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Donna L. Gillette
Mavis Greer
Michele Helene Hayward
William Breen Murray *Editors*

Rock Art and Sacred Landscapes

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Chapter 1
Introduction to Rock Art and Sacred Places

Donna L. Gillette, Mavis Greer, Michele H. Hayward, and William Breen Murray

Introduction

Rock art imagery occurs worldwide, and much of it is believed to have been created as part of a culture's religion or ritual expression. In 1871 Edward B. Taylor, one of the founding fathers of anthropology, defined religion as "belief in a spiritual being" (Taylor 1920 [1871]:13371). Although his definition may appear simplistic, it encompasses the basis of all human religions, which Taylor went on to suggest were rooted in *animism*, or the belief that spirits and souls (spiritual beings) exist in human as well as nonhuman beings such as animals or trees. In the worldview of many people (past and modern) mountains, rocks, and other inanimate objects are also alive or imbued with a spiritual essence. According to Taylor, religion developed to explain the puzzling phenomena people encountered in their everyday life. The existence of *spiritual beings* continues to remain a core belief in many parts of the world, and these *beings*, especially animals, also comprise a large share of rock art imagery. This volume focuses on case studies of rock art imagery that represent

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how humans in the past made sense and interacted with their world within a religious context. Specifically we examine how people recognize when rock art denotes sacred places where ritual occurs.

Religion, Ritual, and Spiritualism

The religions of past peoples have been investigated by cultural anthropologists, archaeologists, religious historians, art historians, and psychologists, and all vary in their definitions and approaches to the subject. In cultural anthropology and archaeology religion is understood to involve beliefs, oral traditions, practices, and rituals, as well as their material correlates including artifacts, landscapes, structural features, and visual representations such as rock art. These terms represent mental constructs devised by investigators to make sense of human thoughts, actions, and material remains that are primarily religious or spiritual as distinct from those that derive mostly from economic, political, or social activities.

The anthropology of religion, ritual, spiritualism, and related topics has a vast literature related to cultural practices and material cultural items (Bell 1997, 2007; Clottes and Lewis-Williams 1996; Douglas 1973; Kyriakidis 2007; Rappaport 1979, 1999; Steadman 2009; Turner 1967, 1969; Whitley and Hays-Gilpin 2008). Here we explore these concepts relative to pictograph and petroglyph images placed on natural surfaces and their role helping individuals negotiate their place and perceived power in the world, as well as obtaining meaning from the world around them. The following chapters demonstrate that the meanings of such terms as religion, ritual, and spirituality need to be particularized with regard to specific cultures in different times and places. The following brief review of certain terms normally associated with religion sets the stage for the studies presented in this volume.

Spirituality

Common definitions of spirituality include a deep regard for religious values; a concern for matters of the spirit; belief in an unseen or immaterial reality; a focus on the soul or self; and as paths toward higher levels of consciousness, self-understanding or communion with the divine (illumen8.com 2008; Merriam-Webster 2011; The Free Dictionary 2011). Religion and spirituality are intricately intertwined with shared beliefs (existence of the divine or immaterial world), practices (meditation, prayers), and organization (rules, structured approaches to self-enlightenment). Even so, certain distinctions can be made. For example, religion is frequently characterized as an external organized system of worship with public practices and formal doctrines that are culturally and institutionally dependent. Spirituality is seen as an internal, private, unenforced, and non-dependent means to similar or the same

goals of religion including experiencing transcendent reality and achieving personal peace (Brown Holt 2006; Chumley 2010; Cline 2009; Thurman 2011).

Traditionally, the relationship between the two concepts has been to consider religion as the outward form and the spiritual as the inward form of faith traditions, where the believer more fully internalizes core values and beliefs that commonly results in inner spiritual advancement. More recently, and especially in regard to the American public, spirituality may be viewed as largely divorced from particular religious traditions with a focus on individual growth. Social reform movements including feminism and transpersonal psychology, as well as encounters among world religions have all influenced the meanings and practices of contemporary spirituality (Cline 2009; Irwin 2010). The traditional inter-linkage between the two concepts is adhered to in the present volume, where religion and spirituality are used interchangeably to reflect the recognition of the divine or otherworldly presence in all living beings and even physical objects.

Ritual

Ritual is sometimes the agent for religious expression, and Catherine Bell takes "… ritual to be the basic social act. …in ritual, the world as lived and the world imagined…turn out to be the same world" (Bell 1997:v). This statement points out that ritual is not easily explained or understood even though it is something humans are associated with on a daily basis, both now and in the past. To understand how rock art had and still has a religious function, it is necessary to focus on ritual because it may lie behind the act of placing images on rock or behind the reason for returning to a rock art site by the same or different cultural groups again and again over the years. Therefore, although ritual and religion are intertwined, they display themselves in a variety of ways, and rock art studies can contribute toward a better understanding of that relationship.

Other anthropologists of the twentieth century have also made significant contributions to the studies of ritual and religion, including Mary Douglas and Victor Turner. Both of these anthropologists were advocates of a symbolic approach to understanding the role of ritual in society (Steadman 2009:33). Douglas was a student of Evans-Pritchard and proponent of symbolic anthropology who, like Pritchard, taught that a culture's most basic values and worldview are represented by "symbolically meaningful components" of ritual and religion (Steadman 2009:31). Douglas (1973) argued that an emic view is needed to unravel the meaning that underlies actions, including rites that make up a religion. As applied to rock art studies this requires an extensive knowledge of a particular cultural group to understand rites portrayed in images. For example, rites of passage sometimes contain a rock art component, such as the girl's puberty rites of the Luiseño's of Southern California, where at the completion of their ceremony, they ran to a nearby rock to place images (usually diamond chains) that represented their spirit helper, the rattlesnake (Du Bois 1908:173–4).

Victor Turner, whose fieldwork was centered with the Ndembu people of eastern Africa (1967), saw symbols as representative of both cognitive and emotional responses (Steadman 2009:33). He viewed symbols (such as rock art figures) as *units of meaning* which could be representative of an *entire cultural structure* (Turner 1967). While symbols may have different meanings to different groups, Turner related that the entire *forest of symbols* was understood by all in the group, and this served to unite the community that shared a complex system of symbolic meaning. In addition to his study of symbols, Turner also focused much of his work on the process of ritual. Turner saw the ritualistic process in the rites of passage as developing a lifetime bond between the participants and the elders they were following, which he referred to as *communitas* (1969).

Gilbert Lewis refers to a puberty ritual among the Gnau people of Papua New Guinea which points out the difficulties that occur when attempting to define ritual (Lewis 1980). He sees the problems encountered as that of understanding the symbols and expressions of other people, and this is certainly relevant to rock art images if, as he suggests, the word *art* is used as an analogy for the word *ritual*. Lewis notes that they pose similar problems in meaning—the separation of a ritual from a game or technique, and to separate art from a craft or an amusement—"So may we choose to say there is a ritual aspect to many actions: and may we choose to see artistry in many artifacts. What are those aspects that we point to by calling them ritual or artistic?" (Lewis 1980:9).

Another good example of the thin line between games, ritual, and religious cosmology are the patolli petroglyphs of Mexico. Patolli was a popular board game like chess or dominos whose symbols and movements were equivalent to a cosmogram of the universe widely shared throughout ancient Mesoamerica. Modern games are rarely defined by religious concepts (unless you really believe in "Lady Luck"), but for ancient Mesoamericans, each move in the game represented the play of celestial beings on a cosmic landscape. Patolli game boards are a special category of petroglyphs found at various sites in west and central Mexico (Mountjoy and Smith 2004).

Rappaport, in his studies of the Maring people of interior New Guinea, views ritual as not producing "any practical result on the external world," but to the "internal construction of the society" where it "gives members of the society confidence" it "dispels their anxieties" and "disciplines their social organization" (Rappaport 1979:17). He identifies ritual as a formal aspect of an event which can include various media—words, gestures, and objects. Joyce (2001:133371) identifies ritual as "repetitive sequences of actions related to beliefs" and emphasizes the importance of contextual analysis, which allows the identification of types of artifacts that can serve as evidence of ritual action. This last definition is especially related to some rock art ritual practices such as the previously mentioned girl's puberty rites of the Luiseño of southern California (Du Bois 1908:173–4), or the Pomo rituals related to fertility (Barrett 1952:386–7), where the same acts, leaving evidence on boulders, are repeated with each ritual act. This kind of ritual behavior has been proposed as the reason that there are hundreds of shield-bearing warrior figures painted and engraved on the walls of Bear Gulch in central Montana (Keyser et al. 2012). In this

case, the site predates written records but comparisons with known ritualistic practices provide the best explanation for the creation of so many images within such a small area. This location appears to have been a place of power, and by drawing an image on the wall in association with religious ritual young warriors gained some of that power for themselves.

Although the Huichol perform rituals at various rock art sites, including one near Monterrey, Mexico, which is identified as part of the creation landscape (Murray 2006), they do not make rock art as part of these rituals. In the Sierra Tarahumara of Chihuahua, and in many parts of central and southern Mexico, these rituals are now linked syncretically to the Christian calendar and have been relocated into new locations, such as the Holy Week celebration of the Rarámuri who dance all night around bonfires in the church plaza to celebrate the Easter passion each year. This ritual includes indigenous elements such as body painting and the use of ritual objects that replicate motifs at nearby rock art sites. Many archaeological sites in Mexico and elsewhere are also now treated as "power centers" in New Age rituals and beliefs and some include rock art as part of their magical landscape.

Sacred Places

Many places in North America and worldwide are considered sacred because of the presence of rock art. In some cultural worldviews (both past and present), the rock itself is a living thing, and the markings on the rock (images) are spiritual symbols (imbued with power) associated with the rock, cave, or other host phenomena and are viewed within the context of the surrounding landscape (Greco 2011). Rock art placed at a location in the past for whatever purpose usually transformed that place into one considered sacred by the group that made the rock art and those (related or not) that came after them to use that space. Conversely, a place may be sacred first for another reason, such as the occurrence of a momentous event or a coming of age vision quest, which is then marked by rock art making the place sacred. A sacred place does not necessarily exclude nonreligious activities at that location for many cultural groups. However, it may mean that special rituals are necessary before entering the sacred place to conduct either spiritual or secular business. The intertwining of sacred places with religious expression and every day mundane work, such as hunting and gathering, undoubtedly occurred in the past as it does today For example, North American tribes make distinctions not only for church buildings but also for outdoor religious activity areas, so that tourism does not usually overlap with times of worship at sacred spaces, such as Devil's Tower National Monument in Wyoming, known as Bear Butte by the tribes who consider it a sacred place. The complexities of what is a sacred place, how one place on the landscape becomes sacred over another even if both have similar natural attributes, and how a sacred place is treated by different cultures through time are often associated with rock art studies throughout the world.

Summary of Contents

In the following chapters one class of material culture—rock art—is employed to address issues regarding the internal and external dynamics of past religion, which encompasses spirituality. An examination of spirituality in past and present societies, along with archaeological data on religion, indicates that religious or spiritual concepts are and always have been a complex worldview composed of living humans and a range of nonhuman spirits or beings, dead ancestors, and animate forces. Recognizing that this totality of life involves interlinked systems of beliefs, behaviors, and physical characteristics, implies that the latter can be used to infer the former. The volume's chapters expand on these ideas with case studies providing well-reasoned and well-grounded arguments for inferring rock art and religious linkages. The studies are drawn from diverse geographical regions—Africa, Australia, Caribbean, Central America, China, Europe, North America, South America, and Southeast Asia—and encompass thousands of years. They are organized according to rock art's role among the following aspects of religion: ritual, beliefs, marked landscapes, practitioners, and formal organization.

In *Rock Art and Spiritualty: Is the Rock Art of 30,000 Years Ago a Window to the Spirituality of the People of the Palaeolithic*? Margaret Bullen addresses the question of continuity of the human mind. She examines whether humans of today have the ability to enter into the prehistoric mind of those who created the art work 30,000 years ago in Chauvet and Lascaux and can we know and understand their worldview. It is her argument that Paleolithic art was created by special people and there are special people in all times and places, and these people have the power to communicate across the boundaries of life and death and perhaps across the boundaries of time and space.

Silence of Signs—Power of Symbols: From Sympathetic Magic Towards Social Semiotic in South Scandinavia Rock Art Research by David Vogt argues that regardless of single or multiple contexts—religious, political, economic, ideological—rock art images communicate messages. A case study from Southern Scandinavia illustrates the utility of this analytic approach to a particular body of rock art, as well as rock art in general. The Late Bronze Age in Southern Scandinavia was a time of dramatic political and environmental change, which is reflected in the rock art. The transformation from forest to vast grasslands was rapid, and coincided with the appearance of thousands of rock carvings. Vogt proposes that this body of Late Bronze Age Southern Scandinavian rock art provides a database for examining the messages of passive religious and active political communication.

Leslie F. Zubieta in *The Rock Art of Chinamwali and its Sacred Landscape: A Pilgrimage to Initiation* analyzes the Chewa matrilineal society of south-central Africa to understand how religious ideas of the Chewa are evidenced in their girls' initiation ceremonies, and how the performance of their rituals have changed through time. Their religious beliefs and rituals are reflected in a specific set of white rock paintings and their placement on the landscape.

Noel Tan and Paul Taçon examine the coexistence of rock art with scared shrines and temples in Myanmar, Thailand, Cambodia, and Laos in *Rock Art and the Development of Sacred Landscapes in Mainland Southeast Asia*. The introduction of Buddhism and Hinduism reconfigured painted landscapes for their own use. Commonalities and differences among these sites suggest that they may always have been regarded as "powerful" or "spiritual" places in varying ways.

In *Spirituality and Chinese Rock Art* Yasha Zhang examines the abundant and diverse rock art of the regions of China relative to their associations with local religious beliefs and worship. Because of the long written history in China, it is possible to make the spirituality connection with more confidence further back in time than it is for many other parts of the world, but even in China the earliest rock art must rely on other means of analysis to determine its function. Different kinds of images were made and used in different regions of the country at different times as people continued to change their ways of thinking, but like other parts of the world, Chinese rock art associated with religion and spirituality is also based on the economics of the region.

Jamie Hampson in *Conflict on the Frontier: San Rock Art, Spirituality, and Historical Narrative in The Free State Province, South Africa* begins with the premise that San rock art was produced within a ritualistic framework based on ethnographic evidence that San paintings and engravings in numerous southern African regions reflect a belief in a tiered cosmos and its interpretation by shamans. Here he examines questions that arise from the study of specific paintings at the Wepener site that can be answered by detailed studies of San beliefs.

In *Spiritual Places: Canadian Shield Rock Art Within Its Sacred Landscape* Daniel Arsenault and Dagmara Zawadzka argue that the physical properties of rock art sites and their placement on the natural features reflect spiritual and cosmological beliefs of Algonquian-speaking peoples, thus creating a sacred landscape. They note that the physical attributes of the site (i.e., properties of the rock outcrop on which rock art is found, the visual and acoustic effects present at the site, the cardinal orientation of the site, and the location near landscape features such as falls) all had spiritual connotations, which enhanced the sacredness of the place and made it propitious for conducting ceremonies.

Ute rock art is the subject of *Concepts of Spirit in Prehistoric Art According to Clifford Duncan, Ute Spiritual Elder* by Carol Patterson and Clifford Duncan. A discussion about spirit and ceremonies of a spiritual nature is offered relative to representations of the Bear Dance at Shavano Valley petroglyph site as interpreted according to Ute Indian traditions. Clifford Duncan, Ute tribal elder, contrasts what he believes to have been prehistoric worldviews with the contemporary Ute worldviews. He presents his concept of spirit from his lifelong study of rock paintings and petroglyph sites as related to Carol Patterson during their visits to these locations.

Old Man Owl: Myth and Gambling Medicine in Klamath Basin Rock Art by Robert David and Melissa Watkins Morgan introduces us to "Owl Site," a petroglyph concentration in southern Oregon and Northern California. Klamath-Modoc shamans believed that characteristics of the owl contained supernatural properties,

and these properties were integrated into their ritual activities. Klamath-Modoc myths, in combination with local ethnographic information, provide specific and detailed explanations why images at the Owl Site are related to power quests in which individuals sought supernatural assistance relative to gambling ventures. They argue that laypersons, as well as the shamans, tapped into this power to assist them in success at gambling.

Trance and Transformation on the Northern Shores of the Chichimec Sea by Solveig Turpin and Herbert Eling focuses on the intimate relationship of prehistoric people with the supernatural universe as expressed in pictographs, petroglyphs, painted and incised pebbles, and painted bones. They view a religious practitioner who is in a trance as having the ability to assume the form of his animal spirit and, through the power of magical flight, travel to the land of the spirits, indicating a far more complex system of beliefs than is denoted by the way they lived.

William Breen Murray in the *Deer: Sacred and Profane* studies the role played by deer in the lives of some northern Mexico groups. Rock art images of deer antlers and hoof prints often occur at good hunting sites and may be semasiographic symbols marking the transformation of these places into ritual settings which relate to the annual solar year which governs antler growth and the entire deer reproductive cycle. Some elements of these deer rituals are well documented and still practiced in modern North Mexican indigenous cultures.

Spiritual Organization in the Late Ceramic Caribbean by Michele H. Hayward, Frank Schieppati, and Michael A. Cinquino applies ethnohistorical accounts coupled with the physical characteristics and iconography of rock art to indicate a shift from a less structured to a more structured organization in studying change and stability of religion/spirituality. Their data indicate that control of ritual objects and places was by the elite, to strengthen their individual and collective influence.

In *Language and Thought in Rock Art: a Discussion of the Spiritual World of Rock Art in Colombia* Guillermo Muñoz stresses the importance of studying rock art in the context of its native cultural setting. Premodern peoples viewed the world, and people and places in it, as more animated and more imbued with spiritual forces and entities than those of the present-day, and thus the spiritual dimension needs to be considered in any interpretation.

Spirituality is not a static concept. The chapters in this volume are only a glimpse at the diverseness of how spirituality and rock art have been viewed by different cultures at different points in time. In the final chapter in the book Donna Gillette and Mavis Greer focus on rock art in North America for *Spirituality in Rock Art Yesterday and Today: Reflections from the Northern Plains and Far Western United States*. In parts of North America there are ethnohistorical and ethnographic records that discuss how rock art's connection with spirituality was viewed by different cultures at different points in time. Although these differed from one tribe to another prior to westernization of the continent, today, for the most part, regardless of the function of a rock art site in the past, it is considered a spiritual place by Native American groups in these regions. How and why this change occurred and under what circumstances reflects the larger cultural landscape within America and how spirituality and rock art serve as an important link to cultural identity.

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Chapter 2
Rock Art and Spirituality: Is the Rock Art of 30,000 Years Ago a Window to the Spirituality of the People of the Paleolithic?

Margaret Bullen

Introduction

Paleolithic rock art such as that of Chauvet Cave (France) reaches out to us across a divide of thirty thousand years with a power that leaves us awestruck. To interrogate it as to its meaning is as presumptuous as to demand an explanation from a present day Australian Aboriginal person of their secret and sacred paintings. Even if a story is offered, we accept that behind those images there are other stories accessible only to those who have the right to know the deeper meanings. Those meanings frequently lie in the realm of the spiritual, described in the introduction to this volume as the "inward form of faith traditions". We are told that much of their art has a sacred meaning for Australian Aboriginal people, but we have no one to tell us if the Paleolithic art was sacred to the people of that time. The question is whether the art itself can reveal the answer.

Spiritualism, animism, and spirituality are all aspects of a belief system that tolerates the idea of a nonmaterial and therefore unknowable other, existing beside the reality that is material and ultimately, knowable.

The core belief of spiritualism is that the spirits of those who have died are able to communicate with the living. This belief has a requirement that the living also have a spirit distinct from their material reality. Materialism, in contrast to spiritualism, is based on the belief that nothing exists except matter and that consciousness is wholly due to material agency. Spirituality is a broader concept which includes religion and concerns itself with matters of the spirit and the sacred as opposed to the profane. Modern science is stripping open the places where the spiritual or numinous aspect could lie hidden. While there is still much to be discovered, the brain is no longer *terra incognita* but a landscape with well-known pathways, nor

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can spirit today secrete itself within the closed world of the cell. That too has been illuminated and even genes are reduced to strings of nucleotides. Yet many modern people, from both Western and non-Western societies, despite accepting a scientific underpinning of the world, do not place all existence within the category of "knowable."

Worship of the ancestors is a feature of many religious practices indicating a belief in the power of the departed to influence the lives of the living.

Modern technology allows us to watch astronomers guide a tiny craft an unimaginable distance across space to land on a distant planet and measure the forces that keep the stars in their orbits. Yet the splendor of the night sky, especially when observed away from the light pollution of modern cities, still has the power to inspire awe. Most people living in modern societies neither prostrate themselves in obeisance before the spirits of the night sky nor find it necessary to carry out rituals to ensure that the sun will rise. However, even in the most modern of Western societies, people write letters to their departed loved ones and find comfort in talking to them at the side of the grave. In some societies meals are left for the departed or eaten in their company beside the grave. Messages in the obituary pages of daily newspapers are frequently directed to the person who has died with thanks for friendship and reminiscences of shared experiences.

Even if definitions are fluid, there is a commonality of understanding about what modern human beings mean by spirituality. However, we may question how realistic it is for we of the twenty-first century to interrogate notions of spirituality in the Upper Paleolithic, at a time before ideas and thoughts were recorded in language and the world was a very different place from the one we now inhabit.

We can only dare to be so presumptive if we can be sure that we share enough with the people of thirty to forty thousand years ago. Arms, legs, hearts, and lungs may to all intents and purposes be identical, but what about the brains, the seat of consciousness? Who were those people and are our brains alike enough to theirs for us to hear what it is they have to say? The clues we have lie in their bones and in the technology and artistry they left behind: tools of stone and bone, paintings and carvings in caves and on rock faces, and even musical instruments.

Art is defined by The Oxford Dictionary as "the expression or application of human creative skill and imagination, typically in a visual form such as painting or sculpture, producing works to be appreciated primarily for their beauty and emotional power." This definition does not include art acting as a symbol, standing as a referent for something else, or, in a definition closer to the Latin *ars*, as a skill. Does art begin in the Upper Paleolithic with the great Franco-Cantabrian naturalistic images or much earlier? When does art—two or three dimensional—show evidence of being a symbol? Is it possible to see within the art of the Upper Paleolithic, the mark of spirituality? This paper will attempt to answer these questions and will consider to what extent, from our current knowledge of the modern brain, we can infer how hominids thought and expressed themselves thirty to forty thousand years ago. The role of the shaman both within the community and as a possible maker of art will also be discussed.

When Does It Begin?

As knowledge increases, so too does the time depth of hominid competence. In 1650 according to James Usher Archbishop of Armagh and his colleague John Lightfoot, Vice Chancellor of Cambridge University, the world was created in 4004 BC (Groves 1996). Only 400 years later the Abbé Breuil looked back over four hundred centuries to the beginnings of prehistoric art (Breuil 1974), a generous time span that allowed for the later discovery of the cave of Chauvet, currently dated to at least 32,000 B.P (Clottes 2003).

The rock art of Chauvet is both aesthetically pleasing and emotionally powerful. It is hard to accept that art of this level of sophistication arose de novo, but it is unclear on whose shoulders the artists of Chauvet were standing. Perhaps it began with an early hominid having a flash of recognition of a human likeness in a reddish-brown jasperite cobble (Fig. 2.1) discovered in 1925 in an Australopithecine context in Makapansgat Cave, South Africa (Bahn 1999; Bahn and Vertut 1997).

After dismissing the cobble as of no significance shortly after it was found, thirty years later Dart recognized its nature was foreign to the cave's dolomite and must have been brought into the cave from a source some distance away. The cobble was extensively studied by Kenneth, Oakley, and Desmond, Morris featured it in a major television program "The Human Animal" (Bahn 1999). There was no evidence that the cobble had been altered except by natural processes, and it has been assessed as too large to have been brought into the cave in the gut of an animal (Bednarik 1998). Unless it was brought into the cave by chance, an individual selected the pebble for

Fig. 2.1 Makapansgat cobble (South Africa) (photo by Paul Bahn)

some reason. Today we might comment that the markings look almost like a human face, with two horizontal depressions for the eyes and one below for the mouth. We might even call it a symbol of humanity. Experimentally, faces are recognized as such given the simple features of two round circles, a vertical line for the nose and a horizontal one for the mouth, provided they are in the correct relationship to each other (Ramachandran 2012). Facial recognition is a function of the brain found in nonhuman primates. Specific cells in the temporal lobes of monkeys have been found to fire off when they visualize another monkey's face and also when they see a highly stylized caricature of the face. It is therefore reasonable to assume that an Australopithecine hominid would also have had the neurological capacity to respond to a stylized face. If we allow ourselves to believe that the cobble was transported a long distance because it resembled a face, we can imagine that the individual concerned wanted to keep it because it aroused certain feelings in him or her and perhaps, to share their observations with others.

We cannot assume that the individual made the higher order recognition that the pebble stood for the concept "human," and that it was therefore a symbol. Beads made from marine shells have been found in the Middle Paleolithic site of Blombos Cave, in a layer dated to seventy two thousand years BP and in that context have been proposed as indicators of symbolic reasoning and syntactical language. According to Henshilwood and Dubrei (2009) they had been deliberately pierced, had on them minute traces of ochre and showed evidence of wear from stringing. They were not randomly distributed in the layer but were found in groups with an internal consistency in the manner of perforation and patterns of use wear. It is argued that this evidence for careful selection suggests the beads were not utilitarian and were worn in front of other people and perhaps indicated membership of a particular group (d'Errico and Vanhoeren 2009).

There is no doubt that creating beads from shells requires forward thinking and planning, but they may have just been decorative. Male bower birds decorate their bowers to attract females, some collecting white objects and others blue, and surveys of abandoned bowers would no doubt reveal internal consistency in terms of color. It may be reasoned that the individuals of Blombos Cave were signifying their belonging to a particular group by their choice of shell color and the way they made and wore their beads. It may also be that their choices were purely dependent on how they had learned from others in their closest community. We have no actual evidence for their being anything more than decorative. The same reasoning can be applied to beads found within a Chatelperronian context pushing bead making back to the Neanderthals (d'Errico et al. 1998) but with no evidence that the beads were anything other than decorative.

The recently reported U-series dating of calcite flowstone covering red marks in caves in northern Spain pushes back the earliest dates for art to circa 40,800 BP (Pike et al. 2012). This is the date put on a red disc in the cave complex of El Castillo. The authors note that this is close to the 41,500 BP date for the arrival of modern humans in Western Europe suggesting that decorating caves may have been part of the cultural package they brought with them. However, they also point out that 40,800 BP is a minimal date and the mark might predate the arrival of *Homo*

sapiens sapiens, making it the work of *Homo sapiens neanderthalensis* (Pike et al. 2012). As is the case with beads, decoration of the cave wall with red marks is very different from making a representation intended to stand for something else; a symbol of that other object or being. Neanderthals may have decorated their caves with flowers and put red marks on the walls to make them more pleasing places to live, but the mark has no features that clearly define it as a symbol, nor does it offer any clues as to whether the people held any spiritual beliefs. There is also controversial evidence that they expressed themselves musically. In 1995 the perforated femur of a cave bear, excavated from a site in Slovenia was dated by Electron Spin Resonance (ESR) to between fifty and sixty thousand years ago (Turk and Dimkaroski 2011). Computerized tomography was said to confirm that the holes were artificial and ethno musicologists identified it as a wind instrument with a range of two and a half to three octaves (2011). While the evidence for the bone artifact being a flute has been challenged (d'Errico et al. 1998) even if it were found to be correct this would be evidence of a musical sensibility not spirituality or symbolism. The desire to decorate the body and/or the cave and a "susceptibility to music" (Sacks 2008:xiii) have been threads running through the evolution of *Homo sapiens sapiens* from before the earliest of the great Franco-Cantabrian galleries. In considering how close we of the twenty-first century are to the people who created those galleries a brief look at the evolution of the brain may help.

Evolution

Evolution has been described as parsimonious because what has gone before is incorporated in the next stage of development. In broad terms this can be seen in Paul MacLean's model of the triune brain, the Reptilian, Paleo-mammalian, and the Neo-mammalian (Maclean 1990:9).

The Reptilian is at the base, both in physical and evolutionary terms; but it is what keeps the basic functions of the body going even if the higher centers are not functioning. The development of the Paleo-mammalian brain saw the emergence of the limbic system with its complex relays involving, among other areas, the thalamus, hippocampus and amygdala, interacting with input from the sensory centers. The ability to learn and recall emotionally significant information vital for survival depends on the limbic system, and survival of the individual often depends on the ability of the limbic system, particularly the amygdala, to initiate a response without internal debate through higher centers. However, it was the neo-mammalian brain with its increasingly complex cortical function that allowed a more considered reaction to the emotions evoked by the limbic system. Tracts run from the various components of the limbic system including the thalamus, the anterior cingulate, and the amygdala connecting with each other, with the motor and sensory cortex and with the prefrontal cortex. In order to think about a response to a stimulus from the limbic system it is necessary to have access to an internal script. That requires language.

How early language began in the evolutionary pathway to *Homo sapiens sapiens* is still a contested topic, but it was probably well established by the Aurignacian. It is argued that the development of social complexity would have required complex language, and therefore archaeological evidence for significant local differentiation in lithic cultures in the period from 50,000 to 150,000 years ago indicates the presence of complex language at that time (Matthiesen 2004).

The makers of the art under discussion were fully human possessing both the capacity for a spoken language and for a personal internal script. They were born in the same state of immaturity as humans are today which would have had a similar effect of strengthening the prevailing culture. Humans are born with a brain representing only 25 % of its adult size compared to 70 % in the macaque monkey and 45 % in a chimpanzee. In the chimpanzee 85 % of adult brain size is reached 1 year after birth while it takes 6 years in the human (Hublin 2005:62). During that long postnatal period of cerebral development thousands of connections between brain cells, or neurons, are being created by the process of synaptogenesis. The connections themselves are dependent on the presence of thousands of proteins on both sides of the junctions known as the synapse complement (Ryan and Grant 2009). While these proteins are found from the most primitive to the most complex organisms it is thought that the evolution of the synapse complement has enabled an increase of neuronal cell types and in the neuronal network complexity of the human brain (Ryan and Grant 2009). Research on the level of protein expression in human and primate brains has identified numerous proteins that are specifically up regulated in humans, but as Ryan and Grant state they can only speculate on the function of these human specific proteins and why their selection sometimes is associated with an increased vulnerability to some psychiatric disorders (Ryan and Grant 2009). We do not have access to either the brain or the genome of the artists of the Palaeolithic although partial sequencing of the Neanderthal genome has been achieved (Green et al. 2010). There are enormous problems to overcome including contamination with modern DNA and microbial DNA but it is not out of the question that DNA may, in the future, be retrieved from earlier hominids.

Synaptogenesis can be divided into four stages. Stages 1 and 2 are early intrauterine phases and of relatively low density, while stage 3 is fast and dense. It lasts for 14 days in the rat, 30 in the cat, 136 in the macaque and 470 in the human. Most importantly, while stage 3 starts before birth, it, and stage 4, continue well into the postnatal period. At that time the infant is exposed, not only to a different physical environment but to one with a social and cultural content. The transmission of culture from one generation to the next is highly dependent on the enormous number and complexity of synapses and their selection in the postnatal period (Changeux 2005). An extended time for synaptogenesis is a characteristic of modern humans that was probably shared by the earliest Homo *sapiens* (Hublin 2005).

About 40,000 years ago human beings had brains that were anatomically close to ours. The brains of their infants had a similar opportunity to develop their synaptic networks and for the cells to learn to respond to visual and auditory cues as do those of today. But the building blocks, the proteins transmitting their messages and storing memories, were probably not identical, and the verbal and visual cues in their physical and cultural experiences would have been very different.

The genetic blueprint encoded in DNA was for a long time considered as the sole and immutable determinant of an individual's identity. It was understood that it was changes in genes through mutations that could bring about changes in offspring, not environmental and behavioral events. The study of epigenetics has profoundly altered that thinking. Epigenetics is about changes to the DNA that do not involve changes to the actual amino acid sequences but rather to the behavior of gene regulating attachments (Francis 2011). These effects start even before the infant is born. Something in the internal or external environment of either or both parents will alter the expression of genes in the fetus, but these epigenetic effects are particularly powerful in utero. Some effects can be passed on directly, but more commonly they result in cultural changes which are then adopted by the descendants, bringing together the influences of nature and nurture. These epigenetic effects will have been acting on the human genome over the past forty thousand years, and the more people dispersed, the more varied those effects will have been.

The discovery of mirror neurons, initially found in macaque monkeys, has added to our understanding of how culture is transmitted. The same cells in an area of the premotor cortex of the monkeys were observed to become active both when an animal carried out an action such as reaching for an object and also when it observed another animal carrying out the same task (Rizzolatti and Giovanni 2005). The mirror neurons in humans were observed to respond also to intransitive but meaningful movements; they were not only mirroring the goal but also the pathways to achieving it.

Other types of mirror neurons have been discovered in humans, not only motor but also sensory. The cingulate cortex is part of the brain's limbic system and is involved, among other things, in the emotions. The anterior part of the cingulate cortex has been found to be particularly involved in conflict situations including pain. Cells in this area, which have been identified as responding to painful stimuli to the skin, were observed to become active when an individual watched another person receiving a painful stimulus. Motor neurons not only allow a person to experience, and learn from, an action carried out by another person but also to feel their experience (Ramachandran 2012). This is perhaps the mechanism of empathy.

A novel idea will only become incorporated into the culture of a society if other people have observed the activity and try it for themselves. Just because one person observes another carrying out a task does not mean they will automatically copy them. If the activity is not copied by others it may never be incorporated into the skill set of the community. The larger the community, the more chance there is that another member will copy a novel activity and it will then become part of the culture.

Assuming that the Makapansgat cobble was carried to the site by an Australopithecine individual, was that individual the only one to have a response to the "image" of a face or did others share the response? Finding the cobble in the deposit was a serendipitous discovery and maybe other individuals also curated objects with a "likeness."

Bead making was clearly an activity that was shared among members of communities at least as far back as *Homo sapiens neanderthalensis*, making use of the ability to learn by observation.

Art will only reflect what is present in a society. Spirituality may exist in a society and not appear in its art, but evidence of spirituality will only be found in its art, if a society, either individually or collectively, engages with a sense of the spiritual. It is likely that, as societies became more complex, specialist practitioners emerged who played a particular role in the spiritual life of their communities.

Shamans and the Unknown

The world of early *Homo sapiens sapiens* must have been full of the inexplicable and the uncontrollable: floods and droughts, plenitude and hunger, shooting stars and eclipses, sickness and death. Their lives may appear to have been essentially materialistic, concerned with finding enough to eat, avoiding being eaten themselves, and procreating; yet they left evidence of a life far richer than one of just survival, a treasure trove of sculptured images, paintings, and carvings.

If there is so much in the world that cannot be explained and over which humans have, apparently, no control, the idea that there is something or somebody external to the experienced world, which or who does have such control, could be both frightening and reassuring. The unknown and unknowable is frightening, but by reifying it, giving it an identity and even more powerfully a name, it can be brought under some measure of control. It can then be appealed to, bribed with gifts and rituals, and become the central point of a hierarchy of power. It might also be approached more safely through intermediaries; those who have left the earthly world and gone on some unknown journey could be ideally suited to fill that role. The intermediaries would need to be approached with care, and special people with special gifts might be needed to make the approach.

Modern religions have many of these features; a priestly class, specially trained, usually operating in an environment with restricted access and often using a language not understood by the majority of the community, invokes spiritual powers. Requests for help, advice or victory over enemies may be sought and offerings made often through such intermediaries as saints, people who once lived and frequently suffered on earth. Latin is still used in many traditional Roman Catholic churches and long passages of Pali are intoned by priests in some Buddhist funerals. In the church of the *Convento di la Merced* in Santiago, Chile, the walls, altars, and any other likely spot are covered in notes conveying a myriad of messages to the saints from thanks for recovery from illness to requests for help in exams. A trajectory from the living to the highest unseen powers is assumed by this behavior. Science can now explain the mechanism of a full solar eclipse, but earthquakes and tsunamis sweep away whole communities and cannot be controlled. People still feel, and frequently are, helpless in the face of catastrophes not of their own making and so turn to a greater power for assistance.

Thirty thousand years ago there was no science to explain why at some times the land was dry and barren and at others it was rich with plant and animal life. From a twenty-first century perspective it would seem reasonable that they would invoke

help from other worldly sources if they had the ability to access them. At what stage in hominid development it was recognized that some individuals in the community had special gifts that allowed them to appeal to the unknown powers, we shall never know. Their skill may have evoked both respect and fear in other members of the community. The ability to experience trance, to shift temporal and spatial realities, is a universal human capacity which can be described as an intense form of focal concentration with a reduction in peripheral awareness (Siegel and Siegel 1978). Trance ability follows a normal distribution curve and in modern societies between 5 and 10 % of the population have a high ability which can be demonstrated in many ways including their capacity to undergo major surgery without anesthesia or chemical analgesia. The trance state alters the way an event is experienced; for example, no pain may be felt despite a severe injury and no fear in a terrifying situation. People, and particularly those with a high innate ability, are more likely to go into a state of spontaneous trance in times of great stress or emotion. Trance not only allows individuals to shift their own reality, but it may also allow them to seek out help for others and to make perilous journeys to distant lands and, most dangerous of all to the "after world." Most importantly, the trance practitioner becomes the interlocutor, seemingly able to bridge the divide between the living and the dead. We will never know when the belief developed that some part of an individual lived on in another reality after death. It was another step to imagine that the other reality might hold answers to the myriad uncertainties of life.

Shamans, medicine men, Australian Aboriginal Men of High Degree (Elkin 1977) and traditional healers all made use of trance in their various activities.

Fortunately, in a time when so-called progress tends to destroy anything that seems irrelevant in our modern world, these people have survived well enough to pass on some of their lore and provide some inkling of how it may have been for early human societies. The word *shaman* really applies to special religious persons from Siberia and Central Asia (Eliade 1964) but also has been used to describe practitioners from many other places and practices including those from the distant past. According to Eliade, the shaman has special qualities. He is a magician as are many others, but not all magicians are shamans. He (or she) is a healer like many others, but not all healers are shamans. In the shaman's trance "his soul is believed to leave his body and ascend to the sky or descend to the underworld" (Eliade 1964:5). The Australian Aboriginal "men of high degree" were also special. They too were said to be able to leave their bodies and travel across the country to obtain information. We know that the process of becoming a man of high degree involved hardship, deprivation and pain, and that only those with the power to shift their reality, that is, those with high trance ability, could endure (Rose 1956).

We are seeking evidence in the art of thirty to forty thousand years ago not only for the presence in the community of such practitioners but also that they were involved in the production of rock art.

The ability to create art is a very special gift and great artists are few and far between. Since writing began their names have come down in history and while we do not have signatures below the images on the walls of Chauvet, Altamira, and Lascaux, we recognize that they too are the works of great artists.

Despite a time lapse of perhaps thirty thousand years the lions of Chauvet still have the power to captivate the viewer; we sense their power and lion-ness. Why? Is it that they are imbued with spirituality and through them we can recognize a connection to some greater power or is it that they are imbued with the quality of mind which philosophers call qualia? Qualia are experiential (Ramachandran 2012). It is impossible to describe to someone else how one experiences the taste of a peach or the perception of a color. Qualia are intangible, an enigma to both philosophers and scientists but can they be equated with spirituality? In his discussion of the quality of vitality in art, Roger Fry uses the term spiritual to mean "all those faculties and activities which are over and above our mere existence as living organisms" (Fry 1962:38). This does not imply the necessity for a mystical or religious underpinning but rather "images of mental representations expressed through an artistic code" (Francfort 2001:250).

The individuals who painted images such as the lions were great artists in that they captured the essence of the animals so that the lions touch us across time. The techniques they used of exaggerating certain features characteristic of an animal, such as the bison's small head and large hump, evoke a response in our visual cortex. The same techniques are used by modern artists to create a caricature, or "peak shift" (Ramachandran 2012:42). Artists have long created caricatures deliberately; a politician with big ears or nose will have that feature emphasized so they are instantly recognized. The Paleolithic painters did not have photographs to copy; they drew the mental representations they had formed from their observation. They were using their innate skill at visual imagery to take an image of the animals into the cave. Their visualized image would emphasize the most striking components of the object or scene and those most relevant to the observer. Some people will have been better at doing this than others.

The oldest period of art in Chauvet is currently dated to between 32,000 and 30,000 years ago in the Aurignacian (Clottes 2003), while that of Lascaux is dated to the Magdalenian with dates around 17,000 years ago (Bahn and Vertut 1997). There are striking naturalistic images at Lascaux as awesome as those of Chauvet; among them horses, bulls, and reindeer, but it is the scene of the falling man in the chamber at the bottom of the shaft which arouses different feelings.

The components of the scene are a small bird-headed, ithyphallic, four fingered male figure that appears to be falling backwards, a bird-headed staff, and a disemboweled bison (Fig. 2.2). There is a small hooked stick near the male figure and a long barbed spear across the body of the bison. Placement at the bottom of a pit suggests the scene was of restricted access and yet the patina and polishing on the walls suggest it was much visited (Marshack 1991:277). We would like to know the story behind the images, and we can easily read into this a shamanic scene. As Marshack suggests, the disemboweled bison could be trance imagery or a ritual killing, while the bird-headed figure and the bird on the stick may be images of the shaman with his bird helper. Birds are well known as guides in the modern shamanic world and have the liminal quality of being of the land and of the air and in some instances also of the water. However, it is not necessary to label the male figure a shaman to accept that this scene is about something out of the ordinary. These

Fig. 2.2 Montage of the scene in Lascaux cave (France) (photo by Paul Bahn)

are not naturalistic images, even the bison is looking back over its shoulder rather than crumpling to the ground as would be expected with such a wound. People do not have bird heads, so this image stands for something or somebody other than a normal person. It is a symbol. The scene suggests that the society in which it was created had an acceptance of there being an alternative reality to that of everyday.

Summary

It is easy to fall into the trap of constructing a past to our liking (Dessaix 1996:247). When we connect with the image on the cave wall we want to connect with the artists. To the three speleologists, who were the first individuals in thirty thousand years to see the art of Chauvet, "Time was abolished, as if the tens of thousands of years that separated us from the producers of these paintings no longer existed. It seemed as if they had just created these masterpieces" (Chauvet et al. 1996:41).

Our modern world is still largely trapped by the duality imposed on it by Descartes. He separated the two realities of the ineffable and the material, allowing them to inhabit different spaces. The real, materialistic world that could be measured was counterbalanced by the other world, that of the mind which was not bounded and could not be explained. Religion could concern itself with matters of the mind and soul leaving Science to look after and investigate the material world (Schwartz and Begley 2002:33).

Science now is moving into that other world trying to find answers to the ineffable and to the enigma of the mind. The mind it is investigating is that of the twenty-first century and we are seeking clues to the mind of artists living thirty thousand years ago.

Our twenty-first century brains and their brains from thirty thousand years ago have much in common. They could make mental images and transfer the images to the wall of a cave, but how did they think about them? The way we think about imagery is largely culture bound, and our present thinking owes much to epigenetic factors acting on our genetic inheritance. It is not necessary to believe that Jesus Christ was the son of God to understand that images of Christ and of Christian saints are invested with a sense of the spiritual. It is not necessary to believe in the veracity of the stories of the Hindu gods to recognize the sacred in their images. The Buddha was not a god, but thousands of statues from the immense to the domestic in size, and from gold leaf to simple wood, are prayed to, decorated with flowers and presented with offerings of food. To those who follow his teachings, he was more than an ordinary man who gave up wealth for a life of learning and his images are invested with other-worldly power.

Indigenous peoples today know of the sacred in their art, the imagery of the creators who painted themselves into the rock wall or made images in places inaccessible to mere mortals (Chaloupka 1993). Danny Woolagoodja, a Worrorra elder from the Kimberley in northwest Australia says "The Wandjinas painted their own image there to remind us of their power" (Woolagoodja 2007:v). It is self-evident that images of Wandjina are spiritual; they contain the spirit of the Wandjina. Paintings believed to have been painted by nonhuman hands are by definition invested with spirituality. The Kimberley Gwion paintings are described by the Ngarinyin *munumburra* (traditional law men) as *junjun* (indelible evidence of ancestors). These images are therefore *mamae* or sacred (Ngarjno et al. 2000:24). The Gwion bird is also credited with making the first Gwion paintings, wiping its beak in blood to do so (Ngarjno et al. 2000:66). We have first-hand information about the sacred nature of these works, and they are respected as such. Paleolithic art unfortunately has no such informants to advocate on its behalf. Inference and analogy are the only tools we have.

We have the evidence that at least some people in the community were highly skilled artists, and we can surmise that some had skills in the use of plants to heal and perhaps some had visions that seemed to give access to knowledge unknown to others. Their world was full of the inexplicable, both good and bad. Sunsets would have been as beautiful and thunder as frightening then as now; the difference is that today we can understand both in terms of waves and frequencies. Those explanations were not available thirty thousand years ago. We can imagine that visionaries, who offered explanations, particularly if they also demonstrated control over pain, would have commanded respect. We might call those visionaries shamans because our imagining of their power fits with our understanding of the ways of present-day shamans. They might also have had gifts as artists. We can interpret the scene of the falling man at Lascaux against the setting of a shamanic template because then it makes a certain kind of sense to us. While that interpretation may not be correct, we can see within the scene something beyond the purely naturalistic.

We have only to look at the paintings of Chauvet to know that the artists who created them were brilliant observers and knew their animals intimately, but there is no indication they were using other than their rational mind when making the

paintings (Francfort 2001). It is certain that a society that was able to allow, and to support, particularly skilled people to create imagery on cave walls was concerned with more than just survival. The scene in the shaft at Lascaux suggests a capacity to recreate something out of the ordinary, whether it was an illustration of a myth, a picture of a shaman, or the heroic death of a hunter. However much we resemble the artists of the Paleolithic outwardly, the way in which we construct our world has changed enormously and we cannot think as they did. Observers today who have a sense of the sacred in their own lives are more likely to interpret the feelings that the images engender as proof of their sacred nature. Others will respond to the skill of the artist to capture the essence of the lions. The people of the Aurignacian period may have been as awestruck by the lions as we are, but the only thing we can be sure of is the feelings that the figures arouse in us.

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Chapter 3
Silence of Signs—Power of Symbols: Rock Art, Landscape and Social Semiotics

David Vogt

Introduction

The international rock art discourse frequently regards rock art as a remnant of religious cults and ritual practices. For a long time this tradition has been strong and there has been more or less a general consensus about its religious or supernatural interpretation. There are no doubts that several motifs, symbols and site contexts support such an approach. However, there are several problems with a generalization of the rock art phenomenon. It is probably far more diversified and culture specific than we believe, and therefore calls for a more pluralistic approach. It is therefore appropriate to ask if we should focus more upon the communicative role that rock art may have played. In modern social science, the idea of symbols, and symbols as bearers of a political and ideological discourse has been emphasized. I argue that a theory of signs and symbols is a new and possible path in rock art research, and in this chapter I will present a case study from Southern Scandinavia as an empirical foundation for a wider theoretical debate.

The understanding of Scandinavian rock art today is founded on theories that are more than 80 years old. These saw the rock carvings as religious testimony. The rock carvings were assumed to have been adjacent to prehistoric fields and to have been part of a fertility cult (Almgren 1926). Circular figures were interpreted as the sun, the boat as the sun boat, and footprints as the tracks of the gods. In Scandinavian archaeology this viewpoint still permeates much of the research on the carvings. The religious theories regarding the rock carvings were legitimized by evolutionism, diffusionism and sympathetic magic, a theoretical foundation that has been more or less abandoned in the social sciences for a long time.

However, today we have a theoretical framework that helps understand the communicative role of signs and symbols in the society. It is commonly referred to as social semiotics. The term "semiotics" has been defined as "the science of the life

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of signs in society" (Saussure in Hodge and Kress 1988). Social Semiotics has become the study of communication and the phenomenon of communication as it is displayed in society between human beings and between groups. Language is an important tool in social communication but not all communication is channelled through verbal or linguistic expressions. Public space is permeated by codes that are included in a complex structure of social and political communication expressed through symbols. In such a way, symbols and structures of symbols serve as a medium for communication between powerful forces in society and the individual. Behind the strategies and the symbols, we can almost always see political and ideological forces mobilizing on a number of fronts and manoeuvring in order to attain power in society.

The rock carvings are physical remains of elements in social communication. There is a large diversity of rock art contexts; some sites are located deep inside caves, others are very visible and situated high up on steep cliffs. The first category could have been part of hidden rituals, perhaps accessible only for some few initiated persons. On the contrary, much rock art is exposed in a way that probably was meant to be highly visible, and its purpose was to be seen, not by a few—but as many as possible. Through their location, size, clarity and numbers, the rock carvings in Southern Scandinavia are characterized by a strategy of high visibility and presence in the public space. Those who produced and tried to control the carvings utilized a strong and forceful medium, a system of signs that once made statements through visual exposure. These conveyed an important message. Behind the signs we can get only a rough idea of a complex and intricate society with a need for communication at many levels and through different modes of expression. However, the sign as it is in its physical shape can be understood only through its context. There is no logical passage from the symbol to the meaning, no causal relationship; this is one of the foundations of social semiotics. Consequently, the context is the most important element for understanding the carving phenomenon. The most important factor in the recreation of context is the landscape and understanding the relationship that the rock carvings had to the landscape.

In Southern Scandinavia we can see the shadows of a dramatic, political change in Late Bronze Age and the rock art could have been part of this political process. In the counties of Østfold (Norway) and Bohuslän (Sweden), GIS-analysis (Geographical Information System) clearly shows that the rock carvings are systematically distributed near large areas with heavy clay soil, and pollen analyses indicate that these were forested before being altered in the Late Bronze Age. These plains were rapidly transformed into vast grasslands used for pasture, and at the same time rock carvings appeared in hundreds and thousands. This grassland could have been cleared for boosting the economy on a higher regional level, and probably it was organized by paramount chiefs as part of a political strategy (Vogt 2006 [2011]). When the new pastures were established, military force was an important part of controlling this territory and the valuable livestock that grazed there. However additional ways to maintain control could have been used. Ideology reflected through symbolic structure was probably part of that. In this chapter, I will debate the rock art phenomenon from a different point of view than religious or not religious; it is the underlying, ideological roles that are important. In this case study,

several factors point more towards an active political meaning behind the rock art. Someone sent a message, and some were the receivers—this article will try to understand what the message tells.

Rock Art in Southern Scandinavia

In Southern Scandinavia in the counties of Østfold (Norway) and Bohuslän (Sweden), there are some 2,700 rock art sites. The rock carvings in the region are distributed within an elongated territory of roughly 160 km from one extreme to the other (Fig. 3.1). The national border between Norway and Sweden divides this territory today, but in the Late Bronze Age, it should be looked upon as one area. This is the largest concentration of rock art in Northern Europe. The most common rock art style in Southern Scandinavia is from the Bronze Age and consists of a large variety of motifs, such as cup marks, ship figures, human figures, footprints, wagons, circular figures and animal figures which represent approximately 90 % of the petroglyphs. The cup mark occurs in the largest numbers, twice the numbers of ship figures, which are the second most common motif. The ship figures occur in a large variety of sizes and shapes; some of the largest are as long as 13 ft (4 m), but most of the ships are 2–3 ft (60–100 cm) long. Cup marks are found as part of the figure repertoire at most sites; however, there also are sites that consist entirely of this type of figures. The South Scandinavian style is typically rock carvings, or petroglyphs; some are deeply cut into the hard granite surface, others are made more shallowly and can be difficult to see today.

The rock carvings in Østfold and Bohuslän have a composite and dissimilar symbolic repertory, hailing from many different environments in time and space.

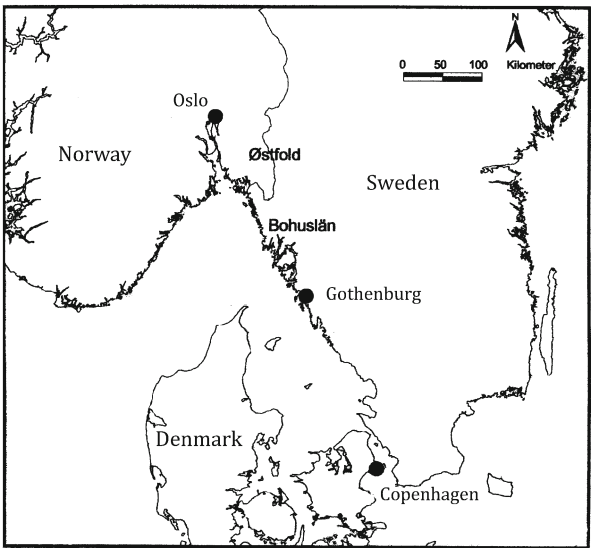

Fig. 3.1 Map of South Scandinavia. Østfold in Norway and Bohsulän in Sweden have the largest concentration of rock art sites in Northern Europe. Most sites are found in the border area (Map by author)

A wide interregional contact and connections between Europe and Scandinavia in the Bronze Age are captured and preserved in the carvings (Fredell 2003; Vogt 2006 [2011]). A part of the motifs are probably from the northern part of Scandinavia, others are found in central Europe within the Celtic culture. Some of the motifs must have their origin in the Mediterranean or farther east. In a given time period and in a chosen landscape, these symbols interacted to create a new complex visual language based upon signs and symbols. They were based on old symbols of Scandinavian origin, put together and blended with new modern images and representations from far away and presented in a new political and social context. Old traditional forms joined with modern and newer ideologies and thus gave the rock carvings meaning and force.

Typology and Comparative Dating

It is of great importance to establish when the rock carvings were made since the question regarding the context of the rock art is crucial to understanding the phenomenon. There has been a long debate in Scandinavia on the dating of the rock art. The South Scandinavian rock art style was originally dated to the Bronze Age (1700–500 BC), however uncertainty increases when we seek a more accurate dating. It is important to gain a clearer picture of when the carving phenomenon appeared, when it reached its widest distribution and its greatest production phase as well as when it ended. A quick review of the research record shows that the topics, chronology and dating have not been treated in a summary fashion in the research on rock carvings in Scandinavia. On the contrary, dating has been the most important and most often discussed topic in many publications (Ekhoff 1880; Marstrander 1963; Malmer 1981; Forsberg 1993; Fredell 2003; Vogt 2011[2006]). Few works have tried to see the large outlines and draw conclusions about frequency, discontinuity and continuity. I will present some of the problems and some attempts to date the South Scandinavian rock carvings here and make some concluding comments.

