

Landscapes of the Ghost Dance: A Cartography of Numic Ritual

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Recent historical and ethnographic research indicates that the study of ritual behavior could be greatly enhanced by combining parameters of place and landscape use with interpretation of material culture. This strategy is especially useful for identifying the archaeological record of ritual among societies that incorporated topographic features and natural resources into their liturgical order. In this article we apply a behavioral framework to the study of Numic ritual technologies. By intergrating ethnographic and historic data on the geography, practice, and material culture of the nineteenth-century Nevada Ghost Dance, we demonstrate how this framework helps to determine the configuration of a ritual place and its position relative to other ritual and nonritual places.

KEY WORDS: Ghost Dance; Nevada Indians; ritual technology; sacred landscape.

Late in the nineteenth century, the Nevada Territory and its indigenous people became the focus of national attention as a result of the Ghost Dance, a religious movement that began in 1870 under the leadership of the Northern Paiute prophet Wodziwob and developed into a pan-Indian movement by 1890. Following a vision received by Wovoka during a full eclipse of the sun, The Ghost Dance of the 1890s quickly spread across the frontier as far as the Northern Plains (Mooney, 1896, p. 771). Euro-Americans of the time saw this movement as a largely subversive response to the settlement of Indian lands and responded with an aggressive military campaign that culminated in the massacre of over 200 Sioux at Wounded Knee in 1890 (Brown, 1972). Soon thereafter, James Mooney of the Bureau of American Ethnology undertook a 3-year study of the movement

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to investigate its origin and spread. The work of later scholars, particularly Du Bois (1939), Spier (1935), Hittman (1973, 1997), Thornton (1986), Kehoe (1989), and Vander (1997), among others, further advanced Mooney's research and was instrumental in providing a broad understanding of the demographic and socio-cultural dimensions as well as pan-continental implications of the Ghost Dance religion.

Typically, scholarly contributions to the extensive Ghost Dance literature (see Osterreich, 1991) have focused on events surrounding the development of the movement from the perspective of intercultural conflict and ideologies of conquest, emphasizing its political connotations as well as the biographic particularities of Wovoka and his main followers (e.g., Bailey, 1957; Dangberg, 1968). This emphasis has resulted in the construction of a case for testing theories of acculturation (e.g., Aberle, 1959; Hertskovitz, 1958) and the origin of modern religious sects (La Barre, 1972; Linton, 1943; Mair, 1959; Overholt, 1974). Ethnohistorians, including Dobyns and Euler (1967), Gayton (1930), Logan (1980), and DeMallie (1982), have examined in detail local manifestations of the Ghost Dance, concentrating on the relationships between sociodemographic and economic factors and the origin and spread of the dance. With the exception of Vander (1986, 1997), who explores relationships among people, place, and power, very little has been written about the spatial context of the dance itself and the ritual connections between the dance and the surrounding landscape. The spatial dimension of the Ghost Dance Movement also has been brought to light as a result of recent legally mandated consultation with American Indian groups regarding cultural resource preservation (Stoffle *et al.*, 2000a).

In this article we shift the focus towards the ritual dimensions of the Nevada Ghost Dance to scrutinize proposed connections between this rite and ancient religious practices of Numic-speaking groups in the Great Basin (Hittman, 1973; Vander, 1997). To this end, we employ an analytical framework that reveals the behavioral and technological character of ritual. We explore some principles of Numic epistemology and liturgy that point to the existence of intricate connections among ritual places, resources, and objects. Our analysis of the structure of ritual settings and associated place-making behaviors complements recent archaeological studies of ritual that focus on object properties and performance characteristics, life histories, and depositional contexts (Brown, 2004; LaMotta and Schiffer, 2001; Walker, 1995, 1999, 2001; Walker and Lucero, 2000). Ultimately, our goal is to uncover the types of material culture as well as the geographic indicators of ritual behaviors and activities that may contribute to the better understanding of an understudied topic in Great Basin prehistory: ritual and ceremonialism. We will show how a behavioral framework applied to the study of a historic ritual event can reveal patterns and elements recognizable in prehistoric contexts.

NUMIC EPISTEMOLOGY AND THE TECHNOLOGY OF RITUAL

Among scholars of Great Basin prehistory, very few theories address religion and ritual as concrete practices that left interpretable material remains (e.g., papers in Whitley and Loendorf, 1994). This problem is particularly acute in archaeological studies of ancestral Numic-speaking Paiute and Shoshone groups from Nevada, Utah, California, and Arizona. In this area, a paucity of conventional clues for identifying ritual activities (e.g., specialized structures and artifacts) is compounded by the persistence of explanatory models that focus almost exclusively on the ecological and socioeconomic aspects of land and resource use (see a review by Stoffle and Zedeño, 2001a). This is an unfortunately narrow approach to Numic archaeology, given how lavishly the classic ethnographies written in the last 150 years describe religious practices of various Desert–Basin–Plateau groups (e.g., Fowler and Fowler, 1971; Hultkrantz, 1976; Jorgensen, 1986; Kelly, 1939; Kelly and Fowler, 1986; Laird, 1976; Liljebblad and Fowler, 1986; Miller, 1983; Mooney, 1896; Park, 1934; Shimkin, 1947). Ethnography and history of the Desert and Basin cultures can provide rich resources for developing the interpretive tools needed to elucidate prehistoric ritual behavior (Thomas, 1976, p. 131; Whitley, 1994).

Perhaps the single most important religious concept derived from ethnographic research among Numic speakers that underwrites all ritual behaviors and activities is known as *Puha* or Power (Bean, 1976; Fowler, 1992; Liljebblad, 1986; Miller, 1983; Stoffle and Zedeño, 2001b). According to Miller (1983, p. 78), *power* may be defined as a cosmic force that, together with the life force, forms the fabric of the universe; the principle of a living universe is the epistemological foundation of Numic culture, or what Rappaport (1999, pp. 263–271, 446) calls an *Ultimate Sacred Postulate*. Power is causal and dynamic, as it constantly flows through a web-like structure that connects all things and beings, human or otherwise, that make up the universe (Miller, 1983, pp. 79–80).

Thus, in the Numic worldview *Puha* pervades all manifestations of the physical world and concentrates in certain people, places, and objects to higher degrees than in others. Humans engage in ritual because it enables them to mediate and balance interactions with multifarious nonhuman forces that inhabit the physical and spiritual worlds. Ritual allows practitioners to harness such power in order to (a) translate it to human proportion and render it accessible to human cognition and (b) effect a transformation from one state of being into another. Ritual transformations are typically embraced for the benefit of a community, but also may be used to advance the interests of an individual (Kelly, 1939). Ethnographic statements from Paiutes indicate that, because of the weighty responsibilities that traditionally accompanied ritual leadership, this role was not always assumed by those who displayed powers consistent with a *Puhagant* or ritual specialist, generally referred to as shaman, medicine person, or simply “doctor” (e.g., Mooney, 1896; Steward, 1934).

A Technological Approach to Ritual

From a practical analytical angle, it may be said that a ritual constitutes an action or a sequence of actions aimed at achieving an observable or a measurable transformation *and* a lasting effect (Walker, 1995, p. 71, 1999). Rituals are repeatable performance-driven actions (*sensu* Schiffer, 1999) whose success depends on a ritual specialist's capacity to effectively harness power from physical and spiritual sources. During the ritual performance, the specialist engages in one or more interactions with objects, places, or people. These ritual actions are usually employed to effect a specific outcome (e.g., improving health, controlling the weather, ensuring fertility, or procuring protection). Rituals are performances that are anchored in collective interpretations about the way the world works. Therefore, while the ritual specialist may change, the framework of the ritual performance remains fairly constant because it is collectively constituted through socially sanctioned activity sequences. Ritual technologies include shared knowledge that justifies a ritual performance, privileged knowledge that informs ascribed methods of performance, the types of ritual objects, the patterns of actions that are associated with harnessing power, and ritual performance settings. Ritual technologies tend to guide and segregate specific sets of interacting people, places, and objects along similar and consistently patterned life histories that, in turn, leave distinctive material traces on the landscape (Walker, 1995, p. 72; Zedeño, 1997, 2000).

