ABSTRACT. Recent scientific investigations into the physical aspects of sacred sites are providing new avenues for investigation. Human abilities to perceive extremely subtle physical parameters, which have previously been considered outside of typical sensory capacity, are being researched. It appears that people can sense differences in the physical environment and have established cultural reminders at such places. These places have been used for many purposes, including to improve health and well-being. A sense of place provides a feeling of well-being. The honoring of such locations is part of the respect and regard that exists among indigenous people and their sites of traditional healing. Reciprocity occurs in the physical closeness and the benefits derived at these locations. Some of these sites are perceived as portals for the mind to access a different level of consciousness and gain information and greater understanding from which well-being can be promoted.

Keywords: healing, indigenous people, sacred sites

Special places mean different things to each individual. Historic sites are special because they have withstood the test of time. Favorite fishing holes are special because they are protected by a code of secrecy. Burial sites are special out of respect for the dead or fear of retribution. Waterfalls are special because of their spectacular display of force or the elevated levels of negative ions they produce. Mountain peaks and land promontories are special because of the geographical uniqueness of their location or because they are the first or last place at which an astrological event can be witnessed.

The recognition that current knowledge was first learned by the ancestors makes a place special to a group or culture. They shared that information in stories that apply the information to demonstrate the understanding that comes from the practical use of wisdom. What is learned today will benefit future generations that are already here within the reproductive capacity of the living. Rene Dubos writes, “Certain anthropologists pragmatically define culture as an acquired or learned system of shared and transmitted ways of enabling the cultural group to handle satisfactorily the problems of life” (1968, 143). Culture is an agreed-on set of behaviors that allow for the greatest number of people in a group to survive over time. At times, that survival knowledge is about place and how it benefits people.

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closeness and the benefits derived at these locations. These sites are perceived as portals for the mind to greater understanding from which well-being can be promoted.

**Knowing place**

**Spiritual aspects**

Sacred sites create a conceptual and emotional parallelism between the objective order of the universe, the realm of the spirits, and the constructs of human cultures. Sacred sites are places of communication with the spirits, portals where people enter the sacred. Thus, they are a link between the world of humans and the sacred, where spiritual power can be attained. (Walker 1995, 111)

According to the Bible, the foundation of the Judeo-Christian heritage, in Exodus 3:5, Moses was instructed by the voice of God to remove his sandals before approaching the burning bush, as he was on holy ground at Mount Horeb. He was later instructed in Exodus 19:23 to “set bounds around the mountain and consecrate it.” That mountain was Mount Sinai, where he later received the Ten Commandments.

The Bible also records, in Genesis 28:17, the story of Jacob, who dreamt of angels ascending and descending a ladder that went from earth to heaven. When he awoke, he set a large stone on end as a pillar, anointed it with oil, and established Bethel—literally a place of God. Within this heritage, humans occasionally had direct and indirect contacts with a spirit that caused them to identify and sanctify places as important to their faith. “Traditional peoples did so through a softer-edged, less egocentric state of mind to that possessed by us today” (Devereux, Steel, and Kubrin 1989, 170). The loss of the association with the earth or “indigenous consciousness” through a process of insulating the body and mind from it is called *dissociative schizogenesis* (Kremer 1995, 45).

The early inhabitants of Europe had close associations with the land and a knowledge of special places.

On a more general level, it has long been recognized that all the evidence, whether literary or archaeological, attests a deep concern with the land, with its sacred geography, its borders, and its natural features and configurations; one important branch of Irish learned tradition is called *dindshenchas*, “the lore of (famous) places,” and has to do with furnishing etiological tales to account for hundreds of place names, for virtually every distinguishable feature in the landscape had its mythic significance, though some were more highly charged with spiritual virtue than others; the same phenomenon is reflected in Gaul in the extensive repertoire of deity names attached to individual sites: hill and mountaintops, clearings, and cultivated fields, rocks, fords, confluences, rivers and springs. (MacCana 1999, 618)

There are ancient places that have been identified that foster spirituality. Subsequent faiths have used the same ancient places to enhance their beliefs. Layers of ritualistic behavior have been applied to geographic sites that imbue a spiritual experience. Potential lessons can be learned from these places through cultural review. New technologies and contemporary experiences may be able to help rediscover the nature of these sites. These ancient sites are also threatened by alternative uses of the land and its resources.