The best way to gain a better and more accurate dating of the rock carvings was considered to be typological (Malmer 1981). Scholars tried to establish an accurate typology based upon the boat figures. However, they were confronted with a series of problems. The first problem concerning typology of the carved figures is that it is not possible to use context. The type series that exist for bronze axes or brooches are founded on artefact comparisons and stratigraphy and thus the comparisons were decisive for placing the object (type) in the series (Gräslund 1996:61–65). This implies that it is not—as it often seems—only the typological change of the objects that is the basis for the series. The series of types is based on the assumption of a development, an evolution of one form into another, from simple to complex. The ship or boat figures that resemble each other were assumed to lie close in time, whereas boats that were different were considered far apart. The series of types was based on an assumed technological development of boats in the Bronze Age, and

Fig. 3.2 Rock art site from Hede in Kville, Northern Bohuslän. The site depicts round shield, horned helmets and wing-formed shapes among other attributes. The main motif is probably a battle scene (Tracing by Fredsjö 1981)

elements such as single or double prows, single- or double-lined ships were established and interpreted as an expression of development. However, such detailed knowledge about Scandinavian ships from the Bronze Age does not exist. From such a classification, different scholars have placed the same boat in different places in the type series depending on which elements are stressed. The placement of the boats in the series thus becomes subjective. The typological method was not particularly successful.

More problematic is the fact that this method did not offer an overall, clear view of the emergence of the carving phenomenon, its progress and culmination. Thus I argue that comparative dating is a far better way to date the carvings than typology. The rock carvings show warriors and weapons and other motifs that can be recognized. They provide more accurate knowledge about the date of these artefacts and offer a comparative way to date the carvings more precisely. That technique gives a more secure date for the individual figures and makes it possible to establish an outline of the chronological development in which the rock carvings occur. I will briefly present some examples of comparison between artefacts and rock art motives in south Scandinavia.

The rock art panels display warriors and their arms. There are three types of warrior equipment that seems to be common: round shields, horned helmets and wing-formed and chaps (Figs. 3.2 and 3.3). The latter is a characteristic trait that occurs

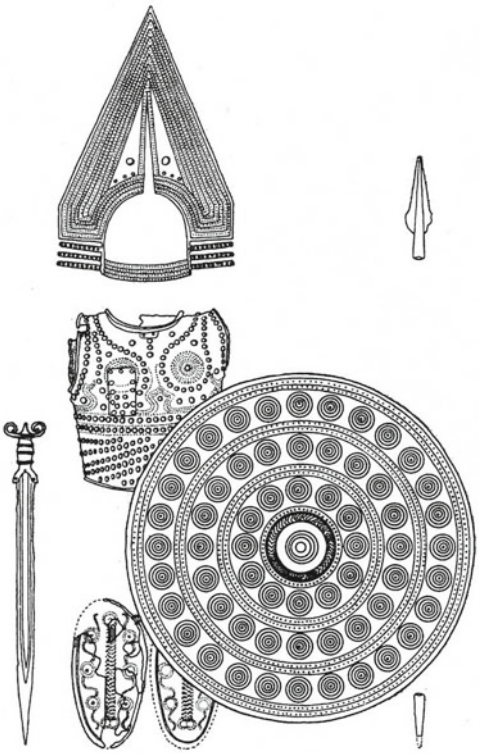

Fig. 3.3 Bronze round shield and graves from a royal Hallstatt grave in central Europe. This shield can be compared with the shield at Fig. 3.2 (Kristiansen 1998 and Schauer 1971)

in Central Europe and Hallstatt culture in the Late Bronze Age and is a type of fitting on the point of the sword scabbard. This is an uncommon find in Scandinavia, but is typical on the continent. The chaps were a common part of the Hallstatt culture and should be seen in connection with the flange-hilted Hallstatt-sword (Fig. 3.4). These appeared in Northern Europe in the last part of the Bronze Age, and are divided into Gundlingen type and Mindelheim type (Reith 1942; Cowen 1967; Pare 1991b and Jensen 1997). In addition to these attributes an important motif is the two wheeled war chariot. These are depicted in a large number of variations that coincide with the Hallstatt period and culture in Central Europe (Cunliffe 1997; Kristiansen 1998a).

In 1921 a magnificent find was made in a deep bog. In southern Denmark, at Hjortspring on the island of Als, a fragmented ancient vessel was discovered. In prehistory the site had been a small lake, and the location had been used for sacrifice. At approximately 400–300 BC a foreign army had been beaten and all their equipment, weapons and gear was smashed to pieces and then dropped in the lake. In this spectacular find there was also a large war-canoe built of wood planks with space for 20–25 men (Crumlin-Pedersen 2003). This boat is precisely the type we find depicted in the South Scandinavian petroglyphs, a couple centuries earlier in Østfold and Bohuslän.

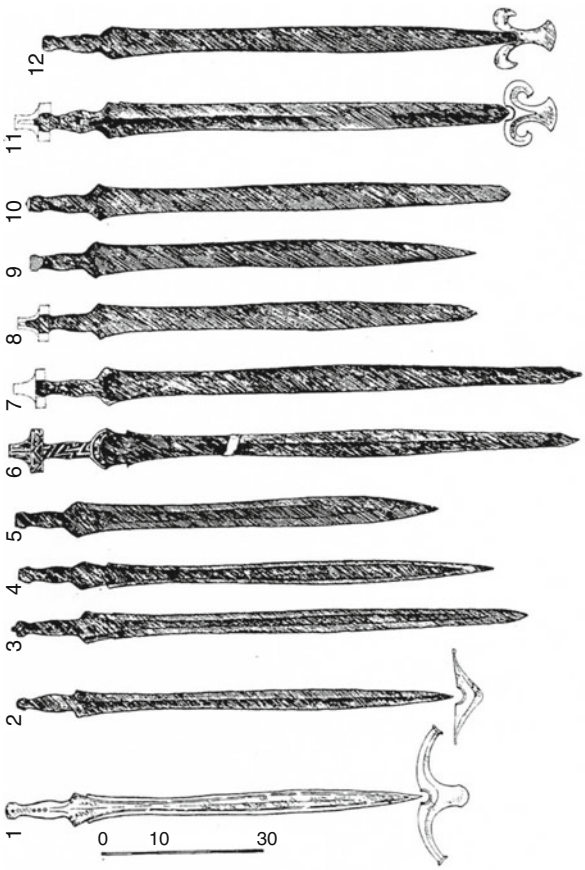

Fig. 3.4 Hallstatt swords—with and without chapes (after Reith 1942)

The Hjortspring boat also throws light on the dating of the rock carvings. The old Scandinavian figure motifs acquire a new stylistic expression (Fig. 3.5).

A large repertory of new figures arrive from the Central European Hallstatt and Urnfield cultures, mainly weapons as attributes to the human figure, chariots and horse motifs as well as the animal figures with deer, oxen, the "Hallstatt bird" and snake motifs among the most important and prominent (Fig. 3.6). These became universal symbols of the warrior aristocracy in one period of time and over a large geographical area from the Alps in the south to southern Scandinavia in the north, from Ireland in the west to the Carpathians in the east. Within this region there were many different groupings with many ethnic boundaries, but at the elite level, there was a tightly knit and uniform affinity of status symbols and warrior equipment within particular groups, probably of significant symbolic value. The new motifs blend with the old ones of Nordic origin, and together they give a new and marked stylistic expression. At the end of Bronze Age period VI and at the beginning of the

Fig. 3.5 Ship on top is reconstruction of the Hjortspring ship found in Denmark in 1921, the second is a ship figure from Bossum in Onsøy, Norway (Tracing by author)

Fig. 3.6 Two wheeled chariot from Beg by in Fredrikstad parish Østfold (Tracing by author)

Iron Age the production of carvings ceases. The square shields and the single boat figures of the Hjortspring type can be seen as the last phase of carving production (Vogt 2006 [2011]).

The published material from Bohuslän and Østfold (prior to 2006) documents 1227 rock carved panels. I have evaluated the datable attributes and the results clarify a tendency, although a precise and secure knowledge of the age of all the rock carving panels is difficult to obtain (Vogt 2006 [2012]). The conclusions to be drawn depend on how strictly one evaluates the arguments and the premises which have been advanced. While parts of the material give a good indication of the age of the carvings, other figures and sites cannot on the whole be dated. A reliable core exists, but the more panels are integrated into the sample, the greater the uncertainty. About 60 % of the figured carvings were created within a time period of 180–200 years, from the last half of period V around 800 BC to the end of period VI around 620 BC Vogt 2006 [2011]).

Dating remains problematic because more than 40 % of the sites are not dated, mainly cup marks and boat figures without datable attributes, and that raises the

question whether those carvings are from the same period or from another. I have thus tried to determine whether there are structures in the spatial organization of the sites that can provide indications of an older phase; possibly the ancient shorelines reveal an older structure or distribution in the carvings. I have not found this, and I therefore believe that the outlines of a distribution pattern are homogenous. There is no divergence between the dated and the undated sites when it comes to context and their situation; therefore, it is likely that most of the carvings were produced within this time span. It can be argued that it is most likely that the rock carvings in Østfold and Bohuslän were made within a short time period during the Late Bronze Age. The homogenous landscape context, the distribution pattern and the related stylistic repertory of figures, as well as the fact that the datable figures are close in time, support such a view.

Within a wider discussion it is interesting to reflect on production frequency and continuity of the carvings. Most sites could well have come into existence within an even shorter time span than 180–200 years, thought to be the chronological framework for the production of the carvings. How many rock carving panels were made within the course of 1 year? If we take the 2700 rock carving panels in Østfold and Bohuslän and imagine that there were ten individuals in the whole area who could make rock carvings, and each individual made five rock carving panels per year, the whole corpus could have been achieved in 55 years. If there were fifteen individuals in all of this vast area and each individual made ten rock carving panels per year, all the sites could have been produced in 18 years. My point is that despite the fact that the dating of the different comparative representations of the carved figures can be stretched to an interval of 180–200 years, it is possible also to relate the production of carvings to a shorter time span within that chronological framework (Vogt 2006 [2011]). This means that the entire production of rock art in the region was done in a short and intensive phase, more like a visual campaign. That assumption will be central in this exposition.

Extensive Pasture, Rock Carvings and the Politics of Landscape

The distribution of the rock carvings shows the way to a forgotten landscape. It is an empty landscape with few archaeological finds, only massive deposits and granite masses shaped by the ice and thousands of rock carvings. There must have been something particular about this landscape in order for the rock carvings to have been made precisely here. It contrasts with the habitation sites, grave mounds and prehistoric fields, all of which are situated on drier land with sandy soil, areas that today are easy recognizable in the archaeological record. GIS-analysis based on large databases with information about soil conditions shows that the rock carvings are systematically distributed near large areas with heavy clay soil (Figs. 3.7 and 3.8). This is in contrast to ice-polished bedrocks and instances of sandy ground which dominate the Quaternary geology in other parts of Østfold and Bohuslän. Pollen

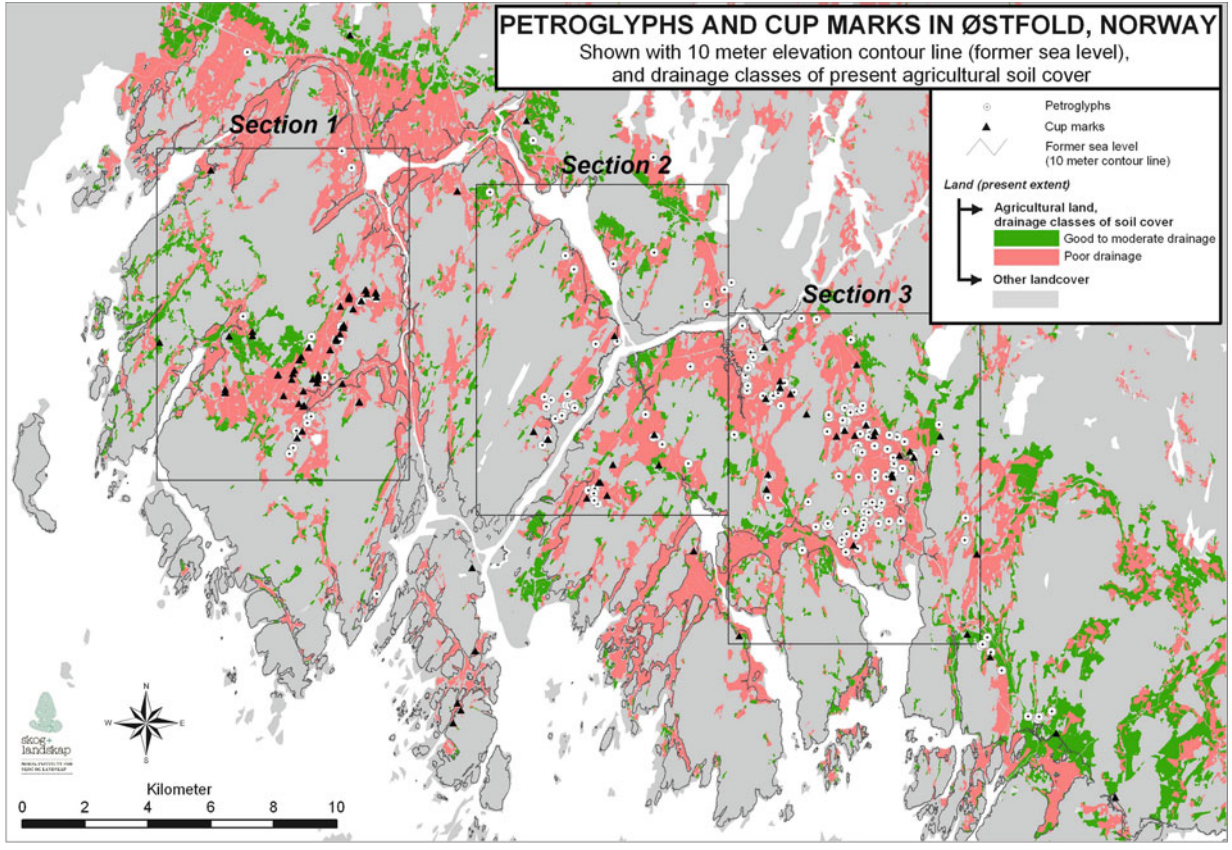

Fig. 3.7 Map showing the distribution of rock art sites (figures and cup marks) and drainage classes. Former sea level in Bronze Age is marked (Map made for the author by The Norwegian Forest and Landscape Institute 2003)

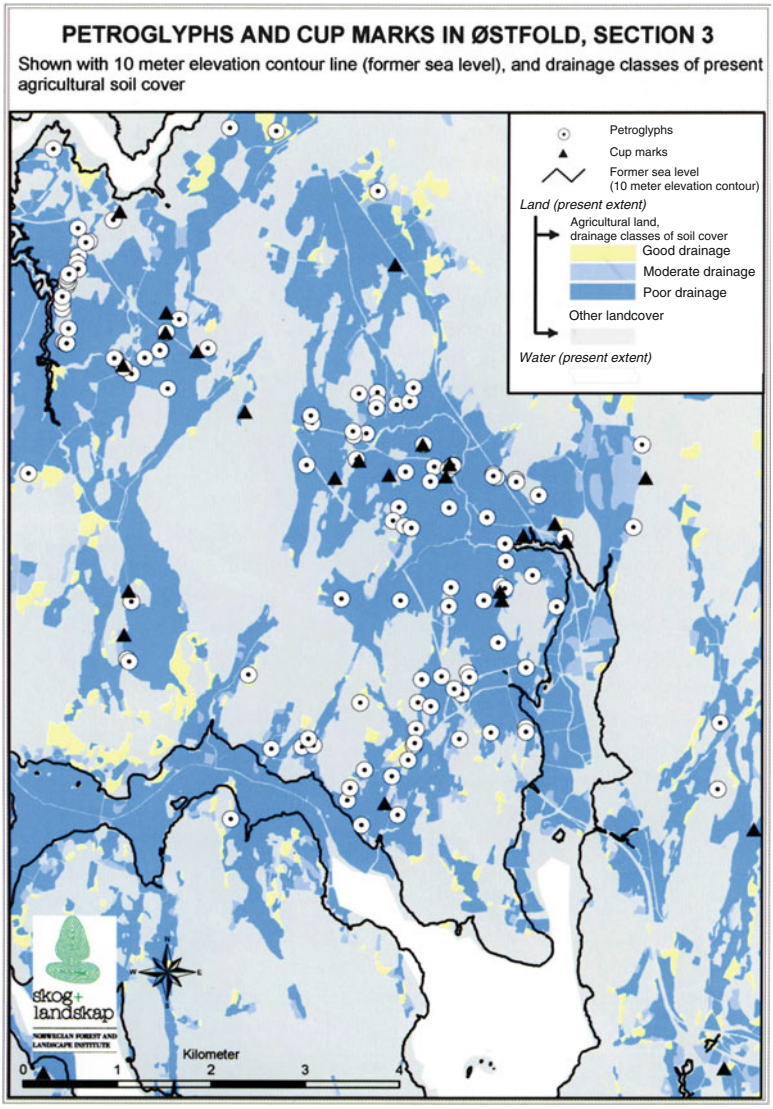

Fig. 3.8 Map showing the distribution of rock art sites (figures and cup marks) and drainage classes in relation to areas well or poorly drained soil at Årum and Skjeberg in Østfold, Norway. Former sea level in Bronze Age is marked (Map made for the author by The Norwegian Forest and Landscape Institute 2003)

analyses indicate that these were forested before being altered in the Late Bronze Age. Pasturage seems suitable with this type of soil. First of all, the clay was suitable for providing lush grass vegetation. Secondly, water was easily accessible in the swampy areas with surface water, streams and rivers. The bare ridges made

natural barriers and it was easy to control the grazing flocks within these areas. The proximity to the sea favoured the microclimate on the clay flat lands; warmth from the sea water made the grassy vegetation start to grow early in spring and the winters were mild in such a way that the areas were suitable for grazing throughout the winter. It is possible that we see the outline of a differentiated exploitation of the landscape that is governed by economic and political factors. One could imagine an economic niche based on extensive and expanding cattle-breeding in a region connected by political expansion to another area. The grazing animals could be the key factor in such a system. Grazing animals are able to transport themselves over long distances and as such become an important commodity.

It is evident that regions in Europe with important raw materials such as copper, tin or salt experienced a significant economic upswing in the Bronze Age, and the same holds true for centres situated along the trade routes. However, rich arable areas also gained economically. For example, Denmark and southern Sweden are some of Europe's richest areas in terms of finds from the Bronze Age (Kristiansen 1998a; Cunliffe 1997). In the material recovered, there are indications of extensive exploitation of local resources, specialization and expansion, probably as an economic source for a political organization in rapid expansion and development. Communication over long distances in well-established networks was created and maintained. Behind these patterns, competition for political control, increased influence and development of power is clearly visible. The local political elite in southern Scandinavia probably controlled the supply of imported goods and manipulated the distribution as a principal means in the political struggle for power. This was the start of developing political power and the emergence of paramount chiefs in Southern Scandinavia.

The changes that are visible in the archaeological material from southern Scandinavia seem in large part to have been influenced by fundamental political changes far outside the region's own frontiers (Kristiansen 1998a; Jensen 1997). The strongly established and well maintained trade networks from north to south were communication arteries of utmost importance to the political and economic structures that seem prominent. Bronze, precious metals and finished goods became important elements in the local political struggle, but more important were ideas on strategies for consolidation and acquisition of power. The Late Bronze Age in Scandinavia, as well as in central Europe, was influenced by the eastern Hallstatt which to a large degree manifested itself in periods V and VI in the last phase of the Bronze Age (Kristiansen 1998a; Jensen 1997). One of the most apparent implications of this change lies in an increasing and more varied local economic stimulus and activity. This implies that the local economy needed to be strengthened for the production of a surplus that could function as barter for import.

Military power, warriors and warrior ideology were the most important tools with which to create a political organization in prehistory (Earle 1987, 1991, 1997; Demarest and Conrad 1992). It seems as though the power of the chieftain always emerged from military leadership. The leader institution in itself was created by the ability to lead a war, and the foundation of power was built on the ability to acquire and keep supporters. Control of the economy was strongly connected to the political institution of the chiefdom. Economic control underpins the possibility of financing

military power, but also ideological investments that support the institutional power. However, the economy of a society will fluctuate. In this debate, it is central to understand the economic variation that exists in different societies and the income to be derived from the land based on the natural environment and historical conditions. Some societies changed and acquired an increasingly complicated political structure with complex administrative organizations. The control over the economy in a society implies practical control of the work and everyday life of people, including the surplus that a single household produces that becomes the property of the institutional power and its collected surplus. The autonomy of the individual and the family nucleus had to be sacrificed at the expense of loyalty to a larger political and social unit. This sacrifice was not made voluntarily. Consequently, key elements of success were long-term and gradual changes and adjustments to the new world order in which control of central economic factors was legitimized in the ideology under pressure from terror and military use of power (Earle 1997).

In Østfold and Bohuslän one way to do this was placing a symbolic structure, launching a visual campaign in this landscape. The question is thus: how were symbols a part of controlling political territory? Or is it as simple as that? Therefore, I will present some theoretical approaches to how landscape could have been understood by people in the Bronze Age and how complicated the understanding of landscape actually is.

In modern social science, landscape has been debated extensively, and different culturally specific understandings of the landscape have been emphasized. The landscape was universal, and the same everywhere for all human beings; it was cross-cultural, a neutral dimension. «*Space was quite literally nothingness, a simple surface for action, lacking depth*» (Tilley 1994:9). The landscape came to be considered as neutral in value and thus assumptions about power structure or political or economic dominance were not incorporated into the interpretation. «*The alternative view starts from regarding space as a medium rather than a container for action, something that is involved in action and cannot be divorced from it*» (Tilley 1994:10). Landscape space is created socially and culturally; the landscape thus differs from culture in time and place. Tilley writes that to speak meaningfully of landscape, one must understand only that landscapes exist and all have a different content and meaning (Tilley 1994:10).

A landscape is generated socially and culturally and is subject to constant change. Everyday use changes its cognitive and physical content and appearance. It is open to interpretation, change and transformation. In general, landscape changes as do language and society. The physical landscape is always connected to the cognitive one through links, points or places. These can be visible and pronounced or by contrast, they become visible and acquire a meaning only with the help of cultural codes. Symbols attached to the landscape act in close relation to the active cognitive structures that are always present in the landscape. Tilley's model suitably demonstrates the most important changes that have taken place during the last decades in the analysis of landscape. The understanding of the landscape in the Bronze Age as it was once understood is impossible to reconstruct. These structures are lost, but it is important to understand how central the cognitive aspect of landscape could have been. The rock art could have been part of constructing the cognitive aspect of the

landscape or interact with the myths in one way or another. Through the visual and symbolic structures the mythical and religious level in landscape could have been expressed and materialized. To that notion we could add a political level. Power relations in prehistory were often legitimized in supernatural and cosmological structures.

For a better understanding of how economy and ideology could have function together I will mention an example from Kauai, Hawaii at the time James Cook came to the island (Earle 1997). At that time the islands saw a political change, which probably could best be described as a development from chiefdom to a kingdom. The main sources for boosting the economy were an increase in the production of taro. The construction of irrigation canals was traditionally organized by the local chiefs; the farmers had to do the actual work, but once finished, they were rewarded. Two circumstances are central in the organization of the increasing production: (1) the local family groups who cultivated the land did not need the surplus; they cultivated what was needed for their own subsistence without the irrigation canals. Consequently, although they did the work, they did not create and maintain the irrigation systems on their own initiative. (2) An increasing production and intensification of the cultivation of taro was, however, desirable from the point of view of the chiefs. Through development and maintenance of irrigation canals in combination with intensive cultivation, it was possible to increase the surplus by up to 70 % (Spriggs and Kirch 1992:161 in Earle 1997:78). The change in this tradition had to been legitimized in the ideological sphere.

The clay plains in Østfold and Bohuslän constituted a landscape of high economic value, a landscape that had taken generations to cultivate and open up. Precisely this wide and valuable land area was marked with rock carvings in the thousands. The rock carvings were situated in an open landscape, where the carved figures, the symbols, appeared to advantage (Fig. 3.9). It was here they were visible and could be seen by people passing by. The combination of an open cultivated landscape and the visibility of the exposed rock carvings is the central point in understanding them.

The common political structure in Northern European Bronze Age was a pattern of smaller chiefdoms. At a certain time this situation started to change and larger units developed, based on warrior ideology and warfare. Political expansion had to rely on military forces and the chiefs had to support a larger band of warriors in their service. It was extremely expensive to equip a warrior; they needed weapons and gear in addition to supplies and other types of expenses, raising the total costs substantially. Those chiefs who managed to have an army could do so because they were able to find new sources for increasing their wealth. Extensive areas with grassland and the transformation of forest into pasture, combined with investment in cattle breeding, could have been the main sources for expanding the economy in Østfold and Bohuslän. But these expansions did not come without conflicts. The land was not free; it was probably owned by others—and war had to be part of that strategy. This could have been the background for the rock art and the landscape as a part of an area characterized by occupied territory and undefined rights to land. Therefore control of the new valuable grazing facilities afforded not only military

Fig. 3.9 Rock art site at Skjellin in Østfold. Photography done at night with artificial light and long shutter time (Photo by author and Jørn Bøhmer Olsen)

power, but more importantly—legitimated the ownership of land. Ideology was such a strategy, and the petroglyphs could have been a part of it.

Ideology is easily recognized on Kauai in Hawaii. The chiefs in Hawaii created a major power structure in which symbols, landscape and ceremonies played a central role: «*Materialization was accomplished through an interesting set of physical forms—an elaborate ceremonial cycle, symbolic objects of personal display, monumental temple constructions, and most important a cultural landscape of intensively farmed and physically marked space. The religious cosmology as practiced ceremonially identified the ruling chiefs as gods on earth*» (Earle 1997:169). The chiefs and the warrior aristocracy created an ideological shield around the institution and role of the leader through a series of activities. The connection between the chief and the God(s) was central but the connecting link between these two was a critical passage in the ritual organization. «*The chiefs* […] *orchestrated an elaborate ceremonial cycle that established the cosmic order as related to earthly existence*» (Earle 1997:169). The way in which this ideological imposition is carried out through politicizing of symbols and public rituals is illustrated by Valeri (1985) and later cited by Earle (1997) «*Practically every important pragmatic action [was] associated with and regulated by a ritual counterpart*» (Valeri 1985:154 in Earle 1997:169).

The rituals were focused to a large degree on economic and political matters and the stage management was totally controlled by the power elite. Thus, "*the aims of ritual action* [were] *always very mundane", in such a way that both the secular and sacral sphere were always united in "chiefly practice*" (Earle 1997:169). In other words, all the actions of the chief seemed to stem from a relationship with a divine order and against the background of a predetermined scheme of action made accessible only by the chiefs. Only with such a practice was it possible to legitimize actions that could have great consequences for society and the individual inhabitant in the archipelago; despite war, famine and casualties, the institution of chiefdom remained. The wars and the political scenario were elevated to an evil not imposed on the society by secular political actors but rooted in the kingdom of God and the hereafter.

The landscape in Hawaii was brought under ritual and political control, a goal which was central to the economic exploitation of the landscape. The ideological transformation of the landscape in Hawaii was achieved through a series of constructions by the chiefdom, namely agricultural facilities, paved roads and religious structures. The ceremonial constructions can be traced through a long time period in the history of Kauai, but they were not erected regularly throughout the time period. Investments in construction in some phases were extensive and in others absent. The largest and most intensive phase of construction occurred in a period that coincides with the most political changes. The constructions are seen in the context of the growth and consolidation of the complex chiefdoms, and the need for ideologizing and increasing ritual investments is striking. «*That construction* […] *was significant at the emergence of complex chiefdoms as a means to institutionalized power, but after materializing the emergent ideology in the monuments, the Hawaiian chiefs did not need to continue their construction on such a large scale*» (Earle 1997:179). It is clear how the increasing ritual activity occurred ahead of extensive and fundamental changes in the dynamics of power in society. Ideological investments in order to increase the authority of the chief and mark and stimulate the collective atmospheres in the society coincide with a start-up of controversial political ventures.

In Østfold and Bohuslän the rock art represents the mark of the ruler; they—in one or another way—represent the new political elite that had gained control of the area. Every single person that walked the tracks through the pastoral area and saw the petroglyphs was concerned about their meaning. To understand more precisely how symbols convey a message in the public space, and how that could be important for understanding of rock art, I will present some general lines in the theory that is called social semiotics.

Social Semiotics, Landscape and the Science of Signs

The term social semiotics was defined by Saussure and semiotics embraces the phenomenon that everything in a society can be seen as types of communication, organized through principles corresponding to linguistic and textual forms. These

must be understood in relation to basic fundamental rules and principles. Such phenomena are studied today in a series of academic disciplines ranging from psychology, sociology, social anthropology, to philosophy, linguistics, literary studies, art and film studies, etc. (Hodge and Kress 1988). Social semiotics can thus be said to be not a subject of its own, but rather a fragmented discipline that can be used as a theoretical and analytical method for the interpretation of communication in society in general.

Semiotics offers a systematic, extensive and comprehensive analysis of communication phenomena and how these are related to a large spectrum of different expressions and media. Semiotics has thus developed into more than a linguistic tool of analysis and is today closely related to the way in which communication between social and cultural conditions function in the society, hence the term "social semiotics". The role of signs and symbols in society and how these are politically and ideologically charged was researched within structuralism and post-structuralism by the French anthropologists and philosophers such as Lèvi-Strauss (1966), Foucault (1972), Derrida (1978), Barthes (1973) and Ricoeur (1989).

Two different traditions connected to the theory of the function of signs and symbols as linguistic structures can be distinguished. The first one has its roots in the semiotics of the American logician C.S. Peirce, developed fragmentarily at the end of the 1800s and published from 1931 to 1958 (Prucel and Bauer 2001). According to Pierce, signs can be part of a sign system in three different ways: icon, index and symbol. Icon implies that the relation between signifier (the form of the expression) and signified (that which is expressed) is fixed, that is, the sign shows likeness to that which is symbolized, for example a horse is a horse. Index implies a causal relationship between signifier and signified, for example smoke means fire since smoke usually occurs as a result of fire. Symbol means that the relationship between signifier and signified is arbitrary and unmotivated, at least at the outset even if the inherent meaning is momentarily chosen and no logical passage exists from expression to content (Hawkes 1977; Hodge and Kress 1988; Prucel and Bauer 2001).

It is the contrast between these signs that is important for the interpretation. The examples are many, but to mention a few: traffic signs, the Christian cross, the lions and the eagles in coat of arms. On the other hand, not all symbols are chosen arbitrarily, with an arbitrary and unmotivated relationship between signifier and signified, some symbols can be seen to have a "transparent syntax". Traffic lights showing red means stop. This is not arbitrary and unmotivated, since the colour red releases in the deeper structures of the human psyche an instinctive reaction to danger. The choice of the eagle and lion as symbols for nations and states is also not a random choice, since these species symbolize strength and authority within a cultural tradition (Hodge and Kress 1988).

The other tradition is founded by the Swiss linguist Ferdinand de Saussures, Structural Linguistics, based on a lecture manuscript published in 1915 (Hawkes 1977; Hodge and Kress 1988; Prucel and Bauer 2001). Structural linguistics was further developed in France in the 1950s and 1960s by Claude Lévi-Strauss to include a theory of society and a method for interpretation. Under the new name of

structuralism, ideas were advanced on how language systems became ruling mechanisms behind the organization of all social aspects. Semiology was gradually re-christened semiotics and subsequently social semiotics and the theory acquired a wider role as a tool for analyzing social communication in societies. Later intellectuals such as Barthes (1973), Derrida (1978); Ricoeur (1989); Foucault (1972); Lacan (1977) and Althusser (1971) further developed semiotics.

Semiotics gradually became the study of how primary linguistic forms are also found in the material culture such as food, clothes, images, sound and music, etc. All of these could be understood as sign systems and be related to social and cultural codes, grammar and strategies deeply anchored in the existing social and cultural systems. The use of symbols in societies became strongly focused on the negative forces of society that controlled the symbols, especially, the economic forces. It was the capitalists in society that seduced the population with symbol systems, through ideological "mystification" (Althusser (1971), Barthes 1973 and others). Later, this was much criticized (see Giddens 1981, 1984).

The whole basis for semiotics and other communication theories is the principle of «message/reception». A message is conveyed and received and the infrastructure that makes communication possible is called a logonomic system (Hodge and Kress 1988:2–5). The concept logonomic system is constructed from the Greek *logos-thought* or thought system and *nomos*—control system. A logonomic system is a set of rules and conventions that decide the conditions for production and reception of meaning: who can convey a message, how it is to be received/understood and by whom. Logonomic systems determine how social semiotics is to be practiced in relation to the production of a set of statements (rules connected to the conveying of a message) and a receiving regime (rules connected to reception of a message) (Hodge and Kress 1988:4). A traffic light can be used to illustrate the theoretical example. The transition from red to green represents the semiotic statement; the traffic lights, the traffic rules and driving patterns is the logonomic system created by the national authorities to achieve increased road safety. The individual driver receives the statement. The logonomic system is never hidden; it is highlighted and emphasized with significant authority and power. However, both message and the manner in which it was conveyed are often far more complex that this example. The single sign, the smallest atom of semiotics often occurs in structures in which many signs are connected in order to give a fuller and more precise expression. This complex sign structure is called a *text*. The concept *text* derives from the Greek *textos*, something that is woven together (Hodge and Kress 1988:6).

Illuminated advertising is a central contemporary actor in the battle for the symbolic urban space, but the use of visual techniques for communication in space is not new. In older European cities there are layers and layers of symbolism that have used the same techniques and codes as advertising. The churches and Gothic decoration are one example; public buildings from more recent eras are another. Good examples of the use of symbols connected to strategies for marking and making visible exist in the urban context. The city space is strongly infected by different symbolic codes with clear conflicts of interests. Churches and cathedrals with elaborate architectural decoration stand in contrast to the royal or governments

buildings such as parliaments and palaces. The forces of private capital are represented by high rise office buildings in steel and glass, illuminated advertising and shop windows. The size of the building, its decoration and grandiosity surpass the practical, appropriate and functional needs. The symbolic content is seen as more important. The pyramids in Egypt and Central America, the Great Wall of China or Versailles in France, are all examples of architectural constructions in time and space built in relation to kings or emperors—the power of the king and the greatness of the nation.

As a general conclusion, a logonomic system can operate in such a way that the semiotic action can be conveyed from sender to recipient. Communication in the public space is often politically charged, but both the powerful and the less powerful use signs in visual strategies to make them visible and in order to attain political and economic goals. Visibility and presence through symbols is an essential political technique. The political elite are often the dominating power and most visibly present in the public space, but not always. Counter-strategies in a power struggle will also try to use symbols in the same way as the established groups. Urban graffiti has been seen as a successful symbolic counter-strategy in urban space; through spray painted art, powerless groups can make themselves visible. This phenomenon is not unlike rock art and is debated by Jeff Ferrel in his book Crimes of Style: Urban Graffiti and the Politics of Criminality (Ferrell 1996). Political ideology is more important in times of unstable power situations, conflict and counter-strategies; thus, more is invested in symbols during such periods. Therefore it seems likely that the strongest visual markers exist in conflictive and unstable societies

Silent and Powerful

Those who made the rock art invested an enormous amount of time and effort into it; therefore, it must have been important—if not, it would not have been made. The rock art in Southern Scandinavia shows some symbols that are most likely of supernatural origin, but more dominant are motives of military significance. They are motifs that show the chief's most important reasons for coming into power—military support - warriors, chariots and ships. To these could be added motives that probably represent their ideology in one or another way.

The symbolic and visual strategies connected to political and territorial legitimacy occur in different forms and on different scales, but the underlying psychological and strategic techniques are comparable. It is part of the same strategy: to make visible the greatness and influence of the political elite in the landscape and in society. The symbolic discourse that is attached to space is almost always a bearer of a political and ideological content connected to an economic and political structure. The landscape always has a third dimension, a cognitive and symbolic field. The exploitation and manipulation of this dimension through a massive symbolic strategy could put the landscape under far stronger political and ideological control than the use of physical power. These symbols were present in the landscape all the

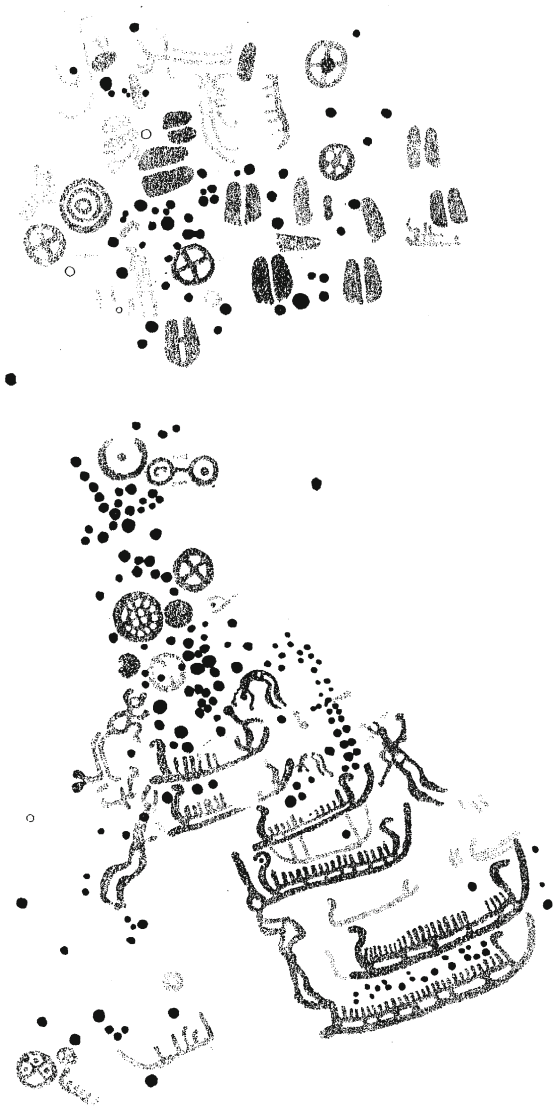

Fig. 3.10 Skjellin in Østfold (Tracing by author)

time—symbols that silently reminded the passerby of an important message (Fig. 3.10). In southern Scandinavia rock art could have been a way to legitimize territorial claims in an area that developed very fast and became an important economical source during a time with many conflicts, locally and interregional.

However, I argue that this theoretical approach has a wider and more general validity, and is applicable at other places and about different rock art styles. In this particular case, the background for the rock art in southern Scandinavia seems to be

related to economic and political structures. Rock art is, in my opinion, culturally specific; it is therefore not possible to generalize and context is the most important element in the interpretation. Therefore I will end with some reflections about social semiotics and rock art from a different cultural environment.

I have been interested in the rock art of the US Southwest for a long time, an area that is very different from South Scandinavian environment, culture and history. My first thoughts when I visited sites there were that these sites mark "strong places" in the landscape. It seems that much of the rock art there is situated in very visible spots and these places must have been of special significance. On the other hand, the diversity of site situations were also striking and it seems difficult, particularly for a foreigner, to understand the context. What were these heights out in the desert, with large, black boulders covered with figures? Or the steep cliffs depicting masks and large anthropomorphic figures? Do they tell about mythological, spiritual or historical places in the landscape, or could this marking be of ethnic significance and represent the territory of a specific tribe? Was it marking borders between territories? Or a particular hunting ground and therefore the rock art style also became bearer of a political strategy? The large diversity of styles that is present in the Southwest and its distribution in the space means that style must have played an important role as bearer of cultural significance and important codes. Polly Schaafsma, who has worked with identifying and different styles in this area, writes: "*We have also seen that art styles, once we can identify them, are sensitive indicators of cultural relationship, of systems of communication and exchange, both temporal and geographical*" (Schaafsma 1980:344). Rock art style was probably an important part of the communication, in one way or another, to members of their own community. It could have told about identity to the passerby; it could have said: this is our land. What that message could have conveyed is important understanding of the landscape. Peter J. Pilles and Ted Vaughan write more in detail about the Yavapai mythology as it is recorded in the Red Rock country near Sedona in central Arizona, an area with hundreds of rock art sites:

> "Yavapai religious traditions are closely associated with the Verde Valley and especially with the Red Rocks country. The most important of these traditions relate to their origins, the activities of their most important culture heroes, and association of supernatural and various events with specific places and areas" (Pilles and Vaughan 2003:5).

The rock art's visual, permanent expressions could have been binding together mythological landscapes, physical landscapes, political landscapes and their oral, unwritten and collective tradition. Rock art and its different styles could have materialized the oral tradition and materialized the cognitive layer into the physical layer. In that way the landscape became a bearer of the society's collective memory, and therefore also it's right to live and rule in that territory. Rock art style could have conveyed a message that was strictly political and its main purpose was to inform passersby, foreigners, or trespassers that this path is entering our land. When this symbolic structure was active back in prehistory, any person would know the code that the petroglyphs signify; it was part of the common knowledge in the society. The rock art was a silent sender of a message.

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Chapter 4
The Rock Art of *Chinamwali* and Its Sacred Landscape

Leslie F. Zubieta

The White Rock Paintings of South-Central Africa: A Brief Background

Four decades of research precede my own work; thus, many people have contributed to the current knowledge about the rock paintings of the study area. Based on the research conducted by researchers such as Desmond Clark (1959a, b, 1973), David Phillipson (1972, 1976, 1977), Matthew Schoffeleers (Lindgren and Schoffeleers 1978), Yusuf Juwayeyi and Mathias Phiri (1992), and Benjamin Smith (1995, 1997, 2001) amongst others, two traditions of white paintings have been linked to the farmer people of this region. In the late 1990s, Smith combined his doctoral results (1995) with previous analyses and proposed names for these two apparently separate traditions (1997): the White Zoomorphic tradition and the White Spread-eagled tradition.

Importantly, none of these pictorial traditions are still executed, but through the study of archaeological materials, specifically ceramics, oral traditions, historical documents and linguistic studies, researchers have linked these paintings to the ancestors of the Chewa. The geographical distribution of the paintings covers an area almost identical to the present-day concentration of this population (eastern Zambia, central Malawi, and central-western Mozambique) (Fig. 4.1). Given the fact that people stopped painting, possibly during the mid-twentieth century (Phillipson 1976), I worked with the premise that these paintings still play an active part in the memory of the people of the region, and thus it should be possible to recover valuable information regarding their meanings and function.

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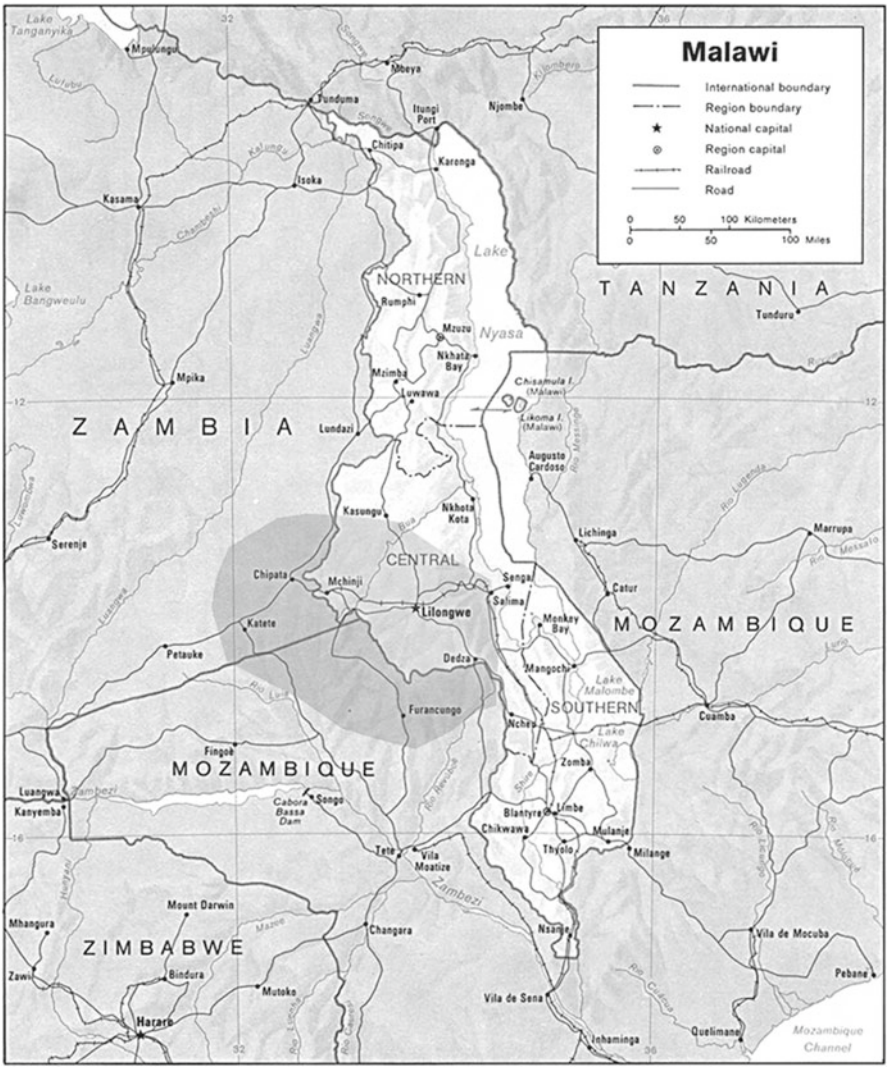

Fig. 4.1 South-central Africa map showing the distribution of rock art sites. This is also the location of the present-day concentration of Chewa modern population. Map courtesy of the University of Texas Libraries, The University of Texas at Austin (enhanced area by author)

The second of these two traditions, and the one that I focus on this paper, is mainly characterized by a figure known as the spread-eagled design. Because of our limited understanding of this rock art tradition, this figure appears to be similar in shape to an extended animal skin that is viewed from above. The main body of these designs is usually represented vertically, but sometimes it can be found

Fig. 4.2 Some motifs characteristic of the rock art of *Chinamwali*. Snake-like motif in association with spread-eagled designs, some of them covered with *black dots* (approx. panel width 3 m). Photo Leslie F. Zubieta (2009:fig. 36)

horizontally. There is a variety in size and aspect of these designs, but in general one can appreciate a head, two arms, two legs, and a tail. The head has protrusions occasionally.

This motif is almost always accompanied by snake-like motifs and other geometric designs such as circles, ovals, and lines made of dots, all in white although sometimes the pigment looks pinkish or yellow. The pigment was applied with the fingers, and sometimes it is possible to see the traces of this application. The primary color used was white, but black is also visible in the instances when the body of the spread-eagled was covered with black dots or sometimes, as I have noticed, a black fine line delineates the body of these designs (Fig. 4.2). Sometimes some of the geometric designs are also covered with dots. An interesting thing to note is that in central Malawi the dots are usually black, while in Eastern Zambia the body of these designs is filled with white dots (Smith 1995; Zubieta 2006, 2009, 2012a, b), which probably reflects local variants within the same tradition.

Due to the formal characteristics of the spread-eagled designs, researchers have suggested that these represent a variety of animals such as chameleons, lizards and turtles. Such associations merit a special discussion below, and my research has focused mostly on such designs. In terms of their distribution, the rock paintings associated with this tradition are located, usually, in rock shelters that do not follow a particular pattern according to their size, orientation, or location. Paintings are

sometimes in noticeable superimposed layers, which indicate that these spaces were used repeatedly over time. However, examples of such rock paintings can also be found in small and isolated rock shelters (Zubieta 2009).

Rock Art and Girls' Initiation Ceremonies

The White Spread-eagled tradition has been linked to girls' initiation ceremonies (Phillipson 1976; Lindgren and Schoffeleers 1978; Prins and Hall 1994) and more specifically to *Chinamwali* (Smith 1997; Zubieta 2006, 2009). *Chinamwali* is an initiation ceremony to which all girls should attend when they have had their first menstrual cycle in order to be transformed into full-grown women. Such ceremony still is of great significance in the Chewa matrilineal society.

Since 2003, I had the opportunity and challenge to work in documenting and interpreting such tradition during my Masters and my Ph.D. studies at the University of the Witwatersrand, and I proposed that there was enough evidence to start calling it the rock art of *Chinamwali*.

For my analysis I relied on both the existent ethnographic accounts and my own field experience in order to understand how this ceremony operates and to suggest how rock art might have played its part (Zubieta 2006, 2009, 2011). Thus, I had the opportunity to undertake the task of understanding as much as possible about the context in which rock art was presumed to be part of in the recent past and that is the girls' initiation ceremony.

Chinamwali usually takes place when a small group of girls is ready for initiation. The community joins efforts in terms of organizing all the preparation for the ceremony because it is a time of rejoicing for the community and also because of financial considerations such as the preparation of beer and food for a large number of guests which is taken on by the initiates' family. The initiates or *anamwali* are isolated from their community and receive specific instructions from an adult woman who is recognized as the main teacher during the initiation, the *namkungwi*. Each girl has one or two tutors (*phungu*), who make sure that the initiate learns properly all the instructions given during the ceremony.

During my research I worked with Chewa women and men to record the information that people still remembered about the paintings and practices that took place in the past during the *Chinamwali* ceremony. I had the opportunity to participate in such ceremonies and to be initiated myself two times in central Malawi. Many of the ideas and outcomes that I have reached, and that I discussed throughout my research, are the result of my discussions with women throughout the region, in Malawi, Zambia, and Mozambique. I am grateful for their patience and for granting permission for what I present here. I do not intend to go into all the details of the ceremony, which complexity I have covered elsewhere (Zubieta 2006), but I focus on those aspects that are important in order to build an argument about the usage of spaces during this ceremony and how this is linked to rock art, Chewa practices and religious beliefs.

Fig. 4.3 Women protecting the *mtengo* from non-initiated eyes. At the back we can see an area covered with trees characteristic of a typical graveyard in every Chewa village. Photo Leslie F. Zubieta (2009: Fig. 36)

In order to understand the dynamics of this ceremony, it is important to be familiar with the landscape where rituals take place today. The two main places that are used during the initiation are the *mtengo* and the *tsimba*. Although *mtengo* is the generic word for tree in Chichewa (the language of the Chewa), women, based on my field experience, use trees with specific characteristics that are linked to womanhood (Zubieta 2009:285). This tree is generally located on the outskirts of the village and is surrounded by vegetation, although it should be noted that throughout the region, mainly in Malawi, logging has been so extensive that these places of instruction are sometimes uncovered and unprotected; thus, I have witnessed women creating barrier-like constructions around the *mtengo* (tree) in order to preserve its secret atmosphere (Fig. 4.3). Any person who is not initiated in *Chinamwali* is chased away by women who are participating in the ceremony.

The other important place where instructions are given is the initiation hut, or *tsimba*, located within the village. It is within the *tsimba* where the main instructions and rules for being a good mother, wife and daughter are taught through songs and dances. I have had the opportunity and privilege to enter the *tsimba*, but I am not authorized to reveal its secrets. No woman is authorized to disclose what she witnesses inside this place and, just as it happens at the nearby *mtengo*, uninitiated people are prohibited from viewing or being close to the hut (*tsimba*).

The custom of the Chewa requires certain rules to be followed before starting *Chinamwali*, otherwise a serious consequence may occur, called *mdulo*. *Mdulo* is a

complex concept of a disease that may happen when sexual activity takes place when it is not required, and vice versa (Hodgson 1933). This means that *mdulo* happens when a ritual transgression occurs. People commonly speak of *mdulo* as the presence of certain symptoms such as excessive coughing or a general medical malaise of the body; its symptomatic expression is extremely complex. Detailed study on *mdulo* has been carried by Anne M. Drake (1976).

In order to get an insight of the effects that *mdulo* has on society, there are two important concepts that must be understood in advance. These are the concepts of "hot" (*-tentha*) and "cold" (*-zizira*). According to Johannes van Breugel (2001), these notions are part of everyday concepts and do not have per se good or bad connotation. Some activities, however, are considered mysterious and therefore dangerous for the community, such as sexual activity or the presence of sexual fluids, especially menstrual blood that makes women fluctuate from a "cold" to a "hot" state.

On the other hand, people who abstain from sex, ancestral spirits, and the bodies of the deceased are considered to be "cold." Sexual abstinence is a prerequisite for participating in the ceremonies of initiation because anyone who is in a "hot" condition may endanger the ceremony, the initiate, and the headman of the community. During *Chinamwali*, the headman, the parents of the initiate, and the women participating in the ceremony are required to follow sexual abstinence before the ceremony, and resume sexual activity at the end of the initiation. If someone disobeys the rules, they are tried and punished severely.

Secret instructions alternate between the tree and the initiation hut, but from both the accounts and my own experience, it is evident that not every teaching is conducted in secret. In fact, some lessons can and should be represented in public. The girls dance in a communal space in the village called *bwalo*. The community gathers around this space creating a circle. Usually there is a designated space for drums, another for women and children, and another for men. First, the initiates have to dance along with their tutors, who closely follow each step that the girl takes and then encourages her to dance alone in order to demonstrate to the community that she has learned the dances, along with their messages, which are dictated by the moral code and tradition (*mwambo*).

The last part of the initiation, or *Chingondo*, is when the whole community celebrates that the girl has become a fully adult woman. For this last stage, the girls wait under the tree (*mtengo*) until their instructor and tutors allow them to leave. A figurine made out of raw clay is decorated entirely with white flour mixed with water and then covered with black and red decorations (usually dots). This figurine is carefully placed on the head of the initiate by her tutor. The figurine represents an animal, and it has a great aesthetic value for the Chewa. Although it is my understanding that there is a limited repertoire of animals (e.g., wild animals such as antelopes and elephants), the animal most often represented is known as *kasiyamaliro*, perhaps an eland (Yoshida 1992), which symbolizes the mother ancestor of the community and that the initiate will eventually become a mother and that it "is from her womb that a new generation will come" (Claude Boucher, pers. comm., November 2003).