Ritual may thus be conceptualized as a technology because it has, like any other technology, three basic requirements: a corpus of principles and knowledge, a set of tools and materials, and an array of particular settings or facilities, where the activity—in this case a ritual—is conducted (after Schiffer and Skibo, 1987, 1997). Ritual specialists fulfill these three requirements in the process of harnessing power to achieve a desired transformation and to preserve its effect. A ritual is a technological sequence because its efficacy requires that ritual actions be carried out in a specific order. Whereas most technological sequences allow some degree of compromise (e.g., choice of materials of comparable properties), the liturgical order is frequently “god-given” or received by the specialist from powerful spirits through visions or dreams (Kelly, 1939) and thus it allows for little compromise.

Liturgical knowledge, the acumen of a ritual specialist (Rappaport, 1999), commonly includes origin stories that guide ritual behavior; songs, dances, and prayers; information derived from visions; climatic, calendric, and astronomical instructions; ethnobiology; and food and sex taboos. Liturgical knowledge lends structure to interactions between humans and powerful forces by prescribing a formal ritual sequence that not only brings about the desired transformation but also preserves its effect. Liturgical knowledge is, therefore, the most stable of all components of a ritual technology, even though some of its components evolve over time because of the ebb and flow of knowledge, as humans lose certain knowledge and replace it, as they adapt old knowledge to new living conditions,

and as they expand their interactions with powerful forces and become wiser and more entrenched in the landscape that contains them.

Ritual knowledge varies in its distribution in terms of use and control of knowledge, places, and paraphernalia (Walker, 1995, p. 73). It is useful, therefore, to apply the concept of techno-community (Schiffer, 2002, p. 1149), a kind of community of practice, to denote a group of people who share a ritual technology and benefit from its results, but whose membership may crosscut social, cultural, and ethnic boundaries. Ritual knowledge may be transferred and adapted as it moves across community boundaries and from one generation to the next. However, because the survival of a ritual technology depends so keenly on rigorous and uncompromising performances, the underlying logic that makes a particular ritual sequence work in the eyes of the techno-community from which it stems tends to remain unchanged for very long periods of time. The connection between knowledge and performance, therefore, partially explains the longevity of formal rituals. If, on the other hand, sudden and drastic changes in the ecological, political, or social environment occur, ritual may also undergo transformations previously considered unnecessary or even undesirable.

The *ritual paraphernalia* required in the performance of a ritual activity include natural resources and tools. Both types of objects, in turn, may have single or multiple uses. Single-use ritual objects are harvested, manufactured, and used exclusively for a particular ritual activity; examples include crystals, feathers, hallucinogenic plants, pipes, and rattles that may be used repeatedly, but only for one purpose. By contrast, a multi-use ritual object may be any object that, at some point in its life history, is included in a ritual performance. These objects also undergo processes of ritual discard, thereby creating more or less distinctive archaeological deposits (see Brown, 2004; LaMotta, 2001; Walker, 1995, 1999, for detailed explanations of these processes).

Ritual discard behaviors can effectively change the life history of a place by transforming it into a ritual setting or into a feature connected to a larger ritual setting. For example, through the contemporary ethnographic study of surface deposits in southern Nevada, we have found that it is the act of discarding, rather than the nature of the discarded object alone, that constitutes ritual behavior. The underlying logic holds that the intentional disposal of certain objects helps to harness the power residing in the place of disposal; at the same time, the human act of disposing powerful objects in a certain place lends power to that place—hence reinforcing the notion that ritual performance involves interactions among people, places, and objects (Stoffle *et al.*, 2001, p. 201). The Wind River Shoshone of Wyoming believe that obsidian flakes are pieces of the body of the feared Water Ghost Being; obsidian is found scattered below the petroglyphs representing this being in Dinwoody Canyon (Shimkin, 1947, p. 334). The Shoshone from Lida, Nevada, used to make arrows from greasewood and shoot them at a prominent rock formation thought to have special powers to propitiate hunting. Some of these arrows got wedged in the crevices of the rock whereas most others fell

around the rock, forming a ritual deposit on the site surface (McCracken, 1990, p. 63). Quartz rocks were found deposited as offerings in cracks or crevices around a rock art panel in the Mohave Desert (Whitley, 1999, p. 221). A similar range of ritual discard practices are also found in shrines made by contemporary Maya highland communities (Brown, 2004).

The locus of ritual performance or the *ritual setting* is a place or set of connected places where powerful forces concentrate to make ritual transformations possible. Ritual settings are diverse in content as well as scale: powerful settings range in size from small caves to volcanoes, from springs to rivers, and from crevices to canyons. Ritual settings may contain a variety of physiographic, botanical, and faunal resources that add to their power. In our study area these include medicinal plants such as tobacco, animals such as the highly regarded big-horn sheep, minerals like quartz or obsidian, and outstanding landforms and rock formations (Stoffle and Zedeño, 2001b). Similar resource arrays are found in other areas and cultures as well; as Layton (1986) observes, the distribution of ritual sites is “remarkably sensitive to the character of local ecology” (in Bradley, 1997, p. 11).

Powerful forces and resources are not equally distributed across the landscape. Thus, when people determine that a particular setting has the power to effectively bring about transformation, they will continue to use it over generations. Moreover, so much effort goes into sanctifying a new ritual site that many modern Numic ceremonies, such as Sun Dances, are held on grounds that were previously used for Ghost Dances, which in turn were frequently used for ceremonies by previous generations (L. Collins, personal communication, 2003). While there are settings cross-culturally recognized as having intrinsic power (e.g., volcanoes, springs), there are also ordinary places that may become powerful ritual settings at some point in their life history. A burial site along a trail, or a place where an individual was struck by lightning, are examples in point. Ritual settings may be inscribed physically through modifications such as rock art, cairns, and stone rings or alignments, or mnemonically through the preservation of oral traditions including songs and stories that make explicit reference to them. Places accrue power by virtue of repeated human interactions with the supernatural and through linguistic inscription practices (see Basso, 1996, for a Western Apache example); in other words, the more people use a ritual place and talk about it, the more powerful it becomes.

A Cartography of Numic Ritual Behavior

A cartographic approach to ritual behavior, in this case that of Numic speakers, derives from the cross-cultural, ethnographic observation that ritual is intimately connected with the landscape (Hultkrantz, 1976). Hence, an understanding of a ritual technology may be achieved by mapping the geographical locales tied to each of its components. Ethnographic data discussed below provide a solid foundation for supporting this claim.

First, liturgical knowledge resides in special and powerful places, such as caves, mountains, and springs. Within each community, particular places that serve as the homes of sacred beings are ritual settings in their own right, and sources of knowledge and objects (Fowler, 1992, pp. 170–172). Kelly's (1939) and Laird's (1976) researches on Southern Paiute and Chemehuevi shamanism and McGuire's (1983) survey of Hualapai religious customs describe how specialists may acquire liturgical knowledge directly from special places, through individual revelation, and during dreams or vision quests. Liturgical information is also relayed to individuals by nonhuman beings, including animals of the religious pantheon and other spirits that figure in origin stories and inhabit these places. Certain knowledge also may be obtained through apprenticeship with seasoned ritual specialists.