**Physical aspects**

Although contemporary culture has moved away from its previous closeness with nature, efforts have been made to understand what was sensed at these locations. The study of some sacred places has provided insight into local anomalies that may physically influence well-being (Becker 1990; Bird 1993; Devereux 1994; Devereux, Steele, and Kubrin 1989).

Countless numbers of vessels that fish or travel through Kodiak [Alaska] waters have experienced unexplained interference with their ships’ navigational instruments. Their autopilot and compass begin to act strangely as they approach Cape Alitak. The compass’s magnetic setting to true north has been seen to spin out of control and the autopilot refuses to keep a true course. . . . Cape Alitak is an indige-
nous sacred site with dozens of petroglyphs. (Knebel 2003, 107)

People should not stay long at Serpentinite Hot Springs, as the healing influences are very strong (Ellanna and Sherrod 2005; Ganley 2002). This hot spring is an Alaskan sacred place known in Inupiaq as Iyat, the cooking pot. This site has many large volcanically produced granite tors, or outcroppings, that have their own names and healing properties (Ellanna and Sherrod 2005).

The potential for traditional sacred sites to have geomagnetic anomalies or other scientifically determined dynamic parameters has been documented, and work continues (Corliss 2001; Devereux 1994; Devereux, Steele, and Kubrin 1989; Swan 1987, 1988, 1990, 1991, 1995). Infrasound, ultrasound, electromagnetic, and ionizing radiation have all been detected at such sites (Corliss 1983, 1991; Pennick 1979; Tandy n.d.). Plants are sensitive to electromagnetic fields and the influence of humans (Tompkins and Bird 1989). The medicinal properties of plants collected at these sites have more potential for healing (Tribal Doctor Program, pers. com., spring 2006).

Animals and humans are also sensitive to such fields (Adams 1987; Becker 1990; Becker and Seldon 1985; Corliss 1992; Davis and Rawls 1987; Gray n.d.; National Research Council [NRC] 1993, 1997; Papatheofanis 1987; Quincy and Alter 1987; Rauscher 1987; Verschuur 1993; Wilson, Stevens, and Anderson 1990). Animals can sense parameters outside those capable of humans (Hughes 2001). Animals also gather and sleep at or near sacred sites (Devereux 1990, 1992, 1994, 1999; Pennick 1979). Research has been done to assess dreams at sacred sites (Krippner 1989; Krippner, Devereux, and Fish 2003). Robin Baker found that humans can detect the earth’s magnetic field and orient themselves accordingly (1984).

Baker conducted additional experiments and found that how one’s body is positioned during sleep may increase the individual’s ability to sense the geomagnetic field (1984). He also found that synthetic clothing inhibited such abilities. Participants wearing natural-fiber clothing or no clothing statistically outperformed those in polyester (Baker 1984). By physically being in contact with the earth in a natural context and observing life in the area, humans can feel a level of influence from place to animals or people or to plants.

The naturopathic philosophy of the past century has promoted the concept of being nude in nature for positive health and as a way to counter the expanding removal of regular contact with the earth (Cinder 1998). This shift from the intimate knowing of nature has been termed desacralization of the cosmos (Glass 1995, 153). Others have commented on the twentieth-century shift of the level of electromagnetic pollution that keeps people from sensing these sites’ subtle parameters (Bachler 1989; Becker 1990; Davis and Rawls 1987; NRC 1993, 1997; Papatheofanis 1987; Quincy and Alter 1987; Rauscher 1987; Verschuur 1993; Wilson, Stevens, and Anderson 1990). “Dr. Manfred Koehlechner writes in his book Nobody Dies in August, ‘The risk factor associated with one’s location needs to be observed much more carefully now than in former times’” (Bachler 1989, 32).

The timing and location of individual health conditions are now gaining attention in light of global climate variability and shifting major weather patterns, such as the North Atlantic Oscillation and its association with heart conditions in Norway (Messner 2005). Messner and colleagues also examined shifting geomagnetic patterns linked to the aurora and studied whether they are associated with the occurrence of heart attacks (Messner, Haggstrom, Sandahl, and Lundberg 2002). The aurora is linked to sunspot activity, which has an eleven-year cycle. Such long, natural cycles are hard to study in human health standards, but other means of understanding their potential influence exist.