Once the initiate is ready, and wearing the aforementioned clay figurine as a headdress, she walks with her tutors from the tree (*mtengo*) to the communal space (*bwalo*). In the *bwalo* the girl must dance carefully so that the figurine will not fall. If it were to fall, it is believed that then she will not have children, and also she has to pay a fine. Once used, the headdress acquires great power and is therefore destroyed at the conclusion of the ceremony by the mother of the initiate. One of the instructors told me in 2006 that it is often necessary to keep the headdress safe after the initiates have finished dancing, thus it must be covered (with a scarf, for example). It is believed that evil people will try to get a piece of the headdress to harm the initiate, her family, or the people involved during the ceremony through witchcraft.

At the end of the ceremony, the initiate goes through a ritual shaving (*kumeta*). The tutors will shave the initiate's head, which symbolizes the transition from girlhood to womanhood. In addition, she is given a new name and returns to her house with great celebration, usually carried on the shoulders of her tutor. Her body is covered with white, red and black dots while the women around her dance and ululate with joy.

I have summarized the main events that take place during the initiation as I think that is of relevance to understand the context in which the paintings were once a part. In this regard, although rock art is no longer made for girls' initiation ceremonies, some women in central Malawi in 2003 confirmed that their relatives (e.g., their grandmothers) knew that the paintings at Mwana wa Chentcherere II, in central Malawi, were used in conjunction with girls' initiation. Moreover, some of the motif's meanings were still remembered (Zubieta 2006). Since then, I have interviewed many women throughout the region who still had a limited recollection about this link between initiation and rock art, but the knowledge throughout the region about the meanings of specific motifs is apparently lost.

It is possible that this rock art tradition stopped in the mid-nineteenth century and thus allows an historical continuity that permits important proposals regarding the use and symbolism of the paintings in the past. I do not presume that there is a uniformity between past and present belief systems and ritual practices, and I am aware of the limitations of using ethnographic material (Zubieta In press); however, I stress the importance of using the richness of oral traditions in the region for the role they have in the interpretation of rock art (Zubieta 2006, 2009).

Smith (1995, 1997) has pointed out that some of the designs that are part of this rock art tradition had a mnemonic function during girls' initiation ceremonies. This proposition arose because of the striking resemblance between the paintings and the objects that continue to be used nowadays in this initiation ceremony (see Yoshida 1992). I have taken this specific topic as the focus of my doctoral thesis, as I suspect that the understanding of rock art as a part of a wider range of material culture used for a specific context is the answer to understanding the way it functioned in the past (Zubieta 2009, 2011).

Moreover, the use of a variety of media to convey messages is not limited to the Chewa. Within the region of research, other matrilineal groups such as the Nsenga, the Bemba, and others utilize objects, even today, to pass on certain lessons during their own girls' initiation ceremonies (Richards 1945, 1956; Apthorpe 1962). It is

therefore conceivable that the ancestors of the Chewa also used objects and paintings to support the learning process and that these were used, as are today, as strategies that allow the Chewa women to memorize the instructions through the use of images and words. If so, the rock paintings to which I refer in this chapter, were made by women and used to educate the "new" women in topical aspects possibly linked with fertility and sexuality, among other things, which are central themes during initiation (Zubieta 2011).

It is through the current initiation ceremony that we know some of the methods that elder women employ to transmit their knowledge to the young girls. One of these methods, however, no longer continues into the present and involved the usage of certain rock paintings. The presence of rock paintings that I have described in the beginning of this chapter, sometimes superimposed on each other and covering the walls of rock shelters, attests to the continuous use of such shelters for ritual purposes.

Understanding Metaphor Representations in Rock Art

Why are certain images used during initiation and what subjects might they have been representing in the rock art? I particularly have found very useful the analysis of the body as a tool of inquiry and as a theoretical framework to answer these questions (Zubieta 2012a).

The social and cultural analysis of the human body, known as "body theory" has an impact in the way we understand the study of gender. Gender studies sometimes focus on the social construction of masculinity and femininity and social values that designate the sexual difference between women and men (Gilchrist 1991). In my study, I refer to gender as a dynamic construct, and as such, it is culturally specific. There are no textbooks or a systematic way of doing archaeological research in gender studies (Conkey and Spector 1984:2) but a variety of approaches to deal with it. I understand gender as a set of roles that are constructed, individually and socially, through the recognition of body functions and behavior. In this sense, these roles are the tasks that a human being has in a society based on social expectations deeply rooted in stereotypes of how a person of a particular sex should act, think, or feel (Zubieta 2006, 2012a).

The perception of the body not only reflects the values of different cultures but also of individuals within a society (Hodder and Hutson 2003). Body concerns deal with its physical characteristics and also with its psychological concerns such as identity and sexuality (Yates 1993; Meskell 1999).

Although the body has been a recurrent concern in the past, recent approaches (e.g., Turner 1996; Synott 1993) have shifted the ways archaeology and ethnology deal with how non-Western societies conceptualize the body. This shift also gave an interesting contribution to rock art studies as it showed that body perceptions are also reflected in the art. Archaeologists have imposed their own moral codes and perceptions when approaching material culture. Tim Yates (1993), for example, specifically worked on this topic based on body representations in Swedish

engravings. He eloquently discusses the fact that our own prejudices limit our ability to interpret gender, specifically when we assign sexual attributes to an image.

I have employed this theoretical framework, along with ethnographic material, and have found this combination most helpful to approach the interpretation of some of the images that the rock art of *Chinamwali* conveys. For this purpose I paid special attention to the perceptions of the body amongst the Chewa in order to understand how they might have represented their concerns related to this topic.

According to the Chewa, the body of a woman has a special ability to menstruate and most importantly to conceive a child. As I have mentioned earlier, there are certain things that allows a body to fluctuate between a "cold" and "hot" state and menstrual blood is one of them thus making a woman's body very powerful. Moreover, when she is in a "hot" condition, she is not allowed to have sexual intercourse with her partner or have direct contact with the food that her relatives, and especially her children, will eat. She is the transmitter of great danger while she is in this condition, and if she does not respect certain rules, she can even bring death to her family and community.

A woman, therefore, has to be careful throughout her life to know how to conduct herself in specific situations. This knowledge is given to her through *Chinamwali*. It is a must, therefore, to participate in this ceremony because if she fails to do so, she will ignore crucial rules for Chewa society stability. *Chinamwali* is a sacred and secret ceremony that gives pride to a girl and to the community. Due to the secretive dimension of this ceremony, I have dealt publicly in my research only with the information the women have allowed me to report. It is a pity that recently in, 2011, sensationalist reporters through the Internet have dealt with such ceremony and its current practice without acknowledging its complexity and value thus diminishing its importance.

The Chewa express themselves through the use of metaphors (e.g., the body of a woman is referred to through metaphors), and this leads me to suggest that the motifs in this rock art tradition can be understood through exploring the metaphors associated to animals and their linkage to people and other realms of Chewa society (Zubieta 2012a). As mentioned earlier, it has been concluded that the formal characteristics of some motifs in the rock art are suggestive enough to be identified with certain animals (e.g., chameleons, lizards). This apparent straightforward association to certain animals is far more complex.

Animals are an important aspect of Chewa cosmology as they play a role in their creation myths, their folk tales, and their proverbs. People often use specific characteristics of animals to talk about certain human behavior, thus I proposed in my research (Zubieta 2006, 2012a) that animal metaphors, in the context of girls' initiation, are used to maintain certain veiled secret teachings and messages that only initiates can understand.

I propose that women may have used the bodies of certain animals in the rock art to teach specific aspects of the correct behavior that women should follow within society. The presence of the paintings in the mountains attests that not all the instructions for girls' initiations were conducted within the village. In the recent past, the teachers, tutors and the initiates took a journey outside the confines of the village in order not to be disturbed or observed by the uninitiated. Surely because of the ways current ceremony operates, I presume women began their pilgrimage to the rock

shelters singing secret songs, clapping and carrying all the necessary things for their stay at this special venue in the woodlands: mats, food, pots and other related paraphernalia (Zubieta 2006).

Chewa knowledge system allows us to understand their perception of the world in which animal symbolism conveyed important messages. This perception is a key element to unlock some of the messages and symbolisms behind the rock art of *Chinamwali*. It is a challenge, however, to know the specific messages that were given through the rock art.

The Chewa perception of the landscape is also an important key; thus I propose that rock shelters were part of a sacred landscape that helped the initiates achieve their status as fully grown women. Choosing a rock shelter in the woodland, however, to carry out the instructions of some lessons during the initiation, was a more complex decision than simply searching for a remote-hidden place covered by trees. I propose that the decision of having a space for instructions in the woodland had to do with the ideas that the Chewa had about the village and the woodlands within the landscape.

The Use of Spaces Within a Spiritual Landscape

To understand the dynamics of how the landscape was used in the specific context of *Chinamwali* and its relationship to the animal world, I have relied specifically on the extensive work by Brian Morris (2000a, b), Kenji Yoshida (1992), and Matthew Schoffeleers and Adrian Roscoe (1985).

Brian Morris (1995) has proposed the following scheme (Table 4.1) to facilitate the discussion of the dichotomy between the village and the woodland, but I would note that his scheme cannot be taken as a generalization for all Malawian culture as he himself emphasizes.

As Westerners, looking at this table, we expect a straightforward association between women, the domestic sphere, and the village. Chewa women, however, continue to perform some activities in the forest, like collecting firewood, plants and water. If we remember the existing repertoire depicted in the rock art, we note that women, for some reason, decided to represent wild animals, not domestic ones, on the walls of rock shelters to carry out their teachings during initiation.

The Chewa associate the woodland with hunting and wild animals and, on the other hand, the village with agriculture and domestic animals. Morris's analysis, in my opinion, reflects two main domains or areas, that rather than being in opposition, they must be understood as complementary. Thus based on Morris's analysis and the archaeological evidence, the presence of rock paintings, I propose that the selection and use of rock shelters for initiation possibly had to do with the perceptions that Chewa had of the village and the woodland and the creatures living in them.

The perception of the woodland is related to external sources of life and power generators. Wild animals are essentially identified with the woodland and as a source of food. They are also perceived as beings close to the spirits of the dead and to political kinship, especially with male affines as an essential source of fertility and therefore as a necessary power for the continuity of the group and the village (Morris 1995).

It is possible that the rock shelters in the woodland that served as important venues for giving instructions also had a connection with the spirits of those male

Table 4.1 The woodland and the village

Woodland (*Thengo*)	Village (*Mudzi*)
Hunting	Agriculture
Dry season	Wet season
Affinal males (semen)	Matrilineal kingroup (blood)
Spirits of the dead (*mizumu ya makolo*)	Living humans (*anthu*)
Wild animals (*chirombo*)	Domestic animals (*chiweto*)
Graves	Houses

Fig. 4.4 Initiates wearing an animal headdress during the *Chingondo* last phase of the initiation. Photo Leslie F. Zubieta

affines and kinship, and thus facilitated fertility. I propose that in order to receive the necessary secret knowledge that only women can share during this sacred ceremony, young initiates embarked on a pilgrimage to the mountains to be immersed into a world different from the one in their own village (Zubieta 2012b).

In this matrilineal group, they usually observe a matrilocal residence, where the husband is perceived as an outsider and a hunter while the headman of the community represents the core of the matrilineal community. It is in the woodland where women seek to reconnect with the hunters, to these strangers, who will ultimately be their husbands and who shall claim them as their brides. They seek, at the end, sexually powerful men with whom to have children and assure the continuity of the community (Zubieta 2009).

Another important aspect of this proposal connects the initiate with wild animals. During the *Chingondo*, the last phase of the initiation, the initiate wears a headdress shaped as an animal as I mentioned earlier (Fig. 4.4). I suggest that this is the time when the girl symbolically represents the animal that is to be hunted when

she is betrothed. There are some accounts in which the groom has been recorded to have participated in a symbolic hunt ceremony (Lancaster 1934:199; Boucher 2002:38). Matthew Schoffeleers mentions that the groom personifies the hunter and his bride the hunted animal (1971:271–282).

As I mentioned, the girls are prepared for the *Chingondo* ceremony under the *mtengo* (tree) which I think is not a coincidence since wild animals belong to the woodland and not to the village. In other words, the *chingondo* headdress could not be recreated within the *tsimba*, for example, as the latter belongs to the village realm.

I propose that one of the main reasons why the mountains were important for the woodland-village dynamic dates back to the time when the farmer groups, who were the ancestors of the Chewa, arrived in this region. We know that when the matrilineal groups arrived (ca. eighth century A.D.) they found hunter-gatherers whom, according to archaeological evidence, had inhabited the region for more than 15,000 years. These groups, known by the name of Akafula or Batwa survived until the late nineteenth century (Clark 1973:40).

There are various propositions on how interaction took place between the farmers and the hunter-gatherers. According to Gadi Mgomezulu's (1978) lithic analysis in central Malawi, it is clear that the hunter-gatherers, rather than being displaced, coexisted with the farmers throughout the Iron Age, which has been divided in two periods, the Early Iron Age (0–1000 A.D.) and the Late Iron Age (1000–1900 A.D.). This coexistence allowed for the incorporation of a hunter-gatherers' lifestyle into the economy of food production (Phillipson 1977:252) as well as the exchange of ideas and symbols.

In their oral traditions, the Chewa claim to have adopted rain calling practices from the hunter-gatherers, and they even claim taking their sacred drum: *mbiriwiri* (Rangeley 1952; Ntara 1973; Schoffeleers 1973; Smith 1997). Farmers had a specific idea of who the hunter-gatherers were. The Akafula or Batwa were associated with mountains and important shrines like *kaphirintiwa* in central Malawi which acquired sacred connotations. For many years the ancestors of the Chewa, along with the hunter-gatherers, occupied the same landscape. Some authors agree that intermarriages took place between the hunter-gatherers and the farmers, but it is also possible that sometimes these interactions were not as friendly and led to death (Mgomezulu 1978; Crader 1984; for further discussion see Schoffeleers 1992).

Even though there is a high probability that ideas were exchanged, it is difficult to know the processes by which these ideas were assimilated. As a tentative hypothesis I proposed in my doctoral dissertation (Zubieta 2009) that the hunter-gatherers may have influenced the spread-eagled design, so characteristic of the rock art of *Chinamwali*. There is a formal similarity between this motif and one observed in the rock art that has been associated with the hunter-gatherers (the so-called Red Geometric tradition; see Smith 1997) which also resembles an "animal" hide seen from above, although red is in this case the predominant color (Fig. 4.5).

I presume that indeed hunter-gatherers had a strong impact as it has been suggested elsewhere (see Smith 1997) as to the possibility that the hunter-gatherers practiced their own rituals related to fertility and rain-calling before the farmers

Fig. 4.5 D-stretch image of a long *red* spread-eagled outline, eastern Zambia (approx. height 60 cm). Photo Leslie F. Zubieta

arrived in the region. Thus, I suggest that the ancestors of the Chewa might have taken, not only certain commodities, as I have explained, but also appropriated certain symbols from the Batwa and assimilated them into their own girls' initiation ceremonies. Perhaps the first step the farmers took was to appropriate the same spaces used by the Batwa. Such appropriation of spaces seems evident, since generally, the white paintings of this tradition are found in rock shelters where the red paintings of hunter-gatherers were also found, indicating a preference for the use of the same spaces.

Another possible scenario is that the ancestors of the Chewa might also have had a similar design as part of their own set of symbols. Similar motifs to the spread-eagled design painted in white have been observed elsewhere. Smith mentions that these designs have been found in Limpopo Province, South Africa, central and southern Zimbabwe, the Tsodilo Mountains in north-eastern Botswana, western Angola, central Tanzania, southwest Kenya, and in the Lake Victoria basin (1995:179–180). The spread of such motifs have prompted other authors to theorize about the possible link between their wide geographical distribution and possible interpretation (Prins and Hall 1994). Caution must be stressed, however, when suggesting that these motifs have the same meaning, and it is advisable to study each region independently before drawing regional conclusions.

An ideal scenario, I propose, would be one where women's fertility and the reproductive cycle of the earth had an importance for both groups, although approached through two different cosmological systems. However, after contact between these two groups, it is possible that some of these concepts were complementary, even compatible, and finally were adapted/adopted not only by the farmers but also by the hunter-gatherers involved.

The complex analysis of the sacred landscape and its connection to the rock art, also leads us to acknowledge the link that oral traditions have between the *Chinamwali* and the rain-calling ceremony of the ancestors of the Chewa. This association was discontinued, presumably, after an incident in which some initiates are said to have been drowned in one of the sacred pools (Linden 1974; Schoffeleers 1976). The sacred pools were important places associated to shrines and where priestesses used to officiate rain-calling ceremonies. This story is still a part of the present-day Chewa folklore, and sacred pools are still considered as pristine places that are protected. Another trace of this connection is evident in the time of year in which the *Chinamwali* takes place: during the dry season, from August to November, and before the rain starts.

The dry season is linked to hunting and the woodland domain thus hunting activities are mainly carried out during this same time of the year (Morris 1995; Schoffeleers 1971:275, 1992:33). I suggest that initiation ceremonies are also conducted at this time of the year so the initiate can then be symbolically transformed into an animal when wearing the headdress and when contacting with the spirits and the woodland.

During the ceremony, I suggest that the initiate is in a transitional state that allows her to wear the headdress. During this time, she is an animal whose access into the village is granted to perform in the communal space. She is perceived to be "hot" and "cold" at the same time because of her liminal state, this is a state that refers to her transitional status, an in-between period that will shape her identity as a fully grown woman at the end of the ceremony. Such condition, I believe, allows her to enter and exit the two main domains used during the initiation: the village, the *tsimba*, and the woodland, the *mtengo*.

The connection between the wild animals, the woodland, the matrilineal kin group and the initiation ceremonies would be incomplete if I omitted from this analysis the participation of *Nyau* and the creation myth known as *kaphirintiwa*.

Nyau is a closed association strictly for men in which members have to go through an initiation (no circumcision involved). The secret teachings are imparted in an isolated area within the cemetery (for more information see Rangeley 1949, 1950; Yoshida 1992; Smith 2001; Boucher 2012). *Nyau* has its own complexity in Chewa history that I will not address here, but suffice it to say for the relevance of this chapter, that *Nyau* has two types of masks; the first are anthropomorphic and symbolize the spirits of the dead and the second are immense zoomorphic creations made from perishable materials, which represent the guardian spirits of animals that can only enter the village at specific times of the day and mostly appear during the night. These masks perform during the girls' initiation and at funerals, and their performance is known as *Gule Wamkulu* or big dance (see Boucher 2012 for further

Fig. 4.6 *Gule Wamkulu* performing during a funeral in central Malawi (Photo by author)

discussion) (Fig. 4.6). *Nyau*, presumably, is responsible for the other set of white paintings that I have mentioned in the beginning of this chapter: the White Zoomorphic tradition (Lindgren 1978; Smith 2001).

In the *kaphirintiwa* creation myth it is said that "in the beginning" God, animals, a man and a woman lived together in peace until man invented fire. According to the myth when fire was invented certain animals ran away from humans and God rose to heaven escaping from the flames (Schoffeleers and Roscoe 1985). Matthew Schoffeleers (1971; also see Boucher 2002) has analyzed in detail the *kaphirintiwa* myth of origin and its relationship to *Nyau* and the reproductive cycles of the Chewa. However, it is also during *Chinamwali* that the Chewa recreate the conditions for reconciliation between people and animals by allowing the entrance of *Nyau* and the initiate wearing the headdress into the village.

The complexity of these connections between the landscape and wild animals, metaphors, and perhaps ancient links with hunter-gatherers allow us to understand that perhaps the distance that women had to go from their village to the rock shelters was just a tiny part of the equation. There was no need to cross borders into a far away land, but to cross the borders of the village, the communal space, and to get immersed into the woodland where the wild animals and spirits ruled.

Rock shelters were used in the past as ritual spaces for girls' initiation ceremonies. However, it is possible that the invasion of the patrilineal Ngoni in the last part of the nineteenth century (Clark 1973) was the main reason why women stopped painting in rock shelters for *Chinamwali*. Rock shelters became places of refuge, to

hide from the Ngoni, and thus the use of these spaces in the mountains for *Chinamwali* stopped and the meanings of these sacred paintings started to disappear (Zubieta 2006).

The interaction with Ngoni groups was also diverse; in some places intermarriages took place (Hodgson 1933:128). From the historical accounts we know that Ngoni invaders were almost exclusively men and intermarried with Chewa women. The children learned the language of their mothers (Chichewa) and with the language, also the rituals and oral traditions (Zubieta 2006). I believe that throughout the region, some rock shelters were used for a longer time than others, and that women gradually discontinued their visit to these sacred places in the mountains. *Chinamwali*, despite the abrupt contact with the Ngoni and the changes that followed within the Chewa social structure, such as the Church scrutiny (see Linden 1974), continued taking place. Women, through their ingenuity, sought new ways to face and to confront the challenges and to continue their traditions in which rock art no longer plays a part.

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Chapter 5
Rock Art and the Sacred Landscapes of Mainland Southeast Asia

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Introduction

The area known as Mainland Southeast Asia consists of the modern nation-states of Myanmar (Burma), Thailand, Malaysia, Cambodia, Laos, and Vietnam. It is a geographically, linguistically, and climatically diverse region. Several mountain ranges are present, including the lower Himalayas in northern Myanmar and the Dangrek chain bordering Thailand and Cambodia. A total of some 270 million people who speak a mixture of Austro-Asiatic, Tai, and Austronesian languages currently live in the region. Evidence for prehistoric human activity is mainly found in caves and rock shelters in the form of stone tools of varying traditions. In fact, caves and rock shelters continue to be used for various purposes, including habitation, burial, and worship as was the situation throughout prehistory. Like many other places in the world, one marker for the human use of these caves is the presence of rock art.

Rock art research in Southeast Asia is a nascent field in archaeology characterized by uneven levels of research across the different countries in the region (see recent surveys of Southeast Asian rock art by Taçon and Tan 2012). Thailand, for example, has documented hundreds of rock art sites over the last 30 years, while in contrast neighboring Laos and Myanmar have less than ten known sites between them, many of them mentioned in local archaeological reports but generally unknown in the larger academic context. Our dearth in knowledge is exacerbated by

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the fact that much of the archaeological literature produced in the region today is written in local languages, and that rock art research often takes a back seat to monument restoration works, which indirectly supports the revenue-generating tourism industry.

Owing to the fragmented nature of the literature, and the general lack of research on the topic, it is difficult to make but the broadest remarks about the characteristics of Southeast Asian rock art. Generally speaking, three main forms of rock art are present in the region—pictograms, petroglyphs, and megaliths. Pictogram sites are by far the most numerous and widespread type of rock art found in Southeast Asia, and megaliths, while numerous, tend to be limited to specific regions. Petroglyph sites are uncommon, but still found throughout the region.

Rock paintings, which are discussed in this chapter, span time frames from the prehistoric past to the very recent present. They are predominantly red in color; other colors also appear. Black pigment presumed to be charcoal is thought to be younger as black paintings appear superimposed over red paintings or depict modern subjects and have ethnographic accounts related to them, such as those at Gua Badak in Malaysia (Faulstich 1988; Mokhtar and Taçon 2011). Polychromatic paintings are also associated with more recent painting activity (Sukkham et al. 2011).

There have been few attempts to date the rock art of Southeast Asia, but where we have dates, the rock art is surprisingly old. Dating of rock art in East Timor by uranium-series dating puts the age of the rock art at 7,000 years old, and possibly as old as 26,000 years (Aubert et al. 2007). Radiocarbon dating of sediments in Myanmar's Padahlin Cave (discussed in this chapter) produced dates of 7,000 and 13,000 BP in association with red-stained stone tools (Moore 2007). Like most rock art elsewhere in the world, dating remains a problem. From these few lines of available evidence from the region, it appears that rock art sites containing red rock paintings without any diagnostic iconography (which is often) tend to be attributed to the prehistoric period.

This chapter stemmed primarily from a study of newly discovered rock art sites in Cambodia located near the world-famous Angkor Archaeological Park. The area in which these rock art sites are located has been considered sacred for over a 1,000 years, or from the Angkor period (between the ninth and fifteenth centuries CE). The discovery of rock art pushes the evidence of human occupation back to pre-Angkor times and possibly extends the anthropogenic use of the landscape to prehistory. Interestingly, this pattern of usage—rock art sites to religious sites—can be found in many countries in Mainland Southeast Asia. Starting with this example from Cambodia, we articulate this phenomenon as it is found in other sites, particularly in Laos, Myanmar, and Thailand. In some cases, we find a long history of human presence at these localities, while in others we find the shift from "prehistoric" rock art to current religious sites to be quite abrupt. Are these similarities superficial, or is there a larger confluence at work?

Cambodia

Little is known about the rock art of Cambodia; indeed, the first discovery of rock art in the country was only in the last decade. Despite a wealth of archaeological work conducted in the country, first by the French at the École Français d'Extrême Orient at the start of the twentieth century, and continuing today with teams from all over the world, the focus of research has been centered on the temples of Angkor and their corresponding periods, between the ninth and fifteenth centuries. Much less is known about the preceding period of "Indianization," when cultural influences from India began to appear in Cambodia's material culture through trade and religion from the first century BCE, and even lesser still to the period before, which is considered the prehistory of Cambodia. More recent work has started to pay attention to this period of the past, such as research on the rock shelter of Laang Spean in Battambang Province which dates to 7000 BCE, and various circular moated earthwork sites which date to the iron age of Southeast Asia, between 200 BCE and 500 CE (Stark 2004).

Rock art was first reported in the Cardamom Mountains, bordering Thailand in the western part of Cambodia in 2005; this site is not in the scope of this chapter. The focus of this chapter is on the rock art discovered in Siem Reap Province, in the vicinity of Phnom Kulen (the Mountain of Lychees), a sandstone plateau situated some 40 km northeast of Siem Reap town and the Angkor Archaeological Park. To date 13 sites have been discovered, 12 on the foothills of Phnom Kulen, and 1 on top of the mountain itself; research in this area is ongoing with additional sites likely to be discovered (Heng 2011; Taçon 2011).

The sites in the mountain's foothills were discovered by a team from the Apsara Authority, the local government agency in charge of the management of the Angkor Archaeological Park, while conducting survey work for another project in 2010 and 2011. The discovery of the single site found on top of Phnom Kulen resulted from 2012 work undertaken by the Archaeology and Development Foundation, which has been working on mapping the unexplored sections of Phnom Kulen since 2008.

The rock art of Phnom Kulen occurs in sandstone rock shelters. The paintings are red in color, and in many cases considerably faded, which may be an indicator of advanced age. Depictions include naturalistic animals such as bovids and fish. There also are various types of anthropomorphs. None of them have any diagnostic features that can be associated with any date. Some shelters also have black drawings in them, which are presumably made from charcoal. These drawings look fresher and are from recent times.

Rock shelters have a long period of use in Phnom Kulen. Rock shelter sites found in this area often have drip lines carved into the inner edge of the roof to run off water (Sakada Sakhouen personal communication 2012) although when these drip lines were carved is uncertain. Anecdotally, local villagers report using the numerous rock shelters found in the foothills as refuges during the recent tragic civil war of the 1970s.

Fig. 5.1 Poeung Komnou, on the foothills of Phnom Kulen in Siem Reap Province, Cambodia. Red paintings occur on the north wall of this boulder past the right side of the bas-relief (photograph by Noel H. Tan)

For the purposes of this chapter, we limit the discussion to just the one site of Poueng Komnou, located in the foothills just east of Phnom Kulen and 20 min from the Angkoran temple of Beng Melea. Poueng Komnou (the Decorated Boulder) consists of two large sandstone outcrops, the larger of which forms a natural rock shelter. On the eastern face of the larger sandstone outcrop is a group of prominent carvings which give the site its name: the bas-relief carvings of the Hindu god Vishnu, flanked by his wife and two other deities, colored green. On the left and right of this set of four deities are smaller carvings of a reclining Vishnu and hermits, as well as an inscription which states that the carving was made by a hermit who lived in the site in the twelfth century (Fig. 5.1).

On the other side of the boulder, at the western end of the shelter, are two other sets of carvings, one depicting Ganesha, the elephant-headed god of prosperity, and the second another depiction of a reclining Vishnu. The site was first mentioned in Boulbet's (1979) survey of Phnom Kulen; and the carvings were later described in detail by Jessup (2008). The rock art was not acknowledged until 2011, when it was recorded by a team from the Apsara Authority with one of the present authors (Taçon 2011). The paintings are located in the north wall between the two groups of carvings.

There are two phases of rock art present at the site: old red paintings and recent black drawings. The black-colored art consisting of charcoal drawings appears to be quite fresh and could easily have been discounted as vandalism. The most

prominent drawing is a portrait of a bearded man, possibly a hermit or *esai* in local tongue, which is cognate to the Sanskrit *rishi*, or ascetic. The connection to the ascetic traditions of Buddhism and Hinduism can be made with the wooden hut just adjacent to Poueng Komnou, and the rattan bed frame on the north side of the shelter where the rock art is, which is said to be used by forest monks when they come to meditate.

The red rock art is fairly hard to see. The most prominent of the paintings includes a large "catfish" figure about a meter long in width and 2 m above the floor. There are numerous smaller red paintings, consisting of linear abstract designs which are hard to see without digital enhancement. The site does appear to have potential for archaeological excavations, but none have been undertaken so far. Pottery sherds from the thirteenth century have been noted from the surface finds.

While Cambodia is predominantly a Buddhist country, and despite the Hindu character of the site, locals still leave offerings and consider Poueng Komnou a shrine. Small wooden altars are found in front of all three groups of carvings, on which are left offerings of joss sticks, sweets, and fruit particularly during the Khmer New Year which occurs every April. In recent years an earthenwork dais has been built in the area in front of the main Vishnu carvings and comparisons of the site today with Boulbet's pictures from 30 years ago show that the site is still very much in use t.

There are no currently secure dates for dating the rock art found in Phnom Kulen. However, their characteristics—the use of red pigment, depictions of naturalistic animals (especially bovids and fish), and their general worn-down appearance—are typical for prehistoric rock art found in Southeast Asia. Assuming this to be true, it is interesting to observe that the human interaction with Phnom Kulen has been longer than previously thought.

Phnom Kulen is more famously known in Cambodian consciousness as the birthplace of the Angkor Empire, when in 802 CE the King Jayavarman II instituted the royal divine cult which established his empire as an independent state. In Angkoran texts, Phnom Kulen is identified as Mahendraparvata, which was thought to be the home of the gods (Miksic 2007). The common narrative that Jayavarman II conducted a ritual to become god-king, or king of the gods, certainly draws from the idea of Phnom Kulen as Mahendraparvata.

All over Phnom Kulen there are numerous remains of temples and landscape carvings that emphasize the sacred nature of this mountain. One particularly potent example is found at Kbal Spean, where hundreds of lingas are carved on the riverbeds. The symbolism of linga, as the representation of the divine energy of Shiva, carved into the beds of rivers on the mountain, is meant to infuse the water with procreative power to fertilize the agrarian fields in the plain below.

Even today, the mountain is considered to be the most holy place in all of Cambodia, a pilgrimage site for many locals, and a place for ascetics to meditate and learn the arcane and magical arts. Monks are deemed to have superior authority and ability if they had spent some prior time meditating in Phnom Kulen (Heng Piphal, personal communication 2012).

Thus, humans must have been interacting with and marking the Phnom Kulen landscape over a long period of time. Starting with the rock art that is to be found in numerous sites at the foothills as well as on the top of the mountain, followed by the Angkor period continuing to popular local devotion today, these activities occur in a backdrop of a sacred landscape. With this as our starting point, we look at other sites in the region that contain a similar history of use: prehistoric rock art sites that later become religious sites.

Thailand

Thailand has more rock art than any other Southeast Asian country and has seen much rock art research including the identification of sites numbering in the low hundreds. It also has a long tradition of religious interaction with landscapes. Here we explore the conjunction of rock art with sacred spaces in three places: Khao Chan Nam, Wat Phuttabat Bua Ban, and Phu Phra Bat—two individual rock art sites and a complex of sites in the northeast of Thailand, respectively.

Khao Chan Ngam (The Mountain of the Beautiful Moon) is located some 300 km northwest of Phnom Kulen near the provincial capital of Nakhon Ratchasima, colloquially known as Korat, the gateway to the northeast plateau. The site is a cluster of large sandstone boulders that form a natural rock shelter—by far the largest shelter amongst the sandstone boulders strewn throughout the landscape. The rock art is clustered at two sides of the shelter, mostly at high elevations or 3 m from the ground.

The most prominent rock art features a group of anthropomorphs, drawn in full profile, presumably hunter-gatherers. They are depicted with little clothing except for "skirts," which are consistent with clothing worn by indigenous populations in the region, and carry bows and arrows. Men, women, and children are depicted, as well as a "dog." The identification of the "dog," it has been suggested, places the rock art no later than 3,000 years old, as dogs do not appear in the archaeological record of this area before then (Higham and Thosarat 2012). However, the domesticated dog could have been introduced earlier without leaving an archaeological signature.

Archaeological excavations at the site are no longer possible, because the rock art of Khao Chan Ngam coexists with a Buddhist shrine and an associated wat (temple) (Fig. 5.2).

A small living space behind the main Buddha image is used as a retreat location by forest monks for meditation. The shrine also receives frequent devotees who come to pay homage to the Buddha image there, as well as a shrine to an aborted baby. The contemporary Buddhist activity at Khao Chan Ngam is relatively recent; the temple was founded by monks only in the 1960s, who said that prior to their arrival the area was deserted. Their motivation for moving to the area was the impression and belief that it would be an advantageous area to perform meditation. The presence of rock art did not appear to influence their decision to set up a temple there.

Fig. 5.2 Khao Chan Ngam, Nakhon Ratchasima Province in Thailand. The rock shelter currently houses a Buddhist shrine. The rock art is located in the wall, 2 m off the ground (photograph by Noel H. Tan)

On face value, it appears that the presence of rock art and Buddhist religious activity is coincidental—the rock art appears to be very old, and the origins of the temple can still be recalled in recent memory. However, the choice of location by the prehistoric painters and the modern monks, located hundreds if not thousands of years apart, are striking. While forest monks have set up other living spaces and meditation spots in additional rock shelters in the area, the spot chosen to seat the Buddha image is one with rock art.

Wat Phuttabat Bat Bua Ban is situated in Udon Thani, a northeastern province of Thailand. The site is a small forest temple, in which a Buddha footprint is enshrined in a stupa, or a reliquary tower. The area of archaeological interest is not within the immediate temple grounds but at a forest clearing some 80 m away. Additionally, the site is not a rock painting site but an arrangement of standing stones known as "sema." These sema stones are associated with the Dvaravati and Lopburi period dating to between the ninth and twelfth centuries CE. It should be noted that the Dvaravati period of Thailand is not well known; it is thought to be a Mon-speaking culture or collection of polities that existed from the sixth to thirteenth centuries. Lopburi culture is the Thai expression for Khmer culture, and can be regarded as synonymous with Angkor.

Eight groups of three stones are arranged in a circle along the cardinal points (Fig. 5.3). This arrangement of stones is also associated with the boundaries of a

Fig. 5.3 The sema stones of Wat Phuttabat Bua Ban in Udon Thani Province, Thailand. Groups of three stones are arranged at the right cardinal points of the compass around a central sacred space (photograph by Noel H. Tan)

sacred space, usually the ordination hall of a Thai Buddhist temple with a of a central stone marking the location of the main Buddha image. Nothing remains of the central sema stone Buddha image or the temple structure which might suggest that the latter was made from wood. These remains indicate that this site was a sacred place in the first millennium.

Further east from the clearing is a small trail that leads past another group of sema to a large boulder where a Buddha shrine is now housed. The shrine appears to be relatively modern: the floor of the shelter has been tiled, the Buddha statue appears to be of recent make, and the shrine is well kept, although several broken sema fragments have also been moved into the sanctuary of the shrine. All along the boulder devotees place sticks between the boulder and the ground to help prop the boulder up, a practice linked to merit-making.

The boulder is also a boundary between the forest clearing and the edge of a cliff. Behind the boulder, the sandstone landscape slopes gently downwards, providing a panoramic view to the vast tree line below. It is on this east-facing side of the boulder that we find rock art. The red markings are fairly unexceptional, made up of faint red linear markings consistent with the numerous rock art sites found in the area (Fig. 5.4).

There is no apparent way to date the paintings as yet, nor do they contain any datable iconographic material. Most of the paintings are faded, and some encroached upon by creeping vegetation. When asked about them, the local abbot said that he

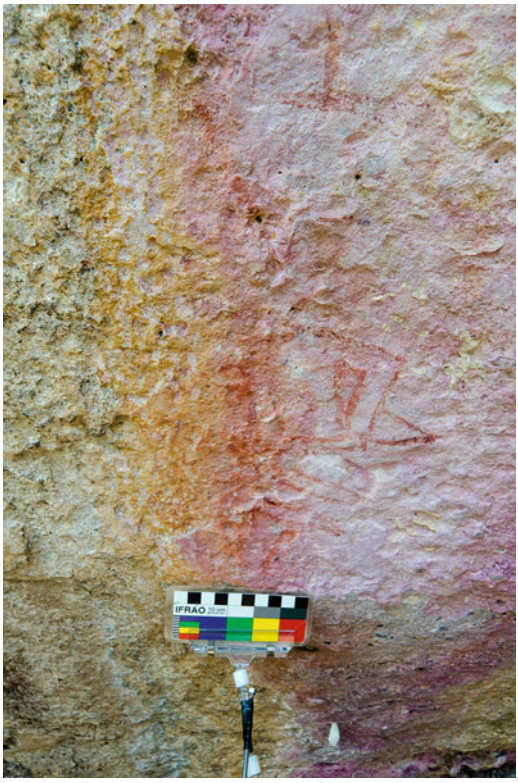

Fig. 5.4 The rock art of Wat Phuttabat Bua Ban is made up of extremely faded abstract linear paintings, which indicate a great age, but are stylistically simple (photograph by Noel H. Tan)

was not aware of the presence of rock art in the site. With the rest of the rock art in the immediate area taken into account, the paintings are estimated to be of the prehistoric period.

Here in Wat Phuttabat Bua Ban we find another pattern of long site use: the presence of rock art (albeit small and unspectacular), sema stones from around the first millennium, and the evidence for contemporary Buddhist practice. Combined with the physical landscape, that is the threshold between a forest clearing and a cliffside vista, these qualities suggests that this area was a significant, if not a sacred, landscape. The presence of rock art, which was hitherto unknown to the abbot until we pointed it out to him, again indicates that there was something special about this location even in prehistoric times.

Unlike Khao Chang Ngam and Wat Phuttaba Bua Ban, which are single rock art sites, Phu Phra Bat represents a cluster of mountainside sites that closely resembles the landscape setting and usage profile of Phnom Kulen in Cambodia. Phu Phra Bat is located some 18 km away from Wat Phuttabat Bua Ban in Udon Thani Province, approximately 400 km north of Phnom Kulen and some 25 kilometers away from Laos to the north. Like Phnom Kulen, the landscape abounds with sandstone rock shelters, many of which contain prehistoric rock art. Many of these shelters also

become adapted for religious use around the tenth century, and still remain religious sites today.

The name of the mountain refers to depressions in the landscape that later become identified as the footprints of the Buddha and his disciples. Probably formed through natural processes, these footprint-shaped depressions are believed to be where Lord Buddha stepped when he was walking through the landscape. They become venerated as part of a popular local religious expression, and they form focal points of pilgrimage for locals. Some footprints later become enshrined in stupas, such as the one found in the main temple of the mountain. This reliquary tower is approximately 100 years old and dates to the Lan Xang Kingdom, a polity that was centered on what is now Laos.

Part of the mountain has been demarcated as the Phu Phra Bat Historical Park, a site for local tourism that showcases the local sandstone formations, many of which have been named for places set in the local legend of Bor-nam and U-sa. The story has its roots in the tragic romance between the prince and princess of two regional kingdoms. Notably, the current abbot has given many of these rock shelters within the park names that correspond to the Bor-nam and U-sa legend. While the shelters do not necessarily have any connection to the folktale, they do indeed show signs of human use, either as shelters for inhabitation or as shrines.

Here in Phu Phra Bat we find a number of sema stones, usually focused around a sandstone boulder that may have once housed a Buddha image. The artistic style of the semas again dates them to the tenth-century Dvaravati period while some of the sculpture carved into the rock shelters is identified as from the Lopburi period also similarly dated around the tenth century. Some rock shelters additionally feature rock art; the two most prominent rock art sites are Tham Khon (the cave of humans) and Tham Wua (the cave of bullocks), both located on the same large sandstone formation and also named for their primary depictions.

The rock art of Tham Khon and Tham Wua consists of naturalistic depictions of anthropomorphs and bullocks, although the humanlike figures are larger and drawn to appear to be emerging from the ground below. The cattle of Tham Wua are generally smaller, averaging 20 cm in length. The interpretation provided by Thai archaeologists for the rock art of Tham Khon and Tham Wua is the presence of prehistoric man having lived in the sandstone shelters of this area. The mountain of Phu Phra Bat may have been part of some sort of prehistoric highway along which people would have travelled. The rock art is thought to date between 2000 and 500 BCE primarily because of the allusion to agriculture from the depiction of bovids (Munier 1998).

Tham Khon and Tham Wua are the most spectacular rock art sites of the area, but are atypical regarding design motifs. The rock art of the region is characterized by linear geometric designs, typically small markings in sandstone shelters. Sometimes, small animals are portrayed in solid silhouette. They are located in a number of rock shelters throughout the mountain, not just in the historical park but their locations have been kept undisclosed and remain only known to the locals.

Thus, at Phu Phra Bat we also have evidence for a long period of human activity, starting with rock art as an indicator of prehistoric activity: Dvaravati and Khmer religious structures and carvings in the tenth century, and contemporary religious

activity that can be seen through the veneration of at least two sets of Buddha footprints, a functional wat (temple), and a number of small shrines located throughout the park. Like Phnom Kulen, Phu Phra Bat appears to have functioned as some sort of focal point for religious activity for a long period of time—a sacred landscape. It is also a landscape where rock art abounds.

In one area of the historical park, called the Wat Porta cluster, we see the confluence of rock art, Dvaravati and Khmer religious activity and modern religious activity. Wat Porta (the Father-in-Law Temple) is one of a few sandstone formations found in a clearing at the historical park. The focal point of this cluster of sandstone boulders is an arrangement of sema stones in the middle; some, including the central stone, are missing but their former positions are demarcated by the notches carved into the sandstone bedrock.

Wat Porta itself is a sandstone boulder consisting of a long natural pillar running north to south, topped with a large sandstone boulder, giving the shelter a mushroom shape. The north end of the pillar contains a single red-colored rock painting of an anthropomorph, which appears to be wearing some sort of headdress, but otherwise does not appear related to the Buddha images found at the site. The base of the pillar once contained bas-relief Buddha carvings but they were chiseled away at some point and only the outlines of the reliefs remain. All around the base of the pillar at the south end are fragmentary remains of Buddha statues, mostly of the bases; they are possibly from the Lopburi period. The modern occupation of this site is in an auxiliary rock shelter just south of the sandstone formation, consisting of a shrine venerating three Buddha statues. Modern visitors today come to pray at the shrine and leave offerings of flowers, candles, and joss sticks.

Just northwest of the Wat Porta formation is a long collapsed sandstone shelter which once housed a Lopburi-style temple called Tham Phra, or the Buddha Cave (Fig. 5.5).

The roof of this shelter has collapsed splitting into half at the center sometime in the last 1,000 years, as the event must have post-dated conversion of the shelter to a cave temple. The remaining carvings that depict the Buddha are distinctly Khmer in character, while linear rock art can be detected underneath the collapsed roof in the east section of the shelter.

Other rock shelters encircling the sema stones include Tham Chang and Tham Mue Dang, both containing rock art of varying styles and condition. Tham Chang (Elephant Cave, although the site is not a true cave but rather a rock shelter) is named after a linear naturalistic drawing of an elephant, but also contains linear abstract rock paintings. Differing levels of deterioration suggest that the elephant painting, which is white in color and finely executed, is much more recent than the abstract red-colored linear paintings, which are more consistent with the undated, presumably older paintings. This in turn suggests at least two periods of artistry at the site, a situation consistent with other rock art sites in Phu Phra Bat.

The second rock shelter, Tham Mue Dang or the Cave of Red Hands, contains two forms of evidence for occupation. The first is the rock art, which is very faint, and includes that of a handprint. The faintness of the rock art despite the good protection provided by the shelter is a possible indication to the age of these paintings.

Fig. 5.5 The Wat Porta sema stones (foreground) in front of Tham Phra, a collapsed sandstone shelter. The break in the middle of the shelter contains Lopburi (Khmer)-style carvings of Buddha, while rock art is found underneath the collapsed section to the left. Udon Thani Province, Thailand (photograph by Noel H. Tan)

The second form of evidence is found in a small section of the sandstone formation, where the natural shelter has been accentuated by chiseling activity such that the walls have become straight and the floor smoothed. These modifications to the shelter imply that it may have been used for habitation at some point. Similar chisel marks on the walls can be seen at other rock shelters in Phu Phra Bat, such as Wat Porta, and are associated with sites used by forest monks for meditation.

Phu Phra Bat is thus functionally comparable to Phnom Kulen: both are sandstone plateaus, both contain a number of rock shelters with rock art, and both were used for religious activity during Angkoran times, as well as today.

Laos

Moving further north along the Mekong River, we come to the Pak Ou Caves, approximately 20 km north of the UNESCO World Heritage Site of Luang Prabang. There is a sort of cultural continuity and connection between the Pak Ou Cave sites and those in Cambodia and Thailand discussed above. For instance, Phnom Kulen is considered the birthplace of the Khmer Empire; the sites in Phu Phra Bat display

stylistic affinities with the Khmer empire in the tenth century; and the founding of Laos through the precursor kingdom of Lan Xang has its origins rooted in Cambodia.

The kingdom of Lan Xang is said to have begun with Fa Ngum (1316–1393 CE), a prince from Luang Prabang province who went to Angkor and married a daughter of the Khmer king. Winning the favor of the Khmers, Fa Ngum raised an army and from 1352 to 1354 CE moved his way north to present-day Laos to establish his kingdom of Lan Xang, named for the million elephants in his army.

The Pak Ou Caves, a pair of limestone caves at the confluence of the Mekong and Ou Rivers, is where Fa Ngum was to have instituted Buddhism as the state religion, over animism that is still practiced in the more remote regions of Laos. The Pak Ou Caves were first introduced to the west through the writings of Garnier, who visited it in the nineteenth century (Garnier 1873). The site is only accessible by boat and serviced by people who live in the village at the opposite bank of the river. Today, Tham Ting is a tourist attraction visited from Luang Prabang, its draw being "the cave of a thousand Buddhas." Since the sixteenth century, with the establishment of Luang Prabang as the royal capital of Lan Xang, thousands of Buddha statues are kept in the lower of the two caves—at its height over 4,000 images were said to be housed there. The site receives many local devotees during the new year who come to bathe the Buddha images and keep the water used thereafter for cleansing and blessing rituals.

The upper cave is a 5-min climb from the lower cave and is the deeper of the two cave systems with six or seven chambers. Despite the lack of natural light sources, Buddha images, sema stones, and altars have been built into various chambers of the cave, which also has its main access way blocked by a wooden gate. It is in this upper cave that we find rock art: first at the entrance beside the gate, and then inside the first chamber of the cave. Some of the rock art most certainly dates to the historic period—there is a green painting of a steamship or a paddle-wheel boat in the first chamber, as well as fragments of gold leaf, set in rows, that are the remains of Buddha images.

Two other groups of rock paintings, one black and the other red, are less easy to date because of the lack of iconographic details. The red paintings, located on the outside of the cave close to the gate, appear to be stylized anthropomorphs, possibly depicting some sort of headgear, posed with outstretched arms and bent legs (Fig. 5.6).

The black paintings, located in the first chamber close to the entrance, depict a series of black anthropomorphic figures with bent legs and bent elbows facing upwards. The black and red anthropomorphs within the site do not appear to be similar to each other and may not have been part of the same painting episode. However, the black paintings are reminiscent of rock paintings in Huashan Mountain in Guangxi Province, China, and Gua Batu Cincin in Kelantan, Malaysia.

The age of these paintings is uncertain. When asked, locals did not know the origin or the antiquity of these paintings. A tour guide felt confident that they were images created as part of offerings left behind by devotees; yet these paintings do not appear to fit with any artistic convention used by Buddhists for worship, even as

Fig. 5.6 The rock art at Tham Theung, at the Pak Ou Caves in Luang Prabang Province, Laos (photograph by Noel H. Tan)

other rock art in the site fits the convention for Buddha imagery. It is likely that the black and red rock art preceded the Buddhist usage of the site.

Myanmar

The last area to be discussed is the Padalin Caves in western Shan state, Myanmar. The Padalin Caves consist of two caves: Cave 1, a rock shelter that contains 2 chambers, and Cave 2, a deep cave system containing 11 chambers, some lit by natural holes in the ceiling. The caves were first reported in the 1969 during a geological survey, with rock art being noted for Cave 1 (Aung Thaw 1971). Cave 1 was systematically excavated twice, once during 1969 by Aung Thaw, the director of the Archaeological Department, and then again in 2004 by the archaeology department of the Ministry of Culture. Despite its deep, picturesque chambers, no archaeological material was found in Cave 2.

To date, Padalin Cave 1 is the only prehistoric site in Myanmar to have been systematically excavated; Aung Thaw's excavation in 1969 unearthed over 4,000 artifacts, mainly stone tools which he attributed to the Neolithic period. Moore (2007) has reassigned the date of the site to the late Palaeolithic or epipaleolithic. The excavations revealed a long sequence of stone tool working.

Fig. 5.7 Cave 1 of the Padalin Caves in Shan State, Myanmar. Note the stupa built in the 1950s on the left; the rock art—paintings and cupules—is found behind the fenced area (photograph by Noel H. Tan)

Carbon-14 results provide an early date range of 7,000–13,500 years BP. Some stone tools are reportedly stained red with ochre and, if so, would demonstrate a direct link to the rock art. The rock art itself occurs in the upper sections of a dividing wall that bisects the rock shelter into two chambers. There are a variety of red paintings, including stylized handprints, various animals, and a "sun" motif. In the past decade, the rock art has been consolidated by the archaeology department; a plastic varnish has been applied over the paintings to protect them, and drip lines installed over the panels to prevent water from running down the walls. Also discovered in the last decade are cupules, numbering over a hundred, at the base of the paintings, some of which appear to continue under the ground and suggest great antiquity (Taçon et al. 2004).

The site is currently closed to public. The lack of visitors is further mitigated by its fairly remote location with access to the site requiring a boat ride across a lake followed by a 2-h trek. The authorities have taken steps to protect Cave 1 by building a wall across the front of the shelter and access to the shelter is locked at all times. Prior to the construction of this wall, modern religious activity is manifested by the erection of a stupa in Cave 1. The stupa dates to 1957 and was built by a couple from a nearby village for the purposes of making merit (Fig. 5.7).

The multi-chambered Cave 2, which lies 300 m away, is reminiscent of the Pak Ou Caves in Laos and contains plentiful evidence for modern religious activity. The entrance contains several shrines to the Buddha, as well as a stupa built by locals seeking to make merit. Most of the chambers inside Cave 2 contain at least one stupa or a Buddha image, even in chambers that do not have any lighting and are engulfed in permanent darkness. As with the stupa in Cave 1, it appears that the construction of religious monuments only occurred in the latter half of the last century.

According to the locals that we spoke to, the caves themselves were discovered during the Second World War, and thus there appears to be no middle layer of occupation at the site—just a prehistoric use, and then a modern one. In this regard, the Padalin Caves are similar to Khao Chan Ngam in Thailand.

Confluences and Coincidences

In describing these six site complexes we do not mean to suggest any kind of direct connection between them; they are varied in terms of rock art style, archaeological material, and current cultural and political landscapes. We do not have secure dates for most of these sites, neither are there any similarities between the motifs in the rock art to suggest a common cultural link between them. However, it is striking that the anthropogenic usage of these places is similar: places where ancient peoples once painted rock art on walls are currently places where people (particularly Buddhists) worship or perform some sort of contemporary religious activity.

Munier (1998: 12) suggests that rocks in Thailand may have had sacred attributes since prehistoric times, and rock art may have converted them into "animist chapels." This is not to say that the rock art by itself is spiritual in meaning, but perhaps their presence signaled to subsequent users that the site was "special" and the images "sacred." Animist beliefs are not unique to Thailand and apply to the whole of mainland Southeast Asia prior to the arrival of Indic religions such as Buddhism and Hinduism. Today, Theravada Buddhism is the main religion of Cambodia, Thailand, Laos, and Myanmar and the beliefs in local spirits are integrated into these religions. However, understanding the interplay of Buddhism with the landscape is essential and there are nuanced differences between how Buddhism and the belief in spirits are expressed in different countries in this regard.

Barnes (1999) notes that caves (and presumably rock shelters) are important in Buddhism because Buddha himself went to caves for meditation. Consistently, we find that monks make frequent visits to these caves for meditation, particularly during Vassa, the Buddhist Lent observed by Theravada Buddhists. However, in talking to local residents and monks about the history of these places, there did not seem to be any connection between the rock art and the current religious practice. For example, the monks we spoke to in Thailand often talked about how good an area was for meditation, but never mentioned the presence of rock art as a deciding factor, if at all. In one case, at Wat Phuttabat Bua Ban, the abbot was unaware of the rock art present in the shelter until we informed him about it, despite his earlier assertion that his temple had been operating in the area for approximately 1,000 years.

Another Buddhist conception of sacred rocks is that they are islands emerging from the landscape after the previous world's destruction by water, wind, and fire, and that Buddha used these rocks to walk, sit, rest, and sleep (Munier 1998). This idea is readily seen in Phu Phra Bat, whose name as the "Mountain of Buddha's Footprints" already evokes the imagery of Buddha walking through the landscape.