Not all specialists hold the same type of knowledge and thus ritual performances are individually tailored to attain specific results. According to Kelly (1939), Gayton (1948), and Whiting (1950), plant doctors, snake doctors, bone doctors, arrow doctors, rock doctors, and sorcerers each have discrete sources of power, liturgical repertoire, and places (including rock art sites they "own"; Gayton, 1948, p. 113) where they obtain their paraphernalia. Despite the degree of individual variability in the range of rituals practiced, in the structure of the settings, and in the resources used, there remain numerous invariant landscape connections acknowledged by all members of a techno-community (see also Kelly and Fowler, 1986; Liljebld, 1986; Miller, 1983), such as the close spatial connection of rock art, springs, caves, and box canyons that is observable across the Desert West, from the Colorado River to the Sierra Nevada (Stoffle *et al.*, 2000a,b; 2002; Stoffle and Zedeño, 2000).

Second, place has a critical role in the maintenance of ritual knowledge. Because the characteristics and physical structure of ritual settings are sanctioned by the community, places where effective rituals have been performed serve as the anchors of collective memory and thus contribute to the development of cultural roots as well as the mechanisms of sociopolitical integration (see Basso, 1996). Memory-anchoring places, such as those associated with the Southern Paiute creation—Mount Charleston, Gypsum Cave, Pintwater Cave, and the Colorado River—are also powerful ritual settings that may be used repeatedly, are mentioned in narrative, prayer, and song, and may be acknowledged as such even after rituals are no longer practiced there. The Salt Song, for example, is a funerary chant that mentions specific places of power along the soul's path to heaven, which are distributed across the traditional territories (Laird, 1976). Such places may be reused when the need arises.

Although ritual settings are varied, ranging in importance from a creation place to a doctoring rock known only to one or a few individuals, they are all connected within the web-like structure of the Numic living universe. These connections are acknowledged in the liturgy, as for example in the lyrics of the Salt

Song (Southern Paiute Nation, 2001) and in the *Naraya* or Ghost Dance songs of the Wind River Shoshone (Vander, 1986, 1997). In her description of the Salt Song Trail, Laird (1976, pp. 616–617) indicates that Salt Songs linguistically and mnemonically connect distant sites throughout the traditional Chemehuevi, Southern Paiute, and Hualapai territories. This cultural landscape begins near the Bill Williams Fork 45 mi from the Colorado River, extending as far as the creation place in the Spring Mountains of southern Nevada. In addition to creating pathways between places, songs bridge the human world with the world of the spirit. As Vander's informant Emily Hill observes, "We always sing those Ghost Dance songs. Our place looks real good. That's what that means. It makes seeds grow. That the kind of song it is, it ain't just a song. It's religious song that you sing to God" (Vander, 1997).

Third, the need to preserve the effect of ritual transformation is satisfied through the permanent marking of a ritual setting (Whitley, 2000; Zedeño *et al.*, 2001). Common ritual setting markers are rock cairns, rock art, and offerings. Marking establishes a permanent bridge between humans and the forces harnessed through ritual acts, ensuring that what was accomplished through a rite may continue to affect the lives of individuals and the community. It follows that ritual deposits and associated features remain active in the religious system long after they were created. Rock art deserves special mention as a unique kind of ritual setting marker because of its mysterious origin.

In the Numic worldview, as in the view of other native cultures, rock art sites are different from any other archaeological site in that they are thought to have been made by spirit beings, variously known as "elves," "ghosts," "little people," or "water babies" (Loendorf, 1993; Stoffle and Zedeño, 2001b, p. 64; Whitley, 1992). Only in exceptional circumstances and under the influence of a powerful dream or vision would a human make rock art, and only certain humans have the power to use rock art as a gateway between worlds and to express in rock art a message received from the spiritual world (Conway, 1993; Hayes-Gilpin, 2004; Whitley, 1994, 1998, 2000; York *et al.*, 1993). The palpable spiritual character of rock art sites makes them especially powerful; this power is also contained in every other resource living around the rock art (Zedeño *et al.*, 2001, p. 123). Rock art sites are inhabited by spirit beings who tend to repel human presence and therefore are the settings of few activities other than rituals.

Efforts to physically separate powerful ritual places from everyday places are evident in the contemporary Shoshone Sun Dance, where participants cross a stream or river at the ritual site and are not allowed to recross this body of water until the ritual performance has ended (L. Collins, personal communication to Carroll, 2003). This boundary-making activity confirms the Durkheimian notion that sacred and profane are acknowledged by non-Western religious practitioners (Durkheim, 1995, p. 34), and supports Douglas' concepts of purity and impurity (Douglas, 1980).

Formal Properties and Performance Characteristics of Numic Ritual Settings

When one combines different sources of ethnographic and historical information of Numic ritual technology with systematic archaeological site assessments by contemporary tribal people, it becomes possible to outline basic patterns in the formal structure of ritual settings. Contemporary tribal people bring unique perspectives to the analysis of Numic ritual technologies. In addition to having a shared understanding of the cultural logic of their ritual performances and ceremonial sites, contemporary informants are the recipients of orally transmitted knowledge about Numic worldviews, places of power, material culture associated with ritual, ritual specialists, and the proper means of carrying out Numic ceremonial activities. Likewise, contemporary Numic people are the heirs of rich oral traditions that relay both mythic and historic memories of ritual technologies.

Using rock art, other forms of rock manipulation, and depositional contexts for various object types as key indicators of possible ritual activity, one may identify different types of spatial associations between key indicators and other cultural and natural features. One specific feature association or “cluster” that is redundant across a vast area minimally includes (a) various forms of rock manipulation, such as pictographs, petroglyphs, cupules, enhanced natural orifices, cairns, rings, and alignments; (b) a water source, such as a spring, water tank, or stream; and (c) an outstanding landform, such as a cave, a box canyon, or a salient rock outcrop. The underlying logic of a cluster holds that the power of individual features and resources is magnified by their proximity to one another (Stoffle *et al.*, 2000a,b; Stoffle and Zedeño, 2001b,c).

A host of physiographic properties that can potentially affect the performance characteristics of a ritual setting include, but are not limited to, elevation, degree of enclosure, slope, line of sight, and spaciousness. Variability in the ritual landscape is thus given by the combination of key feature clusters and particular physiographic properties. Presence of volcanic or geothermal activity, volcanic rock formations, certain medicinal plants (tobacco, *Datura*), mineral pigments and crystals, and certain animal habitats (e.g., bighorn sheep trails; eagle nests) are also factors in the distribution of ritual places. Such variation also determines the mode and tempo of ritual setting uses (Whitley, 1998, 2000; Zedeño *et al.*, 2001). Carroll (2002) has coined the term *degrees of celebration* to predict differential use of ritual settings on the basis of performance characteristics given by specific combinations of key cultural features and physiographic properties. Performance characteristics of ritual settings often noted by tribal elders are accessibility, visibility, vistas, seclusion, and distance to home sites and vital resources (e.g., food, water, and fuel) (Zedeño *et al.*, 2001, pp. 128–134).

Below we apply the framework of ritual technology to the Nevada Ghost Dance Movement to investigate the degree to which this millenary movement

fit within Numic religion and to illustrate how a cartographic approach to ritual behavior may furnish useful tools for the archaeological interpretation of this aspect of Numic culture and society.