Although it has been well studied, little is mentioned on the eleven-year cycle that appears in the basic properties of water (Devereux, Steele, and Kubrin 1989; Milton 1996). Italian researcher Giorgio Piccardi of the Institute for Physical Chemistry in Florence, Italy, conducted work for decades starting in the 1960s. He carefully assessed long-term shifts in the reaction times of pure water. His work was replicated in Brussels and at the Atmospheric Research Center in Colorado. The investigations “strongly suggest that water is susceptible to influence by electromagnetic radiation” (Milton 1996, 40). The eleven-year period matches that of solar activity, which also influences the geomagnetic field in the production of the aurora. Because life depends on water, it is possible that human bodies can sense surroundings differently on a temporal as well as on a spatial scale. Because nerves and the brain function as wet electrical systems, it is also likely that there are direct geomagnetic and electromagnetic influences on living systems.

Aurora and radio-frequency electromagnetic pulses also appear before earthquakes (Corliss 1983, 1991; Devereux, Steele, and Kubrin 1989). Tellurian forces are generated by the pressures on crystal-containing rock, which provides piezoelectric charges not unlike spark generators in gas stoves. In the past, during tectonic plate stress, humans may have sensed the shifts in geomagnetic fields. They may have also observed changes in animal behavior or the formation of subtle earthlights above the fault line in the absence of electric light pollution (Corliss 1983).

The physical aspects of place appear
Indigenous people from a specific place may be aware of the subtle changes that take place over a day, a year, the eleven-year sun spot cycle, and the fifty-six-year lunar cycle, which is indicated in the placement of the Aubrey holes of Stonehenge and through the language of the Sámi.

Knowing the earth

Perhaps our ancestors were able to locate sacred sites because of their intimate association with nature and the natural materials of their clothing (Baker 1984). The resonance that the human body may have with a location is called adaptation entrainment (Taylor 1988, 87). Knowing the nature of a sacred site may require being barefoot and wearing natural-fiber clothing because of the subtleties of the experience (Cohen 2003). Perhaps those who identified these sites long ago also took the time to sense the place and have hierophany.

In contrast to this wealth of knowledge of transpersonal states, there are virtually no data [that] seek to explain the role in which transpersonal states may be associated with geographic places, except for Margarita Laski’s pioneering work on ecstasies, which concludes that ecstasies take place “…almost always after contact with something valuable or beautiful or both.” These external conditions, which influence ecstasies, Laski terms “trigger.” And she notes that some of the most common triggers are natural scenery, especially water or mountains. (Swan 1988, 134)

For some places you can show that there are unusual environmental fields, electromagnetic fields, air-ionization patterns, and unusual soil and water chemistry, which are capable of influencing consciousness and facilitating healing. . . . But the morphogenic field is like a combination of three things: the spirits, the people who come there to honor the place, and the environmental field, which exists there in the first place. (Swann 1988, 145)

The shamans of many cultures can intentionally enter an altered state of mindful consciousness to seek knowledge (Heinze 1997). Ruth-Inge Heinze provides a chart indicating that the shamanic mindset falls within a region in which both mental control and an expanded state of consciousness exist (1997, 38). The work of Edith Jurka suggests that this state of consciousness may include expanded, simultaneous brain activity at the Alpha, Beta, Delta, and Theta frequencies on an electroencephalogram (EEG; Milliren 1997). Today’s clothes, cars, cities, electromagnetic pollution, and pace of the culture inhibit this ability to have intimate contact with the subtleties of nature and achieve that altered state of consciousness regularly (Gallagher 1993; Kremer 1995).

Dowsers are a group of people who know the earth through a sensitive mindful process of mental control and an expanded state of consciousness (Barrett and Besterman 1968; Bird 1993; Goodman 1977; Graves 1980; Milliren 1997). Dowsers quiet their minds and ask three questions before they start their search:

Can I? May I? Should I? These inquiries are offered to the great unknown source of all knowledge. With this assurance, the dowser moves forward with inquiry in mind, holding a forked stick, pendulum, or bobber, with hands outstretched or merely with an awareness to receive and accept information that is provided through quasimeditative insight. Dowsers have searched for water and minerals for millennia (Bird 1993).