In the case of Khao Chan Ngam in Thailand and Padalin Caves in Myanmar, there appears to be a long gap in the sites' history between the prehistoric rock painting period and the erection of the modern shrines and stupas, which only appear very recently—in the last 50 or 60 years. Prior to this modern activity, locals questioned reported that the area was deserted and devoid of previous habitation, which suggests that the paintings are very old, at least older than any generational memory.

Beyond the more-than-coincidental appearance of religious activity at rock art sites in mainland Southeast Asia, the cases of Phnom Kulen in Cambodia and Phu Phra Bat in Thailand fill the gap between the unknown past and the known present with evidence for religious activities in an intermediate period. In Phnom Kulen, a wealth of archaeological evidence—in the form of architecture, epigraphy, and rock carvings that can be dated through art historical methods—shows that this area was inhabited and actively used for religious use from the ninth to the twelfth centuries. Phnom Kulen's role in the Cambodian nationalist narrative as the birthplace of the Khmer empire as well as modern attitudes to the mountain as a place of power further add to the idea that Phnom Kulen was regarded a sacred landscape for a very long time. At Phu Phra Bat and nearby Wat Phuttabat Bua Ban, rock art, ancient monuments, and contemporary religious practice coexist side by side, but never interacting with each other.

Besides the presence of rock art and continuing Buddhist practices today, these sites share a number of similar landscape attributes. They are located far from urban centers and the settlement density in their immediate surroundings is very low. These sites are all associated with some sort of mountain, either located on the foothills or at the top. Often, these sites are also associated with a dramatic vantage point or threshold within the landscape. For example, the concentration of rock art found at the Wat Porta cluster in Phu Phra Bat is situated at a crossroad of many trails found in the mountain; the rock art at Wat Phuttabat Bua Ban overlooks a vast cliff face at the edge of a forest, while the Pak Ou Caves overlook the confluence of two rivers. Despite the lack of archaeological material in some of these sites, they are all good natural habitation sites, providing space for rest and ample shelter from the elements.

We suggest or propose that these six site complexes in Mainland Southeast Asia demonstrate that humans have been interacting with these places for a very long time. While these sites are places of historic or present-day religious ritual and practice, it is also likely that these rock art-marked landscape locations had the same or similar use in the more remote past. Whether recognized or not, each successive group has left visual or material remains that denote "sacred" or at the very least "special" place connections—places where one could interact with spirits and/or supernatural power.

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Chapter 6
Spirituality and Chinese Rock Art

Yasha Zhang

China is the only country in the world with more than a 1,000 years of historical literature referencing rock art. About 2,300 years ago the ancient book, *Han-FeiZi*, recorded "big footprints" (a rock engraving) to provide the world's earliest written record of a petroglyph (Liao 1939). According to ancient Chinese legends, there was a mysterious relationship between the birth of a remarkable leader and rock footprints. The great historical book *Shih Chi* (Watson 1993) reported that the mother of Zhou kingdom's ancestor Houji was able to conceive her child because she accidentally stepped on a giant petroglyph footprint. Li Daoyuan, a geographer who lived and wrote during the North Wei dynasty (fifth century AD), is known for his work *Shui Jing Zhu* (Commentary on the Waterways Classic), in which he reported on rock art in different geographic zones. Even with this rich historical literature it is difficult to find rock art interpretations based on historical records that apply to all time periods because of continual change. However, this literature provides an insight into the historical reasons for rock art, which aids in examining rock art in terms of spirituality.

Research History of Chinese Rock Art

Scientific investigations and studies of rock art in the country began in the twentieth century. In 1915, Huang Zhong Qin, a professor at Lingnan University, visited HuaAn county, Fujian province, and did a field survey of the petroglyph site Xianzhi-Tan (Fig. 6.1). Although almost 20 years passed before he published on this site, his field investigation and empirical research is recognized as the

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Fig. 6.1 Xianzhi-Tan petroglyph site in Fujian province (photo by Zhang Yasha)

pioneering scientific study in this area (Huang Zhong Qin 1935). By the end of 1949, rock art discovery in China was exclusively the realm of foreign archaeologists or explorers because at that time petroglyphs and pictographs seldom drew the attention of Chinese people. However, even these sporadic findings by foreigners were only occasionally mentioned.

Shortly after the founding of the People's Republic of China two pictograph sites were discovered in southwestern China that generated considerable discussion. These cliff painting sites are HuaShan in Guangxi province, which was found during the 1950s (Chen Hanliu 1956), and Cangyuan in Yunnan province, which was found during the 1960s (Investigation Team of Historic Institute of Yunnan 1966). These discoveries were big events in local cultural circles, but they were isolated from each other, and no one investigated their relationship to one another nor did they comprehend the significance of these rock paintings.

The real advances in rock art research came in the 1980s, initially with the rock art found in Yinshan (Fig. 6.2), which was followed by large-scale findings in northern China with sites in the Wulanchabu grasslands, Yinshan mountains, and Danbajilin desert in Inner Mongolia, among others. Rock images were found stretching from the east to the west in northern China eventually forming a very long and broad gallery of rock art (Cheng Zhenguo and Zhang Yuzhong 1984; Ge Shanlin 1980; Li YinPing 1988; Zhang Songbai and Liu Zhiyi 1984). Meanwhile, in the western part of China on the Qinghai-Tibet plateau, unique yak engravings were found. These discoveries were followed by sites in Sichuan, Yunnan, Guizhou, and Guangdong provinces extending the rock art gallery from the west to the south

Fig. 6.2 Mask-shaped petroglyphs in Yinshan, Inner Mongolia (photo by Ge Shanlin)

and southeast so that the distribution of Chinese rock art images formed a big "C" without any missing links (Chen Zhaofu 1991; Zhang Yasha 2011).

The golden age of Chinese rock art discoveries at the end of the twentieth century resulted in great achievements and were so exciting that they created shock waves in the academic circles of art history and archaeology. However, as is probably unavoidable, a depression came after the climax. During the next 10 years (1997–2007), Chinese rock art studies came to a standstill, but at the end of 2008 the rediscovery of the Juci Mountain petroglyphs in Henan province reignited the field (Fig. 6.3). Rock art studies benefited from a general survey to find and record the cultural resources of the region, which resulted in a large number of new rock art sites being found (Fig. 6.4). Additionally, at this time, the Rock Art Research Association of China (RARAC) began to communicate with the International Federation of Rock Art Organizations (IFRAO) and a relationship with other rock art researchers was established after 10 years of isolation. All these occurrences united to allow Chinese rock art research to embrace a resurgence.

Spirituality and Rock Art of the North

The rock art of the north spread from the east at the DaXingAn mountains in the northeastern China through the long and narrow Inner Mongolian plateau to the western end at Tianshan in Xinjiang, which is a distance of thousands of kilometers.

Fig. 6.3 Petroglyph in the Juci Mountains, Henan province (photo by Zhang Yasha)

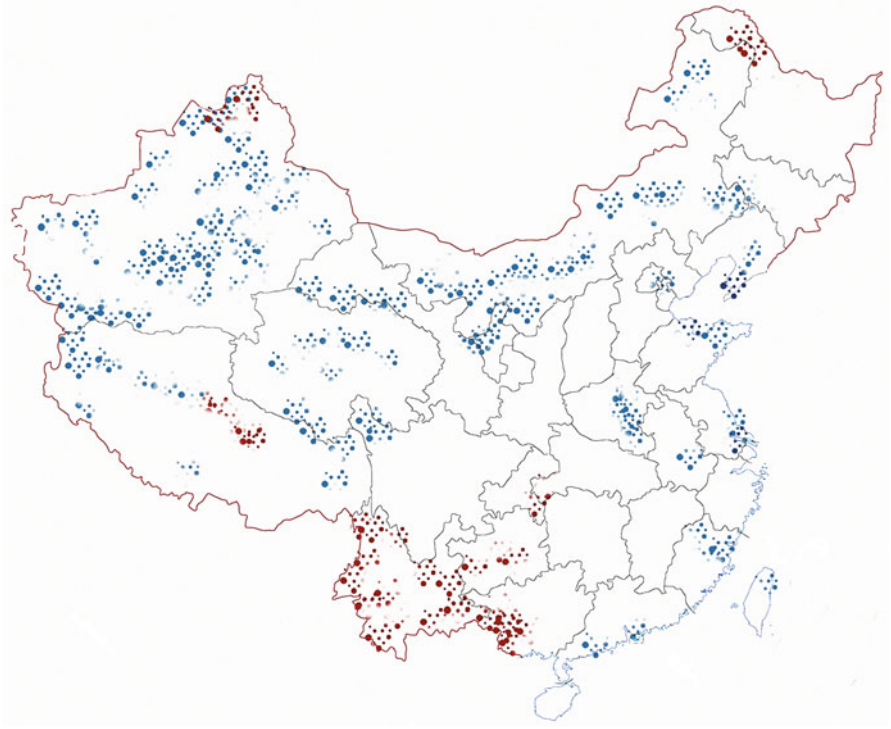

Fig. 6.4 Distribution map of Chinese rock art. Blue dots refer to petroglyphs, and red dots refer to pictographs (map by Zhang Yasha)

Fig. 6.5 Double beasts at the Yinshan Petroglyph site in Inner Mongolia (photo by Ge Shanlin)

These sites form an extremely long and broad distribution of the site type, which resembles the Great Wall and is as old and important as the famous Great Wall. Of course, this Rock Art Great Wall is more northerly, and its cultural attributes are also markedly different. The Great Wall was built by the southern farming empire as a defense from the invasion of northern nomadic ethnic groups, and it served as the economic and cultural boundary between them. However, the Rock Art Great Wall was created by the northern nomadic people because they lacked other ways of historical documentation within their society, and the rock art images were undoubtedly valuable historical records.

The many petroglyphs of the north are widely distributed from Inner Mongolia to Ningxia and Xinjiang, which are China's three main provinces possessing tremendous rock art resources. According to preliminary statistics, there are at least 100,000 panels and no less than one million individual figures. The most prominent theme of the northern rock art is the zoomorph. There are two kinds of animals—(1) grazing animals, which include sheep, deer, horses, dogs, etc. (mostly the present local biological species), and (2) carnivores, which include tigers, wolves, leopards, etc. In these scenes, animals are struggling or fighting with one another (Fig. 6.5), and herbivores are shown being chased by preying beasts. Through the world of animals, the artists show social survival rules of human society and the economic mode of production in the grasslands. Whether it is the breathtaking scenes of animals fighting or fierce pictures of beasts being chased, these images remind us that the law of the wild is not only the basic law of the animal world but also the unique philosophy of life in the northern nomadic region (Li Fushun 1986; Sun Xinzhou 1989).

The animal themes of the northern rock art also show us the religious orientation of these ancient peoples. There are two subjects associated with these beliefs that

Fig. 6.6 The Deer Stone petroglyph in the Helan mountains, Ningxia province (photo by Ge Shanlin)

are displayed in the rock art—(1) the embodiment of *Animal Gods* for the northern nomads, and (2) the concept of *Reproductive Worship*, the latter which was emphasized by representations of animal hoof prints or copulating animals.

Animal Gods were portrayed as hordes of small animals ranked in the body or on the side of huge animal images such as ox or deer. This indicates that giant animals were the guardian angels of the small animals or animal species (Ge Shanlin 1980, 1996). These large animals were thought to possess a godhead or mysterious power. Deer Stones, which were widespread in Inner Mongolia and Xinjiang (Fig. 6.6), showed an unusual animal of power, one with combined parts. For example, the image might have a raptor beak, deer horn, tiger stripes, and a horse's body with wings, making it a powerful god beast with supernatural connections.

Reproductive Worship in the northern rock art took a variety of forms. For example, an arrangement of a large number of animal hoof prints appears to be the product of many magic processes (Fig. 6.7). Another way of portraying this concept in the northern region is by arranging tiny dots in an orderly fashion around the body of bigger animals, which appears to imply the nomadic people's hope of high animal reproduction (Ge Shanlin 1989; Chen Zhaofu 2001).

Spirituality and Rock Art of the Qinghai-Tibet Plateau

Yaks are the main rock art images in the Qinghai-Tibet plateau. There are two themes in Tibetan rock paintings—(1) hunting wild yaks (Fig. 6.8), and (2) grazing yaks. Yak worship has a deep and long tradition in this region, and even today yak

Fig. 6.7 An animal hoof print arrangement in the Wulanchabu grassland, Inner Mongolia (photo by Chen Zhaofu)

Fig. 6.8 Wild yak at Sence of Hunging, Qinghai province (photo by Tang Huisheng)

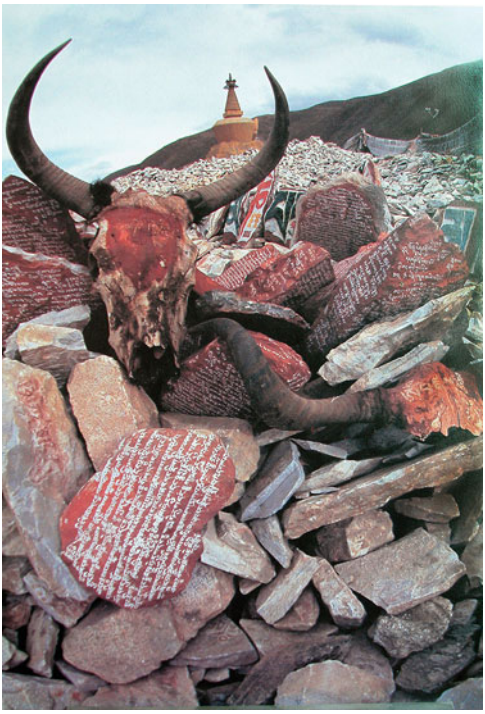

Fig. 6.9 Yak horns are deposited on Mani Stone altars during the present day in western Tibet (photo by Zhang Yasha)

horns are universally deposited on Mani Stone altars in Tibet (Fig. 6.9). The yak is found in high-altitude regions, and its body is large and massive, its bristles are thick, and it is resistant to coldness and hypoxia. Because of these characteristics, the yak is deeply admired by Tibetan people. Within the rock art of this area there are many images of the yak, which is considered a religious symbol to these people (Li Yongxian 1998; Tang Huisheng 1989; Zhang Jianlin 1987; Zhang Yasha 1999).

Although there is a long tradition of yak worship, based on the vast number of images on the rocks, it appears that another god is just as important, if not more so, in northern Tibet. This is a bird, generally called *Khyung* by local people, worshiped by these ethnic groups. The bird is characterized by stretched wings, horns on the head, and a manlike body with four limbs (Fig. 6.10). *Khyung* is also the greatest god in the primitive Bon religion.

Bon religious literature records that *Khyung* was the ancestor god of the *Zhang-Zhung* tribe. Other ancient Tibetans called these people either *Khyung* or *Zhang-Zhung*, while tribal members called themselves *Zhang-Zhung*. The name means a place (*Zhang*) of powerful groups (*Zhung*). *Khyung* is the same as *Zhung* in the ancient Tibetan pronunciation. Thus, it appears that *Khyung* (*Zhung*) refers not only to the tribe but also to the god they worshipped. *Zhang-Zhung* continued to be called a manlike bird tribe in the Dunhuang manuscripts written in the ancient Tibetan language. Also supporting this conclusion is that both in Tibetan rock art and in

Fig. 6.10 *Khyung*, a powerful god, shown in the paintings of a northern Tibetan. The god is recognized by its stretched wings, horns, and anthropomorphic body with four limbs (photo by John Vincent Bellezza)

Fig. 6.11 A bronze sculpture of *Khyung*, the most powerful god of the Bon religion (photo by Zhang Yasha)

Zhang-Zhung culture there is evidence that the holy bird *Khyung* (Fig. 6.11) was worshiped and was considered the tribal totem (Tshering Thar 2005; Zhang Yasha 2005, 2006a, 2006b, 2007, 2009).

Thus, Tibetan rock art offers clues to the migration and expansion of the ancient *Zhang-Zhung* people and reflects the developmental sequence of the primitive Bon

Fig. 6.12 Sun, tree, and bird images, which are original symbols of the early Bon religion shown as they occur within the panel in the *top photo* and shown as extracted line drawings below (photo and drawings by Li Yongxian)

religion as it changes to the later *Yong-Zhong* Bon religion. Representative of the original Bon religious worship were images of realistic natural objects, such as the sun, moon, trees, and birds. The meanings hidden behind these symbols appear to be associated with the ethnic worship of the *Tree* god and *Bird* god. Contemporaneously, the tribe also apparently worshiped the sun and moon (Fig. 6.12). The people who made this rock art likely came from the eastern Tibetan plateau, which is covered by forest, so the *Tree* sign is a representative symbol to assure that the tribe does not forget their beautiful, hometown forest. Additionally, historical literature for this ethnic group records that they had a custom of tree god worship and a custom of practicing divination by the bird god. This group then moved west, and when these people settled on the westernmost Tibetan plateau and established a kingdom, a critical change occurred within the Bon religion. A large number of images of the pagoda shape and the god bird *Khyung* appeared together

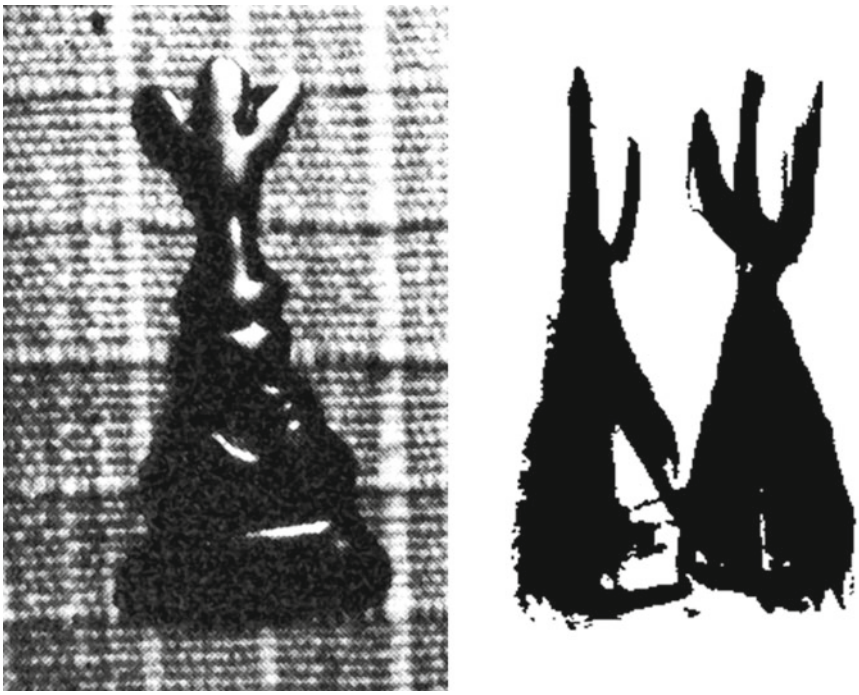

Fig. 6.13 The Khyung altar towers in Tibet shown in tapestry media on the *left* and rock art media on the *right* (photo by John Vincent Bellezza)

in the rock art of Tibet. These new depictions of towers appear to represent altars used for the worship of *Khyung* (Fig. 6.13). These new images are associated with the kingdom of Zhang-Zhung, which means that the earlier Bon religion had finished its process of changing into the Yong-Zhong Bon religion (Zhang Yasha 2008). Thus, the comprehensive social life of ancient *Zhang-Zhung* people can be reconstructed through Tibetan rock art, which is the most direct and also certainly the most vivid pictorial material available to teach us about the ancient *Zhang-Zhung* kingdom (Zhang Yasha 2006b).

Spirituality and the Pictographs of Southwestern China

The most outstanding characteristic of southwestern pictographs is that the images were all painted in red. The geological structures of the cliffs are complex rocks with little hardness, so they are not suitable for carving. In addition, the climate is rainy and moist resulting in luxuriant vegetation and the use of red pigments made the rock art distinctive and easily identified. Additionally, the red pigment probably had a religious purpose. Red, whose hue is strong and full of contradiction, could be related to death or may be the symbol of vitality and divine power. A case in point

Fig. 6.14 The most famous scene at the Huashan pictograph site in Guangxi province. People are shown with raised arms dancing and praying (photo by Zhang Yasha)

is the depiction of the solemn religious sacrificial scene at the Cangyuan pictograph site in Yunnan province. These red paintings present a strong visual effect, and the minds and feelings of the viewers would have been stunned (Wang Liangfan and Luo Xiaoming 1989; Wang Ningsheng 1984).

The second characteristic of southwestern rock art is its focus on religious sacrifice scenes. Some of these are of large scale with overpowering momentum. For example, the Huashan pictographs along the Zuojiang River in Guangxi are a mass of red pictures on the cliff at a bend in the river. The site extends intermittently for hundreds of kilometers with almost all the images repeating the theme of large mass sacrifices. The most famous scene is 40 m high and about 21 m wide with a total of 1,818 images (Fig. 6.14). These images are mainly humans with raised arms dancing and looking in a fixed direction toward dominate humans or gods, who are portrayed as tall, with uplifted arms, squatting legs, and a dog lying under their feet (Wang Kerong et al. 1988).

Jinsha River pictographs are in the northwestern part of Yunnan province. Although the images are red, their styles and subjects are different from those in the rest of the southwest, which mostly date to the Bronze Age (ca. 3000–2000 BP) and show realistic social and religious life. Conversely, the Jinsha River paintings are of a typical zoomorphic style with vivid and realistic characteristics. These animals are especially detailed in the portrayal of their small heads with strong and rotund bodies (Fig. 6.15). Some foreign rock art experts believe that the animal figures are similar to the cave painting style in Europe during the late Paleolithic (Paul Tacon

Fig. 6.15 Animal-style pictographs of the Jinsha River sites in Northwest Yunnan province (photo by Li Gang)

et al. 2011). Geographically the Jinsha River area is on the edge of the Qinghai-Tibet plateau and belongs to the upper reaches of the Yangtze River basin. Although there are hardly any people in this area today, in ancient times it was an important traffic artery between China and Southeast Asia (He Limin 1994; Li Gang 2006).

Spirituality and Petroglyphs of Eastern China

Eastern rock art is mostly petroglyphs on huge rocks that are north of Chifeng in Inner Mongolia and extend from the Liaodong peninsula and Shandong peninsula through Jiangsu province to the southeast coastal provinces. The most common characteristic of the eastern rock art is the consistency of the application technique. Apart from a few red paintings in the DaXingAn Mountains, all the images have been chiseled or grounded (Fig. 6.16). The second prominent characteristic of the region is that almost all the rock art sites have some recess (indentation) or cup shape, which are generally known as cupules around the world (Fig. 6.17). Recess rock cuttings can be divided into two kinds—(1) deep cup shape, and (2) shallow and small recess (indentation) or cup. The vast majority of these are circular concave holes, but a few of them are square recesses (Li Hongfu 1997; Lin Tao 1996).

Many recessed rocks have been found in the Juci Mountains in the middle part of Henan province, Xinzheng, in the past few decades. As early as 1988, Juci

Fig. 6.16 Mask-shaped petroglyphs in Chifeng, the southeasternmost area of Inner Mongolia (photo by Wu Jiacai)

Fig. 6.17 Some recess rock cuttings (cupules) in Fujian province, southeastern China (photo by Chen Zhaofu)

Fig. 6.18 Lines engraved on the rock in the Juci Mountains in Henan province (photo by Liu Wuyi)

Mountain recessed petroglyphs were identified, but it was 20 years before these sites had an impact on academia and attracted public attention. It is difficult to determine the cultural significance of these simple and crude recesses on rocks, which include both circular to square and linear grooves (Fig. 6.18) because they are so different from the elegant artistic paintings (Liu Jihui 2012; Liu Wuyi 2010).

Mask-shaped images are another important and common theme in the eastern petroglyphs (Fig. 6.19). The site of JiangJunya, in Lianyungang city at the easternmost point of China, has human faces, suns, rice, and a large mass of round indentations (cupules). In the early 1980s, archaeologists pointed out the importance of this historical heritage and suggested that it could be the oldest rock paintings discovered in China (Li Hongfu 1987). However, this also appears to be a sacrificial place related to the primitive DongYi tribe (Li Hongfu 1987; Tang Huisheng 2004, 2012). The petroglyphs were made after the introduction of agriculture, but they show that fishing and hunting were still important to the people's economic life. It has been suggested that this site may be related to the origin of the primeval calendar (Gao Wei 2007).

The mask petroglyphs and concave or recessed engravings (cupules and lines) in the eastern region of China appear to be an ancient cultural phenomenon found around the Pacific. The main rock art theme in the north semicircle of the Pacific includes images of masks and recesses, while the main rock art theme in the south Pacific includes images of the vortex, serpentine, and recess series (Song Yaoliang 1992).

Fig. 6.19 Human faces and rice at the JiangJunYa site in Lianyungang, Jiangsu province (photo by Chen Zhaofu)

Remains of the Neolithic and Bronze Age archaeological cultures are abundant and developed in this region of eastern China. The large number of nonrepresentational rock art images, such as recesses (cupules and lines) and abstract symbols as well as simple masks, are difficult to relate to these archaeological cultures, but researchers have noticed that there seems to be a relationship between these figures and the megalithic sites of eastern China (Gao Wei 2007). Several suggestions about the function of the recesses (or cupules) have been put forth and include reproductive worship (the cup being associated with vulvas), ancient astrology, and border markers for ethnic groups, such as the DongYi. Another idea is that some large cupules represent access points to celestial places with ancient altars (Tang Huisheng 2012). Some of the larger, deep cup-shaped holes could have been used as a holy vessel for holding sacrificial blood. As for the masks, these may represent worship of the national ancestors (Song Yaoliang 1997).

Conclusions

Chinese rock art, whether realist or abstract, zoomorphs or simple cupules, can be connected to early human religion and spirituality, with different kinds of images used in different regions of the country at different times as people continued to change their ways of thinking. Researchers believe that cupules, abstracts, and simple mask images are the earliest rock art in China (Tang Huisheng 2012; Zhang Yasha 2011). Scenes with animals or human increased in the rock art and probably in the spiritual life of people in the Bronze Age.

Chinese rock art associated with religion and spirituality is also clearly based on the economics of the region. In the rock art of the northern grasslands, the animal gods and reproductive ceremonies were made by nomadic groups. On the Qinghai-Tibet plateau, changes in the indigenous Bon religion can be traced through changes in rock art, which also reflects movements of people. Southwestern China is an area of pictographs, and the large painted sites in this environment of closed mountains and valleys indicate that people focused on the strong function of the social organization. Collective tribal dance in this region was used to communicate worship to tribal ancestors. In the old rock art of eastern China are the simplest of abstracts, including many recesses or cupules. The meaning and function of this kind of rock art is the hardest to decipher due to its ambiguity, but even here we can determine some of their functions, and most have a spiritual connection. The cupules have a variety of suggested functions, and some of those are associated with ritual and spirituality, including seeking help from the supernatural to increase fertility (reproductive worship), access points to the celestial world where ancient altars await, and use as containers for sacrificial blood. Thus, although the meaning of rock art is difficult to ascertain even in an area with ancient historical records, the spirituality of the early human world and religious beliefs is reflected in China's rock art.

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Chapter 7
Conflict on the Frontier: San Rock Art, Spirituality, and Historical Narrative in the Free State Province, South Africa

Jamie G. Hampson

Introduction

Few rock art researchers in southern Africa today question the notion that San rock art was produced within a ritualistic framework; ethnographic evidence has shown that San paintings and engravings in numerous southern African regions indicate a belief in a tiered cosmos and the interpenetration of cosmological tiers by shamans (Lewis-Williams 1981; Lewis-Williams and Dowson 1989; Lewis-Williams and Pearce 2004). The heuristic potential of this framework has allowed recent studies (Blundell 2004; Challis 2005, 2008; see also Hampson 2011) to focus on social and individual histories and to incorporate rock art into the production of the past.

Relating rock art to ritualism, animism, or shamanism does *not* remove it from the historical arena. A key question, however, remains: Even if we can attribute specific paintings to certain individual artists, does San rock art ever depict or commemorate particular historical events in a strictly narrative sense? By investigating the remarkable paintings at the BOS 1 rock shelter in the Free State Province of South Africa, I offer suggestions as to how researchers might begin to answer this deceptively simple but overlooked question.

Local histories in the Free State: conflict in a frontier society

This investigation of the BOS 1 paintings close to the Caledon River near the town of Wepener in the Free State Province of South Africa (Fig. 7.1) begins with a specific historical incident that occurred nearby. In 1850, a Bushman or San man named Maglatsi asked a European *bywoner* or farm tenant—a man named van Hansen—for tobacco (van Hansen 1859: 134; Collins 1907: 15; Midgely 1949: 270–271).

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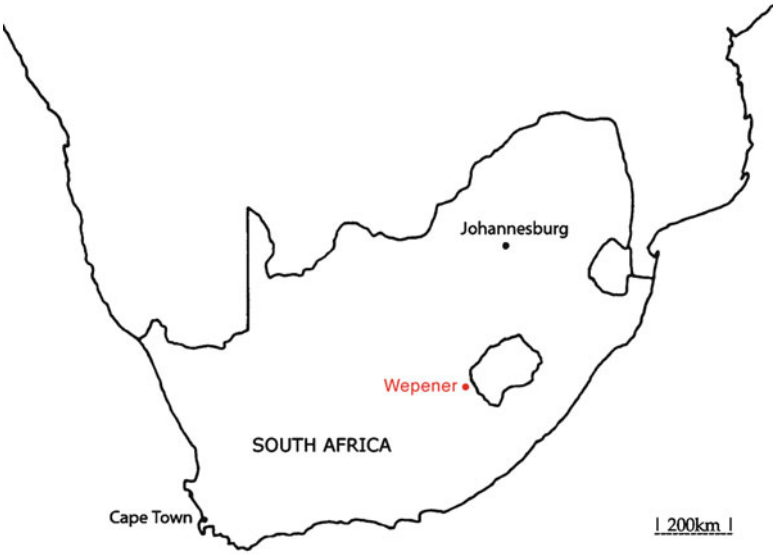

Fig. 7.1 Map showing the town of Wepener, close to the South African border with the landlocked country of Lesotho (map drawn by J. Hampson)

Van Hansen kicked Maglatsi, and refused. Later that day, Maglatsi and at least 12 other Bushmen attacked and set alight van Hansen's house, and killed him, his wife, their three children, and two Khoe (herder) servants.

A Boer commando, aided by a Cape corps and local San trackers, located van Hansen's attackers and during a skirmish killed six of them. The remaining six Bushmen were arrested and subsequently hanged in Bloemfontein, the provincial capital about 80 km distant. Wepener locals believed that one member of the original group escaped and fled towards the Caledon River, a few kilometres from the burned house (Collins 1907; James 2000). It is this alleged escapee whom the Wepener locals believe may have depicted these historical events in the BOS 1 rock shelter. Before addressing the authorship of the rock art images, I outline the nature of frontier society in the Orange Free State during the nineteenth century.

Violent and non-violent conflicts were not uncommon, as in most regions of creolisation (Lightfoot 1995; Lightfoot and Martinez 1995). Besides the San (Maglatsi and his colleagues) and the Boers (the van Hansens), there were British and French missionaries, deserters from British and German armies, Khoe herders and other Khoe-speaking groups (including Koranas), Afrikaans-speaking creolised Griquas and Bastaards, Sotho-speaking clans of various allegiances (including Batlokwa or Mantatees), and more. Many of these groups were often involved in disputes over land and property rights (Stow 1905; Collins 1907; Etherington 2001; Ouzman 2005).

In the late 1700s, before the competition for territory intensified, the San had occasionally welcomed the Boer hunting parties that came north from the Cape, usually because of the feasting that followed the slaughter of hippo and other large game by the farmers' muzzle loaders (Van der Merwe 1936; Dracopoli 1969; Etherington 2001; James 2000). By the nineteenth century, however, these intergroup hostilities took the form of regular warfare waged against the San by the Boers, British, Sotho, and other agricultural settlers. Despite treaties between the groups—treaties that were often made, broken, remade, and broken again—the relationships among the farmer-settlers and the hunter-gatherer (and increasingly creolised) San were marked by profound distrust and prejudice. According to George Stow (Stow and Bleek 1930: 215):

> The pastoral tribes of natives and colonial flock owners could not appreciate the feelings of attachment which those who lived by the chase alone had to their hunting grounds. … Their … utter contempt for all pastoral or agricultural pursuits, made them to be looked upon by all the larger and more robust of the African races as a species of wild animal which it was praiseworthy to exterminate.

By 1850, Bushmen were frequently indentured by settlers and sent to work for farmers in and around Bloemfontein (Midgely 1949: 270; Legassick 1989; Etherington 2001). After the killing of van Hansen and his family, at least 100 San in the area were arrested and put into Boer service, although many of these men and their families escaped and fled to the hills (Midgely 1949: 270; James 2000). For the most part, the raiding and stealing of Boer cattle stopped, except for a few instances when Bushmen allied with Basotho chiefs (Midgely 1949: 271; Etherington 2001). In fact, it was rumoured that Maglatsi and his allies were adherents of the minor Basotho chief Poshili (Collins 1907: 15; James 2000). On the other hand, there is also evidence to suggest that Boers employed Basotho chiefs (such as Malapo) to arrest and even to kill the San who escaped after the patrols and arrests of the early 1850s (Montgomery 1914: 108). In a creolised frontier society, allegiances rapidly alter.

In addition to ethnographic and historical evidence, archaeological artefacts confirm that there was multidirectional contact between farmers, pastoralists, and hunter-gatherers. European bullets, metal, and cloth have been found in rock shelters in the Caledon District alongside Bushman stone tools and grindstones (Brooker 1980; see also Wright 1971; Sampson 1974).

Having addressed some of the complexities of the nineteenth-century frontier society in the Free State, I now consider the specific San painting at BOS 1 in a shallow rock shelter close to the Caledon River. The rock art—in faded red, black, and white pigments—is not well known in the area (James 2000), and there is only a fleeting reference to it in print (Brooker 1980). Local farmers that are aware of its existence have for some years suggested that it depicts the skirmish between the fugitive San and retaliating Boers after the murder of van Hansen and his family. They believe the individual that survived and fled to the river may have painted it (James 2000).

Although many researchers have successfully argued that the "common sense" or "gaze-and-guess" approach to rock art interpretation will almost certainly lead to false conclusions, the suggestions of the local Wepener farmers raise interesting issues regarding San rock art and historical events. It *is* possible that a fugitive San artist produced rock art—including the images in BOS 1—at some point after the events of 1850. But how likely is it that these images depict a specific incident? In order to answer this question, and before considering the applicability within the San world view of the word "depict", I describe the remarkable painting and adumbrate some of the pertinent motifs.

Site BOS 1: Painted History?

Two groups—or what some researchers have dubbed "processions" (Smuts 1999; Hampson et al. 2002: 18)—of human figures are depicted in the main panel at BOS 1 (Figs. 7.2 and 7.3).

One group, painted in black, faces the left of the panel, and the other, predominantly red, faces the opposite direction. I have divided the figures into six somewhat arbitrary groupings in order to show the detail in the re-drawings and photographs.

There are 12 black figures to the left of the panel, all of which hold a club-like piece of equipment in their raised right hands. The legs of these figures are unusual: the calf muscle is not as clearly defined as it is in other San paintings. Three doglike animals separate two subgroups of six: that on the left (subgroup 1) comprises six figures with penises and that on the right six figures with no discernible penises. The figures on the right (subgroup 2) are all touching their waist with their left hands; across their waists are three parallel lines. Three of the figures of subgroup 1 are also depicted with their left hand at their waist, but there are no parallel lines. The human figure at the rear of this subgroup, closest to the canines, has his left arm outstretched towards them. The only figure in the entire panel with his head turned backwards is the leading figure in subgroup 2 to the right of the doglike animals.

Fig. 7.2 Redrawing of main panel at BOS 1 rock shelter, Free State Province, South Africa (~800 mm × ~200 mm) (traced by J. Hampson and W. Challis)

Fig. 7.3 Photograph of main panel at BOS 1 rock shelter. Note the white bags at centre right (photo by J. Hampson)

All but 3 of the 29 figures in subgroups 3 through 6 to the right side of the panel—most of which are painted predominantly in red—have an emanation from the shoulder, protruding behind them towards the left of the panel. Subgroup 3, immediately to the right of the black figures, consists of seven figures, all in red, and all with a white band across the waist and another across the shoulder. Four of these figures have similar white bands across the knees; two of them also have white bands around the ankles.

Farther to the right is another procession of six figures designated subgroup 4, with the three at the far end of the panel partially obscured by a calcite wash. At least five of these figures have white bands across the waist and shoulder (none have bands across the knees or ankles), and all have emanations (some longer than others) from the shoulders.

Below the red figures of subgroup 3 lies an alignment of nine figures belonging to subgroup 5 (Figure 4). The eight red and one black image all face to the right of the panel. Only the black figure does not have an emanation from the shoulders, and one smaller red figure (second from the left and the only one with white bands across waist and shoulders) seems to be carrying a sticklike object in one hand. Six of the figures, including the one in black, are partially hidden by a disproportionately large white bag-like object from which 31 black "tassels" emanate; two of these tassels overlap.

The last subgroup to the far right side of the panel comprises at least seven figures. One is red, and the others black *and* red—usually with a black torso outlined in red. Four of the figures have emanations from the shoulders; the first four in line are partially covered by another, smaller white bag-like object with approximately 24 red tassels. One of the figures has a white torso. To the right of the seven subgroup 6 figures is another white bag-like object that covers remnants of red pigment, most probably additional figures. The calcite wash referred to earlier obliterates most of the details on this third bag-like object, but three black tassels emanate from the right-hand side.

In total, the four subgroups 3 through 6 comprise at least 29 figures, only one of which is depicted entirely in black. Nearly all of them have emanations from the shoulders, and many possess white bands across the waist, shoulders, and ankles. In contrast, the subgroups 1 and 2, facing left, contain 12 black figures, all of whom carry club-like equipment, and six of whom have parallel lines across the waist.

Who are these faded depictions of? Are these the van Hansen family and the Boer authorities (on the right), eager for revenge after the attack on the homestead? The red figures appear to be clothed and carrying weapons. And to the left, the naked, fugitive Bushmen, fleeing for their lives? There is a romance to these unsubstantiated suggestions that is still attractive to many. Narratives, especially those that involve arson and bloodshed, excite. The answer to these questions involves an understanding of certain relevant aspects of the polysemic complexity that underlies southern African San rock art.

Painted History? San Art and Historical Narrative

We can no longer afford a gaze-and-guess approach to rock art, especially when rich ethnographic and historical resources are available. Many early travellers and researchers in South Africa (e.g. Kolben 1731; Barrow 1801; Alexander 1837; Tindall 1856; Balfour 1909), as well as those later in the twentieth century, ignorant of these ethnographic resources, or unwilling to use them, justified the problematic gaze-and-guess approach by asserting that the meaning of the art was self-evident: here were depictions by "primitive people" that reflected "daily life". Balfour (1909: 8) in particular spoke of the "representations of scenes and events in Bushman life-history", implying that rock art could be "read" as easily as the reports of early colonial travellers. Disastrously, the act of "reading" the narrative that was putatively inherent in the images—and the subsequent induction of meaning from that reading—was considered to be a straightforward task. Until the development of heuristic models in the 1970s and beyond (Lewis-Williams 2006), the complexity and ritualistic nature of San art were overlooked.

San paintings featuring European and Nguni-speaking settlers are widespread throughout southern Africa (e.g., Vinnicombe 1976: Figures 12–15; Johnson 1979: Figures 97, 98; Campbell 1986; Lewis-Williams and Dowson 1989; Dowson 1994; Loubser and Laurens 1994; Thorp 2000; Ouzman 2003; Challis 2008).

Several features in these "contact" era paintings unequivocally show European, Nguni-speaking, or creolised settlers—or their accompanying material culture. Indeed, many rock art sites show clearly painted wagons, horses and rifles, cattle, and other domesticated animals, including dogs. The simple depiction of these items, however, does not unambiguously denote European arrival. For example, dogs were domesticated before the colonial era, and non-European groups also had wagons (Brooker 1980; Lewis-Williams 1983: Figures 83–87; Ouzman 2003; Loubser and Laurens 1994; Challis 2008). Regardless of the era, when the San—or, indeed, creolised groups (Challis 2008)—wanted to make a depiction unequivocal, they did.

Many of the colonial era contact paintings also incorporate features that point to a shamanistic context (Vinnicombe 1976; Campbell 1986; Lewis-Williams and Dowson 1989; Dowson 1994; Ouzman 2003; Challis 2008). These features highlight the fact that rock art—whether produced during or prior to the arrival of Khoe-speaking herders, Bantu speakers, or European farmer-settlers—was not made "merely" to record or commemorate events. Western-style narrative and commemoration is not a universal of human image-making or image-meaning, so looking at paintings made by hunter-gatherers and other non-Western groups through Western eyes from a perspective of commemoration yields flawed interpretations. Even specific and the so-called historical events in San rock art are, in fact, implicated in shamanistic beliefs and rituals.

Also noted above is the fact that power relations between Bushmen, farmer-settlers, and other groups were not unidirectional. Because the numbers of nineteenth-century San communities were so reduced and resources so greatly diminished in many regions in southern Africa, hunter-gatherers and herders were obliged to forge new relationships with their agro-pastoralist neighbours—both European and Nguni speakers—in order to survive. Importantly, San, herder, and creolised groups forged these relationships *within* their extant sociopolitical frameworks and indigenous world views (Dowson 1994; Thorp 2000; Ouzman 2003; Blundell 2004; Challis 2008). Many farmers, on the other hand, believed that the San's rainmaking abilities could determine the outcome of their harvests, and therefore feared the Bushmen at the same time as acknowledging their dependence on them (Jolly 1996, 1998; Thorp 2000; Mitchell 2002). For similar reasons, where we *do* find unequivocal depictions of settlers in San rock art, these images do not necessarily depict conflict; rather, they are concerned with sociocultural and political negotiation (Dowson 1994; Ouzman 2003; Blundell 2004; Challis 2008).

As Thomas Dowson (1994: 333) has argued: "Bushman shaman-artists were using two of their traditional techniques (entering the spirit world and making rock art) to engage the new threat"—the threat posed by the European and Nguni-speaking settlers. Once the settlers arrived, characters in the spirit world included not only Bushman spirits but also the new arrivals; settlers became part of the social production of rock art. Depictions of Europeans and other agriculturalists, therefore, represent the San negotiation of power with those settlers *in the spirit world*; there is no evidence to suggest that actual (historical) events—whether antagonistic or not—are depicted. Moreover, the production of rock art—both before and after

the arrival of European settlers—was an *engaging* process; paintings were not simply illustrative, commemorative, representative, or reflective depictions—they were powerful things in themselves, and reservoirs of potency (Lewis-Williams and Dowson 1989; Lewis-Williams 1995; Lewis-Williams 2006). Paintings also helped to "dissolve" the rock face membrane between this world and the next (Lewis-Williams and Dowson 1990; Lewis-Williams and Pearce 2004).

Sotho, San, Bags, and Ritualistic Contexts

Having outlined the complexity of San rock art produced both before and after contact with agro-pastoralist settlers, I return to the specific rock art panel at site BOS 1. As with most rock art sites in southern Africa, we do not know exactly who painted the images. Neither do we know how old the paintings are (cf. Bonneau et al. 2011, 2012); they may or may not predate the arrival of agro-pastoralist groups. This lack of chronological certainty, however, is not indispensable to the argument developed here; more important is the fact that it is unlikely that the ritualistic images illustrate a literal or a narrative event. Because San (and creolised San) paintings are ritualistic, they are always more than mere narrative—they were not produced simply to "tell a story". Despite the historical accounts of San being "shot out" by a Boer commando, and of Cape corps close to the rock shelter, it is improbable that (a) the red figures in the rock art are Boer (or European) soldiers; (b) the black figures are fugitive Bushmen; or, especially, c) together, the paintings depict the events of 1850.

The figures painted in black (Figure 2; subgroups 1 and 2) may depict *Sotho* men. If this is true, we could conclude that the painting categorically does *not* show the 1850 confrontation in a narrative sense, since the Sotho were not involved. Why might the black figures depict Sotho men? The three parallel lines across their waists resemble Sotho shields, depictions of which are also found at many rock art sites nearby (Vinnicombe 1976; Brooker 1980; Ouzman 2003; Loubser and Laurens 1994; James 2000). Also on neighbouring farms is an abundance of unequivocal images of cattle, sheep, and Sotho warriors; contact art is not uncommon in the Caledon River valley (Brooker 1980; Ouzman 2003; James 2000). As noted above, *resemblance* is not enough to develop convincing conclusions, but Sotho warriors also carried club-like knobkerries (Campbell 1986: 261) and owned hunting dogs (Lee 1999)—not unlike those on the left of the painting at BOS 1. The absence of the calf muscle also suggests (but by no means proves) that the artists were not depicting Bushmen, and there is nothing to suggest that the black-painted figures represent Boer settlers. Exactly why the San may have depicted Sotho figures is a more difficult matter, and one I do not attempt to unravel here, other than by reiterating the importance of the concept of San negotiation with the newly arrived settlers, in both the real and the spirit world through the ritualistic act of painting.

The red figures (Figure 2, subgroups 3 through 6) facing in the opposite direction to the black ones might depict soldiers, but are most probably depictions of

Bushmen; these images are consonant with what we know of San rock art and cosmology. To simply state that the emanations from the shoulders are guns and that the white bands across waist and shoulders are belts and bandoliers is not enough: evidence is required. The paintings at BOS 1 include several shamanistic components, suggesting that the processions of both red/black and also red figures to the right of the panel are connected in some way to shamanistic activity, and to the dance used to achieve altered states of consciousness and entry into the spirit world (Lewis-Williams 1981; Lewis-Williams and Dowson 1989; for discussion on processions see Smuts 1999; Hampson et al. 2002: 18).

The white shoulder, waist, knee, and ankle bands could conceivably depict (albeit ambiguous) military regalia, but, as argued above, even if the red figures *are* depictions of European soldiers, the panel is *not* a simple, literal depiction, or representation, of the event described in the local history. We know that various San, Sotho, and creolised groups sometime displayed this regalia, and that they possessed muskets and horses (Orpen 1874; Collins 1907; Jolly 1996; Challis 2008), but there is strong evidence too suggesting that the bands refer to the sensation of constriction experienced by shamans in trance, caused by boiling potency (Lewis-Williams and Dowson 1989). Bushmen in the Kalahari describe their stomach tightening "into a balled fist" (Katz 1982: 46) and their sides being "fastened by pieces of metal" (Biesele 1975: 155, 1980: 56). Similar symbolic depictions of this sensation are found in rock art panels throughout the subcontinent (e.g. Dowson 1989: Figures 4–8; Hampson et al. 2002: 26). Moreover, as mentioned above, there are examples of *unambiguous* military accoutrements in many sites nearby (Lewis-Williams 1983: Figures 83–87; Ouzman 2003; Loubser and Laurens 1994).

The emanations from the shoulder also point to a shamanistic context. Although they have been described locally as poorly drawn rifles, ethnographic evidence again suggests an alternative—that the lines represent the expulsion of sickness from the *n*//*ao* spot at the nape of the neck (Lewis-Williams and Dowson 1989: 32). One of the tasks shamans perform in an altered state of consciousness is to lay their hands on people in order to draw out "sickness" and then return the sickness to its source—malevolent shamans in the spirit world—via the *n*//*ao* spot (Lewis-Williams and Dowson 1989: 32).

The meaning of the three superimposed bags (Fig. 7.4) is clearer, and significant. Bags were—and still are—of great importance to the San because they are imbued with potency. In the Kalahari Desert today bags are often made (by the Ju/'hoan San) from "red meat" animals that possess *n*/*om*, potency harnessed by shamans (Lewis-Williams and Dowson 1989; Biesele 1993; Lewis-Williams and Pearce 2004). Interestingly, Bushmen do not necessarily distinguish between the word for an artefact and that for the substance of which it is made (Biesele 1993). In one San myth, *A visit to the Lion's House*, the lion hides in a bag. From this example, Lewis-Williams and Dowson (1989: 116) have argued that placing oneself in a bag is equivalent to placing oneself inside an animal, that is, to taking on its potency. In another myth, the trickster-deity and first shaman/Kaggen gets into a bag to hide and to change himself into a flying creature (Lewis-Williams and Pearce 2004: 120, 126). In at least one other panel in the Drakensberg, bags are shown transforming

Fig. 7.4 Subgroup 5 of main panel at BOS 1 rock shelter with white bag. The bag is ~130 mm across (traced by J. Hampson and W. Challis)

into eland (Vinnicombe 1976: Figure 107; Lewis-Williams and Pearce 2004: fig. 6.6). Bags, therefore, are obliquely associated with the dance and visits to the spirit realm.

The tassels on the bags are also significant: they are akin to shamans' hairs standing on end while in altered states of consciousness (Lewis-Williams and Dowson 1989; Hollmann 2002). The tassels may also be associated with what Patricia Vinnicombe (1976: 260, 344) dubbed "thinking strings", metaphorical cords situated in the throat and associated with rainmaking specialists.

Whomever the figures may depict, the superimposed bags strongly suggest that the context of the painted panel is shamanistic. Importantly, there is plenty of unpainted rock in the shelter: it is significant that the artist(s) chose to place the bags directly on top of the red figures. If the red figures *are* soldiers, the bags demonstrate that they were understood and incorporated into an indigenous and ritualistic ontology.

A Way Forward?

Interesting tangential questions arise from the study of specific paintings at the Wepener site: Were the two distinct groups painted at the same time or hundreds of years apart? When were the superimposed bags painted? Why are some of the figures with emanations from the shoulder painted in black *and* red? Was colour significant to the artists? Why are some figures outlined (Hampson et al. 2002)?

Detailed studies of San beliefs may provide the answer to these questions. Regardless, researchers cannot afford to avoid rich ethnographic resources,

indispensable oral and written testimonies that, among other things, indicate clearly that San paintings do *not* depict actual historical events—at least not in the Western sense of commemorative narrative. Ethnographies have shown us not only that some beliefs are widespread but also that many *persist*; researchers must always demonstrate—and not merely assume—change through space and over time. The hermeneutic ritualistic models developed by researchers since the 1970s allow for further avenues of theoretically based research and methodology to be explored.

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Chapter 8
Spiritual Places: Canadian Shield Rock Art Within Its Sacred Landscape

Daniel Arsenault and Dagmara Zawadzka

The Canadian Shield is a vast geological territory covering a significant part of North America. It stretches east to the west from Labrador to Saskatchewan, and north to south from Nunavut and Northwest Territories to the northern portions of the states of New York, Michigan, Wisconsin, and Minnesota. Dominated by the boreal forest, it is a land of conifers and an elaborate maze of lakes and rivers. The thin soil cover is interrupted by bare rocky outcrops, most often of granitic and gneissic types, as well as muskegs. For thousands of years, this land has been mainly inhabited by Algonquian-speaking peoples who until the 20th century lived as small bands of hunter-fisher-gatherers pursuing a nomadic way of life. The natural environment was intrinsically part of their daily life, and it is not surprising that it has been incorporated into their cosmological system, culture not being understandable without constant reference to nature.

One expression of Algonquian spiritual beliefs is manifested in the hundreds of rock art sites found especially on rocky cliffs jutting out from lakeshores and riverbanks. Closely combining the tangible with the intangible, these places are, as it was centuries ago, an integral part of the sacred landscape of Algonquian peoples such as the Anishinabe (Ojibwa), Cree, or Innu (Arsenault 2004a). What is depicted in the Algonquian rock art? What are the significant links between the rock art sites and the natural landscape that allowed them to be considered sacred in the past and present for Algonquians groups? From an archaeological perspective, what can we learn from these tangible and intangible relationships in terms of the ancestral Algonquian cosmology?

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According to Algonquian oral traditions, rock art belongs to ancestral sites intrinsically related to the spiritual sphere of those First Nations. Unfortunately there are some regions where traditional sacred knowledge associated with rock art sites has been forgotten, especially with regard to the interpretation of their graphic content. Also forgotten are the specific significance attributed to their locations and the nature of ritual practices conducted there in the ancient times. From an archaeological point of view, finding the meaning of a rock art site always offers a challenge. For some scholars, the interpretation of the physical setting, motifs depicted, their meaning, and even correct identifications of the images are impossible to achieve without the use of eyewitness accounts, either because there are no written records related to a specific site available or because it is assumed that most of the rock art sites have been produced by individuals during a secluded session (such as a vision quest), and no one but the author knows what was depicted. In other words, many Shield rock art sites have remained difficult to explain because of the apparent idiosyncrasy of their meaning and the undecipherable cultural aspect of their "natural setting" when no insights can be obtained directly from Algonquian oral traditions.

This pessimistic view can be successfully challenged if a series of relevant data that may give us convincing significant clues about what is represented on a rock art site is considered relative to why such a location has become sacred. Furthermore, it is possible to determine to a degree the kind of ritual actions that have been performed at such a specific place. To do this, it is important to contextualize the materials and clues available, which include archaeological data gathered in situ, and ethnographic and ethnohistoric sources collected over 400 years in Canada following the arrival of European settlers. This kind of contextual procedure has been discussed by Chippindale and Taçon (1998) in terms of formal and informed approaches as a combination of archaeological and written records. In spite of a lack of dated sites, which would be useful for yielding important clues about their historical status and their specific cultural affiliation, we argue here that the contextual procedure can allow us to convincingly reconstruct the ancestral spiritual contexts of sites in the Algonquian sacred landscape.

Based on examples from Québec and Ontario, we clarify the contextual approach for interpreting the sacred cosmology of the ancient Algonquians where rock art is considered a key element within the reconstruction of this ancestral sacred landscape. The sacred dimension of these rock art sites and their significance in the sacred landscape can be understood better and construed if the landscape characteristics present at, around, or near the sites are closely considered. By examining the relationships between the graphics and the physical attributes of the rock art sites, including the properties of the rocky outcrop and the presence of geological formations or any other natural features close to it, as well as the visual and acoustic effects present at the sites, the cardinal orientation of the decorated panels, and the stories told about them, we argue that their tangible and intangible contexts may together have the potential to reflect spiritual and cosmological ideas of the Algonquian peoples past and present. In so doing, we demonstrate that many Shield rock art sites have been sacred places and elements of a larger sacred landscape for generations of Algonquian-speaking groups.