KNOWLEDGE AND PRINCIPLES OF THE GHOST DANCE

Because of its recognizable Christian elements as well as Euro-American objects, the Ghost Dance was traditionally portrayed as the product of religious syncretism and acculturation (Aberle, 1959; Hertskovitz, 1958). Yet, crucial for understanding the relationships of continuity between the Nevada Ghost Dance and Numic ritual practices of prehistoric origin is the notion that this movement's ideology was also nativistic or focused on the past, and that its leaders used "magic" or supernatural powers to attract followers and exact the promised transformations (Linton, 1943, p. 233; Mair, 1959, p. 120). Arguably, the Ghost Dance ideology involved rejection of negative things of the alien culture (e.g., guns, alcohol, plague); acceptance of positive things of the alien culture (e.g., wage labor, clothes, horses, tools); observation of the Great Spirit's or God's precepts by conduct and by ritual; and strict adherence to a liturgical order dictated by the Paiute Messiah. The promise was a return to the ancient way of life and the resurrection of the dead. According to Mooney (1896, p. 777),

The great underlying principle of the Ghost Dance doctrine is that the time will come when the whole Indian race, living and dead, will be reunited upon a regenerated earth, to live a life of aboriginal happiness, free forever from death, disease, and misery.

The essence of this message was initially spread in Nevada by Wodziwob, also known as Fish Lake Joe, a Northern Paiute prophet originally from Fish Lake Valley, Nevada (Hittman, 1973). In 1869, he dreamed that a train was coming from the east and began to preach at large traditional gatherings or at gatherings he called for this purpose (Du Bois, 1939, p. 5). Over a period of 20 years Numic shamans applied all the liturgical knowledge at their disposal to bring back the dead and restore balance to the world (Du Bois, 1939.3; Hittman, 1973, 1997). Guided at first by Northern Paiute Wodziwob and by Joi Joi, a Western Mono leader from the San Joaquin Valley who initiated the California dance in 1871, the Ghost Dance experienced a resurgence in the late 1880s under the leadership of Wovoka or Jack Wilson, from Smith Valley, Nevada, and spread nationally. After the tragic military intervention at Wounded Knee, Wovoka instructed religious leaders to stop practicing the dance but, despite his mandate and government suppression policies, the dance survived well into the twentieth century, disguised under many ritual forms and names (Hittman, 1973; Kehoe, 1989; Kracht, 1992; Vander, 1997). Purportedly it is still practiced today in places ranging from California to the Great Plains.

To achieve the Ghost Dance's promised transformation of the dead and living worlds, it was necessary to build a successful technological foundation. Hence, the

Ghost Dance leaders integrated three ancient ritual complexes—the Round Dance, the shamanistic rainmaking ritual, and the curing ritual—with certain powerful elements of European religious and secular technology (Du Bois, 1939, pp. 5–6; Hittman, 1973, p. 256; Vander, 1997, p. 30).

The Round Dance

The Great Basin Round Dance, not to be confused with the contemporary pow-wow circle dance of Plains ancestry, is one of the oldest and more widespread community and intercommunity gatherings of religious and secular significance. Round dances were performed at seasonal food-procuring gatherings including the spring festival, the pine nut harvest, the rabbit hunt, and the antelope drive. They were also performed to propitiate fertility, to incite war, to celebrate victory (as the Scalp Dance), to avert illness, to overcome adversity, to bring rain, and to mourn the dead (like the Cry Dance) (Jorgensen, 1986; Park, 1934, 1938; Steward, 1938, pp. 74, 183, 237; 1941, pp. 265, 323; Thomas *et al.*, 1986, p. 272). The latter figures in a Numic origin story, where Coyote dances to become a doctor, to drive illness away, and to trick and devour humans (Lowie, 1909, p. 274; cited in Vander, 1997, pp. 48, 561, ff8).

In addition to its ingrained roots in Numic society, the Round Dance assumed a new significance in the context of the Ghost Dance by allowing the prophets to transfer their message to large audiences through the familiar media of preaching, singing, and dancing at traditional gatherings. Wodziwob, for example, began preaching his vision at pinenut festivals and rabbit hunts. As Hittman (1973, p. 264) notes, “The essential and overwhelming similarities between the 1870 Ghost Dance and the traditional Round Dance enable us to imagine the relative ease with which Wodziwob could have grafted the religious movement he founded upon Paiute culture.”

The Round Dance continued to provide the Ghost Dance leaders of the 1890 movement with a successful stage for spreading their message (Vander, 1997, p. 7) and for adapting the ancient shamanistic ritual technologies of rainmaking, curing, and resurrecting the dead to the public deliverance of the Paiute Messiah’s prophecy, as indicated in biographic notes (Bailey, 1957) and letters (Bailey, 1957).

The Rainmaking Ritual

Rainmaking is a central fertility ritual in Numic religion. Its association with key feature clusters, particularly rock art, springs, and big-horn sheep habitats, has been documented in California and Nevada (Gayton, 1930; Kelly, 1939; Steward, 1941; Stoffle and Zedeño, 2000; Whitley, 1989, 2000), as well as in other Great Basin states (see Vander, 1997). Its formality and widespread distribution among Numic cultures point to considerable antiquity.

Wovoka was known as a gifted rainmaker and doctor himself, as biographies and numerous folk stories regarding his manipulation of the elements describe. But few (e.g., Bailey, 1957; Hittman, 1997, pp. 68–70; Wheat, p. 77) give further thought to the significant role that successful rainmaking performances played in the acceptance of the Ghost Dance by the Numic community. Speaking of Wovoka's gifts, the Mason Valley Paiutes say,

His father was a Medicine Man, and his son was a Medicine Man, just like him. Jack Wilson healed everything. He can control the seasons . . . winter, thunder . . . he can even make the rain come. The thick clouds would start to gather . . . He sings only five songs, not over . . . When Jack lost one son, Jack made the rain fall down to earth, and cover all the foot prints of all the places where the boy had traveled . . . (Interview with Hazel Quinn and Frank Quinn; Intertribal Council of Nevada, 1974)

Mooney (1896, p. 772) also spoke of Wovoka's rainmaking knowledge:

From his uncle I learned that Wovoka has five songs for making it rain, the first of which brings on a mist or cloud, the second a snowfall, the third a shower, and the fourth a hard rain or storm, while he sings the fifth song the weather again becomes clear.

The Nevada Ghost Dance shamans adapted the rainmaking songs, usually sung only by ritual specialists in intimate local settings, to the needs of the new revitalizing ceremonies that required sharing this knowledge with a broader audience.

He said, we will dance for five nights . . . So the Indians dance for five days. Jack Wilson sang all the songs for those nights. There were some real intelligent men among the crowd, they caught on to those songs fast and took turns to sing. My mother has seen all this. (Interview with Hazel Quinn and Frank Quinn; Intertribal Council of Nevada, 1974)

To properly perform the dance, other Numic groups, such as the central Nevada Shoshone from Belmont, sent delegates to Mason Valley to learn Wovoka's rainmaking songs (Interview with Tim Hooper; Wheat, 1959). Newspapers of the time indicate that, once the ritual sequence of the dance had been received from Wovoka, different Numic groups (particularly Western Shoshones) would hold their own Ghost Dance rites at their homesites (e.g., *Belmont Courier*, 1890, 1891b; *Elko Independent*, 1891a,c; *White Pine News*, 1891). After learning the Ghost Dance songs either directly from the Messiah or through instructions passed on by delegates, participants could perform a Ghost Dance. They did not have to be under Wovoka's direct leadership to perform the dance or be at his dance site to be members of this techno-community. This observation strengthens the hypothesis that the Ghost Dance was indeed based upon ancient Numic ritual knowledge and principles and that these were familiar enough to Great Basin groups so that they could adapt them to their local settings. Plains groups, including the Sioux, Arapaho, Pawnee, and Kiowa, took the message and the songs but modified the actual setting and paraphernalia to fit their own ritual technologies (see Dangberg, 1968; Dobyms and Euler, 1967; Gayton, 1930; Kehoe, 1989; Mooney, 1896).