Theories exist that dowsers tap into the tellurian energy or electromagnetic field produced by water moving underground, but such ideas are challenged by the practitioners’ ability to dowse for information of ancient people using distant maps or personal letters. Dowsers state that they are doing more than just detecting subtle energy fields—they are tapping into the great unknown source of all knowledge (Bird 1993; Goodman 1977; Graves 1980; Hawken 1976; Smith 2006). A way exists to gain knowledge without the typical academic or experiential processes: Some suggest that we are all a part of a consciousness that is made up of the entire earth (Devereux, Steele, and Kubrin 1989; Krippner 1988).

Egyptian records show priests with jackal sticks, which are believed to be dowsing rods used for divination (Bird 1993). These rods are similar to the staff of Moses and are used with the power of God throughout Exodus. Moses reportedly used his staff to produce water from rock, part the Red Sea, and consume the serpent rods of the pharaoh because it, or he, could draw on the power of God.

The dowsing technique may be a contemporary survivor of the activities that indigenous people used to assess place. They may have sensed places that were different when encountered during their annual migrations. Those most adept at gaining such knowledge may have used those places for further exploration to understand the land and enter a dialogue with nature. The traditional shamanic practice of spirit travel to obtain information may be an extended form of dowsing that allows communication with the earth consciousness or, worded in a reverse temporal manner, the contemporary dowser may be the vestigial shadow of the former spirit travel skills of the shaman.
Indigenous knowing

The shaman, whose name provides insight into his or her role in the community, could access knowledge that others could not. The shaman had the ability to seek information at will. When shamans recognized and confirmed the special aspects of a place, they marked it or designated that area as sacred and restricted so that future generations could continue to use it (Ganley 1996; 2002; Milan 1964; Reid 2002; Swan 1987, 1991).

The shamans and leaders of indigenous cultures from around the world have marked many sites with durable stone markers. The Inuit—the indigenous peoples of Greenland, northern Canada, northern Alaska, and the Russian Far East—have built inuksuit, which are standing stone markers that often look like humans from a distance (Hallendy 2000). The placement, orientation, and meaning of these stone markers are not fully understood. Some of the markers have stories that relay messages about the area where they are located. Others appear without such oral history. Their spiritual aspects are rarely discussed, although it has been reported that “some served to mark the threshold of spiritual landscape” (Hallendy 2000, 77).

Some mysterious inuksuit-like figures can be fearsome entities: the evil inuksunirlik, which may have been created to cast a spell; the inuksuk assirunnaaq, said to be able to transform into other entities; the inuksuk amrniqtalik are said to contain a spirit, while the sakkabluniit contain spiritual power, the katajqaaq, an arch under which the shaman healed or protected a person; the kattaq, an entrance to a place of power, such as a sacred site; the tupqujaq, a doorway through which a shaman entered the spirit world; and the angaku’habvik, where shamans received their powers of initiation. (Hallendy 2000, 77)

The inuksuit stimulate the mind and raise consciousness in a manner similar to the perspective given by Heinze (1997). Five states of mind can be initiated at some inuksuit, which are not normal waking consciousness or dreaming, according to the Inuit. These states collectively are called quiinuinnaqtuk (Hallendy 2000). In them, one can see other aspects of the real world and not be limited by the physical world. Quiinu-inuinaqtuk is when one is alone and filled entirely with peace. This idea fits with others’ assessments of sacred places (Devereux 1990; Gray n.d.; Swan 1990, 1991). Angnatsiaq is when one thinks of a woman in a loving, dependent partnership that is rich and intertwined, not in a sexual way. Angutisiaq is when one realizes a way of living exists that offers many opportunities to excel. Siilatujik is when one can enter his or her own world, which is just as he or she desires it to be. Issumatujik is when one can think and focus his or her intent on one topic to truly understand it.

Of these five states of mind, the issumatujik defines the mindset that allows a dowser or shaman to become knowledgeable on any focused topic. This state allows interpretation of shifts in animal behavior, the weather, or smell of the land, which could provide the divination of events. It also fosters an understanding of events within the community. This state assists in making decisions to move the herd farther or seek subsistence animals in other locations. It affords the opportunity to know a person’s health condition and a method to provide healing.