Canadian Shield Rock Art Specificities

Canadian Shield rock art is almost exclusively within open-air sites. More than 700 pictograph sites have been found in the Canadian Shield, whereas only about thirty petroglyph sites are known throughout that territory. One of the largest concentrations of petroglyphs is known as *Kinoomaagewaabkong* (which means "the Teaching Rocks" in *Anishinaabemowin*) or more famously known as the Peterborough Petroglyphs site (Vastokas and Vastokas 1973). Very few petroforms (i.e., geoglyphs) occur and only in Manitoba and Saskatchewan, but they will not be considered in this analysis.

Pictographs tend to have been made on vertical cliffs on shores of lakes and rivers, but a few pictograph sites have also been found on boulders (Conway 1984; Lemaitre 2013:194) and in rock shelters (Molyneaux 1987). Some sites are nestled in the bush along portage trails, sometimes away from lakes and rivers. From spring to autumn, most rock art sites in the Canadian Shield can only be reached by watercraft, whereas in winter it is possible to visit them on foot, equipped with or without snowshoes, by walking across the ice.

Usually the pictographs were made with red ochre, a mineral substance powdered and applied wet, by hands or with fingertips on the rock surface. Other tools, such as a stick, a fine brush or a feather, could have occasionally been used as suggested by very thin lines expressing body details such as fingers or toes. We do not know yet whether an organic binder (e.g., fish eggs, sap, oil) was mixed with that mineral pigment for a better adherence. There are also a few isolated examples where a white, yellow, or black pigment was preferred for paintings (Dewdney and Kidd 1967:6). Petroglyphs were incised or pecked, usually with lithic tools but also with the cutting edge of a shell or the tip of an antler, onto horizontally sloping rocky outcrops. Petroglyphs do not seem to have been enhanced with any coloring matter.

The pictorial content includes anthropomorphs and zoomorphs (e.g., mammals, birds, fish), other-than-human beings, handprints, objects of material culture (such as canoes, bow and arrows, drums), and so-called abstractions (that is dots, lines, curves, crosses, triangles, circles, and squares). There are also complex geometrical motifs that are hard to identify (for example, is a reticulated motif the depiction of a fish-net?). It has been estimated that abstractions account for more than a half of the pictographic inventory (Dewdney and Kidd 1967), but this should be judged cautiously because there is no thorough inventory of the sites known today. It is noteworthy that the size of the Shield pictographs is small; usually less than 30cm in length with only a few measuring more than 50cm, and these are mainly petroglyphs such as those appearing at *Kinoomaagewaabkong*.

The tradition of creating rock art in the Canadian Shield appears to be at least a few thousand years old (Aubert et al. 2004; Dewdney 1970; Rajnovich 1994:41; Steinbring 1998); however, images continued to be produced well into the post-contact period as those of horses and guns attest. Some good examples of these are present at the Agawa Bay site in the Lake Superior Provincial Park in Ontario (Conway and Conway 1990). Ethnographic research has demonstrated that rock art is most often linked with a vision quest, medicine men, puberty rites as well as

other-than-human beings known as *maymaygweshiwuk* who were sometimes credited with the creation of rock art. There is evidence that offerings of objects have been placed at the sites—as exemplified by the presence of tobacco leaves, arrowheads, and clothes. There are also some traditions that refer to rock art sites as the proper place for recording of important historical events and of future events (Conway and Conway 1990; Jones 1979:87) or as navigation signs along the numerous lakes and rivers of the Canadian Shield. Some rock art sites may indicate good hunting or fishing grounds, and delineate territorial limits (Arsenault 2004a; Norder and Carroll 2011). Although this rich and complex rock art could have been created for secular purposes, the sacred nature of the sites cannot be negated as the secular and the profane are intertwined in Algonquian-speaking people's cosmology.

The Relation of Algonquian Cosmology and Sacred Landscape to Rock Art

According to Algonquian oral traditions, human beings live on earth and at the same time are in contact with a multilayered universe including the sky, underground, and underwater worlds. All these connected worlds are peopled by several mighty entities, each one characterized by a series of specific powers. Individuals and groups can communicate with them, and these supernatural entities are often propitiated with various offerings. When these entities inhabit or pass through the sacred landscape, they are often associated with particular features on the earth's surface, such as mountains, unusual rock formations, trees, lakes, and rapids, and their supernatural powers can also be subtly suggested through natural phenomena such as thunderstorms and sunrise (Vastokas 1992:30; Vastokas and Vastokas 1973:33, 47–50). Thus, these non-human beings can manifest themselves through natural features, directly or indirectly. For example, one of the strongest entities of the Algonquian cosmology is the *Thunderbird*, whose wingbeat sounds can be heard from a distance when a thunderstorm is coming and whose supernatural powers can be displayed when lightning flashes and strikes the earth (Chamberlain 1890; Fox 2004:291–292).

Natural formations in the landscape are often linked with legendary activities of supernatural beings, and some topographical formations are interpreted in this sense. For instance, there are natural formations resembling human beings, animals, or items of material culture that can be considered sites of transformations and are endowed with sacred meanings. As the Ojibwa missionary George Copway (1972[1850]:151–152) wrote, "There is not a lake or mountain that has not connected with it some story of delight or wonder, and nearly every beast and bird is the subject of the story-teller, being said to have transformed itself at some prior time into some mysterious formation." The Sleeping Giant formation located in Ontario on Lake Superior is a good example. It is believed to be the final resting place of *Nanabush*, the Ojibwa culture-hero (Chamberlain 1891:195).

In some cases, the relationship between an effigy rock and a rock art site is intriguing. According to some 17th century French accounts, such a relationship existed

Fig. 8.1 On the Ottawa River at about 200 meters to the south of *Rocher à l'Oiseau*—an impressive pictograph site unfortunately covered with thousands of graffiti—stands a rocky tower 30 meters high. According to an Algonquian oral lore reported by a Jesuit, Father Jean de Brébeuf, a man was killed at *Rocher à l'Oiseau* and transformed thereafter into a petrified man; it is logical to think that the natural tower still visible close to the rock art site might represent that petrified man. (Photo D. Arsenault)

between a very high cliff (covered with pictographs which passed unnoticed at that time) and a rock tower standing close to it on the east bank of Ottawa River, Québec. All these features pertain to the *Rocher à l'Oiseau* ("Bird Rock" in English) landform, which was seen as imbued with strong powers and was venerated by Indigenous people passing nearby. In the early 1620s, a Recollet Father, Gabriel Sagard, and about ten years later, a Jesuit Father, Jean de Brébeuf, reported that their Native canoe guides stopped at the foot of a mighty rock where they said a man had died and been transformed into a rock formation in the past (Sagard 1939[1632]:171; Thwaites 1896–1901:10:165, 167). Today, a tower of piled rocks, 30 meters high, can still be seen standing about 200 meters south of *Rocher à l'Oiseau*, an enormous rock formation and one of the most important rock painting sites of the Canadian Shield (Fig. 8.1).

The last example also provides evidence that Shield rock art was made on rock formations considered to be at the junction of the four layers of the universe, which is where the Upperworld (the sky), the Earth's surface, the Underwater (lakes, ponds, and rivers), and the Underworld (subterranean world) are interconnected (Rajnovich 1994:35; Vastokas and Vastokas 1973:53–54; Zawadzka 2008). Cliffs and mountains are particularly significant for many Algonquian communities because they can act as cosmic venues endowed with portals to other worlds in the form of caves and crevices (Eliade 2004[1964]:259–260, 266). Additionally, high cliffs or mountains are often associated with important spirits such as *Kitchi Manito*

(the Great Spirit), but more often with other spiritual entities, in particular the *Thunderbirds* (Chamberlain 1890; Jones 1973[1861]:43, 86).

Algonquian oral traditions inform us that water, wind and sun are also considered spirits or *manitous*, which have to be honored properly (Johnston 1976:22,136; Radin 1914:355–356). Thus, indigenous elders state that waterside cliffs were locales where the four elements of water, earth, air, and fire met and could be experienced. At rock art sites, these elements manifest themselves by the water, the cliffs (which stand for earth), the wind (which stands for air), and the sun (which stands for fire) (Zawadzka 2008:120–122). Locating rock art sites near these features may have served the purpose of establishing a better connection with spiritual entities, which are said to inhabit these locations. Rock art sites are sometimes located near rapids, narrows, and waterfalls (Mackenzie 1971[1801]:lxxviii). Underwater and Underworld creatures such as serpents and the Great Lynx, also known as *Mishipeshu*, are associated with lakes, rapids, falls, and portages (Fox 2004; Laidlaw 1918:15, 61; Rogers 1962:D24, D42). It is to such powerful creatures that Algonquians had to pay respect in order to have a safe journey by offering tobacco or another gift or sacrifice while passing by natural features associated with a rock art site. These supernatural connections can usually be experienced only when one visits a rock art site, therefore implying a phenomenological "interpretation" of the rock art and its surroundings as it could have been experienced in the past.

A preference for making rock art on vertical cliffs is well attested in the Canadian Shield (Lambert 1986; Norder 2003:156), and this is partly due to the fact that such locations have previously yielded significant clues about the passage or presence of such powerful entities. For example, stains of white calcite covering a rock face where rock paintings can be seen is an important clue that a Thunderbird has its nest on top of the cliff, the whitish stains symbolize the mighty creature's droppings (Conway and Conway 1990:12–13). This intimate association between the place, the natural features and the spiritual entities triggers ritual behaviors and the creation of rock art.

Beside these entities, rock art is notably linked with other-than-human beings who, live on earth's surface close to humans and share many resources with them. These earthly creatures are known as "*mamakwasiuch*" by the Cree, "*memekweshuat*" by the Innu, or "*maymaygweshiwuk*" by the Ojibwa (Fabvre 1970:70; Flannery 1931; Martijn and Rogers 1969:196, note 5; Silvy 1974:145; Speck 1977[1935]:69; see also Arsenault 2004a; Arsenault et al. 1995; Lemaitre 2013; Zawadzka 2008). According to the Algonquian traditions, these "little people" are characterized by individuals having a slim hairy body with a strong musky scent, and their face is very narrow allowing them to pass easily through the fractures in rock formations, the rocks being their dwellings. These beings are also sometimes linked with falls and rapids, and they travel in "lithic canoes" while on a lake or a river. These singular anthropomorphic creatures have been sometimes credited with the creation of rock art using their blood as a pigment (Rajnovich 1994). Based on this, it is not surprising that some rock art images have been seen as the depiction of an encounter between humans and those unusual nonhuman beings. It is also said that the *maymaygweshiwuk* act as the transmitter of some sacred knowledge, notably with the medicine men to whom they teach the uses of medicinal plants and of mineral substances in exchange for tobacco and fish (Arsenault et al. 1995; Dewdney and Kidd 1967; Jones

1979:84–86; Wheeler 1975). Medicine men could enter the inhabited rock through cracks or caves in order to visit with the *maymaygweshiwuk* and obtain medicine and sacred knowledge from them (Hallowell 1975:166; Wheeler 1975:710).

Some rock art sites are clearly identified as the house of the *memekweshuat*, named *memekweshushuap* by the Innu, and there are stories told about their past interactions with peoples coming too close to their rocky dwellings. This is the case for example at *Kaapepehshapisinikanuuch* (a Cree name meaning "where old pictures on the rock can be seen"), a pictograph site located on Lake Nemiscau, James Bay area (Québec); during a visit to that site in 1998, two Cree elders told us that some *mamakwasiuch* inhabited the rock (Waller and Arsenault 2008). Inland of the north shore of the St. Lawrence River, on a lake called Tétépisca (*Tetepishcauw* in Innu language), some Innu elders still refer to a house where *memekweshuat* lived, and pictographs were recently found on the rock cliff face not far from the entrance of a shallow cave considered to have been the entrance to that *memekweshushuap* (Lemaitre and Arsenault 2011). In these cases, as in many others across the Canadian Shield (Dewdney and Kidd 1967:13–14), these singular beings have been "seen" passing through cracks and crevices in the rock (Arsenault 2004a) (Fig. 8.2). At Lake Nemiscau, in central Quebec, there is a small cavern entrance visible just below a trident-like motif, which was their portal and through which some privileged humans can also pass. However, with the conversion of the various Algonquian groups to Christianity, these kinds of traditional activities have been abandoned, and it seems that the *maymaygweshiwuk* are gone forever. Cracks and crevices are not the only important element in determining the sacred nature of rock art sites, the properties of the rock outcropping are also significant.

Criteria to Consider for Interpreting Algonquian Rock Art Sacredness

As previously stated, rock art could have been associated with a plethora of cultural facets and not strictly restricted to the religious domain (Arsenault 2004b). Therefore it is necessary to determine which criteria are indicative of its sacredness. The following criteria are discussed more specifically: (1) the properties of the rock formation where rock art is found; (2) the visual and acoustic effects manifested at the location, and (3) the cardinal orientation of the decorated surface. We then briefly discuss the rituals that could have been performed directly on a Shield rock art site as reported in the ethnohistoric and ethnographic accounts.

Properties of the Rock Formation

When in front of a pictograph or petroglyph site in the Shield, it is obvious in many cases that the image depicted is not composed only of the painted or carved motifs but also integrates elements of the rock surface. The elements mainly integrated

Fig. 8.2 According to the Algonquian worldview, some geological features appearing on a rock formation, such as a crevice or a cave, have been described as being a passage linking the world of the humans to the spiritual plane or even as an entrance for other-than-human beings: (a) on Tetepishcauw Lake site, inland of the St. Lawrence River North Coast, Québec, Innu elders still talk about a *memekweshushuap* (a house for a singular species named *memekweshuat*, "the little people" in the Innu language) where a shallow cave can be seen at more than 2 meters above the current water level, about 25 meters south of a unique painted panel containing just four morphs; (b) some Cree elders have reported that in the past *mamakwasiuch* inhabited the rock art site located on Lake Nemiscau, James Bay area, Québec; (c) an important narrow passage created by a huge standing slab can be seen just a dozen meters north of the rock painting site found in 1996, on an island at Lake Duparquet, Abitibi, Québec, and this feature might have been seen by Algonquians as an entrance to the spiritual plane or as the door leading to other-than-human beings' house. (Photos D. Arsenault)

with the images were cracks and crevices, quartz veins[1] and calcite or silica deposits.[2] The inclusion of red mineral veins into rock art has also been observed (Vastokas and Vastokas 1973:80).

[1] Quartz is usually colourless or white but can also be purple, pink, yellow-brown and grey. It is characterised by a vitreous lustre. It is one of the most common minerals present in sandstones,sedimentary and metamorphic rocks. It "is an essential constituent of the granitic igneous rocks [and] is probably the most common of vein minerals" (Cox et al. 1967:106–107).

[2] The white calcium precipitate is formed by water which dissolves calcium. When water reaches the surface of a rock, it evaporates and leaves the white, opaque calcite streaks. Silica precipitate is formed in the same way; except that the deposits are clear (McMullin 2006:5). The precipitate takes a long time to form (A. Watchman, cited in Arsenault 2004c:354).

Cracks and fissures were often incorporated into rock art (Arsenault 2004b; Vastokas and Vastokas 1973), and the Peterborough Petroglyphs are a good example. The rock outcrop, now mostly covered by a large glass and concrete structure, is criss-crossed by numerous cracks and fissures, the largest of which separates it diagonally into northern and southern halves. From the depths of this large fissure, which is about 30 cm wide, the trickle of an irregular underground stream has been reported (Vastokas and Vastokas 1973:9). Many of the petroglyphs are arranged around the natural fissures, rendering them an inextricable part of the rock. For example, a large female figure, measuring about 1.5 meters in height, has natural crevices used to portray what may be her womb and genitalia while a red mineral seam runs the length of the figure. Other crevices on the site have also been used to depict female genitalia. Sinuous forms interpreted as snakes are near crevices, and in some instances it appears as if the snakes are emerging from the ground (Vastokas and Vastokas 1973; Zawadzka 2011a). Animal-like or human-like figures, as well as hybrid personages, are sometimes represented as if they were going to enter or exit the rock through a crack. For example, the biggest anthropomorph depicted at the Nisula site, near Forestville, Québec, is shown with big feet pointing toward the right to indicate the direction the figure is walking, which is toward a crevice (Arsenault et al. 1995). As has been previously stated, cracks and crevices were portals between the different worlds.

Caves and bigger crevices can also be significant. As with the examples of both the Nemiscau Lake and *Tetepishcauw* Lake sites, such geological features are sometimes closely associated with rock art sites. At Lake Duparquet, in Abitibi, Québec, there is a small pictograph site located on an island where a high, long slab stands straight up one meter in front of the rock face just to the left of the painted panels. The opening created forms a natural corridor long enough to suggest an entrance to the interior of the rock formation itself, a passage that the *memekweshuat* could have used when entering their "home."

Quartz veins can also be incorporated into rock art, framing the motifs or creating links between the images (Lemaitre 2013:233–234). This is the case at Agawa Bay located on the shore of Lake Superior in Ontario, where two bears facing each other are framed by a triangle made by the junction of quartz veins. At the Fairy Point site on Lake Missinaibi in Ontario, the motifs painted on the main panel are framed by two quartz veins (Fig. 8.3). Incidentally, the name Fairy Point makes reference to the *maymaygweshiwuk*, which were often known as fairies to Euro-Canadians (Zawadzka 2008). Silica and calcite deposits are also integrated with the images. Smooth and light-colored surfaces are also preferred for pictographs and petroglyphs (Arsenault 2004a:304; Dewdney and Kidd 1967:168).

The presence and incorporation of silica or calcite drips and of quartz veins at rock art sites can be explained in terms of indigenous ideas about certain materials endowed with spiritual powers. According to Vastokas:

> In contrast to the Western perception of reality, which is grounded in awareness of physical matter, it is the intangibles which have primacy in Native world view. The material world is simultaneously spiritual and that spirituality is manifested in the material. Access to spirit, to feeling, to meaning, however, is by way of the metaphorical qualities of the actual world (Vastokas1992:30).

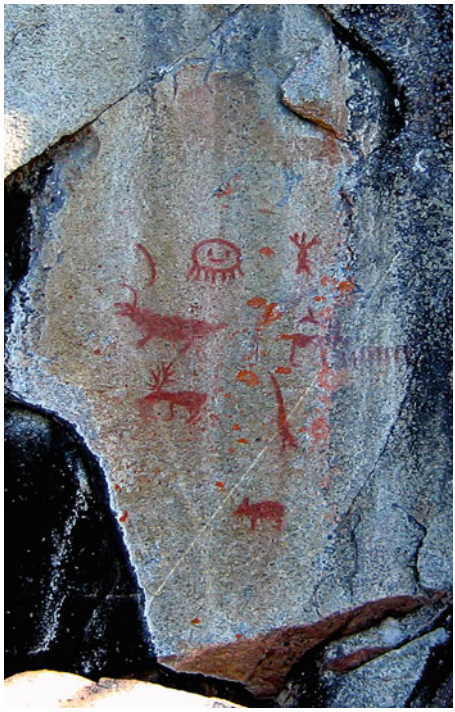

Fig. 8.3 Two quartz veins frame the main panel at the Fairy Point Pictograph Site, Ontario; in the Algonquian belief system, such a geological feature appearing on a rock face can be interpreted as the mark of a lightning strike left by Thunderbirds. (Photo D. Zawadzka)

According to George Hamell (1983), among northeastern Woodland indigenous peoples certain substances which can be characterized as shiny, translucent and light-colored, such as native copper, shell, and crystal, are metaphors for Light, Life, and Knowledge. Furthermore, these substances are often obtained from other-than-human beings such as the Underwater *manitous* (Hamell 1983:5–6; Radin and Reagan 1928:145–146). White shiny objects in Algonquian beliefs were endowed with special powers. For example, the white cowrie shell is the sacred symbol of the *Midewiwin* medicine society (Hoffman 1891:167). Powerful spiritual entities, such as the Thunderbirds and the Underwater spirits, were often perceived as white, and *Nanabush* was known as the white rabbit (Chamberlain 1891; Radin and Reagan 1928:73). Natural formations that were white were also held in reverence and were associated with spiritual powers (Zawadzka 2011b). White manifests itself in the calcite and silica deposits, as well as some quartz veins (Fig. 8.4). However, it can also be the rock outcropping which is white as is the case of *Kinoomaagewaabkong*, whose white crystalline bedrock is engraved with many complex motifs. At the Fairy Point site, the main panel is on a light-colored rock surrounded by black surfaces. Some of the rock painting sites on Cliff Lake, also in Ontario, have been made on white surfaces surrounded by black ones.

Bright and translucent materials may also find their expression in quartz veins. Conway (1993:89–90) was informed that quartz veins were the marks left by lighting that struck a cliff. Lighting is produced by Thunderbirds, which are locked in an

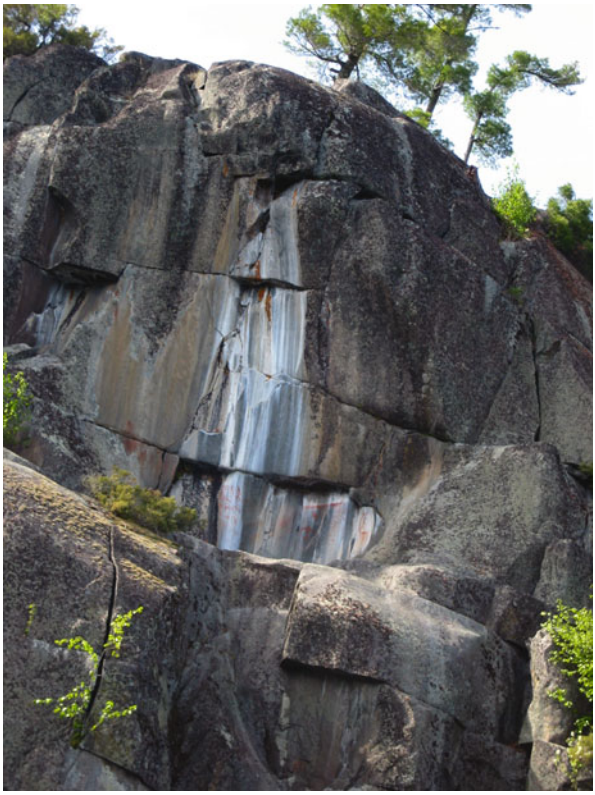

Fig. 8.4 White precipitate covers the cliff at the Picture Rock Island Pictograph Site, Ontario. The pictographs are located above the ledge. For the Algonquians, such whitish deposits appearing on a rock face may represent the feces of a Thunderbird, therefore denoting not only sacredness but also the place where this powerful entity is nestled. (Photo D. Zawadzka)

eternal battle with Underground/Underwater *manitous* such as *Mishipeshu* and the underwater snakes (Fox 2004). The Jesuit Pierre de Charlevoix (1966[1761]:I:231) described the beliefs about lightning as follows: "according to the Montagnais, [lightning] is the effort of a certain genius, in order to vomit up a serpent he had swallowed, and they support this opinion by alleging that when thunder falls on a tree they discover a figure on it, something resembling that animal."

Thunderbirds and snakes have been depicted near quartz veins. At the Mazinaw Lake site, a Thunderbird holds a quartz vein in its talons (Zawadzka 2008:114). At the Wizard Lake site in Ontario, a large quartz vein issues from the talons of Thunderbirds and strikes the head of an underwater serpent located a few meters from them (Lemaitre 2013:233–235).White calcite deposits and quartz veins allude to bright and translucent materials, and they likely denote sacredness and spiritual powers at rock art sites (Zawadzka 2008).

Visual and Acoustic Phenomena

White surfaces and bright quartz veins visually enhanced the spiritual charge of the place. However, there were also visual and acoustic phenomena which might have been interpreted as manifestations of the sacred. "In Native cultures, certain physical formations are important sites because they may show a certain kind of 'power'—a strong wind, the sound of an underground stream, a clear vision of the morning sun" (Diamond et al. 1994:28; also Arsenault 2004b; Waller 1993; Waller and Arsenault 2008; Zawadzka 2008). Among indigenous peoples, spirits can manifest their presence visually in the form of, among others, animals and trees; audibly in the form of voices or the whistling of the wind; or by making a sign such as lightning (Radin 1914:352–353). Visual phenomena, such as shimmering light reflected off the water onto the rock surface or shiny surfaces all recall the importance of brilliant and bright substances. Images that appear and disappear depending on light conditions could also be indicative of the spiritual. At least one story credits the *maymaygwayshiwuk* with the creation of pictographs because the paintings appeared and disappeared depending on the weather (Gatschet 1899:258). One example of a shimmering surface covered with pictographs occurs at the Nisula site in Québec. Here the southeast-facing surface becomes illuminated by the rays of the early morning sun transforming the painted static figures into dancing personages for a short time (Arsenault et al. 1995:47–48; also Arsenault 2004c) (Fig. 8.5).

Fig. 8.5 Sun light effects at the Nisula Pictograph site, Quebec, may have been significant for the ancient Algonquians in relation with the spiritual dimension of the place; moreover, when one stands at the foot of the site on a sunny day, the sunrays reflecting on the water create some shimmering lights on the painted panels, creating then the illusion of animated figures for the onlookers. (Photo D. Arsenault)

Fig. 8.6 At Mazinaw Lake, Ontario, special acoustics (reverberations, amplification) can be easily noticed when passing by the cliff where Mazinaw Pictograph Complex is located. (Photo D. Zawadzka)

Acoustic effects have been observed at rock art sites (Conway 1993:149–157; Vastokas and Vastokas 1973:49). Spirits might potentially manifest themselves through the presence of echoes or by strong winds. Echoes occur at many sites in the Shield country. Among these sites is the Mazinaw Lake site, also known as Bon Echo for its excellent reverberations (Fig. 8.6).

Strong winds are present on many sites, especially at those located at narrows or cliffs which jut out onto large expenses of lakes. For example, strong winds are present at the Fairy Point site. There is also a connection between acoustics and the *maymaygweshiwuk*. People would often hear the rattling of their paddles, their drumming, and their laughter. At some sites, these beings have been heard drumming (Dewdney 1978:115). The "sound of drums" might have been created by waves hitting against grottoes that were formed by rock eroding at the water level (Arsenault 2004a:305), as exemplified by a rock art site on Nemiscau Lake where pictographs have been made only on the panels above two entrances to a grotto. These entrances may have served as an amplifier of sounds produced by the waves and winds passing through, but also when people talked, sang, or made noise nearby (Waller and Arsenault 2008).

Acoustic effects generated at a rock art site location can now be evaluated and quantified scientifically according to the length of resonance, intensity, and tonality of sounds produced under control as has been demonstrated by Steven Waller since

1993. We now know that specific kinds of topographic relief at rock art sites, such as the Mazinaw Lake site, Agawa and *Rocher à l'Oiseau*, represent amphitheaters amplifying or prolonging sounds of nature.

Cardinal Orientation of Sites

The cardinal orientation of rock art sites may have reflected ideas about the sacredness of the landscape. Rock art sites tend to face southeast to southwest and rarely north (Arsenault 2004a:305). Rajnovich (1981:285) proposes that avoidance of northern exposure might have been enforced in order to protect the paintings from "destructive northwest winds." Another explanation for the direction that rock art sites face could be that rising and noontime sunshine reflected from the water produces light sparkles on the pictographs (Arsenault 2004a:304; Lambert 1983:137). However, Lambert (1983:137) noted that the "light-reflecting phenomenon" also was noticed on unpainted cliffs. These explanations do not take into consideration Algonquian spiritual ideas about the cardinal directions.

Algonquian-speaking peoples attach great significance to cardinal directions. Religious ceremonies are performed "sun-wise" (i.e., clockwise) in relation to the cardinal points (Chamberlain 1891:206; Hallowell 1992:62, 70). Space is ritualized, and east is preferred as it is associated with the rising sun (Johnston 1976:22). As the art historian Ruth Phillips (1987:89) explains, sun is the source of light associated with "knowledge, wisdom and far-sightedness." Dwellings and ceremonial structures tend to have their entrances facing east (Hallowell 1992:74; Johnston 1976:22). East is also associated with life and with *Nanabush* (Johnston 1976:136; Radin and Reagan 1928:67, 75, 87). South also carries positive connotations and is associated with warmth, growth, and food plants (Chamberlain 1891:207; Johnston 1976:139). Since ceremonies are often held in relation to the position of the sun, the prevalence of east and southeast facing sites can be explained in terms of their ritual context and the importance of facing the sun. West is usually associated with Thunderbirds but also with the land of the dead (Chamberlain 1890:52; Jones 1973[1861]:86). On Lake Duparquet (Abitibi, Québec), a unique pictograph site shows two painted panels facing due west, those vertical surfaces being plainly illuminated at sunset at the time of the equinoxes; moreover, one of these panels illustrates a denticulated crescent, which could have been the depiction of a sun setting, another clue related to the importance given to that cardinal direction at two crucial moments of the year (March and September), to the ancestors and perhaps to the Thunderbirds altogether with some specific rituals linked to them (Fig. 8.7).

Finally, though North is also full of spiritual connotations, it is the direction where the sun shines the least and towards which the paintings tend to face the least. Thus, sites might have been oriented to face particular directions depending on their ritual use and in order to communicate with particular spirits associated with these directions (Zawadzka 2008).

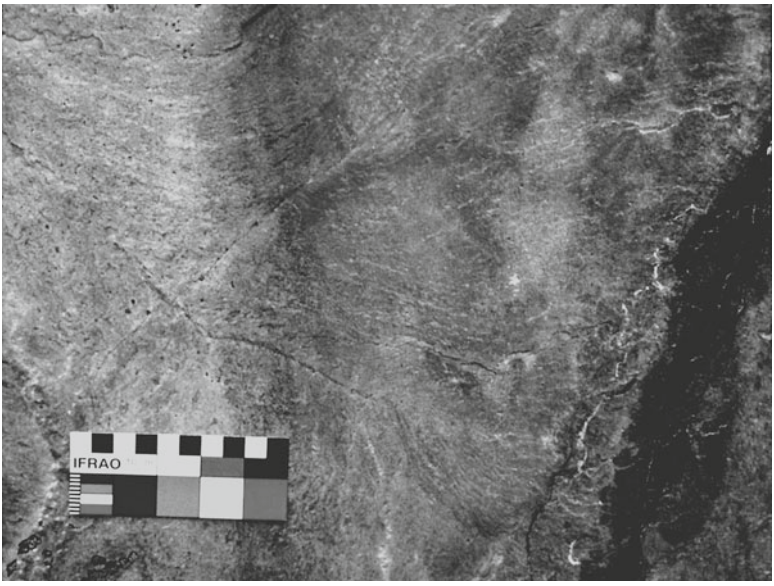

Fig. 8.7 At the only pictograph site known on Lake Duparquet, Abitibi, Québec, one of the two remaining painted panels illustrates a denticulated curvy line. Since that panel is directly oriented to the west, being under the sunrays to a maximum at sunset during the equinoxes, it is likely that this denticulated crescent depicts a sunset per se with reference to the Algonquian worldview and more specifically to some spiritual connotations associated with that cardinal direction. (Photo D. Arsenault)

Ceremonies and Rituals Performed at Rock Art Sites

In order to assess the potential of sacredness allotted to Shield rock art sites we need to look closely at their location, including the rock formation and its setting, as a proper place for ritual performance. With regard to this interpretative process, the ethnographic and ethnohistoric accounts can be very useful in helping us understand how religious activities were conducted on and around them.

The Recollets and later the Jesuits (the latter establishing many missions in New France in the 17th and 18th centuries), as well as explorers described indigenous beliefs regarding some places within the sacred landscape where rock art has been created. One of them, Paul LeJeune, reported during the 1630s that:

> They [indigenous people] address themselves to the Earth, to Rivers, to Lakes, to dangerous Rocks, but above all to the Sky; and believe that all these things are animate, and that some powerful Demon resides there. They are not contented with making simple vows, they often accompany them with a sort of sacrifice… Some are to render them propitious and favourable; others to appease them, when they have received in their opinion some disgrace from them or believe they have incurred their anger or indignation (Thwaites 1896–1901:10:159).

The sacred nature of rock art sites is reaffirmed by ceremonies which were and continue to be held at these locations. Ethnohistoric accounts relate that offerings,

particularly tobacco, were often made at sacred locales in order to solicit the assistance of various *manitous*. As a Recollet missionary, Father Gabriel Sagard related:

> They [indigenous people] believe also that there are certain spirits which bear rule over one place, and others over another, some over rivers, others over journeying, trading, warfare, feasts and diseases, and many other matters. Sometimes they offer them tobacco and make some kind of prayer and ritual observance to obtain from them what they desire (Sagard 1939 [1632]:171).

Along with Sagard, Father Jean de Brébeuf (a Jesuit), as well as Chevalier de Troyes (French military man) reported that arrows to which tobacco was attached were shot by indigenous travellers as an offering to the majestic rock cliff named *Rocher à l'Oiseau*, a rock painting site (Lemaitre and Arsenault 2011; Caron 1918:37; Thwaites 1896–1901:10:165,167). Algonquian groups often left pictographs or petroglyphs in these kinds of places in order to emphasize, among other things, the sacred nature of the location, the historical events which happened there, or the individual or collective magico-religious experiences experienced by members of a particular community.

Another account describing a sacred rock was left by John Long, a fur trader. At the entrance to Lake Superior, near Sault Ste. Marie, he heard about the following:

> …a high rock, somewhat in the shape of a man, which the Chippeway [Ojibwa] Indians call "KitcheeManitoo," or the Master of life. Here they all stop to make their offerings, which they do by throwing tobacco, and other things, into the water: by this they intend to make an acknowledgment to the rock, as the representative of the Supreme being, for the blessings they enjoy, cheerfully sacrificing to him their ornaments, and those things they hold most dear (Long 1971 [1791]:43–44).

Rock art sites are among many sacred sites where spirits were propitiated with offerings. Various offerings were and continue to be made to the *maymaygweshiwuk* that inhabit rock art sites, for reasons such as safe passage on the lake or obtaining medicine and securing health. Offerings at rock art sites are sometimes deposited in crevices and consist most often of tobacco, sage and sweetgrass, and cloth, but money, brass-bottom shotgun casings, cutlery, enamelware, glass marbles, and a china cup were also observed (Arsenault 2004a; Dewdney and Kidd 1967; Zawadzka 2008). Rajnovich (1989:193) has suggested that the offerings could have been deposited as "payment for the knowledge received from the Medicine Manitous." However, the offerings seem to have a strong connection to curing rituals and thus to the *maymaygwayshiwuk* and the medicine they dispense from their rocky abodes. The gift of clothing appears to be widespread among Algonquian-speaking people today.

> A gift of some article of clothing or an ornament is believed to act as a super inducement to…dreams. After giving the informant just mentioned one of my red neckties that he admired, he told several of us that later during the winter, when he was short on food, he would wear it about his neck and would then have one of these dreams, which should be followed by a good hunt (Speck 1977[1935]:189).
>
> Scraps of cloth were hung on medicine poles for, among others, assisting in curing of the sick (Densmore 1973 [1910, 1913]:II:248–249, cited in White 1994:376).

Clothing would be offered upon a spirit's request if someone was sick or passed away (Zawadzka 2008:140). The offerings indicate a strong link between healing

rituals and the *maymaygweshiwuk*. The link between cloth and the *maymaygwayshi* has been suggested, and according to the Ojibwa missionary Peter Jones (1973 [1861]:157) the *maymaygweshiwuk* "are reported to be extravagantly fond of pieces of scarlet cloth and smart prints; and whenever they appear to an Indian, if he can only bestow some such gaudy present upon them, however small, the giver is sure to be rewarded either with long life or success in hunting."

Norval Morriseau, the late famous Ojibwa artist, recounted a legend which further suggests the connection between rock art sites, offerings, and curing of illness.

> An old Ojibway Indian at Lake Nipigon [Ontario] had six sons and each summer one died of sickness. Finally the youngest of the sons, who was sixteen years old, was the only one left alive. One summer day the Ojibway Indian set out for the Orient Bay rock painting site and took with him a bundle of goods, including tobacco, and placed it in the waters and said, "Great Misshipeshu, hear my plea. I ask you by your power to save my only child. I offer these. In return, show me a sign that my plea is heard." The Indian went further down the bay, and when he reached Reflection Lake Camps on Lake Nipigon, behold, from the bottom of the water, he saw two eyes looking at him, which came to the surface with a splash. It was a very huge, red sturgeon, the keeper, or watcher, of the offering rock. This he believed was a sign of good luck, and from that day the only son recovered and lived (Morriseau 1965:32).

The offerings of money, brass-bottom shotgun casings, cutlery, enamelware, glass marbles, and china could be understood in the context of sacred symbolic substances, for which they were substitutes. These offerings were shiny, sometimes translucent or light-colored and sometimes made with copper (i.e., money and brass-bottom shotgun casings, brass being an alloy of copper and zinc). Copper is imbued with deep spiritual significance because of its reflective characteristics (Hamell 1983:6). Thus, offerings can be indicative of the ceremonies that occurred at rock art sites. Ceremonies, such as incantation, burning of sage and sweetgrass, and purification rituals are still conducted on rock art sites in various parts of the Canadian Shield.

Conclusions

Algonquian-speaking people situate themselves within a landscape imbued with spiritual significance, and rock art is used to express how their relations, either between individuals and groups or between them and other-than-human beings, are created, developed, and maintained over time. Rock art locales, along with other sacred spots such as natural effigy formations, have become integral elements of the sacred landscape and are still active for many Algonquian communities today. The images themselves act as mediators in social relations; their efficacy is not divorced from their landscape context. Furthermore, the location of rock art sites, their cardinal orientation, the physical properties of the rock formation and the visual and acoustic phenomena occurring in those very places reflect spiritual and cosmological beliefs of the present-day Algonquian-speaking peoples as they did when rock art was originally made. For researchers, such criteria are part of a series of data to

be archaeologically considered and recorded as they work toward reconstructing the sacred landscapes of ancient peoples, with only a limited amount of their tangible and intangible properties still present.

Archaeologists have to look more closely at the relations between the material remains of a rock art site (including its graphic content) and the intangible aspects associated with it (such as ancient lore or oral histories belonging to Algonquian living traditions). For us, this is a productive way of construing which rock art sites could have been part of an ancient sacred landscape, full of material and symbolic resources. The sacred dimension of any rock art site in the Canadian Shield cannot be taken for granted, but there are always clues to be identified and explored in order to educe the potential sacredness of any rock art site wherever it may be (Chapman and Geary 2000; Norder 2007). This ongoing interpretive process based on a contextual approach remains a challenging adventure allowing us to experience the "sacred past" as it may have been for the ancestors of the Algonquian First Nations.

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Chapter 9
Concepts of Spirit in Prehistoric Art According to Clifford Duncan, Ute Spiritual Elder

Carol Patterson and Clifford Duncan

Introduction

Ute History

The Ute Indians ranged across much of the northern Colorado Plateau beginning at least 2,000 years B.P. The very name "Ute," from which the name of the state of Utah was derived, means "high land" or "land of the sun." The Ute language, Southern Numic, belongs to the Numic group of Uto-Aztecan languages shared by most of the Great Basin tribes. The Utes, however, included mountain-dwellers as well as desert nomads.

Bands in the mountainous eastern regions subsisted by hunting large game and by fishing, while bands in the arid western and southern regions adapted to their environments by wandering widely and taking advantage of the periodic abundance of food and material resources in different eco zones. The arrival of Utes in the Four Corners area came later, but most anthropologists agree that by 1,500 A.D. they were well established in the region.

Prior to their acquisition of horses the Ute traveled on foot, moving through known hunting and gathering territories on a seasonal basis. Men hunted deer, antelope, buffalo, rabbits, and other small mammals and birds. Women gathered seed grasses, piñon nuts, berries, roots, and greens in woven baskets, and processed and stored meat and plant materials for winter use. Ute families lived in brush wickiups and ramadas in the western and southern areas and used hide tepees in the eastern

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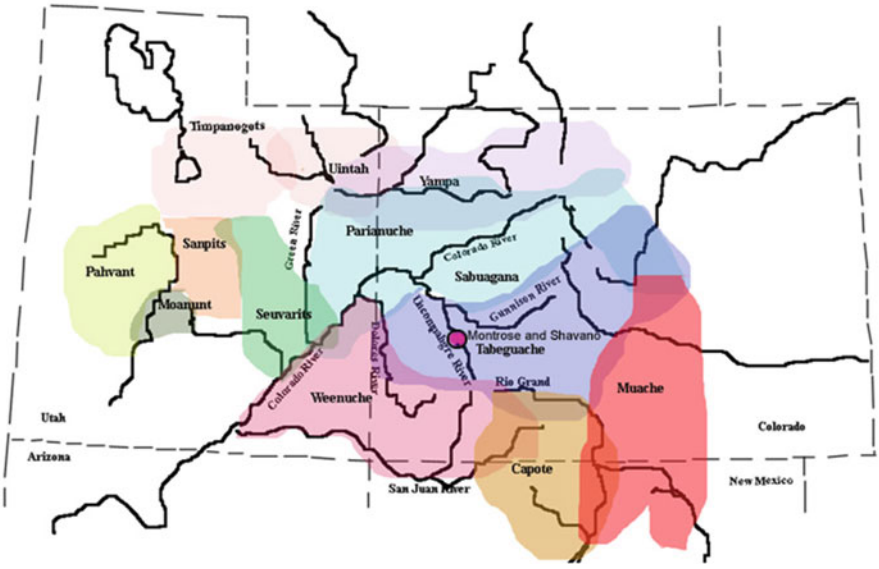

Fig. 9.1 Ute Bands in Utah and Colorado with location of Montrose and Shavano (drawing by Carol Patterson after Simmons 2000)

reaches of their territory. Of all the Ute bands, only the Pahvant were cultivating food plants at early contact.

Once they obtained Spanish horses and livestock from the Pueblo peoples of northern New Mexico, the Ute began to raise horses, cattle, and sheep, and became involved in raiding and trading. In eastern areas in particular, Utes became respected warriors and important participants in the southwestern slave and horse trade. In the north, they remained largely independent of colonial control until the arrival of Mormon settlers, who pressured the Utes to settle down and farm (Fig. 9.1).

One of the Ute bands that live in Western Colorado were called the *Tabeguache* derived from a descriptive Ute term, *Mogwatavungwantsingwu*, which means "cedar-bark, sunny slope people." The Tabeguache Band was the largest Ute band, consisting of 500–1,000 or more who hunted and foraged throughout the Rocky Mountains and Western Colorado living in small extended family groups with leaders of their own lodges. The natural resources of this region made it a popular place to camp, with plenty of grass for their horses, old growth forests within which to build wikiup villages, pinyon nuts, berries, seeds, and game.

The United States persuaded the Utes to sign the treaty of 1868, eventually placing the Utes on a small reservation south of present-day Montrose in the Uncompahgre Valley. There, the Tabeguaches became more commonly known as Uncompahgre Utes. While living in that area, some farmed, but they still hunted and wandered at will.

Soon, the presence of white miners, in the San Juan Mountains within the reservation, exacerbated problems. In the aftermath of the Meeker Incident in northwestern Colorado, all of the Uncompahgres, which included Tabeguaches with familiar names like Chipeta and McCook and Shavano, were moved to the Uintah

Fig. 9.2 Clifford Duncan and Carol Patterson at Big Dominguez Canyon examining a Ute panel depicting the 1881 military extradition of the Uncompahgre Utes out of western Colorado to the Ouray Reservation in Utah (photograph by Karen Derick)

reservation in Utah. The Uncompahgres/Tabeguaches became leaders in the consolidated Uintah and Ouray Reservation (Simmons 2005).

Present-day Utes occupy a tiny fraction of their former territories. The Northern Ute live on the Uintah-Ouray Reservation near Fort Duchesne in northeastern Utah. The Southern Ute live on a reservation in the southwestern corner of Colorado near Ignacio. The Ute Mountain Ute are descendants of the Weminuche band who moved to the western end of the Southern Ute Reservation in 1897. Their reservation is located near Towaoc, Colorado, and includes small sections of Utah and New Mexico.

The Ute bands of Western Colorado and Eastern Utah left hundreds of painted and pecked rock art galleries at the convergence of rivers, canyons, and major trails. This author has documented over 350 rock art sites in Western Colorado, of which over 100 are Ute. Typical Ute rock art panels depict trail maps, hunting strategies (Duncan 2011a, b, 2012), episodes in Ute myths and folklore (Patterson and Watchman 2005; Patterson and Duncan 2007), historic battle scenes and raids, rabbit hunts (Patterson et al. 2006), deer and elk ambush sites (Patterson and Williams 2010), and sacred medicine and healing sites (Patterson et al. 2006) (Fig. 9.2).

Clifford Duncan is a Northern Ute elder and the tribe's retired historian. He is an artist, a former museum director, and currently the cultural resource advisor to the Northern Ute tribe. He was born into a traditional family and lived all his life on a reservation except for a few years while he was in the armed forces during the Korean conflict. He has lectured at many conferences and various colleges and

universities and traveled abroad to countries including Chile, Peru, Norway, Greece, France, and Germany on behalf of the Native American Traditions. He lives near Roosevelt, Utah.

For nearly 8 years, Carol Patterson, a PhD anthropologist and rock art scholar, has been accompanying Clifford to many petroglyph sites in Western Colorado and eastern Utah. She has captured on tape Clifford's interpretation of Ute and protohistoric Ute petroglyph sites. The spiritual nature of these sites is of primary interest and Clifford is candid on explaining just what he understands from a traditional Ute perspective. The following are quotes from Clifford from 2009 to 2012 concerning Ute spiritual beliefs pertaining to Ute petroglyphs throughout Western Colorado.

Rock Art

Clifford: "Take it into consideration that times have changed. The prehistoric way of thinking by the Native Americans was different than it is today. We should try to look at the rock art from both prehistoric and historic world views. We may not be accurate, because today we are looking at the rock art from only our present day perspective."

"Rock art is something sacred and that is because it has a spirit. This is what made my parents and relatives always say to the younger ones not to bother the rock art sites of the *Moquich*."

"My parents would say that you should stay away from these places and don't touch them. So after awhile you begin to feel that what they say is real, a way of life, and that you should always leave them alone. They have nothing to do with you. They are associated with life after death."

"A lot of people want to know what a rock art panel means 'up front' and spend a lot of time trying to figure it out. But we are told not to bother with all that because it's depicting a different world. Perhaps they thought that you would disturb a spirit of another world. This could be bad. So, most of us don't pay much attention to rock art. The meaning is behind rock art. It has to be interpreted from the point of view of the author or people putting it there. Those people were not just ordinary, they had some kind of special experience or background to produce those drawings. You can't just draw something like that just for the sake of drawing. Only the trained people oriented to the spiritual aspects can make the rock art."

"What draws me to rock art are two things:

First, that whatever those drawings are suppose to represent, for this place, is for the life on the earth as it is today. Second, it is like an identity—it is serving that purpose too. To say: 'People were here'. This is their story of the beginning, from these people, in a certain place."

"The spirit is within the rock art and it shows a story that is talking to us. So you listen to the rock art. You listen with your soul and you listen to it with your eyes barely scanning the panel as you look into it. What you are receiving is this….. After you have pulled it out, there are other things attached to it. So you are actually trying to break it down into smaller bits that you can understand."

Fig. 9.3 Clifford Duncan at the Cross Mountain petroglyph site in northwestern Colorado with Clifford talking to the petroglyph (photograph by Carol Patterson)

"You say to the rock art, "I want to feel what you feel", yet you're scared, so you hold back. So you find other ways to understand what it means. For example, I would take some Indian paint and I would put it on my body, somewhere. Then I would say "protect me from evil" By saying this, it also means that I believe the rock art is bad too. But if I said, "Protect me so I can do it right." Then it means if I don't do it right, it can harm me. So these things are part of how I approach rock art or what I call 'sacredness'."

"Sacredness can mean glorified. But lots of people think sacredness means you feel peaceful all over your body, your mind, your soul. Perhaps that is what it is, I don't know, but I often look at it, like it contains both. So I have to pass through whatever is there, and if it shows negativity, I still have to keep going to reach the other side."

"After I have studied rock art over a period of time I begin to feel relaxed and at ease with what I see. Then, I say, I think I have completed my journey. Each rock art panel is a journey. Every little thing that you see is a journey. It could be just one little drawing or one drawing that contains a lot of little things; it could be made to throw you off and cover something simple that is really there." (Fig. 9.3).

"So using a long description of what I think rock art is, I see that it is sacred. It's alive, and tobacco is my way of communicating with the spirit. I find that it too needs the same to communicate with me. So I give tobacco to say thank you and also for blessing the lands, and other things around there. Sometimes I use cornmeal. Some people use cornmeal or corn pollen, to open a pass from you to the light or you to whomever you want to communicate with. They use it in a straight line. When they get through, they rub it off, and that closes the pathway."

"By that I also mean that as long as rock art remains somewhere in the world, it is doing something. That's why I want to record and document it, because you have a chapter to add in their history. That is what it is for. Then I make my offering."

Shavano Valley Rock Art Site

Shavano Valley petroglyph site is about five and a half miles west of Montrose, Colorado, located on a high escarpment of Dakota sandstone overlooking a fertile valley sheltered between the Uncompahgre Plateau on the west and Spring Creek Mesa on the east. A gentle graded trail winds up 200 feet to the rim where the petroglyphs are located on the cliff face and on detached boulders that have tumbled down the slope (see map, Fig. 9.1).

Shavano Valley petroglyph site is a world-class rock art site with the added value of its access to native interpretation. It is still within the memories of the Ute people who know and understand the symbolism exhibited there. It has well preserved petroglyphs from the Late Archaic to the Historic Ute era.

Clifford Duncan was born on the Uinta/Ouray Ute Reservation in Utah, but his father was an Uncompahgre/Tabaguache Ute. Clifford returns to the Uncompahgre Plateau in Colorado many times each year. Shavano Valley petroglyph site is one of his favorite places to visit and remember the teachings of his parents and pay respects to the spirits of his ancestors and those spirits who still dwell in this site. The petroglyphs are highly symbolic and difficult to interpret by an outside culture. But in this case, Clifford has provided a Ute perspective. The following are conversations Clifford has shared concerning the Shavano Valley petroglyph site.

"If I go to Shavano, I begin with an introduction to the 'people who live there'. I become it in order to see it. I see it as part of the creation of the world." …. "What I am looking for is a thinking pattern. What is it that is hidden in that picture? Those drawings are depicting something that is still there—still faintly there today. They have a spirit that throws out a certain feeling if you are looking for it. It is just a matter of unlocking yourself from the inside to read it." (Fig. 9.4).

The Shavano Valley petroglyph site was used by early prehistoric hunters and gathers and more recently by Ute bands because of the presence of artesian springs and game trails that crossed back and forth through the valley from the Uncompahgre Plateau. Ancient Ute trails converged at this site, one running off the top of the mesa down to the valley, and others that ran up and down the valley, and east and west through the Uncompahgre Plateau (Fig. 9.5a, b).

Three Bears Panel at Shavano Valley

The "three bears panel" is the principal panel of the site. It is found on a vertical sandstone cliff face on the rim of Shavano Valley. There is a well-drawn "bear" shown in profile. Below this bear are two more bears and two trees. The one on the right is

Fig. 9.4 Carol Patterson and Clifford Duncan looking at the Shavano Valley petroglyphs depicting the Bear Dance using sign language symbols (photograph by Josh McDaniels)

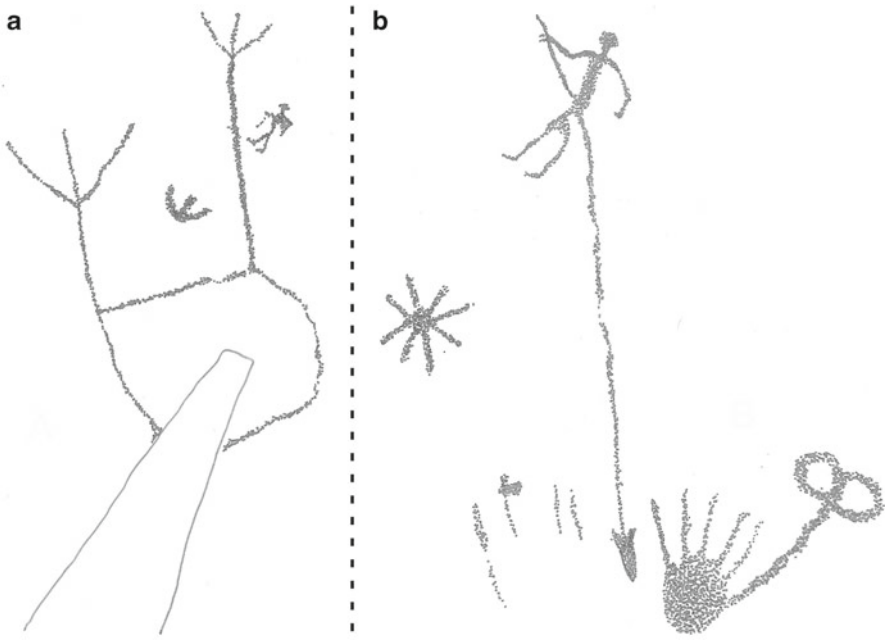

Fig. 9.5 Archaic petroglyphs at Shavano: (**a**) Archaic food gatherer is shown walking on a trail with her burden basket and digging stick; (**b**) an archaic hunter with his atlatl spear and archaic dart point. These panels are very faint and date 2,000–4,000 B.P. (drawing by Carol Patterson)

Fig. 9.6 Three Bears Panel at Shavano (photograph by Carol Patterson)

hard to distinguish, but the second one resembles a bear with a short tail. There are small dots representing "tracks" leading up to this bear, from a natural crevice in the rock face. This is a convention used by native people called "rock incorporation." Natural features of the rock are used to illustrate concepts such as "caves" or "mountains" or "canyons" as part of the narration. This panel is an illustration of a bear that comes out of its cave and walks up to a tree and stands there holding it (Fig. 9.6).