The Curing Ritual

Another ancient and important aspect of the Ghost Dance, also associated with landscape features, was healing the sick and, in some cases where outstanding doctors were at work, bringing back the dead (Du Bois, 1939, p. 3). Curing complexes usually entailed the use of special rocks, both stationary and portable; the use of crystals, pigments, obsidian, and other rocks and minerals; the use of medicinal plants and animal parts; and invocation through prayer, song, dance, and gesture (e.g., sucking, blowing). Most technological sequences that exhibited particular combinations of settings, paraphernalia, and liturgical knowledge were malady-specific (e.g., arrow wounds versus snake bites) and, furthermore, were owned by a doctor (Gayton, 1930; Kelly, 1939).

At the time the Ghost Dance Movement was initiated in California, exotic epidemics were ravaging the aboriginal population, and Indian doctors had no known powers to fight new diseases. Following ancient Numic tradition, Paiutes would ritually kill doctors after a third patient died at their hands. Understandably, doctor killings were so frequent in Nevada and California during the late 1800s that local newspapers reported them in their weekly columns (e.g., *Elko Independent*, 1890b; *Pioche Record*, 1890; *Reese River Reveille*, 1886; *Reno Evening Gazette*, 1881; *Reno Weekly Gazette*, 1884; *Silver State*, 1890, 1891a,b; *Territorial Enterprise*, 1873). The resulting depletion of knowledgeable shamans who could maintain the ritual activity required for the community's well-being also forced tribal groups to send people to see Wovoka to relearn the ritual sequences needed to make rain, heal the sick, and bring back the dead.

Modern Technology

Through the widespread adoption of railroad travel—a compelling choice of transportation given Wodziwob's original vision—American Indian communities regularly sent tribal delegates to western Nevada, where they would meet the Messiah, participate in Ghost Dances, and become the mouthpieces through which the Ghost Dance spread (Carroll and Stoffle, 2003). Other Euro-American adoptions included the Mormon bulletproof shirt, apocalyptic iconography, and the American flag.

According to Mooney (1896, p. 29), “the Great Spirit, who had so long deserted his red children . . . was now once more with them and against the Whites.” The frequently sought-after immunity against the bullets of the Whites could be realized by donning Ghost Dance shirts made from animal skins, coarse white cloth, muslin, and even recycled flour sacks. Ghost Dance shirt technology appears to have been non-native. Both Mooney (1896, p. 34) and Bailey (1957) suggest that the idea of Ghost Dance shirts grew out of Wovoka's interest in the sacred undergarments worn by members of the Latter Day Saints Church. This inference

is quite tenable, given that the leader of the Mormon Church, Joseph Smith, endeavored to merge Wovoka's message with the teachings of the Mormon Church, and had prophesized that the Messiah would return to the earth in 1890 (Mooney, 1896, p. 36). Even though Wovoka expressed no interest in joining the Mormons and publicly disclaimed responsibility for the Ghost Dance shirts, they remained a central ritual item among many Ghost Dance participants (Mooney, 1896, p. 772).

Wovoka also adopted Western religious and political iconography in the form of the Horsemen of the Apocalypse and the American flag (Mooney, 1896, p. 823). In at least one story, a White horse descended from a mountain just to the west of the Wilson Ranch, where Wovoka is reported to have had one of his visions. Apocalyptic visions of arguable origin (Spier, 1935) also included stories of fires and floods that only the indigenous people would survive. The adoption of the American flag, on the other hand, served as a risk management strategy aimed at allaying the fears of the White people. The flag was commonly seen among communities who used the center pole in the Ghost Dance grounds. They tied the flag to the pole and danced around it (Laubin and Laubin, 1977, p. 60).

Thus, the new dance integrated knowledge of multiple modern and ancient technologies: the railroad and the English language as predominant modes of communication, the bulletproof shirt and the flag as protection, apocalyptic visions, and three ancient rituals fused into a single sequence: round-dancing, rainmaking, and healing-resurrecting. For example, the Southern Paiute Ghost Dance combined the liturgy of The Salt Song Trail—a series of place-specific songs that track the journey of the dead from earth to heaven—with the traditional rituals associated with rock art in the Grand Canyon (Stoffle *et al.*, 2000a, p. 24). Similar associations permeated the Ghost Dance among the Owens Valley Paiute (Carroll and Stoffle, 2003).

GHOST DANCE PARAPHERNALIA

In addition to linking the community to their ancestral ritual knowledge and local settings, the liturgical order of the Ghost Dance entailed establishing a connection with Mount Grant, the Northern Paiute origin mountain (Mooney, 1896, pp. 778–779). This mountain contained deposits of red ocher that the Ghost Dancers used as body-paint (Mooney, 1896, p. 779). Whereas red ocher is requisite in Numic rituals and pigment sources are commonly found at key feature clusters, the particular pigment used in the dance had to come from Mount Grant. This is well documented in the correspondence between Wovoka and Ghost Dance leaders from as far as Wyoming and North Dakota, requesting shipments of the sacred pigment (Dangberg, 1968).

Other items associated specifically with the Ghost Dance were white body paint (Stoffle *et al.*, 2000a, pp. 20–21), eagle, crow, sage hen, and magpie feathers—the latter were also Wovoka's personal curing objects—and clothing Wovoka had

worn, suggesting that the power sought through the dance was at least partly associated with the Messiah himself and with the origin mountain, and therefore it could be harnessed with the aid of these ritual objects (Bailey, 1957, 1970). And, of course, they wore the indispensable bulletproof shirt, which portrayed numerous native sacred symbols, particularly the Plains morning star, the thunderbird, the calumet, and the Numic concentric circles and handprints (Minneapolis Institute of Arts, 1976).

PERFORMANCE CHARACTERISTICS OF THE GHOST DANCE SETTINGS

Despite the obvious and somewhat acknowledged nature–ritual connections of the Ghost Dance (Mooney, 1896; Vander, 1997), the relationship between the dance sites and other Numic ritual settings, from origin places to key feature clusters, has never been placed under analytical scrutiny. Yet, official and eyewitness narratives indicate that the Nevada Ghost Dance, like any other formal ritual, had performance requirements that needed to be met. Consequently, careful thought went into negotiating the types of places where the dance would be performed. Issues faced by the dancers included the need to connect to ancient rituals, to have access to basic facilities and resources, and to keep the attendants safe from military scrutiny or aggression.

Ancient Connections

Ghost Dance leaders sought the ancient ritual settings sanctioned by generations of successful ritual use, inasmuch as the dance was rooted in the prehistoric religious system. The logic was simple—*if knowledge resides in powerful places, then let us return to those places where we can recapture it*. Oral history gathered in the 1950s (Wheat, 1959) and 1970s (Intertribal Council of Nevada, 1974) suggests that Ghost dancers had to return to places where forefathers had ceremonies. Western Shoshone spiritual leader Corbin Harney told the authors that people preferred ancient ceremonial sites to new sites because “some areas are stronger than others; these sites already had power, but for them to remain powerful they have to be needed by people” (Carroll and Stoffle, 2003, p. 142). Although by 1870 many of these powerful places, particularly those with cool and clear springs, had been taken over by White prospectors, Indian groups retained control of remote locations where it is known, through newspaper articles and oral history, that the dance was held. Aside from the well-documented Ghost Dance sites proximate to the northern Paiute origin place, Mount Grant (Hittman, 1973, 1997), other ritual places such as rock art caves along the upper Colorado River (Stoffle *et al.*, 2000a), and a dozen other sites in Nevada, including Darrough’s Hot Springs,

Battle Mountain, Dixie Valley, Spring Valley, Beowawe in the Crescent Valley area, Ash Meadows, Hiko, Cornucopia, Tecopa Springs (Carroll and Stoffle, 2003), Moapa, and the Pahrnatag Valley (Kelly and Fowler, 1986), were incorporated into local expressions of the dance. Similarly, numerous other sites were spread across Owens Valley and in other areas of California.