Only some of the inuksuit mark the places where these states of consciousness can be accessed or where this hyperconsciousness dialogue can take place (Hallendy 2000). Alaskan ethnographies report healers going to special sites marked with stones or large bones to engage in spirit communication as part of the ritual journey to well-being (Ganley 1996; Giddings 1967; Lowenstein 1992, 1994; Milan 1964; Ray 1983; Schaaf 2004; Spencer 1969). Regular communication and dialogue can again occur with earth consciousness.

Land, for the Inupiat, is an entity much like a person. From this viewpoint, the earth itself can speak, and one of the ways it has spoken and continues to narrate Inupiaq experience and worldviews is through the placement and transmission of names. There are a number of tales from this region that refer to persons actually traveling through or being within the land, rather than existing upon it, as Westerners do. This kind of situation occurred at Serpentine Hot Springs (iyat, meaning cooking pot), where shamanistic initiation took place through underground travel in several layers of permafrost. The earth became, for a shaman’s sometimes unwilling apprentices, both opponent and mentor during these experiences. Certain places are still “quoted” as though they can talk. (Schaaf 2004, 111)

A series of granite tors surround Serpentine Hot Springs. Stories say that they were women who transformed into stone, not unlike the inuksuk assirunnaaq mentioned previously in this article (National Park Service 2003). Iyat has a long history of being a place of traditional healing and to train healers (Elanna and Sherrod 2005; Ganley 2002; National Park Service 2003; Schaaf 2004). Stories also say that each of the tors has its own name and a specific healing power, not unlike the sakkabluniit (Herbert Anungazuk, Native Liaison for the National Park Service, pers. com., February 21, 2006). The belief that Iyat is a place to enter and initiate underground travel to the spirit realm reflects the inuksuk kattaq and tupqujaaq. The Inuit of northwestern Alaska are the Inupiaq, and their name for the region in which Iyat is located is tapqagmiut. Iyat is also a place for divination of a person’s lifespan on the first visit. This insight would be similar to the issumatujik as a place to allow other knowledge to be accessible (Ellanna and Sherrod 2005; Ganley 2002).

American Indians attempt to discover “access points” or “portals” to the sacred that are often impossible to know before the dreams or visions that reveal them. Despite this, there are underlying regular-
The sacred sites of indigenous people provide them with an opportunity to know at a different level of consciousness than the general individual.


Lowenstein, T. 1992. The things that were said of them: Shaman stories and oral histories of the Tikigaq people. Berkeley: University of California Press.


National Park Service. 2003. Iyat (Serpentine Hot Springs) Bering Land Bridge National Preserve, cultural landscapes inventory. Anchorage, AK:
Even the ancients understood that some places had healing powers. But in the late 20th century, scientists began to study how space affects both mental and physical health for good and ill. NIH researcher Sternberg thoroughly chronicles research on the neural pathways that connect our sensory perception of our environment with our ability to heal. Healing Spaces is an exploration of environmental influences over the brain, the body and the course of mental and physical disease. Anyone who has ever felt peace descend in lovely surroundings will find a few seeds of explanation in her book. Abigail Zuger, M.D., New York Times. Your mind is always occupied in one of two places: what is going on inside your head or what is going on outside your head. It is impossible to focus at the same time on both what is internal and what is external, just as it is to focus on neither. Autopilot: Recognizing Habits of the Mind. Autopilot kicks in when you allow what was once exciting and challenging to become boring or mundane. You stop thinking about the situation and, instead, respond in preprogrammed ways. This happens in several ways. What turns autopilot on (and turns the thinking mind off)? There isn’t a formula that dictates when you should be in one state and when you should be in the other, but much like dancing, you need to find a rhythm and delicately move as the situation (or music) requires. Carl M. Hild. ABSTRACT. Recent scientific investigations into the physical aspects of sacred sites are providing new avenues for investigation. Human abilities to perceive extremely subtle physical parameters, which have previously been considered outside of typical sensory capacity, are being researched. It appears that people can sense differences in the physical environment and have established cultural reminders at such places. These places have been used for many purposes,