This panel has at least three episodes of production on the surface. The first episode is archaic and consists of a thin line that forks at the top. A small human figure is "walking up the faint, trail," with a burden basket and digging stick. The second episode of production of this panel is that of the bear climbing the tree and the elevated bear. These elements are characteristic of dense pecking and of note are the three roots descending below and the fork at the top of the tree. The rock incorporation of cracks and crevices is used to refer to the natural features in the landscape that are important in a creation story. The small dots represent the bear's tracks as he emerges out of a cave and goes up to the tree. The crevice also mimics the tunnel cave below. Together the tracks may indicate "emergence from the Underworld in the spring" (Figs. 9.7a–c and 9.8).

The elevated bear is drawn "diagrammatically." That is, it is shown in profile (side on) but its paws are shown front on. This is a technique commonly used in picture writing to give clarity to the identity of the subject. The author wants the viewer to know it is a bear, and not a squirrel on a tree.

Diagrammatic illustrations are not meant to be viewed as "naturalistic." A majority of the indigenous picture writing around the world and especially in North America use this technique to describe something, rather than just draw a picture of

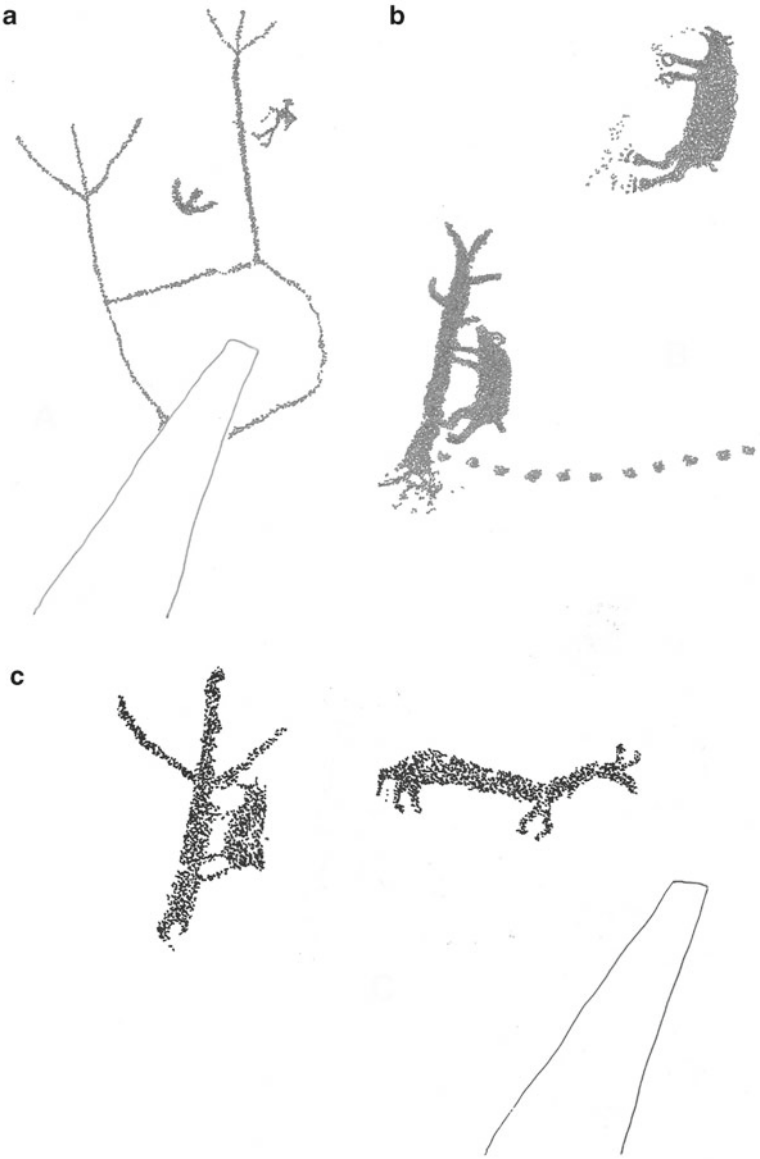

Fig. 9.7 Line drawings of the "three bears panel" showing the three episodes of production, (**a**) Archaic, (**b**) Proto-historic and (**c**) Historic eras (drawings by Carol Patterson)

it. It is referred to as "drawing what one 'understands' rather than what one 'sees'." There are dots coming from its mouth that may represent blood. "*Sometimes (during the Bear Dance), the Utes would apply red paint around their mouth to look as though blood were dripping from the jaws, suggesting the ferocity of the bear*" (Densmore 1972:57) (see Fig. 9.8).

Fig. 9.8 Bear with flexed paws and spit coming out of its mouth showing ferocity and power (black and white drawing by Carol Patterson)

The third episode is that of a cruder tree and bear. There are no roots or a fork at the top of the tree. A typical Ute horse with elongated neck and body and shortened legs has been added. These elements, the tree, bear, and horse, are produced with an iron tool that would have been available in the late 1800s (see Fig. 9.7c).

The Bear Dance is the central theme and is specific to Ute cultural traditions during the eighteenth and nineteenth centuries, after the relocation of the Uncompahgre Utes out of Colorado and onto the Uinta/Ouray Reservation in Eastern Utah in 1881.

Clifford explains the bear paw motif: "Places like Shavano have symbols of bear paws. The bear is always connected to something, either by sight, body or the spirit. That is why the bear stands up. A bear normally walks on all fours. But when there is something interesting, or something that a bear wants to see, it stands up. That is why he leaves his prints on the wall, because he was standing up. The bear prints on the wall mean that they are talking about something."

"Sometimes we see a bear standing upright to a tree. The only way to interpret it is through a spiritual connection. That's my way of looking at it. After you are through studying books on rock art the way you are suppose to study it, try studying it through your soul." (Fig. 9.9a–c).

The Tunnel Cave at Shavano

The Tunnel Cave has very old engravings on the walls and suggests a mythological theme of the underworld. The south panel has serpentine lines and distinct bear paw tracks. The north wall has linear motifs that are interpreted as a "spirit line" that crosses horizontally over this earth and then journeys vertically skyward (Fig. 9.10).

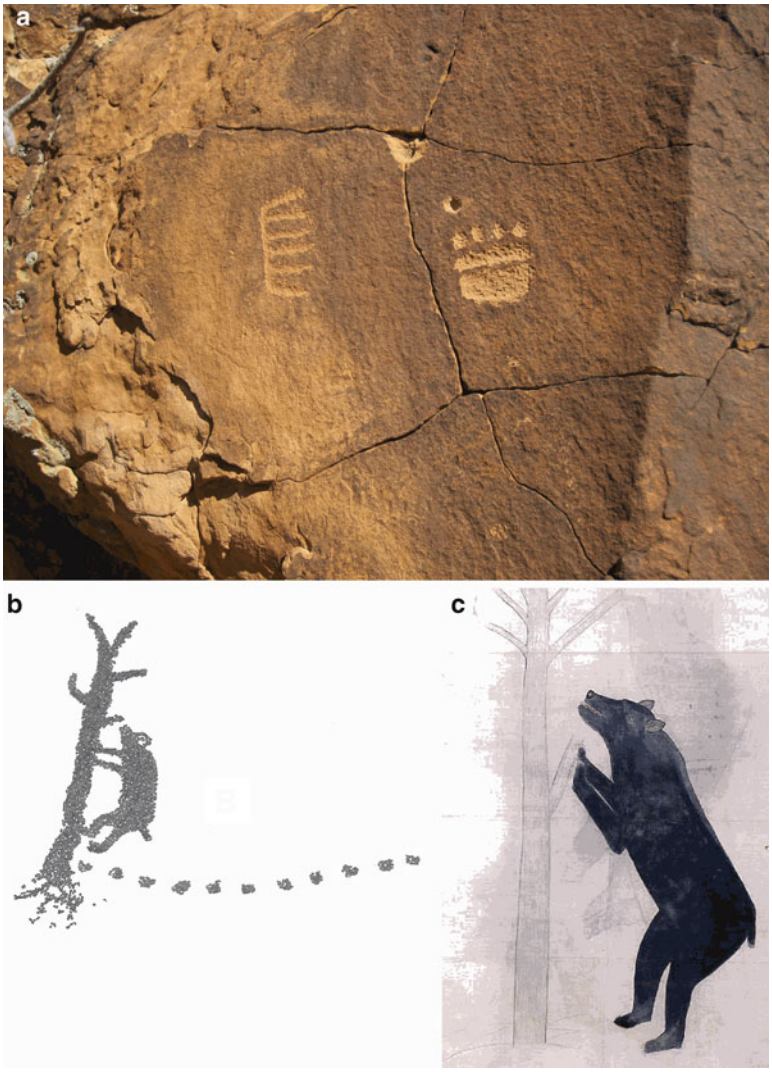

Fig. 9.9 (**a**) Bear paw at Shavano, (**b**) bear and tree at Shavano, (**c**) Ute painting of the bear and tree (photograph and drawing by Carol Patterson)

"In Numic mythology the brothers are known as the big and little wolf or "the wolf brothers." *Sinav* to the Ute is wolf who appears occasionally as a cultural hero and is generally a benign and responsible fellow, a kind of a mythological counterpart to the Supreme Being. Coyote, besides being the greedy and licentious character described in myths, is responsible for many cultural institutions and natural conditions. He secured the fire and the pine nuts, released the game impounded in a cave, caused death to occur, and imparted to man knowledge of arts and crafts" (Hultkrantz 1986:638).

Fig. 9.10 The Tunnel Cave at Shavano Valley rock art site has very old engravings on the walls that are difficult to see. Some are very faint and old and demonstrate the great age of some of these panels (photograph by Carol Patterson)

According to Clifford, *Sinav* is the creator figure that greets you after death. In this panel, a canine figure (wolf) faces toward the lines. Clifford believes that the "Tunnel Cave" petroglyphs are related to ancient creation stories. A wolf or a coyote is featured along with many linear motifs, animal tracks, and bear paw prints. The cave walls depict bear paws pointed down as the bear descends into the underworld, and pointed up as the bear emerges out every spring. The "tunnel cave" may be metaphoric for a womb-like portal from which the bear emerges from the underworld (hibernation) to upper world (Fig. 9.11a, b).

Clifford has never entered this cave, noting that "I'm not ready to meet my maker just yet" (Duncan 2008). The tunnel cave may be the equivalent to the underworld realm where spirits go after death. "The path to the other world followed the Milky Way but was sometimes described as an underground passage ending with a bridge over a terrific chasm…" (Hultkrantz 1957:78). "The domains of the dead lie in the south, north or west and are situated on the other side of the ocean or up in the sky." The ruler is Wolf, for the Ute and Southern Paiute…. Wolf and the Father have been interchangeable concepts… Wolf has to wash the newly dead and even escort them to the other world" (Hultkrantz 1986:637).

Caves and other named localities, which remained sacred sites for shamanistic power quest, are believed to have served formerly as entrances to the legendary underground pathway. The recurrent theme in these stories is the adventures of a hunter following a wounded animal to the lower world and his return after a time

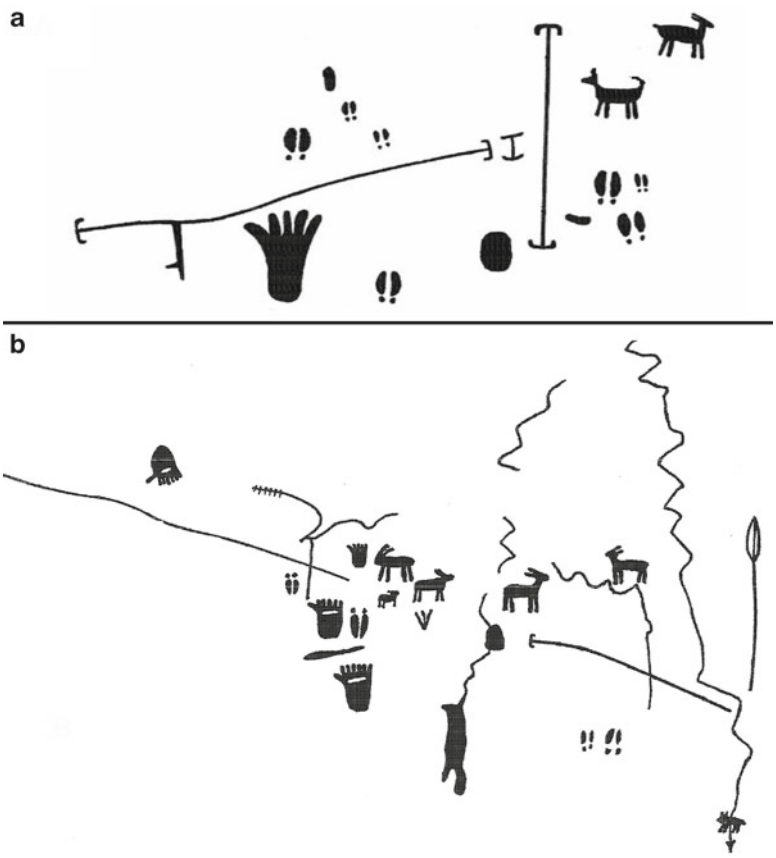

Fig. 9.11 Drawings of the petroglyphs on the (**a**) north and (**b**) south walls of Tunnel Cave (drawings by Carol Patterson)

spent with the dwellers down below. The underworld is also similar in concept to the underground cave that bear hibernates in through the winter, and emerges from in the spring (Pettit 1990:73).

The Ute buried their dead in rock crevices and cave entrances. The passage to the underworld was known as *Na-gun-tu-wip*, where departed spirits dwell. When passing through, owls hoot, wolves howl in the distance, and grizzly bears' foot prints can be seen in the sands. At the end of the passage a bridge crosses to the "beyond the chasm" (Pettit 1990:73).

Clifford: "From the Ute perspective, Man has to walk through darkness for a long period of time and then walk into the light, and then back into the darkness. Like the sunrise, the sun rises out of dark and then sets into the dark. Some of our beliefs are this: The spirit is born and told to travel in total darkness for 9 months inside your mother. Then you are born into this world from your mother and born into the light. Prior to that, you don't remember. I don't believe there is energy that

Fig. 9.12 Cosmic Tree and Levels of the Universe (photograph by David Manley)

is invisible that has no beginning; they all have to have a beginning somewhere. Beyond beginning is another beginning. So that is what makes 'spirit' come to this world. When a family becomes civilized, in so called civilization they began to write and record things in the petroglyphs, and that is what keeps man in this light. It is during this time of light that they put this information on the rocks."

Ute "Cosmic Tree" at Shavano

Shavano Valley petroglyph site has a remote petroglyph perched high up on the rock face. On the left side is a "cosmic tree." It has three roots below it and a fork at the top. On the right side is also a tree with three tiny roots below and a fork at the top. The three arcs around it represent the three levels of the earth (terrestrial) and two celestial representing the sky and the underworld (Fig. 9.12).

The Ute view the cosmos as a series of circular planes. This comes from the experience of looking out at the horizon that forms a semicircle around the viewer. The upper world and the lower world logically follow this model. The way in which to diagram the three cosmic realms bisected by an Axis Mundi or "tree" would appear like in Fig. 9.12.

Dr. James Goss studied the language and mythology of the Southern Utes for over 50 years. He writes:

> Five is a very important ritual number for the Ute. Five colors match the five levels of the Cosmos. These in turn are matched by five shamanistic clans. Each clan "boss" is the

> "boss" of the logically appropriate level of the Cosmos. Eagle rules over the white world of the sky. Mountain Lion rules over the Upper earth, the cold world which is lighted by the yellow light of sunrise. Wolf rules over the Center Earth of grays, greens, and blues, the focus of the primary vegetation. This is the main realm of man, too, where the greatest variety of resources is available. Weasel is the ruler of the Lower Earth, which is red, dry, and warm, with occasional oases which open to the Underworld. Rattlesnake rules over the Underworld, the domain of darkness under earth and water (Goss 2000).

The tree at the center of a ceremony or a painted composition is part of a body of myths, rites, images, and symbols which together make up what is called "symbolism of the Centre" by Mircea Eliade (1964). He believes that through time, man has always had an obsession with the origins of things and it is reflected in all mythologies. In the symbolic language of myth and religion, the tree acts like a vertical axis, the "cosmic axis," or "axis of the world" (Axis Mundi) which connects the cosmic zones of sky, earth, and underworld. It descends through the discs of the earth into the world below. This idea of the cosmic axis and the "center of the world" is extremely ancient (fourth or third millennium B.C.) and widely diffused around the world.

The tree roots are key to the identification of this image. It is the roots that penetrate the underworld while the fork at the top of the tree penetrates the sky world. The three levels of the earth are bisected by the spiritual conduit of this tree motif.

According to Clifford and the Utes, the tree is sacred in many parts of Ute culture. The sacred tree was used by the bear as part of a transformation between worlds. The tree possesses all kinds of Indian medicine (Duncan 2005). For Clifford the image in this panel signifies: "The tree is the most important motif within the Bear Dance theme. It is the Bear that leads you to the Tree. The tree is related to the bear, and he is related to the tree."

"The Tree is a birth place of certain rituals, and it has the power. The bear, emerging out of hibernation, comes out and marks the Tree, and while he's doing that, there are songs that come out of the Tree. Because in the spring time fresh new life is coming out of the tree. That is where the bear gets a new song and creates the bear dance."

"The Tree represents vegetation and all things that grow. At the beginning, it was the animals that were the teachers for early Native Americans as to what was right and what was wrong, and what types of plants were for medicinal use."

"My grandmother told me that life is like a tree and each branch is a gift a person is born with. At the end of your life time all that remains is the very top of tree. That is the place of the little container that we are born with and that never dies. It comes with us when we leave. If we get to the top of the tree there is an amazing sense of happiness, like we have never known, and we will want to have that happiness all the time. This is what we all yearn for in our lives."

The Ute Bear Dance

The Ute Bear Dance is called *mamaqui mawats*, meaning to dance forward and back or mamaqui niqap, "Forward-backward dance" (Opler 1941:25). It is believed that the Bear Dance is originally a Ute dance. It was practiced by all Ute bands at the

Fig. 9.13 Ute Bear Dance (Colorado Historical Society, public web site)

time of contact, preformed in the late winter toward the end of February or beginning of March. Each band would have one and also invited others to participate. The host band provides food and builds a large circular brush enclosure for the dance. The Bear Dances lasted from 4 to 10 days and consisted of a group of men playing musical rasps (a notched stick and unnotched stick) that was placed on the top of a drum resonator. This encouraged the dancers by stimulating them to dance. It imitates the calls and sounds of the bear as it emerges from hibernation in early spring (Jorgensen 1986).

Shamanizing was important as was the notion that bear dancing was curative. All of the Ute religion is charged with faith healing and ritual curing. Individuals constantly sought supernatural power for their own well-being, as well as for control of power to help others (Jorgensen 1986:60) (Fig. 9.13).

Preparations were made all winter: Around the campfires the storyteller told tales of the way of life and the singers practiced songs which had come in dreams. As the time came near the men prepared the Bear Dance corral and did other necessary work, while the women made the family's clothes for the dance. In the spring the bands would come and set up camp. The men and women would enter the corral wearing plumes of feathers that signified their worries. At the end of the dance on the fourth day, the plumes would be hung on a cedar tree at the east entrance of the corral and they would leave their troubles behind.

The Bear Dance today is almost identical to the precontact version of the dance except that menstrual lodges for pubescent are no longer constructed near the brush-enclosed dance grounds. The Ute Bear Dance was slightly altered in the 1870s and 1880s, only to be restored to a form close to the original by the 1890s.

The origin of the Bear Dance is told this way. Two brothers were hunting in the mountains and stopped to rest. One of the brothers saw a bear clawing and singing as he danced around a tree. As one brother went on to hunt the other watched the bear who taught him the dance and the song. The bear told him to teach this to his people as a sign of respect for the bear's spirit which gives strength (Jorgensen 1986). "The dance is held in a large circular brush corral of cedar trees gathered every year by the men. The corral entrance faces the rising sun in the east. Two cedar trees are positioned on either side of the entrance just inside the circle. Men sit on the north side of the circle, and the women sit o the south side. The singers made booming thunder sounds to accompany their songs by running a stick across a long wood rasp over the hole. On the first day of the dance, the bears heard this "thunder" in their dens and woke up (Rockwell 1991:158).

"If someone should fall in exhaustion, the dance chief would revive both of them by rubbing the musical rasp on their bodies. The dance terminated with a feast sponsored by the host band" (Pettit 1990:92).

"The dance is in imitation of the bear as he steps forward and backward with each thrust at a standing tree. Altogether this creates a rhythm which quickens the flow of blood in the body and renews the zest for life" (Annabell W. Eagle, Southern Ute Drum in Pettit 1990:93).

Clifford Duncan tells another version:

"The Bear Dance is called "*mo waka wi*" in Ute. Laterally "forward/back" dance. The lady imitates the bear. A woman was kidnapped by a bear and she had a child. The child ran away and got back to the people. The people want the mother back to the tribe. The brush arbor or circle has the bear (man in a bear skin) in the middle. The woman dances toward the bear. She likes it. It's a seductive dance. These are old stories. The Bear, Circles, are all old. The Bear is not just an animal. It has spiritual powers. A person gains power from the bear. In the old days, the Grizzly was abundant in this land. It was a made person. It possessed objects for rituals. We make objects but must get permission from the bear to use them" (Duncan 2005).

"Certain bears can climb a tree, but other can't. A Black bear can climb a tree, but Grizzly won't, because he doesn't' know how to climb. So you have to pick out which one you want. The Grizzly is more powerful in that way, and is given the tobacco. That's why they were given tobacco in that pipe" (Duncan 2011a, b) (Fig. 9.14).

"This skin painting at the Ute Indian Museum depicting the Bear Dance shows the line of dancers in the middle. At the top are the musicians seated around a resonator or hollow table, playing the marches, and a "tree" stands near them. On the other side near the entrance is another "tree with a forked top" (Duncan 2010a, b).

"Goshutes have a story of two youths, hunters who went out into the woods and they heard the bears in an open space surrounded by pine trees. They watched from a hill. They heard the songs the bears were singing; *rum rum rumm*. They listened to the song, and they caught it. Then they picked up another song the bears were singing. They took the songs back to the village and sang the songs and then created

Fig. 9.14 The Bear Dance scene painted on buckskin is detailed showing the corral, people seated at a table playing moraches, (bear growlers), 12 pairs of men and women in facing dance lines with male "whippers" (Cat men) at either end, seated spectators on both sides of the corral entrance, fruit on a table beneath a leafless tree, a White man facing the spectators, and a girl clothed in a blanket peering into the corral at the right of the entrance. Collected about 1890–1900 by Thomas Mckee. Colorado Historical Society 1894.170 (photograph by Carol Patterson, Ute Indian Museum collection)

a spring celebrating. Then one year during the time of that dance, the bear came back to the village prowling around looking for that song. A woman is singing it and she gave it back to the bear" (Duncan 2010a, b).

"In rock art, the bear and ritual is symbolized by the bear paw. The songs for the dance were inspired from the sound of thunder in the sky. The singing is about that. The women select a partner. On the last day is the appearance of the bear, a man with a cape and bear head. People dance to one side and say 'the bear is coming'. Kids hide behind their parents. The bear comes into the corral and moves all around while the dance is going on. Then a man comes to the center of the circle to east, singing a song, rhythm and sound. A woman dresses up in buckskins goes to the center of the enclosure and holds her hands up. She becomes the 'bear' and the bear is the 'tree'. The woman dances around the man (bear), several times. The song ends and the bear/man goes away. The last night of the Bear Dance, they dance all night into the morning. The sun comes up and they all line up and face the East. The medicine man says prayers and fans each one and then excuses them. Then our parents

go home. They take a branch of willow and walk around the house, talking to the 'little ones' the crawling things. They say 'bugs, we are going to live here with you. You help us, and we help you. We all live close to nature'" (Duncan 2012).

Clifford has a special affinity to animals. He says:

"Animals all have a special gift. *Pachuk*—is Otter, and he lives in the water, swims like a fish, comes out of the water, goes out on the land, plays on the land, and does many things. When Otter gets to the water, he rolls around, and is very playful. So many Indian medicine men really like that animal and they will connect to Otter and say, 'I want you to be my teacher.' You have to talk to these animals in such a way that they will become your teacher. You say, 'Teach me how to talk to people, or teach me how to doctor this sickness, or teach me how to identify plants. Teach me about signs I should watch for, Animal Teacher.' You select the animal you like, maybe magpie. Then say; 'Magpie, I have come to you, I want you to teach me how to read rock art.' Over time they will come and say 'yes' or 'no', or else you are not ready. Most of the time you are not ready" (Duncan 2008).

"Mountain sheep in rock art are different. You (Carol) as a person, have studied many drawings of sheep, and learned they are not all the same. They are different in many ways. They are telling a story to you, and eventually you will pick up the idea that they are not really what you think they are. They are people. Animals are people. They tell you what the people are doing" (Duncan 2012).

"Rock art that depicts animals, is really talking about something that is not really dead. Rock art is not a place of dead drawings. They are very much alive. The animals depicted make it alive. When I look at bird or an animal like an Elk, I will talk to that Elk and say, 'well, I am not supposed to do this, but I can talk to you, so you can listen to me for awhile.' Then I go on and talk to it. The rock art is actually communicating with me. A lot of people say *praying*, but it is not. You are actually throwing it out to the rock art. That's what the difference is. We've picked up this idea of praying and make it sacred, but we only use praying at certain times. In this case, it is actually talking and communicating" (Duncan 2011a, b).

Spiritual Discussion

Clifford's conception of spiritual matters involves: "When you start thinking about spirit, you center your thought on what is really your existence. Is it a spirit that brought you here or is it inside your body? You have two that are parallel. When you start thinking about it in this manner it becomes clear that the spiritual part of a human is actually coming from the past into this world and will continue on into the beyond. So in that sense, it is an everlasting spirit. While it is here on this earth, the spirit takes on a body. The important thing is that all things on this earth do have spirits. That is why when a Native American is procuring plants for medicinal uses, they are selecting the plant spirit also. It is the spirit of that plant that's going to do the healing. It is the spirits that are part of whatever we do in life" (Duncan 2010a, b).

"Those were the teachings of my great-grandfathers. You have to actually take it step by step because it all cannot be acquired overnight. It has to be taught from the

Fig. 9.15 Clifford talking to Polly Schaafsma. A little lizard jumped up on his shoulder (twice) pictured here. Clifford calls "Lizard" his spirit helper (photograph by Carol Patterson)

very first day of life on this earth and taught step by step. All the things that you must acquire will take a life time of teaching" (Duncan 2010a, b) (Fig. 9.15).

"So the respect for humans then is on the spiritual level, not as a person. You don't just look at a person as being a person, you have to look within that person and know how they feel. My father used to say that the color of the skin does not really make a difference because the color of that spirit comes first and you will have to learn how to recognize what is inside the person. But we're in a world that the first thing that we do in the morning is look at ourselves in the mirror. In the mirror you are really looking at the surface of your face, your body, not your spirit. Its the spirit that is behind that face or inside that body so you have to learn how to pull that out and look at that first, when you look at that mirror" (Duncan 2010a, b).

"That's the way I was taught. It's the same way with sacred space. When we are going to perform a certain type of ritual or ceremony, we create a sacred space. We do that by bringing all spiritual things into one world, and we say, this is a spiritual space and this is what we are going to use this for. Upon completing that ceremony, what we came together to do, we then have to close that space up. Yet it's the same world. It is how we look at things that are invisible, and learn how to see with that invisible eye, rather than this eye. These are the teachings of my elders and my ancestors, who passed it on to the next generation. There are very few of us now who are actually part of that world so this is my explanation as to how we should respect people. This is what we have to be part of, and coming to the conclusion that I am part of the universe, I therefore belong to the universe and everything that is here I am part of. I am not separate. This is something that we all have to strive for" (Duncan 2010a, b).

Song Is a Spirit

Clifford continues in a similar manner regarding the role of song in a spiritual context: "The Song is a spirit. It moves like thinking, like a thought. From this to this, it jumps around. So one day you're are sitting there and it jumps into you. And the song says "Sing me". So you sing it. Two minutes after you get through with that, it's gone, and you don't remember, because it's a spirit, it is gone away. So that's why I catch that and put it in a tape recorder. And it doesn't get away from me, and I keep going back to that, and I've got it. And I say, 'Ok I've got you, you are a spirit, and I want you to teach me how to be like you'. So that song becomes part of me and I sing it. That's how that goes" (Duncan 2009) (Fig. 9.16).

Sacred Landscape

"The songs I sing are an opener. They open things up. Songs are derived from the landscape and from the sounds of nature. If a certain place feels a certain way, it's because there is a song for it. It comes into your mind and you start singing. It is a means of exploring. When we go to a rock art site, and you tell me the site

Fig. 9.16 Clifford Playing the Flute (photograph by Carol Patterson)

is on top of that hill, a song comes into my mind I start singing it. I start humming that sound. What I am doing is throwing the song up into that area on the hill. It kind of like clears the way for me. It is also like a prayer" (Daniels 2010).

"Each place in the landscape has its own song. They are especially Indian songs that don't have words. We call them chants. Some people say they don't make any sense. *Heeyaayaaa*. It is not even a word. But it has to be repeated the same way every time. A song can be the sound of a wind. When you go up into the mountains and sit in an area with lots of pine trees, the wind blows through there and makes a song. It is this singing that you pick up on. And when you sing these songs, they bring back the feeling of that place. That is why we sing songs in each place that we go. It is not really planned. It just happens. I like it. I like songs. I think that is why I sing all the time" (Daniels 2010).

"In ceremonies we say we don't own a song, *the song owns you*. Don't say you own that song—that is the wrong way of thinking. I don't own the land*, the land owns me*. That is the way of looking at life prior to the Europeans. How could you own something that owns you?" (Daniels 2010).

Summary

Clifford Duncan has spent most of his life following the teachings of his Ute religion, conducting ceremonies for the spiritual well-being of others and studying Ute petroglyphs and paintings throughout Colorado and Utah to better understand his cultural history and prehistoric world view. His perspective provides a unique aspect of rock art interpretation for nonnative scholars. Rock art enthusiasts are always curious about "what it means." Perhaps we can never know the whole truth, but for Ute rock art panels in Western Colorado, there still is a connection to the living culture that created it. These interpretations by Clifford Duncan remain invaluable.

As with many religious traditions around the world there are three modes of expression: the mythological narrative, the visual iconic display, and the ritualized performance. Shavano Valley petroglyph site provides a unique example of a prehistoric visual display of the Bear Dance ceremony that Clifford retells in his versions of the Bear Dance myth. It serves as the ceremonial grounds for the gathering of Ute bands each spring, to recite myths and spiritual beliefs, sing songs, and dance for many days, paying their respects to the bear and reverence for the "tree." Medicine men perform healing ceremonies for the benefit of the community. Shavano Valley petroglyph site is indeed a sacred landscape.

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Chapter 10
Old Man Owl: Myth and Gambling Medicine in Klamath Basin Rock Art

Robert J. David and Melissa L. Morgan

Introduction

Site 38-15-04-03P, referred to in this chapter as the "Owl Site," is a petroglyph concentration located within the headwaters of the Upper Sprague River Watershed in the eastern portion of the Klamath Basin of Southern Oregon and Northern California (Fig. 10.1). Klamath–Modoc peoples believed that characteristics of the owl contained supernatural properties, and these properties were integrated into their ritual activities. Klamath–Modoc myths, in combination with local ethnographic information, provide specific and detailed explanations for why the rock art at site 38-15-04-03P is related to power quests in which individuals sought supernatural assistance in gambling. In this chapter we argue that laypersons, as well as the shamans, visited this site in order to acquire the owl's supernatural assistance that would help them to become successful gamblers.

Site Description

The petroglyph site comprises two main panels. Panel 1 is a combination of circular and linear designs arranged to look like an owl, containing a pair of eyes, a single ear, a beak, a wing, and probable stomach or symbolized pellet containing prey.

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Fig. 10.1 Map of traditional Klamath–Modoc territories. The *red star* shows the approximate site location. Map adapted from Gatschet (1890a)

The rock art today is partially obscured by lichens and mineral staining. Nevertheless, as Figs. 10.2 and 10.3 show, the entire panel has the strong suggestion of an owl with its torso in twisted perspective as it stares back at the viewer over its wing. Panel 2 consists of two sets of concentric circles that have been arranged to emulate the eyes of an owl staring sharply back at the viewer (Fig. 10.4). Aside from the

Fig. 10.2 The rock face on Panel 1 has been modified to resemble an owl. Photos by R. David

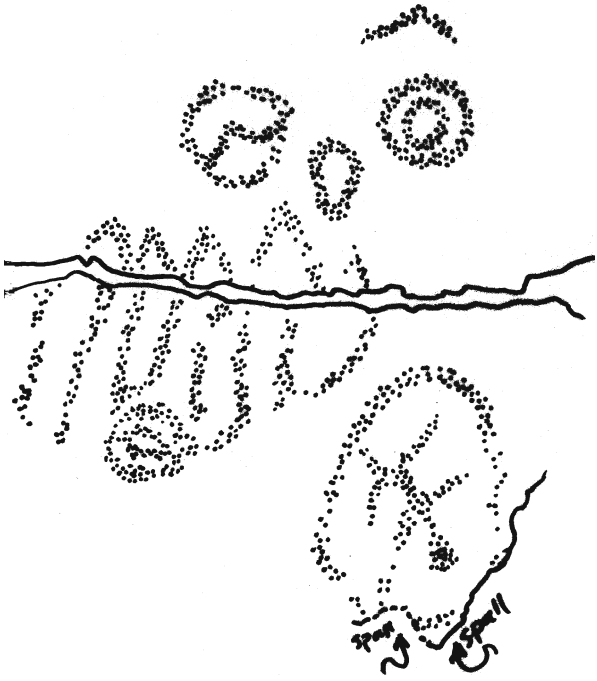

Fig. 10.3 Stipple-traced representation of Panel 1 imagery. Drawing by R. David

Fig. 10.4 Panel 2 petroglyphs represent eyes overlooking the pond in Fig. 10.4. Photo by R. David

petroglyphs, the only other cultural features on or around the site are artificial rock piles, which are by-products of Klamath–Modoc power quest rituals (Spier 1930:96; Haynal 2000).

Site Setting

The Klamath Basin is the traditional homeland of the Klamath and Modoc Indians. It is bound on the west by the southern end of the Cascade Range, and on the east by the northwest rim of the Great Basin. To the north are the Wood, Williamson, Sycan, and Sprague Rivers, all of which are significant Upper Klamath Lake tributaries. To the south, the Klamath River drains Upper Klamath Lake Basin, bisecting the Cascade and Coastal Ranges (National Marine Fisheries Service 2007:2–7). Within the southern portion of the Basin, the Lost River/Tule Lake/Clear Lake Basin water complex now cut off from the Klamath River, once connected through Lower Klamath Lake during periods of high water (Dicken and Dicken 1985:1–4).

The petroglyphs are located within the Upper Sprague River watershed in a region known to the Klamath and Modoc as *Plaikni.* They are concentrated within a small canyon spur draining into the larger canyon stream that forms a tributary to the Upper Sprague River. Periodic overflow from a spring-fed lake on the plateau forms an intermittent waterfall that drains the overflow into the main canyon stream. This overflow has created a permanent pool at its base (Fig. 10.5). Although its water level varies, the pool retains water throughout the year. The site was

Fig. 10.5 Fed by an intermittent waterfall, this pond is over 3 ft deep during the wet season. Photo by A. David

discovered in July 2009 during a cultural survey of the canyon system. Its relative isolation and difficult access are perhaps the largest contributing factors to its pristine condition and provide an important interpretive clue.

Cultural Background

The people who came to be called the Klamath and Modoc entered this region approximately 10,000 years ago from the Great Basin, and by the time of the Mount Mazama eruption, these hunting and fishing peoples began taking on the life ways described in their ethnographies (Cressman 1956:402; Sampson 1985: 507; Stern 1966:3–4). Although once a unified people, the Klamath and Modoc underwent a series of political separations beginning around 1780, and by the time they encountered the whites considered themselves distinct but related peoples (Gatschet 1890a:13). Yet in spite of their political separation, the two peoples remained culturally similar in almost all significant ways (Loubser and Whitley 1999:48), including their use of language and sharing the same corpus of myths, including their creation narrative (Stern 1966:4). Thus, given their commonalities, we refer to them throughout this chapter as the Klamath–Modoc when speaking of cultural traits or properties they shared in common, and by their distinctive names when speaking of traits peculiar to a specific group.

Of particular importance to this chapter is the large corpus of myths that the Klamath and Modoc shared in common. It was this body of cultural information that provided the underlying logic for their rituals and ceremonies, but also structured the more mundane aspects of their daily lives (David 2010). This latter aspect has yet to be explored in Klamath Basin rock art studies.

Rock Art and Spiritual Connections

The earliest rock art studies in the Klamath Basin were concerned largely with where the art fit stylistically within wider regional patterns (Cressman 1937; Swartz 1963). Later studies, however, showed an increasing interest in understanding rock art's shamanic significance (David 2010, 2012a, b; Hann and Bettles 2006; Hedges 1992; Ritter 1999; Loubser and Whitley 1999; Whitley et al. 2004). More recently, Whitley et al. (2004), Hann and Bettles (2006), and David (2010) have specifically explored the relationship between myth, shamanism, and the distribution of supernatural power, and where these ideals converge on the Klamath–Modoc sacred landscapes. As these latter studies purport, rock art sites are places on the landscape where shamans or people with adequate spiritual power traveled between the physical and supernatural worlds (Hann and Bettles 2006:186; Loubser and Whitley 1999:49; Whitley et al. 2004:226) or where supernatural feats of curing occurred (David 2005:68, 2010:394). It was within these contexts that spirit power gave shamans the necessary potency to diagnose and cure sickness, see the future, control the weather, and excise dangerous spirits from the community. In many instances, the owl spirit provided specific kinds of power directly related to these abilities (Gatschet 1890a:175–176). So it should come as little surprise that we should find owl referents throughout Klamath Basin rock art.

Spirit power was not limited to shamans. Non-shaman Klamath and Modoc individuals also embarked on quests in search of supernatural power. Although the kind of supernatural power gained from such quests was not considered of the same type or caliber as that received by shamans, it did provide the laity with supernatural assistance useful for more mundane pursuits including gambling. So while it is tempting to associate the rock art at this site with any of these shamanic abilities, we propose instead that the owl, in this context, served a more mundane purpose.

According to myth, gambling power came from *Mukus,* Old Man Owl (Curtin 1912:9). The owl, in fact, was an important supernatural being amongst most western North American tribes (Spier and Sapir 1930:237–240; Ray 1939:94–95; Keyser 1992:91, Keyser et al. 2004:74; Keyser et al. 1998), and is probably best summarized by Malotkni (1992:2), who says, "Few birds have generated such powerful emotional reactions and caused more ambivalent impressions on the human mind than the owl." In Klamath–Modoc spiritual practices, the owl plays a number of important roles, including shamanic curing medicine and as a purveyor of supernatural power for gamblers. Shamanistic cultures around the world recognize a more or less uniform set of characteristics that have made the owl a desirable source

of supernatural power. One of the owl's most prominent features is its ability to extract secrets. Equipped with acute vision and hearing, the owl is specially adapted to detect subtleties in the night. They have extra light-sensitive cones and rods in the retina to help with this. Thus, it is believed that one of the owl's supernatural powers was its ability to see what others could not see or to be able to see into the darkness within other people, where they kept their secrets (Andrews 1996:173).

> One who works with the owl medicine will be able to see and hear what others try to hide. You will hear what is not being said, and you will see what is hidden or in the shadows. You can detect and pinpoint the subtleties. This can make others uncomfortable because they will not be able to deceive you about their motives or actions. Owl people have a unique ability to see into the darkness of others' souls and life. This is very scary to most people. This vision and hearing capabilities has metaphysical links to the gifts of clairvoyance and clairaudience as well (Andrews 1996:175–176).

For Klamath and Modoc peoples, it was these same characteristics of the owl that were believed to contain certain supernatural properties, and are, in fact, the reasons why supplicants sought out the owl's powers to assist them in becoming successful gamblers.

Ethnographic Information

The Klamath and Modoc visited the Upper Sprague River Valley seasonally in order to exploit salmon runs and to hunt and gather upland roots and berries (Coville 1897:101; Ray 1963:198; Spier 1930:146). When the hunting and gathering concluded in the late fall, the Klamath joined a gathering of various other groups to engage in gambling, trade, and other activities in the uplands (Allison 1994:202; Rosetti 1995). Thus, it is within this context of seasonal use that we must evaluate this site.

Gambling and trade fairs continue to be an underappreciated aspect of the Klamath–Modoc economic life. Although intra-tribal gambling occurred at any time throughout the year (Ray 1963:123), *inter*tribal gambling took place only at times that accommodated large gatherings. Near the end of their food-gathering cycle in the late fall, the Klamath, Modoc, Snake, Paiute, Shasta, Achumawi, and other groups congregated in this region to gamble and trade (Davis 1974:19). Tremendous amounts of wealth often traded hands. One such location was located in the Klamath uplands. These large fairs were important components in the tribal economy, as they provided wealth to some and served as an economic leveling mechanism for others (Ray 1963:180–182; Spier 1930:145–146).

The principal gambling game was the four-stick game called *so'kals* (Spier 1930:77). Played exclusively by men, this game was basically a contest between two opponents. While one player arranged marked game pieces and kept them hidden under a special gambling mat called *p'a'la*, the opposing player tried to guess their arrangement (Fig. 10.6). While success was largely a matter of chance, an element of skill was also present. According to Ray, "… the guesser was permitted

Fig. 10.6 Klamath versus Paiute in the traditional "stick" game, in which players from one side arrange two sets of marked bones beneath the bandanas while their side sings a power song. Opposing players must then guess the arrangement. 1915 Photo by H. W. Hinks

unlimited preliminary guesses, without being committed to such guesses until he accompanied one with a subtle formal signal (1963:12)." Likewise, until such a signal was given, "… the opponent was privileged to shift the position of the pieces at will" (Ray 1963:123). As this went on, the two opponents studied one another's eyes, facial expressions, and body movements, seeking subtle clues that would yield an added advantage in the contest. Notably, the player who interpreted his opponent's actions more accurately was usually the winner in the long run (Ray 1963:123–124).

The skilled gambler enjoyed high social and economic status. Even though the contest was between two "champion" players, any number of individuals could participate. Less skilled gamblers, or those less economically fortunate, could increase their wealth by casting bets with those who were more successful (Ray 1963:124). As the two primary opponents played, the participating bystanders cast bets and supported their champion by singing power songs (Ray 1963:124; Stern 1966:49). Small red-painted sticks, sharpened at one end, were used as counters (*kshesh*). Correct guesses as to the arrangement of the gaming pieces resulted in winning possession of one or two counting sticks, depending on the value of the guess. An incorrect guess resulted in the forfeiture of one of these counters (Dorsey 1901:24). When one side possessed all of the counters, the game was concluded.

Acquisition of Supernatural Power

Both skill and luck were contributing factors to the gamblers' success, but those who possessed the most potent spiritual assistance had an additional edge. Spirit power was necessary for all aspects of Klamath–Modoc life, and according to Spier (1930:93–95) was sought by nearly every member of the community, starting at puberty. Supplicants sought supernatural assistance with things like hunting, love-making, warfare, and gambling. The quest itself is called *spu'tu,* and the power was manifested in a song heard in a dream. During this period of ritual isolation, supplicants spent up to several days running up and down hills, piling rocks, and swimming in lonely mountain pools. They would call loudly to the spirits at night, asking for power, and would sleep uncovered, warming themselves only occasionally by a small fire throughout the night. Their goal was to secure song that arrived in a dream. The song itself (*swi'is*) was the manifestation of spiritual power.

The Owl as Gambling Medicine

Observing and keeping track of your opponent's subtleties took a very accomplished gambler—one in possession of the right kind of spirit power. Two of the owl's characteristics most relevant to gamblers include its extraordinary vision and its habit of ingesting prey head first, keeping only those parts that were most beneficial and regurgitating the rest. For gamblers, these abilities served as powerful metaphors for the skills necessary to be successful. The owl's ability to see at night (e.g., to see what is concealed) is parallel to the successful gambler's ability to read his opponent's face and body language and correctly guess the arrangement of the game pieces, which were concealed under a blanket, skin, or woven mat. Similarly, the owl's ability to ingest only the most beneficial parts of its prey, and regurgitate the rest, is parallel to the guesser's role in sorting through all of the preliminary guesses and discarding them until he is ready to make the official guess he feels is correct. A close examination of the petroglyphs comprising Panel 1 demonstrates that these are the very characteristics the artist chose to depict, and even to exaggerate, on this site (Figs. 10.2 and 10.3).

For example, a close look at the owl's eyes reveals that they differ, but that these differences actually enhance the owl's normal vision. One eye comprises a simple set of concentric rings while the other is a circle bisected by a zigzag through its center (Fig. 10.3). The concentric circle is a pervasive motif throughout the Klamath Basin and has been identified with *Kumush,* the most powerful spirit in Klamath–Modoc cosmology (Hann and Bettles 2006:190). The use of this symbol in place of an owl's eye links it specifically to spirit power. At the same time, the senior author has suggested elsewhere that in at least some instances the zigzag symbol represents the Lightning Spirit (*Lemenish*) (David 2012a:126). The use of this motif in combination with the owl's eyes symbolically enhances the owl's already amazing sense of vision.

According to Ray, Lightning was among the first spirits called in shamans' curing ceremonies because it *enhanced the shamans' vision*, enabling them to "see" the supernatural causes of sickness and disease (Ray 1963:56). In mythical terms, the act of adding the power of Lightning to the eye of an owl enhances its already supernatural eyesight, thus giving him something akin to "super vision." Taken together, these combined motifs symbolize exactly the kind of keen vision that would benefit gamblers, whose often enormous wagers depended greatly on their ability to read their opponents' facial expressions and guess their thoughts (Ray 1963:123–127). Supplicants in search of supernatural aid in gambling would visit this site for just that very purpose.

Another owl characteristic represented in the petroglyphs is the circle enclosing the stick-bodied zoomorphic figure (Fig. 10.3). The head-down posture of the zoomorph indicates that the artist understood that the owl ingested its prey head first and incorporated this concept into the motif. The reason for this is because the head-down stick-figured quadruped constitutes another gambling metaphor.

> Much study has been done on owls in regards to their prey. This is possible predominantly due to "owl pellets." An owl will usually swallow its prey whole and *head first* [emphasis mine]. The parts of the prey that are indigestible (bones, fir, teeth, claws, and such) are then regurgitated in the form of pellets. This is a very symbolic act in which much significance can be found. In the swallowing of the prey head first, the owl *takes into itself the wisdom and energy of the prey* [emphasis mine]. The regurgitation reflects its ability to eliminate those aspects that are unbeneficial and unhealthy for it (Andrews 1996:177).

A head-down posture of the stick figure quadruped in Fig. 10.3 is reminiscent of the behavior of the guesser's opponent in the stick game. Just as an owl absorbs the wisdom and energy of its prey (Andrews 1996:177), the guesser studies his opponent's subtle movements, facial reactions, and movements while making a series of preliminary guesses, weeding out all the non-useful information in preparation for making his final guess as to the arrangement of the gambling pieces. This part of the panel appears to be a reference to that aspect of the contest.

The supernatural connection between the owl and gambling medicine is contained in Klamath–Modoc myth. One story from *Myths of the Modocs* (1912), recorded originally by Jeremiah and Alma Curtin in 1884, tells about how *Kumush* instructed his adopted son, *Aisis*, to embark on a series of quests throughout the Klamath Basin for supernatural power. Each location offered a specific kind of power, but by and large, the ritual process at each locale was identical. As he visited each location, *Aisis* followed *Kumush's* prescription, speaking to the spirits at each locale, telling them what he desired, piling rocks, and then swimming and drinking from the sacred ponds. His goal at each location was to dream, and in those dreams secure a song (*swi'is*), which was the manifestation of his supernatural power (Curtin 1912:7–9).

After each visit, *Aisis* returned home to sweat in a sweat lodge and to recuperate from his journey. Finally, near the end of these quests, *Kumush* sent him to the owl rock in search of gambling medicine:

> *Kumush* said: "Now you must go to old man *Mukus*. Before *Gäk* turned him into a rock *Mukus* was the greatest gambler in the world. Around him are many rocks, the men he was gambling with when *Gäk's* word was spoken" (Curtin 1912:9).

Notably, in Curtin's original manuscripts, *Kumush* instructed *Aisis* to pile rocks at the Lava Beds before going to visit Old Man *Mukus* (Curtin 1884). Nonetheless, the description of *Aisis'* trials is very much in line with Spier's description of the Klamath–Modoc power quest (Spier 1930:95). Seeking isolated places praying to the hills, piling rocks, and swimming in ponds believed to be charged with supernatural power are common elements of this procedure. Subsequent to his visit with Old Man *Mukus*, *Aisis* visited yet another site called *Kaimpeos* and specifically swam in the pool located there in order to receive gambling sticks from one of the "*Kai's*" that lived under the water (Curtin 1912:10).

Based on the mythical description of these ritual activities associated with "Owl Rock," site 38-15-04-03P is well suited to facilitate power-seeking rituals of just this nature. Not only is it isolated from the mundane activity areas in and along this canyon system, but artifacts related to everyday living such as ground stone items, broken stone tools, and debitage are pointedly absent from the site. Its isolation from the mundane added to this site's suitability as a place for seeking supernatural power. The presence of the owl motif in Panel 1 suggests that this site was a place where people came to specifically seek supernatural assistance for gambling. By extension, we argue that the petroglyphs on this panel represented none other than *Mukus*, the Old Man Owl from myth. The stacked rock features in the surrounding area demonstrate that seekers followed the ritual power quest protocols described in the myths and noted above. Upon emerging from the pool after ritual bathing, seekers found themselves staring back at the stark, piercing eyes of the owl spirit in Panel 2, which appear to have been placed low on the rock face and overlooking the pond for that very purpose (Fig. 10.4).

Discussion

As a spiritual enterprise, it should come as no surprise that gambling referents turn up in Klamath Basin rock art. Gambling played an important role in the Klamath–Modoc economic life, and continues to be an important tradition in the form of modern-day Indian casinos. Games were played intra-tribally and intertribally. Large quantities of wealth often traded hands during these games. In economic terms, intra-tribal gambling served primarily as an economic leveling mechanism. Losses of one day could be offset by winning the next. At the same time, intertribal gambling brought wealth into the tribe as a whole. And while some players were consistently more successful than others, the less talented players could still increase their own winnings by betting with the more successful gamblers (Ray 1963:124).

Success at gambling, however, required supernatural assistance, which supplicants sought in familiar spirit dwellings in the rivers or in mountain lakes (Spier 1930:76). According to myth, this power was also found by visiting places associated with *Mukus,* which are the petrified remains of the mythical character Old Man Owl (Curtin 1912:9).

The owl as a source of gambling medicine makes a certain kind of sense. The owl's phenomenal eyesight equates well with the kind of shrewdness needed to be a keen gambler, thus providing a suitable metaphor for gambling prowess represented in rock art. All of the owl's powers are related to the kind of sight that transcended that of ordinary people and beings. Even shamans, whose primary job is to identify and excise malicious disease-causing spirits from the community, required supernatural assistance for this extraordinary ability in perception (Spier 1930:104). Lightning, by virtue of illumination, further enhanced this ability. Thus, it is no great surprise that these properties were featured in the rock art together.

While it is apparent from the available ethnography that power questing for gambling success was a common enough practice in the North American far west (Haynal 2000:175; Holt 1946:335; Keyser 1992:47; Pritzker 1998:154; Ray 1963:77; Silver 1978:215; Spier 1930:94), it is not yet known whether mythical beings provided this specific kind of spirit power, and consequently came to be represented in other local rock art traditions. Discovering this could greatly expand our understanding of rock art in the North American far west. The ethnography of the Shasta, Paiute, and Achumawi groups indicates that gambling was among the various reasons why people sought out supernatural power (Olmsted and Sturtevant 1978:228–229). Perhaps a deeper exploration of their mythologies might shed light on some of the rock art in this regard.

Starting in the mid-twentieth century, researchers have focused on a number of different aspects of Klamath Basin rock art. Swartz (1963) has demonstrated that plausible relationships exist between the rock art's design styles and rendering techniques, and thus he proposes its suitability for archaeological study. Lee and Hyder (1989) incorporated paleoenvironmental data in order to propose relative dates for some of the petroglyphs in Lava Beds National Monument. Armitage et al. (1997) turned to AMS dating to provide chronometric dates for a painted site within Lava Beds National Monument. Ritter (1999) examined local ethnographies to gain insights into the intertribal use of one important rock art site near an important upper Klamath River fishing station. More recently, Loubser and Whitley (1999), Whitley et al. (2004), Hann and Bettles (2006), Hann et al. (2010), Poetschat et al. (2010), and David (2005, 2010, 2012a, b) have incorporated landscape studies in conjunction with ethnographic information to propose that at least some Klamath Basin rock art sites are the outcomes of shamans' vision quest rituals.

While a few of these researchers incorporated information from local mythology, none have recognized that non-shamanic activities such as gambling *also* required supernatural power, and that information related to that very concept is contained in the myths. This example, so well grounded in local myth and ethnography/ethnohistory, illustrates a wider role for rock art in spiritual power needs and practices.

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Chapter 11
Trance and Transformation on the Northern Shores of the Chichimec Sea, Coahuila, Mexico

Solveig A. Turpin and Herbert H. Eling Jr.

The huge arid landmass that makes up the Mexican state of Coahuila and parts of adjacent Nuevo León and Texas contains a dense and varied body of rock art, ranging from hundreds of elaborate polychrome pictographs in the north to thousands of petroglyphs in the south (Fig. 11.1). The two largest assemblages—the Pecos River pictographs and the Desert Abstract petroglyphs—differ in terms of the effect the physical landscape had upon iconography, technique, distribution, and themes while elements of a shared belief system conspire to create a sacred landscape that can be glimpsed through a sometimes-bewildering array of glyphs.