Of all the ancient ritual components incorporated into the Ghost Dance, rock art is the most intriguing and least understood. Little is known of its direct role in the dance aside from its obvious importance in channeling power. For example, the common handprint motif in Great Basin rock art, which has been interpreted by contemporary Paiute shamans as a portal of power from the rock to the ritual specialist (Stoffle *et al.*, 2000b, p. 130), also appears in Ghost Dance shirts collected from the Arapaho (Minneapolis Institute of Arts, 1976). Interviews conducted by Stoffle *et al.* (2000a, pp. 20–21) with Southern Paiute elders at the rock art site in Kanab Creek, Arizona, indicate that this site was made either during a Ghost Dance episode or thereafter, as a record of the rite. The use of white paint—a color rarely used in Numic pictographs—and the proximity of a white paint source constitute a close association with the prescribed paraphernalia of the Ghost dancers. Yet another indication of the role of rock art is suggested indirectly by Vander (1997, p. 117), who in her discussion of the role of water and power in Numic ritual notes that people who wanted to receive *bulletproof power* (an aim of the Ghost Dance) in a dream or vision slept near water, or other places the water babies inhabit. Ethnographic research conducted at rock art sites, from Wyoming to California, invariably bring about the presence of water babies—“shamans’ assistants,” as Whitley (1992) calls them—and their authorship of rock art (Loendorf, 1993). A good candidate site for testing a proposed connection among water babies, rock art, and the Ghost Dance is Black Canyon in the Pahrnatag Valley, eastern Nevada. Black Canyon contains a number of anthropomorphic designs that both Southern Paiute and Owens Valley Paiute elders interpret as water babies. For example, a medicine man who was born within view of Black Canyon and who in numerous occasions saw shamans use the site for ritual activities comments:

There are water babies there. There are quite a few of them. They can also fly in the air. The people are kind of scared of them; sometimes they get to know them. They get the power of the water babies and when they do this, they get thrilled and just fall down. They get married to the water baby—that water baby is going to be mine. *Tuhumpingang* means to marry the water baby spirit. Water baby is a strange spirit. *Pông ipits* is the water baby. It looks like a little child. I have seen the water baby marriage a number of times. It happens to both men and women. It lasts ten to twenty minutes and after, they get up from their [trance] and are excited and happy, with lots of energy. (Stoffle *et al.*, 2002, p. 74)

The Pahrnatag Valley and nearby Moapa and Panaca sustained large Southern Paiute settlements at the time of the Ghost Dance (Fowler and Fowler, 1971, p. 107); perhaps not coincidentally, Panaca and Moapa were Ghost Dance centers from where the movement spread to southern Nevada and Arizona (Kelly and Fowler, 1986, p. 384).

Logistics of the Ghost Dance

In addition to the required proximity to powerful settings, especially to clusters of key cultural and natural features used in rainmaking and healing, Ghost Dancers needed to use places located on spacious, accessible, and relatively flat terrain where large groups of as many as 3000 people could simultaneously join hands for the purpose of creating ritual circles as the Round Dance dictated. Government Agent A.I. Chapman (Report of the Secretary of War, 1890) described three such sites where he observed the Ghost Dance under the leadership of Wovoka. He recalls,

They [the ceremonial sites] had been cleared of sagebrush and grass and made perfectly level, around the outer edge of which the willow sticks were still standing, over which they spread their tenting for shelter during these ceremonies. The cleared ground must have been from 200 to 300 feet in diameter, and only about four places left open to enter the grounds.

The structures described by Chapman may have been windbreaks or boundary-marking features. The known Ghost Dance sites in Mason Valley, Nevada (Bailey, 1957, 1970), as well as the Maidu Ghost Dance site in the Patrick Rancheria near Chico, California (Gruber, 1963, pp. 30–34), conform to this pattern. Reports of the dance among neighboring groups in south-central California indicate a similar preferences for flat places. As Gayton (1930, p. 66) described,

The first Ghost Dance on the western slope of the Sierras, the one initiated by Joi Joi, was held May 1871. The site selected, a high flat-topped hill overlooking the North Fork of the San Joaquin River called the *Sanganiu*. People came from all around.

Dance events lasted over a period extending from several days to several weeks and, at least in south-central Nevada, some dances took place in the depth of winter. Consequently, Ghost Dance sites had to be in proximity to places where people could sleep, eat, find shelter from the elements, and perform other daily activities. Some Ghost Dance sites were close to indigenous settlements that could act as support communities (Gayton, 1930, p. 69; Gruber, 1963, p. 32). In the absence of this arrangement, participants would bring resources with them or utilize whatever resources could be gleaned from the immediate environment. In the case of the Hualapai, this once entailed killing cattle owned by Euro-Americans, which exacerbated the already-strained relationships between the Hualapai and new settlers (Dobyns and Euler, 1967).

Location Compromises

While site accessibility was desirable, Ghost dancers sometimes had to compromise access to gain seclusion. The need for seclusion was integral to the dance; indeed, Wovoka instructed Ghost Dance participants to abstain from revealing the Ghost Dance prophecies to White people for fear of invoking their censure,

which was manifested in complaints against the Indians logged in local newspapers, refusal of passes required to leave their reservations, and the arrest of delegates who visited Wovoka (Mooney, 1896). Ghost Dance events took place in scheduled areas where participants would be less likely to attract the attention of non-participants. In the case of neighboring Yokuts and Western Mono tribes of south-central California, a principal Ghost Dancing site,

was selected because of its central location in the lower mountains and its seclusion from White settlers: the valley is deep, but with a level floor perhaps a mile long and a quarter of a mile wide, and had an excellent water supply and well timbered slopes with abounding game. A Wasachi village, Chitatu, occupied a low crest of ground at one end of the valley. (Gayton, 1930, p. 69)

With the exponential growth of the Ghost Dance, however, the strategy of concealment became increasingly difficult to maintain, and newspaper reportage of Ghost Dance activities flourished. Seclusion was often regarded by government agents as a subversive indicator, and the dancers were forced to enumerate performance requirements such as access to food, water, and fuel, to justify their choice of dance sites (Gayton, 1930).

On the basis of these performance characteristics and on the presence of feature clusters, one may begin to triangulate the location of other such ritual settings.

Ghost Dancing at Pigeon Spring

An analysis of the ritual setting at *Pigeon Spring* in Esmeralda County, south-central Nevada (Fig. 1), provides a useful venue for exploring ritual uses of pre-historic key feature clusters through information on the local Ghost Dance episode that took place in January of 1891 (Zanjani, 1994, p. 39). The Pigeon Spring site rests at the foot of a small mountain range, 29 mi west of the mining town of Lida. Pigeon Spring is located along the Shoshone–Paiute boundary and had a mixed population. Steward (1938, p. 63) identified the indigenous settlement of *Tu' nava* at Pigeon Spring as having “several springs at 6,200 to 6,500 feet in the mountains on the eastern end of Fish Lake valley . . . advantageously located in the midst of pine-nut country.” According to Steward’s informant (MH), 31 people, including a chief and his family, lived in four settlements in proximity to *Tu' nava* during the last quarter of the nineteenth century. Fish Lake Valley has the distinction of being the birthplace of the 1870 Ghost Dance prophet Wodziwob (Hittman, 1973), as well as the region selected by Ghost dancers during the winter of 1890–1891 to perform their ritual activities.

