holistically explained in terms of cultural landscapes.

In this paper we have fused ideas from the hundreds of Indian people interviewed about their lands and resources and from anthropologists who are currently conducting landscape studies in the United States and elsewhere. These ideas attempt to humanize research in land and resource use by focusing on the people's identifications and interpretations of their own cultural landscapes and the interconnections that, in their view, were established at Creation and have grown ever since.

Notes

1. Dr. Richard W. Stoffle is a cultural anthropologist and Full Research Anthropologist at the Bureau of Applied Research in Anthropology, University of Arizona. Dr. Stoffle has worked on American Indian environmental issues since 1976 when he participated in the first American Indian social impact assessment in the U.S., the Environmental Impact Study of the Devers-Palo Verde powerline proposed from the Buckeye Atomicpower plant near Phoenix, Arizona, to the Palo Verde substation of Southern California Edison, in California. Since then, Dr. Stoffle has worked successfully with more than 95 American Indian tribes and most federal agencies to represent Indian environmental issues in land management decisions (Stoffle, Halmo, Olmsted and Evans 1990).

Dr. Maria Nieves Zedeño is an archaeologist and Assistant Research Anthropologist specializing in southwestern archaeology, ethnohistory, and the contemporary ethnography of cultural resources. Dr. Zedeño has worked for seven years with BARA on environmental and cultural assessment projects involving American Indians and Federal agencies and has been the senior researcher on a number of them. Currently she is directing an ethnographic resource assessment project for three national parks in Arizona and New Mexico and co-directing with Richard Stoffle a multi-park project in the Great Lakes region with the Ojibway people.

2. The Numic branch of the Uto-Aztecan language family is also spoken by the Mono, Utes, Northern Paiutes, including Bannock, Panamint, Comanche, Kawaiisu, and Tubatulabal (Silver and Miller 1997, 370-71).

3. The Quechan, Maricopa, Diegueno (Kumeyaay), Kiliwa, Paipai, and Cocopa along the lower Colorado

and the Havasupai, Yavapai, and Walapai in the upper Colorado also speak the Yuman branch of the Yuman-Cochimi language family (Silver and Miller 1997, 374). Yuman and Numic are not mutually intelligible.

4. See for comparison Vecsey's (1988, 45) description of the role of travel along trails in Navajo curing rituals.

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