Throughout prehistory, the entire area was the domain of hunting and gathering people whose basic subsistence economy relied upon an elementary tool kit manufactured from readily available resources such as stone, wood, fiber, bone, and hide. Presumably, society was egalitarian and status meritorious. The basic social unit consisted of the extended family; population remained sparsely distributed with seasonal or cyclical aggregations providing opportunities for information exchange, mate selection, alliance forging, and ritual performances, including the production of rock art. Elsewhere (Turpin 1990, 2004a) we have suggested that an emergent form of social complexity was manifested by the rock art, but the local environment was not capable of sustaining the "necessary and sufficient" conditions for the development of a hierarchical social structure. Richard P. Schaedel described a model he called cyclical nucleation in which the mobile populations met at specified locations at specific times that in effect transformed these locations into sacred

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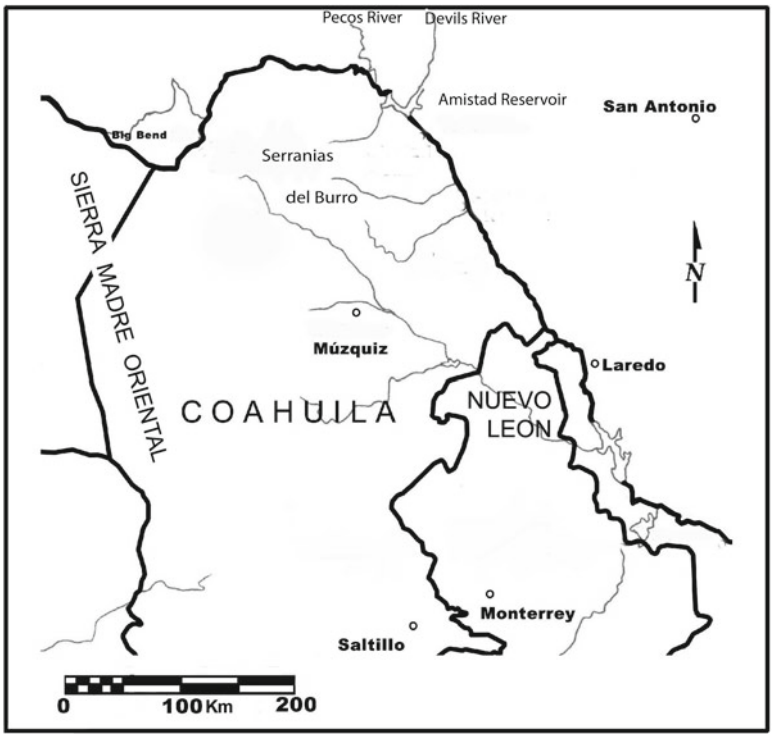

Fig. 11.1 Map of Coahuila and adjacent areas

spaces that were further defined by rock art. Both the pictographs and petroglyphs of the region served the same function—focal points for the interaction with the supernatural powers that inhabited these topographic features (Turpin 2004a).

Attempts to gain an understanding of the indigenous art are complicated by a number of factors, not the least of which are the daunting terrain, the vast waterless expanses (Turpin and Eling 2009), the distance between sites, and the lack of systematic archeological research in Coahuila (Fig. 11.2). Only recently has attention turned to the basic tools of typology and chronology to create a framework for analysis (Turpin 2010). Comparisons of the two largest assemblages show that the various bodies of rock art are clearly conditioned by the stark differences in physical landscapes while sharing threads of a belief system that transcends space and time.

Environmental Contrasts

In the far north, the cultural area known as the Lower Pecos region was originally defined on the basis of polychrome monumental pictographs painted in the dry rock-shelters that line the three major rivers—the Rio Grande, the Pecos, and the

Fig. 11.2 Sweeping view from the elaborate Pecos River-style site, Cuatralba. These extraordinary vistas are conducive to meditation and altered states of consciousness, which in turn inspired the shamanistic rock art

Devils—and their tributaries. The core of the area is the confluence of the Pecos and the Rio Grande, now inundated by Amistad Reservoir (see Fig. 11.1). The karst topography is riddled with rock-shelters that provide protected environments for all manner of normally perishable items, ranging from domestic products to portable art. The excellent preservation of organic material has provided the basis for hundreds of radiocarbon dates that contribute to a detailed chronology of prehistoric occupation (Table 11.1). The traditional sequence of Paleoindian; Late Paleoindian; Early, Middle, and Late Archaic; Late Prehistoric; and Historic periods has been somewhat refined by compilation of relevant radiocarbon dates that Dibble, in unpublished notes, used to isolate 11 sub-periods (Turpin 1991).

The key to the sustainability of human populations in arid lands is water. North of the Rio Grande, the three rivers are augmented by springs and casual water retained in pools in the solid limestone of the canyon floors. Broad access to water permitted wide-ranging economic strategies based on the exploitation of floral and faunal resources. The first people were big game hunters who pursued elephant, camels, horses, and other now-extinct species at the end of the Pleistocene era (Dibble and Dessamae 1968). A trend to aridity that began about 9,000 years ago dried up many of the casual water sources and forced the people to adapt to a changing environment. Desert succulents became the staples of an Archaic lifeway where plants were converted into food, clothing, tools, and even shelter (Bryant 1966). Thus began the 8,000-year-long Archaic period. The aridity reached its peak about 5,000 BP and then relented for a brief mesic interlude about 3,000 BP. The climate

Table 11.1 Chronology and rock art styles in the Coahuila, Mexico, region (Turpin 1991) shown relative to archeological periods and radiocarbon dates (a) and relative to designs (b)

Period	Radiocarbon years (BP)	Subperiod	Radiocarbon years (BP)	Art styles (relative sequences)[a]
Paleoindian	<12,000–9,800			
		Aurora	14,500–11,900	
		Bonfire	10,700–9,800	
Late Paleoindian	9,400–9,000			
		Oriente	9,400–8,800	
Early Archaic	9,000–6,000			Painted pebbles
		Viejo	8,900–6,500	
Middle Archaic	6,000–3,000			
		Eagle Nest	5,500–4,100	Coconos incised pebbles
		San Felipe	4,100–3,200	Pecos River style
Late Archaic	3,000–1,000			
		Cibola	3,150–2,300	Red Linear pictographs
				San Pedro incised pebbles
		Flanders	2,300??	
		Blue Hills	2,300–1,300	
Late Prehistoric	1,000–350			Bold Line Geometrics
		Flecha	1,320–450	Red Monochrome
		Infierno (phase)	450–250	
Historic	350–0			Historic

[a]The ages of painted pebbles and the Pecos River pictographs are supported by C14 dates; the Red Monochrome and Historic pictographs by stylistic time makers

cycled in this way up to modern times, alternating between hot/dry and cooler/moister conditions. The practice of painting on smooth stream-rolled pebbles began early in the Archaic period, with specimens recovered from dry rock-shelter deposits that date at least 7,000–8,500 years ago (Mock 2011; Turpin and Middleton 1998). Incised pebbles appear on open campsites in Coahuila somewhat later (Turpin et al. 1996); more radiocarbon dates may push back the beginning of that tradition. Counterintuitively, the explosion of polychrome monumental art, now called the Pecos River style, took place during one of the most xeric climatic episodes—the Middle Archaic period, ca. 3,000–4,000 years ago.

The Texas side of the Rio Grande has been the subject of intensive study for decades, especially in advance of the impoundment of Amistad Reservoir (Gebhard 1965; Jackson 1938; Kirkland and Newcomb 1967). Five pictograph styles have been defined and sequenced (see Table 11.1). The Pecos River style is followed by the Red Linear miniature monochrome pictographs whose characters are engaged in animated group activities, including battles, hunts, and sexual intercourse. Curiously, the only large petroglyph site in the region, Lewis Canyon, includes warriors

identical to some of the Red Linear men. The Red Monochrome and Bold Line Geometric styles are Late Prehistoric art forms (Table 11.1). The former is peopled by lifelike men and animals that are very similar to panels in the Big Bend area of the Rio Grande. Bold Line Geometrics are a variation on Chihuahua Desert Abstracts rendered in dense glossy paint. The Historic art is not a type but rather an accumulation of sites that reflect European influences. Of these five groups, only the oldest, the Pecos River style, and the most recent, the Historic art, extend south into Coahuila. The Pecos River artists were the most prolific, painting their multicolored vision of a supernatural universe on hundreds of shelter walls. The ritual nature of the art is evident in its complexity, its redundancy, and the esoteric knowledge encapsulated in mythic forms (Conkey 1985).

For 50 years, the consensus was that the Pecos River-style paintings stopped just a short distance south of the river where the canyon country gives way to the broad, flat, and barren Rio Grande Plain beyond which rise the Serranías del Burro, an outlier of the Sierra Madre Oriental (González Rul 1990; Taylor and González Rul 1958). However, surveys during the 1990s and 2000s identified a number of Pecos River-style sites in the Serranías (Sayther 1999; Sayther and Stuart 1998), adding yet another ecozone to the mix and extending the boundaries of the culture area 150 km into Coahuila (see Fig. 11.1). The mountains present a formidable barrier, looming on the southern horizon as seen by the canyon dwellers. There are no permanent rivers; water is found in isolated springs that flow from the mountain sides, leading Taylor (1964) to propose a settlement pattern he called "tethered nomadism" in which populations were tied to water while exploiting the food resources of the surrounding slopes. Rock-shelters are less common in the sierra and show fewer signs of concentrated occupation. Nevertheless, the pictographs clearly belong to the Pecos River style, sharing themes, techniques, and esoteric knowledge. Thus, the unified belief system expressed by this monumental religious art encompassed three environmental zones within a relatively restricted area—the canyon country in the north, the riverine plain in the middle, and the mountains in the south. Each presents a different set of challenges and each apparently contributed to the construction of the mythic universe portrayed in the rock art.

Technically, most of Coahuila is in the Mexican Basin and Range Province, which consists of alternating bands of mountains separated by desert valleys. One famous explorer-geologist, Clarence Dutton, colorfully described the many narrow parallel mountain ranges of the Basin and Range province as looking like an "army of caterpillars marching toward Mexico." His description, often unattributed, has been repeated in books and online, but the original source is not cited.

In addition to the Pecos River polychromes in the north, a few distinctive pictograph styles have been recognized along the Rio Grande and the Coahuila–Nueva León state line where a series of high overhangs shelter polychrome geometric pictographs whose defining characteristic is the boxing or the containment of zigzag lines in rectangular or basket forms. This style is called Chiquihuitillos for the type site in Nuevo León (Turpin et al. 1998). Other provisional pictograph styles—Hundido and La Linda—are tentative since they are found at so few sites (Turpin 2010).

Fig. 11.3 The distinctive V formed by the juncture of upthrust ridges usually signals the presence of numerous petroglyphs

Nevertheless, by far the majority of the rock art in southern Coahuila and Nuevo León consists of petroglyphs pecked into huge boulders that litter the valley floors. Thousands upon thousands of boulders are covered with circles, zigzags, meanders, grids, and other abstract motifs. All of them are classified as entoptic phenomenon, or hardwired images that reside within all human brains represented in some form or another (Lewis-Williams and Dowson 1988).

Again, the influence of water is evident in the distribution of sites. The eastern front of the sierra is cut by canyons formed by a series of contiguous basins, ringed by rocky ridges that flow ever downward toward the Rio Grande Plain. The constricted mouths, or *bocas*, of the basins are natural dams that retard runoff, forming pools that supported mesic vegetation, fauna, and the people that relied upon them. A beneficial side effect for past humans and present researchers is the soft, level alluvial fans created when the suspended sediment load is dropped, forming ideal camping surfaces and gently burying extant occupational debris. Giant boulders litter the alluvial fans at the base of the rocky ridges, and these boulders are the features of the landscape that provide a canvas for the glyphs. The upthrust rocky ridgelines form distinctive V-shaped landforms that are highly visible from a distance, thus serving as landmarks for potentially rich resources and as guides to the petroglyph fields (Fig. 11.3).

Minimal systematic archeological research has been carried out in north-central Mexico, so the various rock art studies lack the secure context afforded in the north by the numerous surveys and excavations in the Amistad district. The radiocarbon sequence at the famous open site Boca de Potrerillos in Nuevo León describes a

7,800-year-long climatic trajectory marked by alternating periods of erosion and aggradation, mirroring the mesic-xeric cycles in the north (Turpin et al. 1993, 1994). Although the petroglyphs have not been dated, incised sandstone pebbles were recovered from at least two prehistoric occupation areas—Coconos where charcoal preserved in buried hearths was radiocarbon assayed to the range from 4,800 to 5,400 and San Pedro with its simpler designs to 2,800–3,400 years ago (Table 11.1). The redundant designs cut into these small platular rocks imply that ritual art was being produced in the open desert camps at least 5,000 years ago (Turpin and Eling 2003; Turpin et al. 1996). However, like the painted pebbles found in the dry rockshelters in the north, the portable art employs a different iconographic vocabulary than do the stationary glyphs.

Dr. W. Breen Murray has devoted decades to recording and interpreting the petroglyphs in this region (e.g., Murray 1982, 1986, 1992; Murray and Lascano 2001). Site analyses have proceeded from two fronts. One approach has been to try to define style sets within the overall corpus and another has targeted specific motifs or clusters of motifs in an attempt to define function or meaning. The overwhelming amount of data resident in any one site or area justifies the use of both.

The Pecos River Style

As early as 1967, Newcomb intuited that the Pecos River-style pictographs are the overt expression of an animistic belief system wherein the central figures represent religious practitioners, commonly called shamans, in an altered state of consciousness or trance (Kirkland and Newcomb 1967). His interpretation remains the consensus and has been bolstered by other individual studies (Turpin 1994a, b). Animal transformation or shape-shifting is portrayed by human figures modified by the attributes of mountain lions, deer, serpents, birds, and rabbits. The power of magical flight to the land of the spirits is implied by the soaring, diving, or swooping posture of the anthropomorph and by wings, feathers, and a geometric design that is a schematized feather. Copious literature relates these perceptions to actual physical symptoms experienced during altered states of consciousness whether induced by stress, sensory deprivation, hallucinogenic substances, or any of the other myriad ways of entering a trance state (Turpin 1994a, b).

In the larger shelters, the paintings are monumental in size and extent, the tallest reaching a height of 18 ft (5.5 m) above the shelter floor (Fig. 11.4). Red, black, yellow, and white anthropomorphic, zoomorphic, and geometric figures are often so densely superimposed that they melt into a dense blur of color. The focal character is a frontally posed, faceless anthropomorph who stands with outstretched arms, often holding aloft an atlatl, darts, and fending sticks. Animal characteristics that identify specific subsets include feline ears, deer antlers, serpent snouts, rabbit ears, fur, and feathers. Variations include a horizontal figure soaring through clouds of matter and, on rare occasions, the central character stands in profile. Duality between body and spirit is demonstrated by the judicious use of color and

Fig. 11.4 A 12 ft (4 m) tall serpent shaman at Abrigo Diego extends 18 ft (5.5 m) above the current shelter floor. It belongs in a group with several similar figures at Rattlesnake Canyon on the north side of the Rio Grande. The artist probably used a scaffold or a ladder. Next to him is a classic rabbit-eared shaman

shadow. Sinuous power lines surround or extrude from the central figure, and that figure is often accompanied by disembodied antlers, feathers, birds, darts, or miniature self-replicas. The most prominent animal in the Pecos River bestiary is the mountain lion, colloquially called panther. Deer and birds are numerically superior but much smaller, as though of lesser stature. The compositions are curiously static and solemn, and the figures frozen, even when implying some form of action, such as ascension or transmogrification.

The paints are ground mineral pigment—red, yellow, and orange are varying shades of hematite easily found in the pebbled bottoms of the arroyos where they have eroded from the Boquillas limestone formation. Heating ocher alters the color, so it is possible to obtain a wider range, including deep burgundy reds and purple. Calcite nodules in the same gravel beds provide white paint, which is the least popular of the colors. Manganese is so plentiful in some areas that there have been repeated attempts to mine it, especially during wartime shortages (Turpin 2004b).

Fig. 11.5 Three of the varied figures that line the wall at San Vicente, one of the more elaborate pictograph sites in the Serranías del Burro. Two are typical rabbit-eared figures (*left* and *right*); the *middle* one is divided between an ascending torso and the lower body. Several figures in other sites consist only of the torso with upstretched hands

The physical landscape is reflected by differences between the paintings in the canyons and those in the mountains. In the former, many panels are over-painted with little regard for the extant images. In the latter, the anthropomorphic figures are discrete and separate, looking out from the heights aligned side by side but not touching (Fig. 11.5). They bear the characteristic signs of magical flight and, to a lesser degree, animal transformation, but they are not bristling with weapons like the militant figures in the heartland. Strangely, the omni-present deer that accompany the riverine shamans are absent, and other animals are represented only by the transmogrifying mountain lion and a few depictions of bison that presumably were painted at the end of the Middle Archaic period (Turpin 2010, 2011). Living debris is also rare in the shelters of the sierras, which are sometimes high and dry, remote from potable water.

The most likely explanation for these quantitative differences is that the mountains were sacred places that drew initiates or pilgrims on their spiritual quest. Mountains are often granted mystical powers; in arid lands, they are often the source of rain and, by extrapolation, the home of the gods where esoteric knowledge might be accessed through ritual deprivation. Vision seekers find that elevation, expansive views, and isolation are conducive to achieving the trance state, and it may be that the painted images of those who came before add to the sanctity of the rock art sites. In this scenario, the physical and sacred landscapes were indistinguishable one from another.

Petroglyphs

So far, the spiritual or the ritual intent of the Pecos River-style pictographs and the portable art has been fairly evident. However, the bewildering mass of petroglyphs that densely populates the arid so-called Chichimec Sea is much more confusing, forcing a reliance on much more tenuous inferences. A few glyphs are informative, but they must be culled from the proportionately larger mass of enigmatic designs.

An uncounted number of boulders are covered with circles, zigzags, meanders, grids, and other abstract geometric motifs. The tendency to link glyphs to natural phenomena, such as comets, stars, suns, and rainfall, has led to hypotheses about calendrics, astronomy, hunting magic, and control of the elements (Murray 1986, 1992; Murray and Lascano 2001). Names have been attached to many of the geometric designs that resemble familiar objects—such as rakes or combs, ladders, suns, stars, or lightning, but they may have had an entirely different meaning in prehistory. The inventory of abstract motifs includes spirals, concentric circles, zigzags, circles, triangles, diamonds or herringbone patterns, meandering lines, and various combinations thereof. Clearly the glyph-makers were capable of reproducing natural phenomena, but the redundancies in design imply that more complex ideation underlies their production.

A much-debated explanation for the repetition of these same motifs around the world, wherever rock art is found, is based on the assumption that the human brain is hardwired to carry certain encoded symbols that appear under various circumstances ranging from hallucinations to extreme stress. This proposition was put forth by researchers in different parts of the world who saw the universality of certain forms—Bednarik (1984) in Australia, Hedges (1982) and Whitley (1992) in California, Reichel-Dolmatoff (1978) in the Amazon, and Lewis-Williams (1981, 2001) with Thomas Dowson (1988) in South Africa have all found evidence to support this idea although the elements themselves have been variously called phosphenes, and form constants, or entoptic phenomena. Amazonian tribesmen, migraine sufferers, psychedelic drug users, hallucinating psychiatric patients, and Paleolithic painters all envision geometric forms that have been classified into anywhere from 7 to 15 categories—grids, parallel lines, dots and flecks, zigzags, nested curves, filigrees, and meanders, and vortices (Lewis-Williams and Dowson 1988)—all of which appear individually or in composite in the rock art of Coahuila. This hypothesis explains that design similarities are innate products of "humanism" but does not claim that they mean the same thing to everyone who makes them. However, the redundancy of biologically fixed constants has been taken by many to imply that the trance state was part of—or a precursor to—their production.

The fact that so many of these motifs are ubiquitous in petroglyph assemblages around the world implies that their meaning ensues from and is specific to their local context. For example, the cross in the circle has been related to the Mesoamerican concern for cardinal directions, but this motif is so widely distributed worldwide that it is known as Odin's cross in northern European mythology.

Fig. 11.6 Atlatls morphing into birds as they rise toward a series of vortices that may represent the entrance to the spirit world

The embedded oval cross is considered the symbol for Venus and is thus equated to the Mexican culture hero deity Quetzalcoatl who is the morning and the evening star. This interpretation presumes that the ancient people had already identified specific members of the Mesoamerican pantheon that was recorded at the time of European contact.

A cluster of more representative glyphs has been considered evidence of a hunting cult that revolved around deer. The core motifs are antlers, spear throwers, projectile points, hafted knives, slings, and an enigmatic paddle shape seen in the pictographs of the north. Murray and Lascano (2001) carried out a functional analysis of atlatls or spear throwers in which they noted the diversity of forms and correlated their distribution with prime hunting locations. As the most effective weapon in the Archaic arsenal, spear throwers were undoubtedly prized for their role in hunting and warfare, but they are also one of the realistic motifs that is easily endowed with supernatural power. As is often the case, the weight or the banner stone is exaggerated well beyond any reasonable size, thus implying some special importance that is as yet enigmatic. In one rare scene, a cloud of winged atlatls appear to be morphing into birds, flying toward the vortices that are the entrance to the supernatural world (Fig. 11.6), and in others the missile shafts are jagged like lightning, denying them a functional reality.

Deer antlers are also considered part of the functionally oriented hunting complex, associated with different kinds of weaponry. Deer were of course an important component of the diet, but their spiritual role is ethnographically and archeologically documented. Antler headdresses, painted deer scapulae, racks as mortuary goods, and hundreds of petroglyphs testify to their role in active and passive rituals. The cyclical growth and loss of antlers provide an apt metaphor for regeneration, death, and rebirth, and an accurate calendar of the seasons. Although the prehistoric artists were perfectly capable of rendering antlers accurately, most of the glyph racks are malformed. Some may reflect aberrations seen in nature,

Fig. 11.7 A human foot is linked with a paw print, showing the metamorphic process

but the preponderance of asymmetrical antlers suggests that they are purposefully made imperfect, perhaps to inform the audience that they are in the presence of spirit deer. Such a hypothesis also accounts for the numerous deer track glyphs left by his ghostly passage.

Human foot and hand prints—like the deer antlers—are most often malformed or mutilated. Four to six toes are common and fingers lost or broken. One of the few recorded myths from this area explains the footprints in the rock (León 1961). The magical setting is a tinaja or a water hole that never empties surrounded by vegetation that never diminishes no matter how often it is cut. A pleasant young man appeared, told the people good things, and then vanished. An ugly man then materialized and told the same people that his predecessor should not be believed. The good man returned, but when the people failed to listen to him, he disappeared, leaving his foot prints in the rock. Despite the tinges of Christian morality interjected, possibly by the Spanish recorder, this myth correlates the foot glyphs with supernatural beings. A structural analysis of this myth by Ramírez Almaraz (2007) carries the metaphor even further, relating the mutilated or the malformed feet to classic culture heroes such as Oedipus and Tezcatlipoca.

The process of transformation is also subtly illustrated by glyphs that show human feet morphing into prints, either in a single action or in a series that starts as feet and ends as tracks (Fig. 11.7). Nowhere, however, is the altered state of being clearer than in a scene at Pelillal, north of Saltillo, which clearly shows the metamorphosis from human to deer, arms into antlers, feet into cloven hoofs, and the silent presence of the spirit animal marked by his tracks (Fig. 11.8).

Fig. 11.8 One of the few petroglyphs that shows a composite man-deer, complete with malformed antlers and spirit tracks

Discussion

The dominant rock art forms in Coahuila—the polychrome pictographs of the north and the petroglyphs of the south—spring from widely disparate physical environments, and these differences are reflected in technique, iconography, and distribution. Nevertheless, the people of both the northern canyon country and the southern basin-and-range province created a supernatural landscape that incorporated many of the same beliefs and patterns. Although the two areas are strikingly different, each is internally cohesive, thus defining the territory from which the pool of participants was drawn. In both cases, aggregation is evidenced by dense concentrations of elaborate rock art that, by virtue of sheer size and complexity, imply group participation in the rituals that produced them (Turpin 2004a). The aggregation sites are littered with domestic debris that proclaims that the rock art was on public display; ergo it may have been sacred, but it was not secret. In fact, the huge numbers of petroglyphs and the over-painting that reduces some pictograph panels to a blur suggest that making art was a performance that may have been more important than the images that resulted.

Clearly, the pictographs only exist today because they were painted in sheltered environments. Although the petroglyphs have not been dated, the rapid rate of deterioration seen in many open and unprotected sites suggests that they are much

younger than the Pecos River-style paintings. However, both were products of very different natural environments that greatly influenced the form and content of the rock art within the same rubric. In the north, mineral paints are readily available in veins of ocher, manganese, and calcite, and these vivid colors show up well against the light background of the native limestone bedrock. Their fluidity is well suited to the painting of nuanced and complex compositions on hard two-dimensional vertical surfaces. The petroglyph makers were faced with manipulating raw material that requires a different approach—removing the outer "skin" of the softer siltstone boulders by percussion so that the desired design was revealed by contrast between shades of the same color. The boulder surfaces are often curved or fissured; the truly proficient designer incorporated those features into the layout of some of the more complex groupings. However, the medium conditioned the range of meaning, resulting in more angular, asymmetrical, and monochromatic forms. In addition, unlike painting, which is additive and can be corrected, percussive dinting is subtractive and more difficult to restore except by enlarging or changing the shape of the glyph. Thus, although it is still difficult to say why any of the indigenous people chose to create rock art in the first place, the different forms that emerged were strongly influenced by the natural resources that provided the background canvas, the palette, and the tools.

The physical context is also expressed in the preference for certain themes and motifs both between and within the different areas. The transformational metaphors for magical flight exhibited in the pictographs by soaring, ascending, flying, and diving anthropomorphs and, to a less obvious degree, by the clouds of feathers and miniature avatars are correlated to rock-shelters with broad vistas and direct contact with the sky. Many figures appear to be leaping into space, their outstretched arms winging them skyward; others emerge from cracks or natural faults in the bedrock, soaring horizontally while others are penetrating the hole in the universe that leads to the land of the spirits. Thus, not only are the heights conducive to communion with the supernatural, but also the rock art illustrates how to burst the physical bounds and enter the celestial realm that is so clearly visible from the heights.

Flight metaphors are rare in the petroglyph assemblage, with the exception of the scenes where atlatls appear to be morphing into birds (see Fig. 11.6). In fact, depictions of human/anthropomorphic figures taking any kind of action are rare until the historic period. Whereas the quasi-humans of the pictographs of the north are endowed with all manner of magical powers, the artists of the south were far more interested in the supernatural potency of inanimate objects or some of the more mundane body parts. The repeated depiction of human footprints and tracks—absent in the pictographs—ties those motifs to the earth, in keeping with the grounded nature of their context.

Despite the differences in media, technique, and context, both bodies of art hold clues to their common commitment to some of the same principles of an animistic belief system whose tenets included transmogrification—that is, the ability to assume the form of an animal familiar—and communication with the spirit world through the vehicle of the trance state. Both are public displays, intended to inform the people about the structure of their natural and supernatural worlds through

ritualized visual art, but the petroglyphs are much more elusive, in part because of the static thrown up by the thousands of enigmatic abstract geometrics that show no action at all. Nevertheless, within that huge assemblage, humans and animals are exposed as spirit incarnations by reducing them to body parts that are malformed or damaged, paws become feet, feet become paws, atlatls become birds, and, in the most dramatic illustration of transmogrification, a man-deer emerges from a boulder (see Fig. 11.8).

The rock art and its context are synergistic. The sacred nature of mountains and caves in general was enhanced by the veneer of ritual art painted on the walls by seekers, pilgrims, or mystics. The goal was oneness with the spirit world, by either assuming the form of an animal familiar or flying to the dangerous supernatural universe above or below. Some hint of their enduring spiritual potency is the reluctance of later prehistoric artists to molest the murals. The scratching that mars many of the more dramatic characters may be an attempt to acquire some of the power of the ancients rather than destroy it.

The persistence of sacred beliefs is in some way connected to the massing of similar petroglyph motifs, perhaps in an attempt to maximize their impact on their spiritual audience. Some may be prosaic—Murray (1982) noticed a cluster of circular glyphs on a small rise at Boca de Potrerillos that he thought had astronomical implications. However, in others the seemingly excessive repetition of objects appears to be another way of achieving ritual redundancy. At Cerro Bola, the sheer faces of large rectangular boulders are covered with representations of hafted knives, such as those taken from the famous Coahuila mortuary cave, Cueva Candelaria (Aveleyra et al. 1956). The boulders stand erect on the peyote-covered slopes of the hill, which is capped by a Christian shrine. Every Lent, flagellants emerge from the nearby town to reenact the crucifixion, dragging their crosses to the hilltop in a supreme act of atonement. Supplicants write messages on slips of paper that are burned atop the hill, transmitting their requests to the spirits above. The holy mantle that envelopes Cerro Bola was cast hundreds to thousands of years ago and now every ritual act—whether sacrifice, contrition, or offering—perpetuates its landmark status. A map of the sacred landscape of Coahuila would range from the mountaintops to the canyon floors, their distinctive natural features enhanced by rock art that may have been the pathway to the land of the spirits, whether above or below the ground trod by humankind.

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Chapter 12
Deer: Sacred and Profane

William Breen Murray

Deer ritualism is an important feature of many traditional North Mexican indigenous religious practices, some of which continue to the present day. The Yaqui Deer Dancer (Spicer 1994:125–30), for example, is now emblematic of the state of Sonora, and the annual Huichol pilgrimage to Wirakuta, near Real de Catorce, S.L.P., in which deer and the peyote plant merge into a single identity, is still a defining feature of their ethnic/cultural identity. Among other indigenous groups, deer-related traditions are known mainly from ethnohistoric sources. Their prehistoric roots can be inferred from various archaeological finds (Guevara 2005), while various rock art motifs at sites throughout northern Mexico provide a parallel line of graphic evidence.

Although the Yaqui Deer Dance now takes place in a completely Christianized setting, its roots in earlier native traditions are evident. The dancer's deer headdress and ankle bracelets made of deer hooves as well as his mock imitation of the posture and movements of the deer all hark back to earlier times when deer hunting was an everyday occupation. The accompanying songs are in an archaic language now barely understood. They identify the deer with fertility and the coming of the rains. "Little flower deer, far away in the place of the animals, you are playing in the flower garden to the east, you will soon be coming out to play in flower water." (Spicer 1994:127 [author's translation]).

In spite of the associations generated by Carlos Castañeda's invented shaman Don Juan, the Yaqui Deer Dance as practiced today is not associated with either ecstatic trance or the use of peyote or any other mind-altering substances. This may be due to its incorporation into the Catholic Church calendar, but it also reflects a

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rather different social context. As described by modern ethnographers, the Deer dance is a solo male performance with a limited musical accompaniment—drum, gourd, and violin—which is enacted before the entire community. Although the sacrality of the dancer's role is heightened by personal commitment, it is transitory and carries no special status other than its own successful fulfillment.

In contrast, the Huichol deer hunt/peyote pilgrimage shows less Christian influence. It is a collective ritual involving the entire community led by an experienced leader (*mara'akáme*). The pilgrimage reenacts the mythic history of Creation and includes both a peyote hunt and real deer hunting. The hunters follow in the steps of their ancestors. Deer hoofprints mark the places where peyote grows, and the plant itself is considered the manifestation of a divinity dwelling within it who communes with those who eat it. In Huichol culture, deer, peyote, and maize are merged into a single symbol, which communicates renewed fertility and coincides with the onset of the rainy season. The sacrality of peyote and its ritual ingestion continue to be key features of modern Huichol cultural identity and are tacitly accepted by Mexican drug authorities under the curious heading of "*usos y costumbres*" (uses and customs).

Until recently, when the scarcity of deer and protests from their mestizo neighbors have made its fulfillment impossible, the peyote pilgrimage was regularly preceded by a real deer hunt (Lemaistre 1996). This hunt is itself a 5-day ritual led by a community member with a special ritual role. The objective of the search is for the deer with the largest antlers: "Paritsika, the great Deer, the wisest one, the one who gave peyote to human beings" (LeMaistre 1996:320). The individual leading the hunt (*mara'akáme*) consumes powdered deer antler and converts his feather wand (*muviéri*) into deer antlers by singing special songs to attract the deer: "Yes, indeed, the song of flowers, the song of the deer approaches, transmitted in the *muviéri*" (LeMaistre 1996:319). His dreams guide the pursuit by associating the real places visited with a mythic landscape and by identifying the real deer which fulfills his dreams. Although the leader is central and crucial, each hunter brings his own offerings and plays a role in the ritual. The hunt also provides real deer meat for each family which is later processed and dried and hung on strings just like peyote for future consumption.

At present, rock art production is not associated with any phase of this ritual deer hunt or the peyote pilgrimage, but some Huichol sacred places are associated with rock art. Mountjoy (2001) has also identified sites in the Cañon de Ocotillo (Jalisco) near Huichol territory marked by petroglyphs which depict deer and hunting scenes. They are located at places suitable for real hunting and might indicate that in an earlier phase, rock art production was indeed part of the hunting ritual.

Likewise, no depictions of deer dancers are known so far in the rock art of Sonora, but at least one petroglyph at La Angostura, near Casas Grandes, Chihuahua (Mendiola 2002:122), bears a striking resemblance to a deer dancer. It in turn points toward a long line of antlered personages depicted in rock art stretching back to the Middle–Late Archaic period. They appear in the Candelaria-style rock art of Chihuahua (Mendiola 2006), the Pecos River rock art of south Texas and northern

Coahuila (Turpin 2010), as well as the Great Murals of Baja California. Finds of antler headdresses as well as other ritual accoutrements in various archaeological contexts (Guevara 2005) confirm the considerable antiquity of deer ritualism over a much broader area of northern Mexico and the adjacent USA.

What do these antler headdresses mean? What powers did they confer on those who wore them? How was a deer antler transformed from a simple raw material into a symbolic attribute? What do antler representations in rock art intend to convey? Answers to these questions require a broader view which considers rock art manifestations as part of the archaeological picture and traces the conceptual transformation of natural observation into a new sacred context.

Quite apart from their symbolic meanings, deer were obviously a welcome feast for all who practiced deer hunting not for sport, but as a real subsistence activity. On the profane level, deer provided food and skins for clothing and leather artifacts. Deerskins also acquired exchange value in trade between individuals and groups, partly because deer hunting success demanded effort and cunning and even a bit of good fortune. It also depended on an intimate knowledge of deer behavior which, at some point, transformed deer hunting from mere subsistence into a ritual pursuit and became linked to graphic symbolism in rock art. Although the overall direction of the process seems clear, the links in the chain are sometimes difficult to define and indeed some may never be known.

Deer representations in rock art are a logical starting point to search for these missing links. In north Mexico, deer are one of the most frequently represented animals, a testimony to its importance among the prey species of early hunters. These depictions frequently show the animal in full figure, sometimes in very dramatic and characteristic poses, and often in sufficiently naturalistic detail to permit species identification. The vast majority depict the beam-and-tine architecture of the Virginia whitetail deer [*O. virginianus*], but the simple bifurcated antlers of the desert mule deer [*O. hemionis*] are also shown occasionally.

Particularly in northeast Mexico (Nuevo León and Coahuila states), full-figure representations are less common, but the deer's presence is indicated by its petroglyphic hoofprints and especially its antlers (Murray 1992). These disembodied signs do not occur in hunting scenes and indeed the men hunting the deer are rarely shown. Both the hoofprints and the antlers are often depicted with great realism and detail, even showing specific anomalies in antler growth, such as descending tines, but they are not merely drawings from nature. They record antlers as found objects, symbols of the deer's presence, rather than the animal itself as a product of the hunt (Fig. 12.1).

Likewise, the presence of the hunters is not explicit, but rather implied by very elaborate and oversized representations of the hunter's arsenal in a distinctive incised relief style. These include projectile points and atlatls (spear throwers) as well as knives and other lithic tools. The motifs in the La Presa style (Turpin 2010) (from its type site, Presa de La Mula, Nuevo León) are often shown in sufficient detail to compare them with real artifacts and identify their lithic typology. The point types generally correspond to those used in atlatl hunting during the Middle–Late Archaic period (6,000–1,500 BP).

Fig. 12.1 Deer antler petroglyph, Boca de Potrerillos, Mina, Nuevo León, Mexico (author's photo)

Like the Huichol site in Jalisco described by Mountjoy (2001), these hunting motifs are most often clustered at locations which offer strategic advantages for the hunter, such as springs where animals come to drink, or natural passes in the landscape. Experimental throws with replicated atlatls showed that nearly all of the atlatl petroglyphs marked places which could have been used as real hunting sites. They indicated a strategy of collective hunting in groups—a pattern of deployment which aimed to provide the maximum opportunity for success by using the landscape as a natural trap and enhance effectiveness of their weapon (Murray and Lazcano 2000) (Fig. 12.2).

Deer antler petroglyphs point to the antler itself as the initial link in the transformation from hunting to ritual. For early hunters, antler was definitely a sought-after raw material. Artifacts from south Texas (Shafer 1986:102) confirm its use in the manufacture of atlatl hooks, and at Shumla cave, an atlatl was carved from an antler tine. In rock art, the percussion marks of pecked petroglyphs suggest that antler picks might have been the tool used to produce some of them.

As with other species of ungulates, antlers are the distinctive biological feature of the male deer, and the antler cycle provides important clues for understanding the cultural meaning behind its representations in rock art. Antler growth is an annual cycle triggered by the increasing hours of sunlight in the spring. All the hormonal processes involved in the antler cycle are biologically controlled by the annual cycle of the Sun. In effect, at whatever geographical latitude the species occurs, each deer

Fig. 12.2 Atlatl throw at Icamole canyon, García, Nuevo León, Mexico. The stream pool below is an easy target and an atlatl petroglyph is right behind the thrower. (Author's photo)

antler is a natural record representing one solar year. This suggests immediately that the wearers of antler headdresses were symbolically linked to sun time and it also implies that they must have known how to use solar observation as a way of marking the seasons.

The hormonal changes associated with antler growth are also manifested by dramatic changes in the deer's behavior (Marchinton and Hirth 1984; Leopold 1977:168 ff.), a fact which could hardly have escaped the attention of assiduous prehistoric hunters. These behavioral concomitants transform the antlers into a peculiarly male gender marker in nearly all deer species. The antlers reach their full growth in the early winter (November/December) when the ritualized combat of the stags accompanies the mating season. These combats convert the deer antlers into weapons not unlike the hunter's weapons whose power is demonstrated in a dramatic struggle. Today, this is the deer hunting season, the time when the stags possess their most impressive antler racks and are easiest to track. Since only the does will give birth to the next generation, the number of stags taken at this time has little or no effect on the total deer population, a natural relation still reflected in modern hunting laws. Stags wounded in combat are also common and much easier prey.

Once the mating season ends, however, the male hormonal level drops sharply, and the stags move into all-male groups. Lacking their antlers, the stag's appearance

Fig. 12.3 Deer antler petroglyph with 29–30 tines, equivalent to a lunar synodic month, at Presa de La Mula, Nuevo León, Mexico. (Author's photo)

becomes physically less distinguishable from the does, and a hunter could more easily mistake one for the other. When antler growth reinitiates in late spring/early summer, these all-male groups break up and aggressive displays begin anew. The cycle reinitiates with the birth of the new fawns approximately 7 months later which, at the latitude of northeast Mexico, occurs in midsummer (July/August). Thus, antler growth is a visible affirmation of a key stage within the annual reproductive cycle, just as the gestation period represents continued female fertility and survival of the species.

The conceptual links between antler growth and the timing of the deer reproductive cycle may have been expressed explicitly in the associated rock art (Murray 1992). As already noted, some of the antler representations are eminently naturalistic, but others are much more stylized and schematic. They involve distortions in perspective and representational conventions which deviate from the natural object (Fig. 12.3).

In particular, the number of tines shown sometimes far exceeds the limits of even the largest buck. In these examples, the antler becomes a symbol of the broader concept of size, and graphically adds a numerical dimension to its measurement. In one key example at Presa de La Mula, the tines are reduced to simple tally marks and divided at the antler base into two halves whose sum (29–30) is equivalent to a lunar synodic month. It suggests that lunar timekeeping was also part of the deer hunter's view. Antler growth was governed by sun time, but the reproductive cycle of the doe may have been measured in moon time (Fig. 12.4).

A link between lunar timekeeping and deer reproduction is most clearly identifiable in the tally petroglyph at Presa de La Mula, only a short distance from the

Fig. 12.4 Tally count of 7 lunar synodic months (207 days) at Presa de La Mula, Nuevo León, Mexico, equivalent to the gestation period of the female whitetail deer. (Author's photo)

antler just mentioned. This tally systematically records seven synodic months (207 days) within a complex matrix of six horizontal lines and four vertical sections. The tally includes special notations for the lunar eclipse cycles at the end of the fifth and sixth months (148, 177 days), cycles which are also recorded in the Dresden codex, but unlike the Dresden, the La Mula count then continues. The total number of days recorded (207) is unrelated to lunar eclipse intervals. Rather, it is a fairly close approximation of the gestation period of the female whitetail deer (195–212 days). We suggest that the final count was made by hunters who were using lunar timekeeping to keep track of the deer reproductive cycle. This could also derive from naturally observed behavior during the mating season. During the nights of full moon, the females are more receptive and the stags more active, and of course if a lunar eclipse occurred at this time, it might be noted as an omen of special significance.

Our own culture keeps time in terms of much longer periods (decades, centuries, and even millennia), but early hunters were probably more concerned with its shorter seasonal components within the annual year which directly influenced their subsistence. For marking any time period less than a year long, such as the deer gestation period, counting the lunar phases can be more useful than a horizon calendar marking the solar year.

The pairing of male deer with sun and female deer with the moon is a common theme in many later Mesoamerican traditions. Our hypothesis suggests that this

Table 12.1 A transformational model of deer symbolism

From profane		To sacred
Stage	Activity	Manifestation
1. Subsistence	Hunting	Ritualization
2. Natural raw material	Manufacture	Artifacts (useful or magical)
3. Antler	Location/search	Petroglyph marker
4. Reproductive cycle	Antler cycle	Gender/fertility symbol
5. Sun/moon observation	Counting/stylized representation	Synodic timekeeping

symbolic association may have derived originally from the hunter's observation of real deer reproductive behavior. Antlers are exclusively male and grow larger with the waxing summer sun. The females are impregnated under the light of the moon and 7 months later give birth to the new generation. It is difficult to imagine that astute and successful hunters would not have observed these events in minute detail, including especially their most dramatic moments, the clash of antlers.

Today, the deer's transformation from prey to sacred animal seems a remote and alien cultural process. The deer hunting season is of interest only to a small coterie of sport hunters and our perception of deer is more influenced by Bambi than real meat for dinner. Their sacral status in earlier traditions becomes more comprehensible only when we include rock art manifestations in the picture.

The transformational model proposed here identifies five stages, each corresponding to a profane activity which generates a cultural activity manifesting its transformation into sacralized symbolic context (Table 12.1).

The process begins with the food quest and the value of deer as a subsistence item. Since deer hunting requires both skill and good fortune, the hunt must be guided by special strategies and knowledge of the right locations. Deer by-products that are not consumed as food, such as antler, hide, and bone, become raw materials but maintain their deer identity and so can be transformed into artifacts of sympathetic "hunting magic." Deer antler is best obtained at preferred hunting sites which may be marked by antler petroglyphs and other hunting motifs. The transformation of the real antler into a broader time marker is indicated by the graphic shift from naturalistic representations to stylized ones, a process which culminates in the La Mula tally count. It specifically marks the deer gestation period by means of lunar synodic timekeeping and uses a number icon which is later incorporated into Mesoamerican bar-and-dot counting.

The transformation of dots into days may be a development particular to the northeast Mexican tradition, but to the extent that this model is based on universal attributes of deer biology, the same symbolic association between sun time = antler growth = male and moon time = birth = female could underlie hunter's rock art in other contexts where deer occurred albeit under many different guises (Comuri et al. 1993).

Rock Art, Ritual and Sacred Landscapes

From the foregoing exposition, one might conclude that the northern Mexican evidence fully confirms the ritual use of a sacred landscape. The peyote plant is native to the region, and its use in sacred ritual among Mexican Native American groups (particularly the Huichol and Rarámuri) is well documented and continues today. Its consciousness-altering effects (similar to mescaline) are also well known and have been suggested as the inspiration for the many "entoptic" geometrical motifs found at the region's rock art sites (González Arratia 1999; Turpin 2010). At some sites, peyote even grows in close proximity to the rock art. Its presence may mark an area like Wirakuta (San Luís Potosí) as a sacred landscape in which ritual consumption produced an altered state of consciousness (ASC) experience expressed in the rock art imagery. Some authors (Mendiola 2002) have inferred that certain circular motifs could be representations of peyote. Deer hoof petroglyphs might be another direct graphic conceptual link (Fig. 12.5).

Nevertheless, a closer look at the earliest ethnohistoric accounts of peyote use in northeast Mexico reveals several elements that don't fit. Admittedly, none of the local Native American groups survive today, and our eyewitness description comes from a seventeenth-century Spanish colonial source with a very limited appreciation of native beliefs and an open hostility to peyote use. Even so, the *mitote* which Alonso de León (1649) describes is quite different from either the modern Huichol pilgrimage or the Yaqui deer dance, and rock art apparently played no role at all in its realization. His account provides no specific evidence linking rock art to sacred ritual and supplies only an indirect connection to deer ritualism. Key elements of his description suggest that *mitotes* were not held at sacred places, nor was rock art production a regular feature of these gatherings.

Alonso de León (1649) states that *mitotes* were held frequently throughout the year, but especially during the summer when food was abundant. They involved food sharing, socializing, and alliance formation and evidently had more to do with the seasonal cycle of nature than a ritual calendar per se. The event was an all-night dance at which peyote was prepared and consumed by all members of the neighboring groups who were invited. The dancers formed two circles around a bonfire—one male and one female—so tight that "the belly of one touched the butt of the other." They circled in opposite directions singing in unison chant for 4–6 h, after which each participant drank peyote crushed in water and fell "like dead men." In this state, they then used a scarifier to provoke abundant superficial bleeding and smeared the blood over their bodies. The next morning when they recovered, food was distributed to the participants as well as "deer skins, which are the most esteemed thing by them." Thus, deer enter only indirectly through the exchange value of deerskins rather than as a magical symbolic object endowed with special powers.

The *mitote* evidently did not emphasize the visionary aspects of peyote sought by modern consumers, but rather another property of the plant often deemed less relevant, but perhaps much more important to earlier peoples. When eaten in

Fig. 12.5 Deer hoofprint petroglyph. Puerto del Indio, Nuevo León, Mexico. (Author's photo)

appropriate doses, peyote suppresses fatigue and pain. Scratches and bleeding wounds are a constant feature of life in the desert. Peyote has both antiseptic properties in its root and the ability to reduce sensations of fatigue and pain. The bloodletting ritual in northeast Mexico did not involve a personal vision quest or a private or a collective experience of God or gods, but rather a public exercise in peyote use in order to confront the harsh desert and the prolonged pursuit of wounded animals.

This use of peyote is well identified among the Huichol and Rarámuri by Carl Lumholtz and other early ethnographers. An archaeological example of these scarifiers with blood stains still adhered was found in northern Coahuila (Turpin and Eling 1999) and they are also represented occasionally in the region's rock art. Alonso de Leon's (1649) account suggests that the mitotes were big public events held at open places chosen for convenience rather than their sacrality. In this ritual scenario, rock art is neither present nor necessary; indeed, it seems unlikely that the participants would be in any condition to have made it anyway. Any association with rock art sites or places where peyote grew would be more a circumstantial rather than a necessary condition.

How then can we account for the process by which deer become transformed from profane to sacred? The first step is to remove peyote use totally from its modern context. The *mitote* was not a "vision quest" as practiced by some of the Native

American groups, nor was it like the ritual use later adopted by the followers of the "peyote cult" in the nineteenth century. Imposing this ethnographic analogy on the rock art evidence leads us further away from its earlier context as a collective practice.

The second step is to realize that the secluded locations sought by modern users seeking communion with the spirit world are not the likely locations for *mitotes*. The *mitote* may not have been the only native ritual in which peyote was consumed; one can never rule out other contexts, but our sources make clear that it was certainly the most common. The landscape surrounding rock art is always relevant, but by looking for the wrong thing, we can be easily led to the wrong places and miss the real links which can tie ritual activity in prehistoric contexts to sacred places.

Instead of following the trail of peyote, it is the trail of the deer which leads into the ritual world so richly documented in Mesoamerican native traditions. Peyote and deer are linked for practical as well as symbolic reasons, but deer are the guide and center of the so-called peyote religion (Stewart 1987), which in prehistoric contexts I think should be more aptly called a "deer religion" centered on the miraculous transformations which this animal undergoes each year. Deer representations in rock art appear to be a regular feature of this cult and are found at numerous places which became sites for ritual activity dedicated to its deeper symbolic attributes: time, gender, and the cosmic order of nature. The rock art evidence suggests that deer ritualism was an integral part of an ancient and widespread antecedent of the later Mesoamerican cosmovision.

A review of deer-related symbolism and ritual in Mesoamerican religious practice is beyond the scope of this chapter, but these ties are evident at various rock art sites along the Mesoamerican frontier which are linked to different ethnic groups. El Zape, Durango, is a rock art site in the Tepehuan area of the Western Sierra Madre (Peschard et al. 1991; Lazalde 1987). The site features numerous representations of stylized shields, many decorated with the quadripartite geometrical motifs replicating Mesoamerican cardinal directional iconography. Behind these shields, the hunters lie unseen, but in a few examples, the shields are crowned by schematic deer antlers, and nearby sites feature actual deer hunting scenes. At nearby La Cantera, Durango, deer representations are more explicit and Herrera (2012) has analyzed their links to the Mesoamerican cosmovision in greater detail. He identifies these petroglyphs with the Chalchihuites cultural phase and links them to the iconography and cosmovision of the modern Hopi, thus bridging the gap between prehistoric deer hunters and later agriculturalists on both sides of the modern international border.

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Chapter 13
Religious Organization in the Late Ceramic Caribbean

Michele H. Hayward, Frank J. Schieppati, and Michael A. Cinquino

Introduction

This volume's goal of employing rock art to address issues regarding the internal and external dynamics of religion begins here with considering religion as a set of interconnected and changeable components. Table 13.1 presents a number of, through certainly not all, elements by the major categories of cognitive aspects, practices, sociopolitical features, and material correlates.

Recent cognitive neuroscience research as applied to religion (see for example Whitehouse 2004; Whitley 2008) has opened up new avenues of investigating the origin, maintenance, and changes in religious systems, as well as emphasizing that religions engage the emotions. Levels of psychological involvement range from high to low within normal to altered states of consciences. Rituals, ceremonies, and prayers may involve a single individual to transnational communities in open/public or closed/privet settings. Sociopolitical features include practitioners that range from priests and lay leaders to shamans that through various mechanisms exercise high to low degrees of control and integration. Religious belief and practices may also entail material correlates such as structures (churches, shrines), particular landscape features (mountain tops, caves, sink holes/cenotes), objects (special containers and rock art), and substances (particular foods, hallucinogenic ingredients).

Religious systems additionally interconnect with the political, social, and economic segments of societies. For instance, in the Caribbean, various researchers (Rouse 1992; Roe 1993; Oliver 1998, 2005) have argued that ball courts and plazas (level prepared earthen surfaces) likely served as places for communal activities involving singing, dancing, and the playing of a ball game that had religious as well as social and political connotations.

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Table 13.1 Components of religion

Category	External expression
Cognitive features	
Transmission of religion	Formally learned (texts, specific educational program) to knowledgeable individual or small group informal acquisition
Emotional intensity	High to low
Emotional states	Unaltered or normal consciousness verses altered states of consciousness
Practices	
Rituals	Large-scale/small-scale, open/closed, public/private
Ceremonies	Large-scale/small-scale, open/closed, public/private
Prayers	Communal to private
Sociopolitical features	
Practitioners	Hierarchical priesthood, lay leaders, prophets, shamans
Scale	Large to small scale
Belief system	Formal theology to ideologically heterogeneous
Structure	Centralized to decentralized
Material correlates	
Structures	Public places of worship and shrines; marked and unmarked landscape features, private household altars/shrines
Objects	Special containers and clothing, figurines, different-scaled everyday items (ceramics, weapons), rock art
Substances	Particular foods, body paints, incense, hallucinogenic ingredients

Source: After Whitehouse 2004:74, Table 4.1

The complex interactions that characterize the religious system and its relationships with other cultural segments also characterize the link between rock art and religion. The images themselves are material correlates that further reflect or interact with the cognitive, performance, and sociopolitical aspects of religion. The figures and forms provide visual referents to draw out desired emotional states. Certain types of rock art worldwide were apparently produced as a result of shamanistic trances (see Lewis-Williams 2002) or as has been inferred in the Caribbean to represent cosmological as well as mythic themes and personages (see Oliver 1998, 2005). Rock art locations are forms of marked landscapes, frequently denoting sacred or other-worldly spaces. The images were employed in a wide range of religious practices and, as we propose in this chapter, with attributes such as location and degree of design element repetition reflecting levels of institutional control and hierarchical development.

Religions as interconnected and flexible systems are also characterized by both change and stability across time and space. Harvey Whitehouse's (2004) Theory of Modes of Religiosity represents one formal ordering of these dynamic component relationships. His framework relates the inward cognitive mechanisms for the origin, maintenance, and change of religions with their outward beliefs, rituals, and organizational structure. Cultures possess or tend towards one or more idealized modes:

Cognitive Optimum—a low level of religious organizational principles found in all cultures.

Doctrinal Mode—a high level of religious organizational principles characterized by large-scale, standardized, centrally regulated religious traditions with frequently repeated rituals.

Imagistic Mode—a high level of religious organizational principles typified by small-scale, ideologically heterogeneous, non-centralized religious traditions with infrequently repeated rituals.

We have noted (Cinquino et al. 2003; Hayward et al. 2007, 2012) that while the region's rock art maintains an overall unique identity, a high degree of image variability or site-specific distinctiveness is nonetheless apparent. We interpreted (Hayward et al. 2007) this distinctiveness as reflecting an imagistic or even optimum mode during the Late Ceramic Period, A.D. 600–1,500, the primary phase of precontact rock art production (Roe 2009). We also considered that a possible shift to a more doctrinal mode might have been taking place by the end of the period. Roe (2004), Siegel (1999), Oliver (1998, 2005) and Walker (1993), among others, have made a case for parallel increased stratification in the social, political, and religious realms by the end of this period. Intensification does not always equate with the doctrinal mode, as more than one mode can coexist within a religious tradition or sociopolitical entity (Whitehouse 2004:8).