Primary historical information on the local Ghost Dance comes from Hershell Knapp, a prospector and miner who lived in a nearby cabin and witnessed the Ghost Dance that took place on a low flat hill across from Pigeon Spring (Fig. 2). The

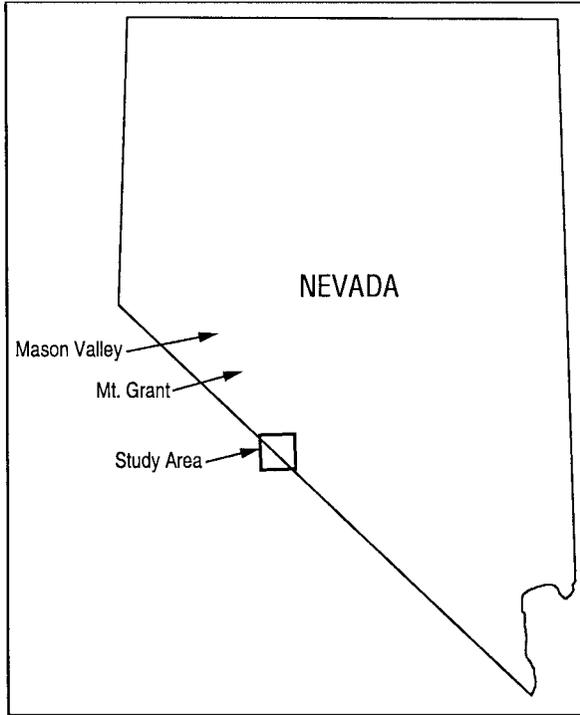


Fig. 1. Location of the study area and landmarks mentioned in the text.

dance was performed in the winter of 1890–1891, following an Indian uprising led by a White rancher, miner, and renegade known as Jack Longstreet against the local mine superintendent, Robert Starrett (*Inyo Independent*, Jan. 16, 1891). Longstreet had extensive connections with native communities, spoke the Paiute language, and married a Paiute woman named Suzie. Longstreet reportedly encouraged Indians working at the mine to track down their employer and demand money for work performed but never compensated—reportedly a common occurrence across western Nevada at that time (Lingenfelter, 1986, p. 103). When Starret refused to pay, the Indian workers physically tortured the superintendent until he finally ceded to their demands (Zanjani, 1994, p. 39). This event was reported in the *Inyo Independent* (1891) and in the *Belmont Courier* (1891a). Following this episode the workers reportedly gathered at Pigeon Spring and held a Ghost Dance. This occurred during one of the coldest winters in the history of Nevada; so severe was the weather that Knapp described how the dancers had to take refuge inside the mine until the blizzard had passed (Zanjani, 1994, p. 38).

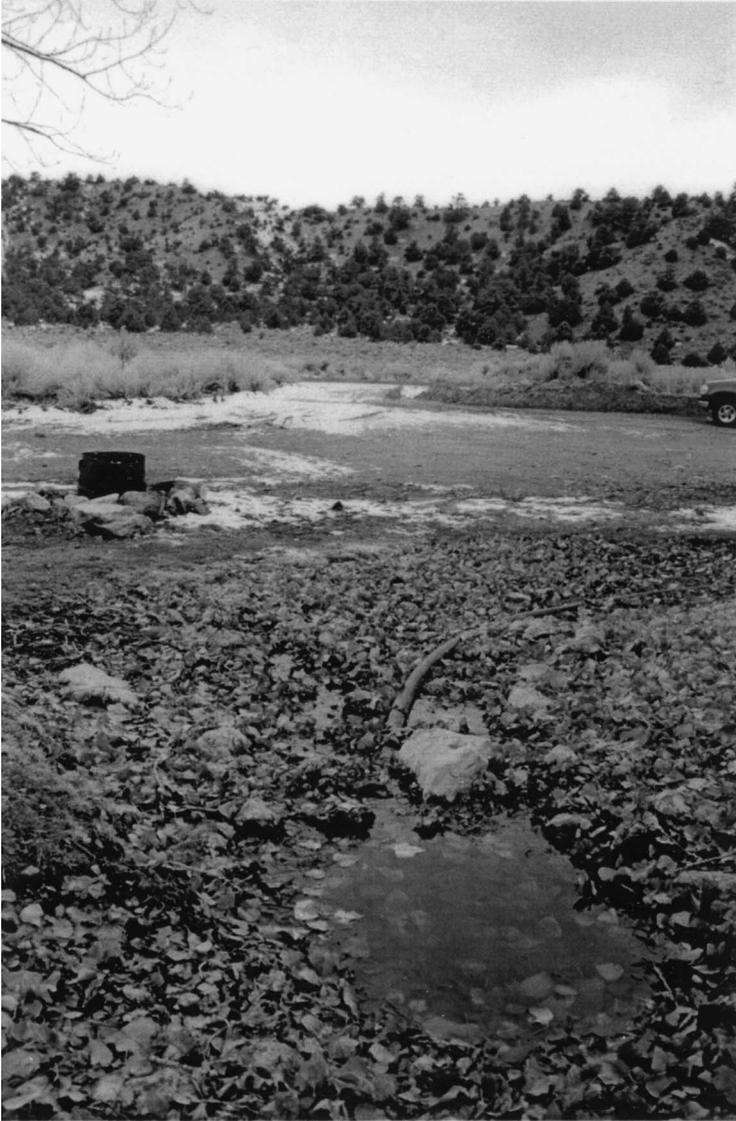


Fig. 2. Pigeon Spring viewed from the north, with dance site in the background.

In the spring of 2000 we relocated the archaeological site at Pigeon Spring with the help of avocational archaeologist Don Hendrix and determined that the Ghost Dance place was in the immediate vicinity of a key feature cluster characteristic of rainmaking and healing ritual settings found elsewhere in the region

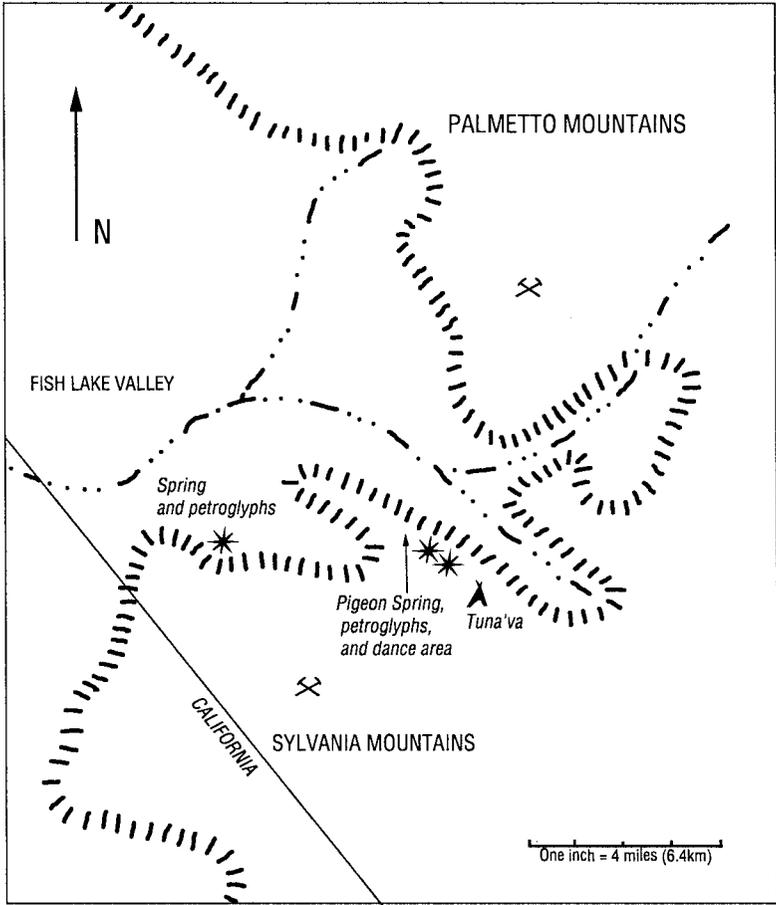


Fig. 3. Location of dance site and key feature clusters at Pigeon Spring and vicinity.

(Fig. 3). The cluster at Pigeon Spring includes the three essential features that typify prehistoric Numic ritual settings: a cool water spring, a salient rock outcrop, and petroglyphs (Fig. 4). The old trail to the site is marked with three red pictographs. The spring surfaces in the center of an open area enclosed by a low hill with a relatively flat surface where the dance was performed (see Fig. 2).

Today, a grove of large cottonwood trees towers over Pigeon Spring. Judging from their size, it is probable that they are over 100 years old. The area around the spring is very level and it is likely that the cottonwood trees were saplings at the time of the 1890s Ghost Dance. In arid regions such as western Nevada, cottonwoods bordering springs stand out as conspicuous features of the landscape. Among the Indians of the Plains and Great Basin, the cottonwood is often



Fig. 4. Petroglyph detail, Pigeon Spring.

associated with the presence of water and is consequently revered (Mooney, 1896, p. 968). So important was the cottonwood that the Paiutes created a Ghost Dance song to commemorate its presence. Mooney (1896, p. 1055) suggests that the trees represent the “return of the spring.” Significantly, the spring is the time when Wovoka promised that his prophecy would come to pass. The song’s translation is

as follows:

The cottonwoods are growing tall,
The cottonwoods are growing tall,
The cottonwoods are growing tall.
They are growing tall and verdant,
They are growing tall and verdant,
They are growing tall and verdant.

Within a radius of a half-mile from Pigeon Spring are three areas with prehistoric and historic rock art. The petroglyphs are all around the south end of the hill. Whereas the prehistoric petroglyphs demonstrate that this was a traditional site that was visited for ceremonial purposes long before the onset of the Ghost Dance, inscriptions of calendric dates on a possible gravestone or other commemorative feature mark the presence of people at Pigeon Spring in the early 1890s, at the height of the Ghost Dance, and again in 1912 (Fig. 5).

The nearest set of petroglyphs is located on a dramatic white boulder alongside a dirt road within a quarter mile of the spring. The petroglyphs are all positioned on the backside of the rock and thus cannot be seen from a distance. The faded glyphs include a bighorn sheep, two distinctive vulva-like motifs, line scratching, and concentric semicircles. The bighorn sheep is often associated with rainmaking



Fig. 5. Calendric dates at Pigeon Spring.

rituals (Whitley, 1998), and weather control is a central motif of the Ghost Dance. Ethnographic information also links vulva glyphs to women's rites of passage and fertility (Hayes-Gilpin, 2004, pp. 47, 114); furthermore, this motif occurs at ritual settings that may have been used by male shamans (Whitley, 1998).

According to written records and oral histories, the Ghost Dance was held in January of 1891 on a hill across from Pigeon Spring (Zanjani, 1988, p. 39). Directly across from Pigeon Spring is a mesa that fits this description. Atop the mesa and the adjoining hill we found small lithic scatters, metal cans, and a modern ceramic bowl broken into multiple sherds. We found no immediate evidence of a dance depression; however, we observed a partial rock ring or windbreak. It is possible that this site was used for a short duration. In this case, the dancing would not have left a strong archaeological signature. Other historic components around the site include a stamp mill, a cabin structure, and a large cluster of tin cans commonly found in mining camps across Nevada (Paher, 1970). Further study of the cans could reveal whether their age approximates that of the Ghost Dance episode. Less than five mi from the dance site there is yet another much narrower and secluded feature cluster with numerous petroglyphs including the knotted string motif historically associated with Paiute runners (Laird, 1976) and the vulva glyph. This site also has a *tinaja* or natural rock depression where rain water would be collected.

Additional performance characteristics of the Pigeon Spring site include proximity to open flats where antelope could be hunted, abundance of useful plants and wood for fuel and construction, accessibility from several directions, and proximity of a substantial camp that was occupied by the aboriginal population throughout the 1920s. While the location of Pigeon Spring and vicinity lends itself to seclusion, at the time of the dance the area was already encroached upon by White miners and thus their presence needed to be considered in determining the logistics of the ritual dance.

CONCLUDING THOUGHTS

Data on the geography, practice, and material culture of the nineteenth-century Ghost Dance allow one to examine the configuration of Numic ritual places, particularly how topography, natural resources, and ancient cultural features may be integrated in a single ritual sequence. The Ghost Dance Movement is a well-documented and admittedly recent phenomenon that was the direct result of European encroachment into native lands (but see Spier, 1935) and syncretized some elements of the Apocalypse. Yet its roots can be traced to ritual complexes of prehistoric origin that continued to be practiced after the demise of the 1890 movement. The Ghost Dance provides a useful window into the ancestral ritual landscape of the *Numa*, because it was founded upon ancient ritual technologies that required very specific and very formal uses of the landscape. It is important to

point out that, in Nevada, the historic period did not begin until 1827 and settlers did not arrive until after the Gold Rush of 1849 (Angel, 1881). Thus, barely two generations had passed between this date and the first Ghost Dance of 1871. The timing lends additional strength to our argument of prehistoric–historic continuity in ritual technologies. This case study also lends validity to research that uses both classic and contemporary ethnographic information to identify the material evidence of ritual place-making behaviors and to construct testable hypotheses about prehistoric patterns of ritual land and resource use.

Our case study demonstrates that ritual place-making behaviors have material associations that derive directly from the practical application of ritual knowledge and principles, and that these associations, in turn, are distinctive enough to allow the formulation of criteria for the systematic identification of ritual settings in the archaeological record. The key, at least in the case of the *Numa*, is to acknowledge the very real possibility that consistent and redundant ritual landscape uses generate sites with ambiguous artifact concentrations (e.g., obsidian scatters) and few, if any, specialized cultural features other than rock art. Numic ritual settings exhibit non random associations between rock art and other rock manipulations and natural features (e.g., outstanding landforms, springs, medicinal plants, certain minerals and rocks, certain animal habitats), and are distributed across a broad region. When the contemporary ethnographic concepts of “sacred place” and “sacred landscape” are formulated within a behavioral framework that focuses on concrete interactions among people, places, and objects, it becomes possible to operationalize them in archaeology.

Finally, this study adds to research endeavors that strive to integrate ethnography, history, and archaeology into a single frame of analysis. This integration works well when the focus is on human behavior, and it is particularly useful and relevant to the study of religion and ritual. After all, ritual is the realm of social life that, because of its performance requirements and rigorous formality, changes the least or at least changes the slowest, even under circumstances when a technocommunity must defeat powerful forces of a new and unfathomable source. Such was precisely the case of the Nevada Ghost Dance.

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