In this essay, we continue to explore this doctrinal-mode shift possibility through the technique of cross-media isomorphism (after Roe 1993, 2004). After accounting for media-based differences, the procedure involves the charting of structural and visual parallelisms across different material classes. One expectation of a doctrinal-mode religious organization would be a significant or a consistent presence of such parallelisms. We suggest that one such parallelism—a circle-dot-flanking-triangle motif—found in rock art, ceramics, and sculptured stone artifacts reflects apparent successful attempts to more effectively structure the religious system. This restructuring may have complemented rather than displaced the earlier imagistic or more individualized, decentralized organization. The focus here is on materials from the Greater Antillean island of Puerto Rico which possesses a significant percentage of rock art and sculptured stone artifacts.

The region's investigators also draw upon information from culturally cognate South American lowland native groups, as well as ethnohistorical accounts of Amerindians at Contact, in particular Taíno groups in the Greater Antilles. Inferences from the ethnohistorical sources indicate that the most likely restructurers of the Late Ceramic religious organization were the emerging or the protohistoric Taíno religious and sociopolitical elite segments of societies. Their motivation was to augment personal and group influence through the increased use and control of esoteric or spiritual information materialized as ritual symbols, objects, and places. The repetition of visual elements across various media and placement within the landscape served to underscore and physically proclaim their raising prestige vis-à-vis their own and competing groups. The linkage of "elite power derived through control of religious knowledge and organization" has been made in a Caribbean context by

various investigators including Oliver (1998, 2005, 2009), Siegel (1999), and Wilson (1990). Our position builds upon this line of reasoning and in particular owes a debt to Roe's (1993, 2004) earlier cross-media work and observations.

Our reasoning also assumes that images or designs on these referenced material class objects are symbolic and not merely decorative elements. Ethnographic studies and the ethnohistorical sources clearly indicate that this is a plausible, if not likely, supposition. For example, a deeply rooted symbolic context for pottery manufacture and use is found among the Kari'na natives of northeast Suriname (Vredenbregt 2004). Oral tradition attributes the Milky Way to a group of women who found a good source of clay in the sky but never returned leaving only their footprints as the stars in the sky; water spirits are connected to different clay sources; rituals surround the collection of certain river pebbles used to polish the vessels in order to appease and show respect to the water spirit; the typical ceramic decorations of fine-line paintings in geometric shapes are in some cases said to be inspired by spirits through dreams, while the origin of all decorative patterns on different materials including pottery is considered the gift of the moon-woman or alternatively the result of markings of a mythical snake that were left on the body of a man. For the Kari'na pottery making is an integrated process involving belief and ritual-laden production that results in finished vessels with symbolic or social value.

The Design Layout, Rock Art, and Sacred Places

Like the aforementioned example, we propose that the circle-dot-flanking-triangle design layout found in rock art, ceramics, and sculptured rock artifacts is similarly embedded in a symbolic context. Once completed, the ascribed value of these objects offered an opportunity by the emerging Chican Ostionoid or protohistoric (A.D. 1,200–1,500) Taíno sociopolitical and religious elite to enhance their prestige, as well as to more formally organize their respective and intersecting realms of influence.

This design layout or complex in Puerto Rican rock art has thus far been found as petroglyphs on cave walls and at ball courts. Petroglyphs and pictographs are widespread and abundant within the Caribbean though not evenly distributed. Several islands possess relatively higher densities including Puerto Rico numbering over 500 sites within approximately 9,000 km^2. In addition to ball courts, plazas, and caves, the island's rock art is also found on inland rock formations and on boulders along rivers or ocean edge (Roe 2009:204–211).

Ball courts and plazas represent level prepared earthen surfaces wholly or partially lined with stone slabs, earthen embankments, or both. Most of the examples are rectangular in shape (alternative forms being square, oval, circular) ranging in size from under 100 square meters to one at 43,000 square meters in the Dominican Republic. Typically these enclosures are demarked with single lines of earth-embedded upright stone slabs or low-lying boulders along two sides with open or unmarked opposing sides. Puerto Rico possesses the majority of these structures in the Caribbean (low hundreds), with a significantly lesser

number (forty or less) reported from the Greater Antillean islands of Cuba, Hispaniola, and the Virgin Islands. Most of the island's enclosures occur as single precincts within or associated with habitation sites; multi-enclosure locations range from 2 up to 10 or 12 as at Tibes and Caguana (see description below) (Hayward and Cinquino 2012:105,107–112).

Descriptions found in ethnohistorical sources, as well as the physical characteristics of recorded enclosures, suggest that these structures were open, public spaces that served a variety of functions organized and led by the sociopolitical and religious elite. Activities specifically outlined included the playing of a game with a solid rubber ball, hence the term ball court, and *areitos*. These involved recitals and performances of chiefly, community, and religious histories accompanied by drinking, feasting, and mock battles that apparently varied according to the particular occasion. Instances might include deaths and marriages of chiefs, declarations of war or peace, times of natural disasters, and arrivals or departures of important people. Local to regional chiefs organized the *areitos* that encompassed such actions as composing or selecting the songs during performances and providing the food, drink, and other necessary items. *Areitos* apparently varied in scale from small local community affairs to multi-village occasions involving large number of chiefs, elite, and commoners either as participants or spectators (Alegría 1983, 1997:21; Oliver 2005:263–264; Sued-Badillo 2003:259–274; Wilson 2007:119–123).

Ball courts and plazas also commonly contained rock art at single- to multi-precinct sites numbering from as little as one image to the lower hundreds on multiple stone row alignments (Hayward and Cinquino 2012:105). Enclosures first appear in the archaeological record at the beginning of the Late Ceramic Period, A.D. 600, with a subsequent florescence especially at the end between A.D. 1,200 and 1,400 (Rouse 1992; Alegría 1983; Oliver 1998, 2005). The increase in the number and layout complexity of enclosures, along with such detectable changes as the introduction of new or elaboration of earlier material cultural items and shifts in settlement systems, are considered to reflect the transformation of the Early Ceramic, 250 B.C. to A.D. 600, tribal, non-stratified societies into the incipient and later complex, socially two-tiered Taíno chiefdoms in the northern Caribbean at and immediately before Contact (see for example Oliver 1998, 2005; Rouse 1992; Siegel 1999; Walker 1993; Wilson 2007).

These single- to multi-level chiefdoms have been characterized as elite-dominated sociopolitical structures where control primarily derived from persuasive abilities and kinship ties. Chiefs or leaders from a single village to supra-regional polities interacted with supernatural entities or *cemís* (deities, ancestral spirits, and natural forces) to attract retainers and maintain the support of the commoners who made up the majority of the population. They could mobilize people for agricultural labor, as well as military service; they might lead military operations that could involve thousands of warriors. Chiefs redistributed food and goods during their lifetimes and at death when much of their material wealth was given away to mourners during *areitos* cerebrated in their honor (Oliver 2005:241–244, 2009; Sued-Badillo 2003:259–274).

Chiefs were assisted in their roles by other high-ranking individuals and relatives who, among other responsibilities, implemented chiefly policies, administrated

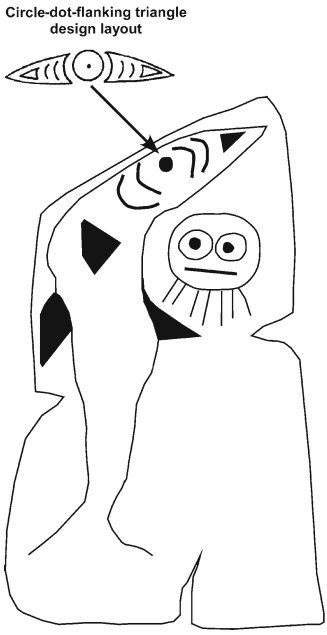

Fig. 13.1 Two petroglyphs from the El Bronze ball court, Puerto Rico, with the circle-dot-flanking-triangle design layout (redrawn from Oliver 1998:41, Fig. 25)

villages or subregions, and organized long-distance trading expeditions. Chiefly/elite religious roles and functions were counterbalanced by shamans who were also intimately involved with *cemí* spirits through rituals and paraphernalia. Although their roles overlapped, it appears that chiefly/elite *cemí* encounters focused on soliciting advise and help regarding public community-wide political affairs, while those of the shaman centered on individual physical-spiritual health and well-being (Oliver 2005:241–245).

Roe (2009) as well as Hayward and Cinquino (2012) suggest that rock art development at ball courts parallels these evolving sociopolitical structures. Ball court petroglyphs display an overall increase in image complexity and iconographic conceptual design from the Late Ceramic's mid (A.D. 900–1,200) to end phase (A.D. 1,200–1,500), although not all later sites necessarily exhibit such developed traits as fully rendered images or involved layouts. The mid-phase ball court site of Tibes on the south coast, for instance, dating to A.D. 1,000/1,100–1,200/1,300 possesses 10 precincts where some 17 images are found on 12 boulders from the main square-shaped enclosure. The petroglyphs represent small undeveloped humanlike faces and simple facial-body forms with a prevailing anthropomorphic theme (Roe 2009; Hayward and Cinquino 2012:107–110,113).

Successive images become more elaborate as at El Bronze, a one-precinct site also on the south coast with around 17 images on 11 boulders dated to somewhat later than Tibes at A.D. 1,100–1,200 (Robinson et al. 1985). An emphasis on facial embellishments including elaborate headgear and internal elements is evident, along with the depiction of a large shark in profile adjacent to a humanlike face (Fig. 13.1) (Roe 2009: 220).

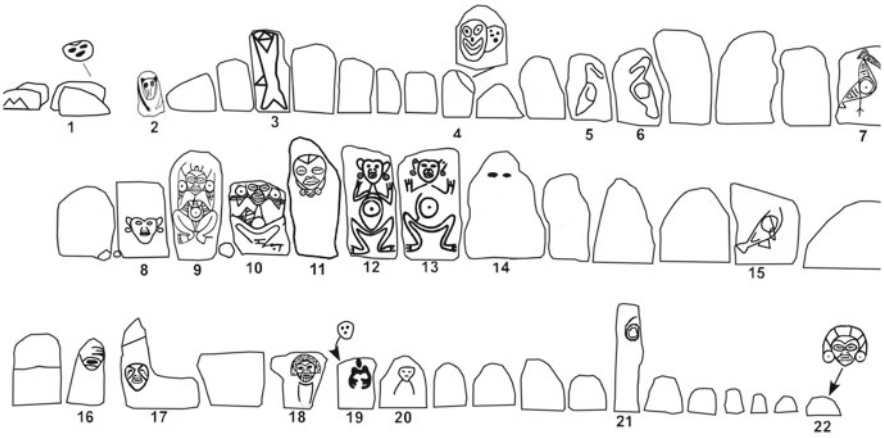

Fig. 13.2 Petroglyph sequence from the west side of Plaza A, Caguana, Puerto Rico (redrawn from Oliver 1998:121, Fig. 39)

We repeat Roe's (1993:662, Note 21) observation that the dot and flanking semicircles and triangles that represent the natural features of eye and gill slits of the shark become transformed into a circle-dot-flanking-triangle petroglyph design layout that figures prominently at the later premier Caguana ball court complex, the enclosure at Jácana, and Cueva Negra on Mona Island, a political dependency off the west coast of Puerto Rico.

Caguana is the largest enclosure site on Puerto Rico with 12 precincts located in the west-central highlands. Twenty-six of the remaining 35 images are found at the site's central square or Plaza A—24 on 22 boulders along the west side and 2 petroglyphs from the east alignment confirmed by only early 1900s' photographs. While Caguana was initially settled around A.D. 700, the primary occupational phase and associated ball court construction date to the last phase of the Late Ceramic, A.D. 1,200–1,450. The enclosure images are notable among the island's rock art assemblages not for their great number, but for their degree of elaboration and integrated iconographic themes. Fully detailed anthropomorphs, complex facial designs, developed face and body forms, as well as fish, bird, and abstract designs are all present (Oliver 1998; Hayward et al. 2012:107, 110–111, 113–115, 118) (Fig. 13.2) (Roe 2009).

Two of the most elaborately executed images are female and male anthropomorphs rendered in a frog-like pose with developed headgear that occupy the center of Plaza A's west alignment (Fig. 13.3, upper row).

These, in addition to other design elements such as rounded earplugs, indicate enhanced status or group identities. They are complemented by a less detailed pair (Fig. 13.3, lower row) separated by a boulder with a complex facial image. As Roe (1993) aptly points out the circle and dot elements of the design layout are prominent and make up the navels in all four figures.

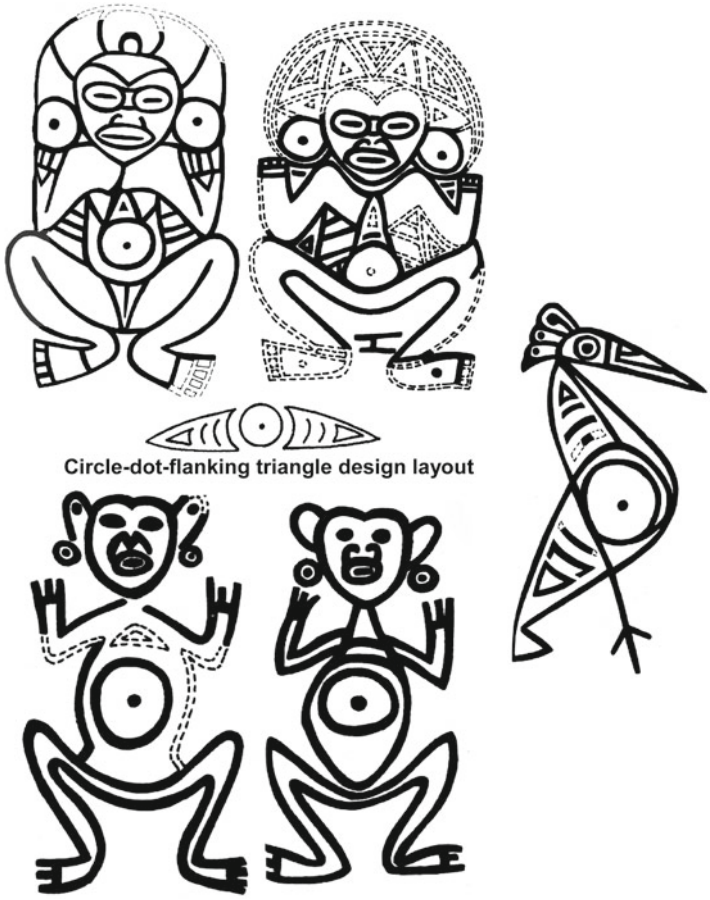

Fig. 13.3 Four fully detailed anthropomorphs (top petroglyph numbers 9 and 10; bottom12 and 13) and bird image (right petroglyph number 7) (numbers refer to petroglyph ordering of Fig. 13.2) from west side of Plaza A, Caguana, Puerto Rico (Roe 1993:665–667, 669, Figs. 3a, 4, 5b, c, 7, respectively)

Roe (1993) further observes that the triangle and semicircle elements within the larger vertically orientated triangle are directly connected to the circle-dot and in the case of the female figure act to differentiate her breasts. The chest triangles and rectangles form the ribs suggesting skeletonized or deceased beings. Roe adds that the triangle- and rectangle-formed hands attached to the large earspool repeat the chest design layout, thereby enhancing its effect, or importance.

The layout also accounts for the entire body portion of one of the bird forms (Fig. 13.3, right). The circle-dot forms the main body of this long-beaked bird, with proportionally emphasized opposing triangles in addition to internal triangles and curved lines that make up the neck and tail. A stick foot, dot-and-lines crest, and a long beak with enclosed pupil for an eye and triangle designs complete the motif.

Another prominent example of the circle-dot-flanking-triangle layout comes from the Jácana PO29 site on the south coast of the island (Loubser 2009, 2010; Loubser et al. 2010). Jácana possesses a single enclosure containing a large number of images, currently recorded as some 62 on 25 stone slabs from the north, south, and west alignments, as well as 1 displaced near-site boulder. Two major occupations are indicated—one from the beginning of the Late Ceramic A.D. 650–900 and the second from the end phase A.D. 1,300–1,500. The enclosure and at least the north-side petroglyphs date to the second major occupational phase (Hayward and Cinquino 2012:111–113,115).

A prevailing anthropomorphic theme is evident at Jácana, with most images ranging from simple to complex facial designs, in addition to simple facial-body motifs with occasional zoomorphic (two possible unmodified boulders suggesting owl shapes) and pit-line elements. It is the two fully rendered anthropomorphic figures on the north wall that are of particular relevance to the present discussion since they are stylistically nearly identical to the two fully executed anthropomorphs from Caguana (Fig. 13.4, left and center) (Loubser 2009, 2010; Loubser et al. 2010).

Sex is again indicated, with a repeat of the frog-like pose with developed headgear. The circle-dot forms the navel in both Jácana figures where one side or half of the flanking triangle with an internal small triangle or triangle-like design and curved line is orientated perpendicular to the circle-dot. Other triangles and curved rectangles fill in the chest area, as at Caguana, giving a skeletonized appearance. Arms are upright in all four examples. Dissimilarities are observable as well, including the marked 90° rotation of the head on the Jácana boulder 9 figure along with a bottom-attached inverted, humanlike face which would have been below the enclosure's surface (Loubser 2009, 2010; Loubser et al. 2010).

The large multi-chambered Cueva Negra on Mona Island's west coast contains one petroglyph and three pictographs considered to date to the Chican Ostionoid or the Táino period, A.D. 1,300–1,500. The three pictographs represent two complex faces—one human and the other monkey-like—while the third represents a generic lizard. The anthropomorphic petroglyph once again is strikingly similar to those fully detailed from Caguana and Jácana (Fig. 13.4, right). Fleshly frog-like legs on this male are matched by a rounded abdomen that instead of a dot and skeletonized elements depicts a humanlike face. A triangle-dot design connects the abdomen to the face that stresses the earlike circle-dot-triangle layout. The cave may well have been used for religious rituals and ceremonies (Dávila Dávila 2003:179–185, 262, 273, 333–335, 438–440).

Various researchers have offered interpretations of the Caguana petroglyphs wholly or in part (Stevens-Arroyo 1988:162; Roe 1993), as well as the Jácana assemblage. Oliver (1998, 2005, 2009) provides the most comprehensive structuralist-based iconographic decoding of the Caguana petroglyphs. He views the assemblage as a micro-representation of backward-in time-projected Taíno cosmological beliefs which served to articulate different sociopolitical segments, as well as the living with the nonliving world.

The world, according to the animistic beliefs of Caribbean precontact native populations, included the earthly plain with living people and an underworld and

Fig. 13.4 Fully detailed anthropomorphs from (1) north boulder alignment at Jácana ball court, Puerto Rico (petroglyph numbers 9 and 5 *left upper* and *lower*, respectively); (2) west side of Plaza A, Caguana, Puerto Rico (petroglyph numbers 9 and 10, *center upper* and *lower*, respectively); and (3) Cueva Negra, Mona Island (petroglyph number 1, *right*). Sources: Jácana, redrawn from Loubser et al. 2010; Caguana, Roe 1993:665–666, Figs. 3a and 4; Cueva Negra, retraced from Dávila Dávila 2003:333, Fig. 25

sky realm inhabited by supernatural entities or *cemís*. These included mystical or godlike forces, life-sustaining energies, supernatural beings (some of whom were named), and spirits of the dead. *Cemís* could manifest themselves in a variety of ways or objects such as smells, rocks, and animals. Their manifestations might, though not always, require some form of more permanent representation made from a number of materials including wood, preserved skeletal remains, and, not illogically, rock art. These objects were considered not only to represent supernatural beings and forces but also to embody their powers and were also called *cemís* (Alegría 1997:23; Oliver 2005:246–248; Stevens-Arroyo 1988).

Within this context, Oliver (1998, 2005, 2009) considers that the four dominant centrally located fully executed and less detailed anthropomorphs represent the ancestors and descendants of the governing chiefs of Caguana, manifested as *cemís*. The remaining petroglyphs serve to emphasize their status, in addition to

representing components of the cosmological world order just noted. Communal events at the main enclosure likely focused on *areitos*, where the secular and sacred activities discussed above were acted out, and would have projected the political and religious prominence of the area and its rulers. Chiefs, as outlined above, had intertwining political and religious roles that included maintaining the proper balance between the spiritual and natural worlds that ensured the good order and material well-being of the people. As objects with embedded *cemí* power, these central petroglyph images were active, not merely passive, participants in the ceremonies. Further, they would have served as witnesses to the validation of the current ruler and sociopolitical order that linked individuals to various social strata and groups to groups at local or higher political levels.

Loubser (2009, 2010; Loubser et al. 2010) in his less extensive than Oliver's treatment of the Jácana petroglyphs employs a similar approach. Relying on ethnohistoric sources, as does Olivier, he also considers that the petroglyphs represent *cemís* matching individual petroglyphs to specifically described *cemís* (see Stevens-Arroyo 1988 for such descriptions). For instance, the two fully elaborated male and female anthropomorphic figures in Fig. 13.4 (left) Loubser identifies as deceased chiefs standing in for or by virtue of their status linked to the *cemís* Yaya the supreme or high god and Attabiera guardian of female fertility (Stevens-Arroyo 1988:221–223, 226).

Regardless of the specific interpretations of the rock art at the enclosure sites of Caguana and Jácana, they all firmly relate the images to the spiritual realm. Rock art at caves is similarly ascribed to *cemís* or spirits of dead ancestors with attendant religious rituals and ceremonies. Ball court structures and caves marked these particular locations within the surrounding landscape as "sacred," "apart from normal activity," and "other worldly" with rock art reinforcing this status. Yet as Oliver (1998, 2005) for example has argued enclosures and associated rock art were multifunctional as suggested by the ethnohistorically described mix of religious and secular activities led by individuals with intersecting religious, economic, and sociopolitical roles. These individuals or groups took advantage of, and proclaimed their prestige through, the construction of enclosures and their symbolic-laden images.

The Design Layout and Chican Ostionoid Ceramics

The circle-dot-flanking-triangle layout also appears to be a late development in the Greater Antillean ceramic sequence. That sequence largely coincides with the arrival of groups from the lowlands of northeast South America that begin moving into the region around 450 B.C. The Saladoids bring with them an established pottery-making tradition, settled village life, and full-time horticulture into a region already populated with Archaic hunter-gather groups that nonetheless produced ceramics on a lesser scale and engaged in low-level plant manipulation. The post-Archaic cultural development period or Ceramic Age is divided into Early and Late

Table 13.2 Chronological framework and ceramic sequence for prehistoric Puerto Rico

Chronological period	Ceramic series/subseries/styles	Calendric dates
Early ceramic	Saladoid	
First phase	Early Cedrosan Saladoid/Hacienda Grande, La Hueca	300 B.C.–350/400 A.D.
Second phase	Late Cedrosan Saladoid/Cuevas	350/400–600 A.D.
Late ceramic	Ostionoid	
First phase	Early Ostionan and Elenan Ostionoid/pure or early Ostiones and Monserrate	600–900 A.D.
Second phase	Late Ostionan and Elenan Ostionoid/modified Ostiones and Santa Elena	900–1,200 A.D.
Third phase	Chican Ostionoid/Esperanza, Capá, and Boca Chica	1,200–1,500 A.D.

Sources: Rouse (1982, 1992)

Periods and subdivided into two and three phases, respectively. The associated ceramic series for the Early Ceramic is the Saladoid followed by the Late Ceramic Ostionoid. Saladoid ceramics are found throughout the Lesser Antilles, Virgin Islands, Puerto Rico, and eastern Hispaniola, the latter region apparently representing a frontier zone between the newly arrived Saladoid groups and the resident Archaic populations (Rouse 1992; Wilson 2007).

A commonly employed spatiotemporal model for Caribbean prehistoric cultural and ceramic development is that of Rouse (1992:52–53, Figs. 14 and 15). His framework for Puerto Rico during the Ceramic Age is presented in Table 13.2 with columns for the cultural phases, calendric dates, and associated ceramic styles (assemblages of ceramic or other material cultural items characteristic of one or more sites), series (sets of closely related styles shared by groups from assumed common origin), and subseries (an intermediate taxonomic unit between series and styles).

The early Cedrosan Saladoid Hacienda Grande and La Hueca styles (300 B.C.–A.D. 350/400) are characterized by poly- and bichrome, as well as incised designs on a variety of thin light tan-colored straight-sided and sharply angled vessel forms as sketched in Fig. 13.5 (top row).

Red, orange, white, and black were employed in polychrome painting and slipping, while the more numerous finely executed bichrome designs featured white-on-red (WOR) combinations. A particular form of incision was common, termed zoned incised crosshatching (ZIC) where areas were outlined with broad, deep lines and then filled in with lightly incised crosshatching. Detailed modeled zoo- and anthropomorphic forms or *adornos* on lugs or handles were also common. The later Saladoid Cuevas style ceramics (A.D. 350/400–600), while maintaining the manufacture of thin well-made vessels, also feature decreasing ZIC-type incising, less well-executed WOR designs, and softening of wall profiles (Wilson 2007:67, 74–75; Rouse 1992).

While the designs within all styles of Puerto Rican Saladoid pottery are highly variable and frequently include curvilinear elements as the examples in Fig. 13.5

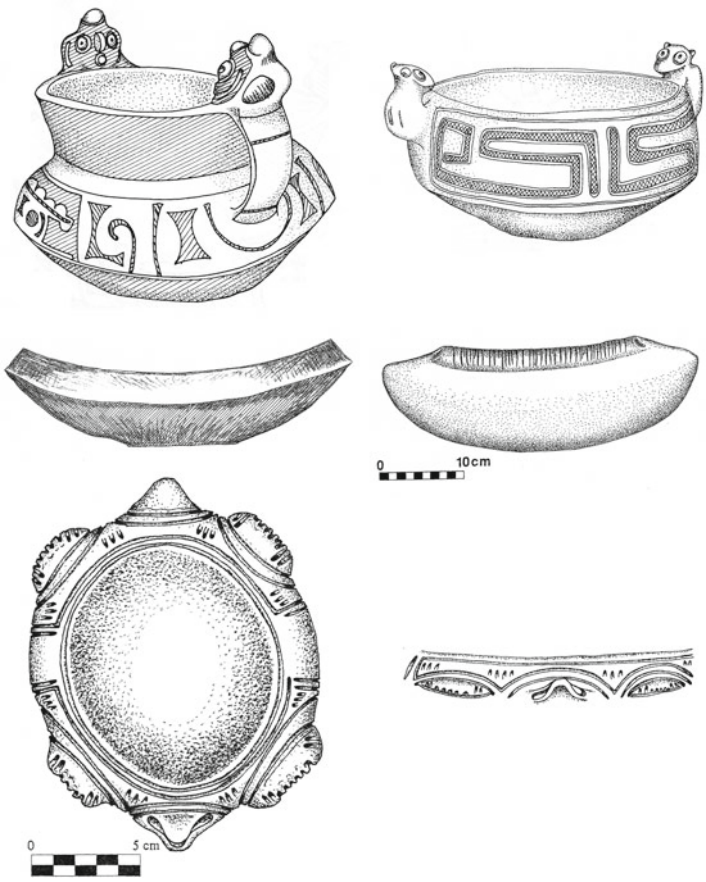

Fig. 13.5 Representative vessels of Hacienda Grande style, white-on-red jar with modeled adorno on handles (*upper left*): La Hueca, ZIC decorated open bowl with modeled dog adornos (*upper right*); Monserrate-style open shallow bowl (*center left*); Santa Elena-style open bowl with thick incised rolled rim on upper shoulder (*center right*); Esperanza-style open bowl with accompanying upper shoulder incised line design (*lower left* and *right*, respectively). Sources: Hacienda Grande, Roe 1989:348, Fig. 20; La Hueca, Roe 1989:359, Fig. 31; Monserrate, courtesy of Peter G. Roe; Santa Elena, Roe and Ortíz Montañez 2011: Fig. 2c; Esperanza, Roe and Ortíz Montañez 2011: Fig. 20e, g, respectively

illustrate, the circle-dot-flanking design layout is not one of them (Roe 1993, 2004). Nor is it apparently found in the succeeding early and middle phases of the Ostionoid series. The series has often been described in the literature as one of simplification where the well-executed poly- and bichrome painted designs and modeling are replaced by an increasing importance on incision for decoration applied to less well-made vessels (Rouse 1992; Roe 1993:649, 2004:117–125). A change is also noted in the number of pottery styles on Puerto Rico which increase from three to seven as noted in Table 13.2.

The early Pure Ostiones and Monserrate styles (A.D. 600–900) retain certain technologies and vessel forms of the Saladoid series including red-painting, yet increasingly display differentiation in forms and decoration. Simpler, thicker, and coarser vessels are typical of the Monserrate style with bowls being the predominate form (Fig. 13.5, center left). Black, negative resist, and smudged motifs are added to the set of decorative techniques that still include incised and red-painted/slipped designs. The Pure Ostiones style displays less differentiation however, with a continuance of thin, fine, and smooth-surfaced vessels similar to Saladoid ones. A higher frequency of red-paint, red and lilac slips, and polished surfaces are found in the Pure over Monserrate style (Curet 2005:20–21).

The second-phase Modified Ostiones and Santa Elena ceramics (A.D. 900–1,200) display modeling and incision, especially in the execution of zoomorphic and anthropomorphic handles that refer back to Saladoid precedents. Simple shapes again predominate in the Santa Elena style with vessels increasingly being thicker, coarser, and rougher (Fig. 13.5, center right). The use of red paint and slip is reduced. Incision is frequently found as rough, vertical, rectilinear lines close to bowl rims, often complemented by applique strips. The Modified Ostiones style is still defined by thin, fine, and smooth pottery that also retains most of the prior phase's shapes. Red paint and lilac slip are evident, with incised designs becoming more frequent and oft times similar to those of Eastern Hispaniola of the same period, as well as the later Puerto Rican Chican Ostionoid (Curet 2005:21–22).

The Chican Ostionoid is the final or the protohistoric ceramic phase (A.D. 1,200–1,500) and is also the most widely distributed of the post-Saladoid series in the region. Chican style ceramics are found from Cuba, Hispaniola, Puerto Rico, the Virgin Islands, and the northern Lesser Antilles. Esperanza vessels typically have rounded bases and incurving shoulders (Fig. 13.5, lower row). Modeled and incised attached figures, in addition to appliquéd features on handles and vessels, are present. Both the Esperanza and Capá styles are typified by incising that consists of combinations of curved lines and punctuations that often are found above the shoulders of inward sloping bowls (Rouse 1992).

Among those combinations of incised lines and punctuations as Roe (1993, 2004:125–126, figs. 7.9 and 7.10) points out is the circle-dot-flanking-triangle layout (Fig. 13.6).

The derivation or the transference of the layout from the Caguna, Jácana, and Cueva Negra petroglyphs is straightforwardly seen in the detailed anthropomorph central circular abdomens and associated body part triangles with short lines as discussed above (see Fig. 13.4), in addition to the long-beaked bird image from Caguana (see Fig. 13.3, right). Both the anthropomorphic and bird images exhibit a simple 90° rotation of chest elements, in the case of the anthropomorphs, and the neck and wing elements of the bird, to flanking or vertically opposing positions around their central circle-dot middles. These appear as repeating layouts across the upper incurving shoulder of commonly occurring Chican bowls which are made with a pronounced shoulder and restricted opening on round to flat bases. Roe (1993) adds that the triangle and rectangular forms on the crowned anthropomorphic figures at Caguana, and now at Jácana, also repeat typical Chican ceramic geometric designs.

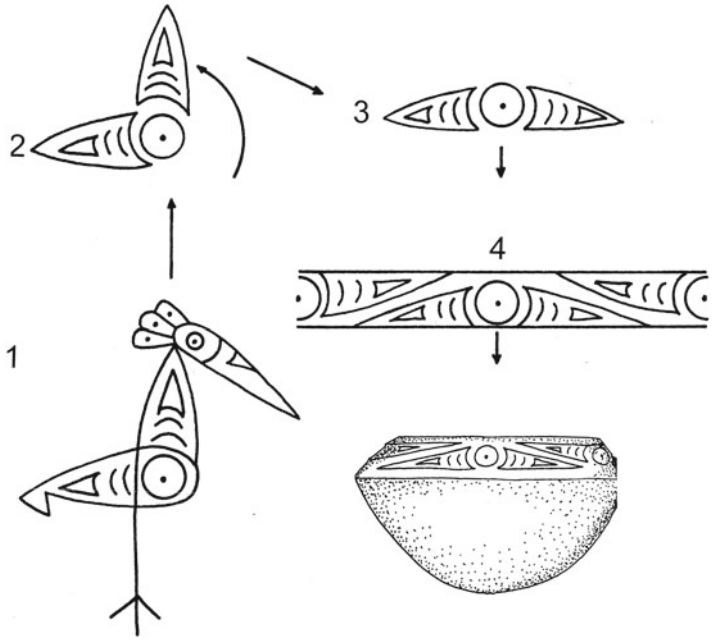

Fig. 13.6 Circle-dot-flanking-triangle design layout derivation from bird petroglyph number 7 at Plaza A, Caguana, to Chican Ostionoid ceramics (Roe 1993:670, Fig. 8)

Gender, material composition, and design analysis of Caribbean ceramics are among the investigative topics in the literature beyond low-level descriptions and functional categorizations. Roe (2004) in particular over the years has argued that Western art conventions applied to present as well as past Amerindian art fail to capture the rich symbolism and meaning behind even seemingly geometric designs. Their animistic world view, reconstructed from ethnographic observations and ethnohistorical accounts, includes notions of hidden and present realities, human/animal/spirit transformations or associations, and drug-induced visions that form a distinctly different context for the production of designs or "art" across different media from ceramics to small-scale sculpture.

Roe considers that the pictorial dualism or visual ambiguity trait seen in Cedrosan Saladoid, Elenan, and Chican Ostionoid ceramics, as well as the island's Late Ceramic rock art, is one such manifestation of this distinct cognitive framework. Pictorial dualism incorporates such conventions as mirror and nested images, as well as motifs with interlinked designs that incorporate multiple meanings or representations depending upon the viewing perspective. Examples cover modeled adornos (molded figures as or on vessel handles) that reveal, upon rotation, different anthropomorphic or animal images as in a front-facing squid whose features at two other angles form another sea animal and a bulging-eyed fish; the inverted face (below the surface of the ball court and thus "hidden" from normal view) at the bottom of the elaborately detailed anthropomorph with a 90° turned head from the

north row of the Jácana ball court (see Fig. 13.4, upper left); or the Cueva Negra petroglyph with a humanlike face in its abdomen (see Fig. 13.4, right).

Roe further argues that simple geometric circles, a prime Chican motif, with or without dots and flanking triangles are highly charged with meaning. Circles appear in Taíno art as markers of major joints, like the femur and hip ball-and-socket pairing, and most particularly the abdomen with the center dot therefore standing in for the navel. Ethnographic and ethnohistoric sources record that the joints, abdomen, and other such body openings—ears, mouths, lips, and eyelids—were considered doors or portals into the body where the soul resided (see Oliver 2009:68, 142 for head as a locus for the soul, Roe 2004:126 for body as locus). Further, one noted explanation for illness is the intrusion of malevolent spirits into the body that contaminate or obscure the soul. Curing of this kind of disease involves sucking or extracting the spiritual contagion, and relatedly, blowing or sending the pathogen to one's enemies.

The body's openings conceived of as entry and exit points of soul matter or energy would naturally also possess protective mechanisms. Roe proposes that circles symbolically express these entry points that at the same time guard against spiritual contagion and soul-capture. Just as the facial openings have additional skin fold protections as in ears for the ear cannel, the curved lines and triangles surrounding the circles may represent additional portal control features. Extending Roe's line of reasoning to the Cueva Negra anthropomorph with a facial image in its abdomen (see Fig. 13.4, right) may mean that this figure (perhaps a shaman or a political-religious elite) was especially adept at either capturing other souls or guarding against evil soul intrusion and hence illness.

The Design Layout and Sculptured Stone Artifacts

Sculpted and worked stone, bone, shell, coral, and wood artifacts from the prehistoric Caribbean cover a wide range of categories from lithic blades to finely detailed pendants of exotic materials and seaworthy wood canoes. Lithic and ground stone tools were manufactured by the earliest settlers who by the end of the European-interrupted cultural development also showcase large, elaborately detailed single- and multiple-composite wood, stone, fiber, and even human bone items (Rouse 1992; Wilson 2007). We are here concerned with a subset of these later-in-time artifacts—sculpted ground stone collars, three-pointers or *cemís*, and elbow stones—that are considered functionally related and that also display the circle-dot-flanking-triangle layout. Walker's 1993 dissertation still stands as the most comprehensive study of these artifact classes, that has since been complemented by Sued-Badillo's (2001) discovery of additional stone collars and Oliver's (2009) interpretation of the design motifs.

Stone collars are large oval rings pecked and grounded from largely non-exotic materials such as finer grained sedimentary and metamorphic rock, in addition to coarse-grained sandstones and siltstones (Fig. 13.7, upper row).

Fig. 13.7 Representative sculpted stone artifacts: Slender stone collar with design element components (*upper right*); massive stone collar (*upper left*) (scale approximate for stone collars); elbow stone (*center*); small undecorated three-pointer (*lower right*); and large three-pointer with detailed anthropomorphic design (*lower right*). Note: All examples from Puerto Rico except for the small three-pointer from Dominican Republic. Sources: Slender stone collar, redrawn from Walker 1997:86, Fig. 64; massive stone collar, redrawn from Walker 1997:81, Fig. 58; elbow stone, redrawn from Walker 1997:88, Fig. 65; small three-pointer, redrawn from McGinnis 1997:96, Fig. 71; and large three-pointer redrawn from McGinnis 1997:99, Fig. 75

The collars are divided into two size categories of massive and slender based on their relative thicknesses since both possess similar overall dimensions. Those overall dimensions in Walker's sample averaged 18 by 24 in. (45 by 31 cm); the weight average for slender examples was 11 pounds (5 kg) and for the massive variety 34

pounds (16 kg). All have minimal designs and many exhibit elaborate zoomorphic and anthropomorphic images along with geometric motifs. Walker's designated features include (see Fig. 13.7, upper right) a prominent bulbous projection or boss section at one point of the collar; exterior upper and lower decorated panels on one side of the boss; a prepared, but undecorated section on the other side of the boss; and a shoulder portion that completes the ring outline (Walker 1993).

The overwhelming majority of the region's stone collars are from the eastern Greater Antilles, most particularly Puerto Rico, followed by Hispaniola and the Virgin Islands; a few are from the Lesser Antilles. Production at present is noted only for the Late Ceramic (A.D. 600–1,500), with Walker maintaining that massive collars preceded slender ones. In his dissertation, Walker (1993) included some 120 stone collars whose numbers now stand at 465 due to Sued-Badillo's (2001:71–73) recent locational efforts. Sued-Badillo has not however published a design analysis of the additional stone collars.

Elbow stones are similar in size to the boss and adjacent decorated and undecorated portions of stone collars that they closely resemble. Most of Walker's twenty-four examples were all made from locally available sandstone, with the majority undecorated. However, eight possessed anthropomorphic images on one of the arms as in Fig. 13.7, center. Fifteen were from Puerto Rico; one each from the Dominican Republic, Vieques (a Puerto Rican politically dependent island to the east), St. Thomas (one of the US Virgin Islands), and possibly Guadeloupe in the Lesser Antilles; and five had no provenience. Dating is limited. The elbow stone from St. Thomas was found in association with Elenan Ostionoid ceramics (A.D. 900–1,200) and Walker proposes that the simple undecorated versions preceded the decorated ones with corresponding date ranges of A.D. 600–1,250 and 1,250–1,500. Although provenience data for Walker's sample was limited, both stone collars and elbow stones are found in association with enclosures and Chican Ostionoid pottery (Walker 1993).

Three-pointers or *cemís*, so called because of their triangular shape in cross section consisting of a higher central and lower flanking pointed ends, tend to come in small 1–3 in. (3 to 7 cm) lengths and large 6–12 in. (15–30 cm) sizes. The small ones made from clay, stone, shell, and coral are usually undecorated (Fig. 13.7, lower left) that offer a strong counterpoint to the large sculpted stone variety, frequently with complex zoomorphic and anthropomorphic designs as exemplified in Fig. 13.7, lower right. Objects identified, though not described, as *cemís* in the ethnohistorical accounts are considered to include both the decorated and undecorated three-pointers that would therefore represent, as well as embody, *cemí* spirits and forces as outlined above. Walker included in his study some 200 of the large three-pointers made from a number of commonly occurring fine to coarse-grained stone. The large examples, like stone collars and elbow stones, were produced during the Late Ceramic and are not widely distributed. The small versions, however, are noted from the beginning of the Ceramic Period and continue to be produced alongside the large examples. They also differ in their distributional patterns and frequencies. Small three-pointers are found throughout the Caribbean in a variety of contexts (e.g., caves, middens, habitation sites), and numerically outnumber the larger sculpted stone categories: thousands versus mid-hundreds (Sued-Badillo 2001: 71–73; Walker 1993).

Walker (1993), following earlier suggestions and his own research, argues that these three classes of stone artifacts are functionally interrelated sets of composite objects. The first set involves the pairing of large three-pointers onto the undecorated panels of stone collars. Elbow stones represent a labor-saving shorthand version of stone collars where the stone loop portion was likely replaced by wood, basketry, or cloth. At first, large three-pointers were attached to the undecorated arm, as with stone collars. The later decorated versions correspond to the transference of three-pointer images directly onto elbow stones, thus serving as a second type of composite artifact.

In his analysis of the design fields from 106 stone collars, Walker (1993:295–310) considers that the exterior lower decorated panels form a compound motif that he terms a "headless fish." The panel outlines a fish body with tail and fins (but without a head) that progresses from an easily recognizable fish to more stylized versions. It is the body or the interior portion of the fish outline where the circle-dot-flanking-triangle design layout is evident, as in Fig. 13.7, upper row. Variations on the now familiar layout are also evident and can be derived via a series of steps that are illustrated in Fig. 13.8.

These steps or derivational chains logically set out changes in a core design based on a number of rules such as union (combine elements), rotation, and horizontal or vertical compression. In the case of the triangle core layout, a series of design changes (Chain B) can be obtained via deletion, duplication, and rotation, where the circle-dot portion of the core is largely dropped and replaced by triangle, diamond, and diagonal line motifs. In Walker's sample, thirty-five (33 %) possessed some form of the circle-dot-triangle-flanking layout; twenty-four (23 %) displayed another derivational chain motif based on chevrons (Chain A); three (3 %) were classified into a miscellaneous category; and forty-three (41 %) had no interior body design to the delineated fish forms.

The exterior upper panels of stone collars are also decorated with a motif that Walker (1993:311–321) terms bird-frog twins (Fig. 13.9).

This is another example of the visual ambiguity art form where viewed from the side the designs incorporate the head of some type of water bird with sharply curved beaks that upon a 90° vertical rotation of the collar (seen from above) become transformed into human/frog heads with necks and open mouths. These motifs always occur in reflecting or opposing pairs, be they of one or two sets. None of Walker's 42 massive stone collars had the design, while half of the 64 slender or later-in-time collars did have the design. The bird-frog twin motif may also incorporate a centrally placed figure, which evolves from simple geometrical outlines to a well-developed normally bat-like facial form; the figure was present on 20 (63 %) of the slender collars with the bird-frog twin design.

A wide range of anthropomorphic and zoomorphic designs alone or in combination are found on large three-pointers that incorporate the three points and surfaces in between as illustrated in Fig. 13.7 (lower right). Heads are emphasized that may also be accompanied by such body parts as legs, backs, arms, and wings. Naturalistic and abstract representations of birds, reptiles, and mammals are identifiable including hummingbirds, owls, snakes, and frogs. The elements of the circle-dot-flanking-triangle layout can figure prominently within overall designs, again as illustrated in

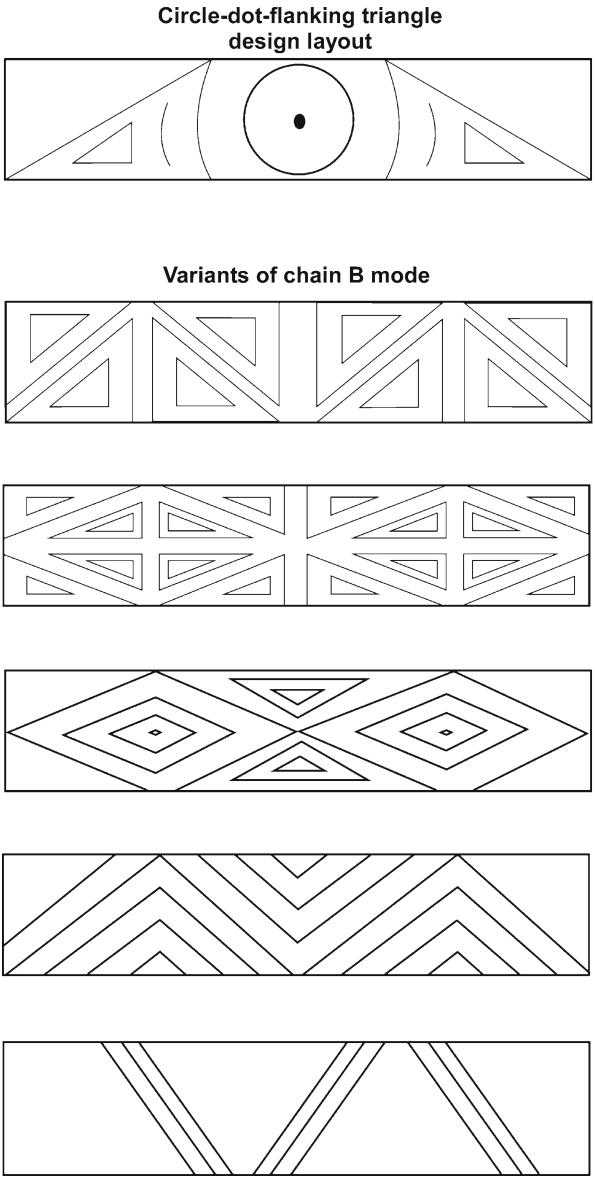

Fig. 13.8 Circle-dot-flanking-triangle design variants of Chain B sequence (retraced from Walker 1993:303, Fig. 5.8)

Fig. 13.7 (lower right) with the circle-dot for the hip and shoulder joints (see above discussion on significance) and what are probably earspools. Additionally circles, dots, triangles, and curved or straight lines are used to complete body parts (e.g., ribs, backbone) or fill in the design sections (Walker 1993:360–363).

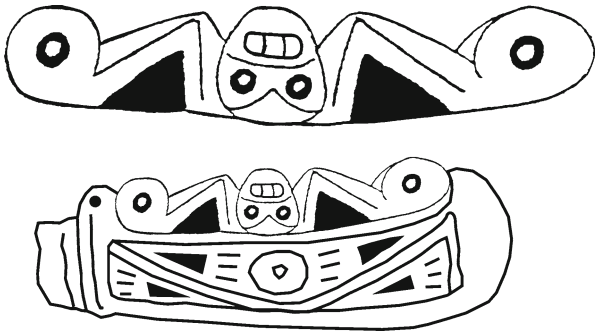

Fig. 13.9 Bird-frog twin design theme with central bat-like upside down figure (*upper*) and its placement on a stone collar decorated exterior panel (*lower*); design is a variant of the circle-dot-flanking-triangle layout (retraced from Walker 1993:317, Fig. 5.10)

Anthropomorphic forms are the only type of images found on elbow stones that are similar in design to comparable images on three-pointers, a situation that further supports Walker's (1993) three-category interrelationship proposal. Frequently, only the face was depicted but, as the image in Fig. 13.7 (center) demonstrates, the disproportionally accentuated face is bounded by headgear, upright arms to the earspools, and a body with a circular abdomen and frog-like flexed legs that clearly echoes the fully rendered anthropomorphic petroglyphs at Caguana, Jácana, and Cueva Negra.

Apart from passive messages that stone collars, elbow stones, and large three-pointers convey, as in representing labor- and skill-intensive artifacts, Walker (1993) as well as Oliver (2009) argue that their design motifs codify active symbolic messages. For Walker (1993:421–433, 1997:84–87), the headless fish and bird-frog twin motifs on stone collars embody certain recorded myths of the Taínos. The headless fish composite may represent the gourd in the story of Yaya, the supreme *cemí* spirit (see above discussion of Jácana petroglyphs). Yaya banishes his son Yayael who nonetheless returns, prompting Yaya to kill him and afterwards place his bones in a gourd hung from the roof. One day he wishes to see his son which makes his wife happy and she takes down the gourd only to discover that the bones have turned into fish, which they eat. Later in the myth cycle two sets of twin *cemís* decide to seize Yaya's gourd with the fish, but only one of the four caracaracol/*cemí* quadruplets, identified in the myth as Deminán, actually dares to take the gourd. Yaya surprises them while they are eating the fish and during their escape the gourd is broken, letting loose the waters of the sea and the fish in it. The bird-frog opposing motifs would stand in for the twin *cemís* in the myth, and the central figure most likely is Deminán, the only one of the caracaracol quadruplets that is named.

The two internal fish body design motif chains, Chain A chevrons and Chain B the circle-dot-flanking-triangle layout, are related to the Yaya myth, but as Walker (1993:426, 430–432) argues could also be another instance of the multiple identity and hence messaging trait of Taíno art. The chevron designs may represent basketry as well as fish scales, while the triangle layout may also reference the woodpecker-wooden-bride myth or how men re-obtained women. Men had lost their women, but

one day saw creatures fall from trees that were neither men nor women. They tried to catch them thinking they could convert them into women. They needed help to capture the creatures which they obtained from four caracaracol or *cemí* spirits, likely the two sets of twins of the Yaya myth. After securing the beings, they got a woodpecker and fastened him to the creatures so that his pecking in the appropriate area would transform them into women.

Oliver (2009:130–139) offers complementary yet distinctive iconographic interpretations of the three stone artifact classes. For example, he also references the ocean-aquatic life origin myth cycle of Yaya equating the headless fish design with Yayael or his descendants in their transformed natures as fishes and thus sources of food. The fish forms on petroglyphs like those at Caguana and El Bronze (see Figs. 13.1 and 13.3, right) may likewise embody the same mythic message. Oliver takes a more anthropomorphic viewpoint of the single- or the double-twin figures seeing them as representing a single personage where the triangle layout group of Chain B instead of referring to another myth displays the body consisting of arms, legs, and abdomen, or in the case of central bat forms folded wings. The circle-dot is the abdomen as Roe (1993) proposes, while the triangles depict feet and legs.

This interpretive shading underscores the common link or function provided by the triangle layout across worked stone for fully detailed anthropomorphs as either the only bodily depiction on stone collars or the part of the body depiction (e.g., ribs, chest, arms) on petroglyphs, elbow stones, and three-pointers. The fleshly frog-like body forms may allude to notions of ancestral fertility or in the case of the twin images to personages as bearers of spiritual or esoteric knowledge. Oliver 2009 considers that the central figures represent bats, who in Taíno oral traditions symbolize the souls of the dead, thus reinforcing the link between the living and spirit worlds.

A discussion on the iconographic interpretation of stone collars, elbow stones, and large three-pointers can easily be expanded from these and other sources (see for example Stevens-Arroyo 1988). The present treatment is intended to demonstrate that multiple readings are possible and not necessarily contradictory given the nature of precontact native art forms. While the messages overtly referenced the religious and cosmological realms, the symbolically codified meanings also carried a social value that was used by aspiring individuals or groups to enhance their influence and prestige. Both Oliver (2009) and Walker (1993) argue that these interrelated artifacts, given their relatively scarce number, association in the case of at least stone collars with ball courts, large size, and high degree of decoration, were used by the political elite in large-scale or group-orientated public ritual theater and ceremonies. A chief displaying a stone collar, as Oliver (2009:134) suggests, with the headless fish image would be signaling his direct association to the mythic Yayael and therefore his legitimate control over matters regarding marine and fresh water resources.

Considerations

Religion viewed as a dynamic, open, and changing or changeable system nonetheless possesses an ordered structure among its constituent components. Those components include beliefs, actions, emotions, and people that are directed by certain individuals who conduct these actions at certain locations and employ certain objects. Rock art within this scheme serves to reinforce the sense of special place be it of a religious or other intersecting nature (political, theatrical, economic), in addition to serving as referents to personages, deeds, and events in the mythic past or every day present.

Harvey Whitehouse's Modes of Religiosity is one such ordered framework that focuses on the origin and maintenance of the formal external organization of religious systems. Cognitive, doctrinal, and imagistic modes represent a continuum from low-level to high-level organizational forms that are found in all cultures with more than one state possible within a given society. We suggested that Late Ceramic (A.D. 1,200–1,500) Taíno chiefdoms in the northern Caribbean, particularly in Puerto Rico, were undergoing a shift from the less structured imagistic mode to the more structured doctrinal form. Our logic rested on three factors: the assumption that native art was at least partially embedded in a symbolic context, the use of cross-media visual analysis, and the employment of ethnohistoric sources and ethnographic analogy.

One expectation of Whitehouse's model is that increasing religious organizational structure is reflected in the presence of redundant art styles or forms. We traced one such form—the circle-dot-flanking-triangle layout—across various media including rock art at the three Puerto Rican sites of Caguana, Jácana, and Cueva Negra; Chican Ostionoid ceramics; and the interrelated artifact classes of stone collars, elbow stones, and large three-pointers/*cemís*. The layout's multimedia presence strengthens the case for a shift to the doctrinal mode by the end of the Late Ceramic. Perhaps more critically, we point out that arguments based on redundant art styles can be made regardless of knowing the specific meaning or symbolism; the fact that repeated motifs or thematic layouts are or are not present can be used to argue for or against one of these modes.

In the Caribbean, proposals for specific meanings for rock art, ceramic, and sculpted stone designs are possible due to a range of available ethnohistoric sources and direct ethnographic analogs. As the foregoing discussion indicates, the meanings may be multiple and overlapping. Although these sources suggest that the coded messages relate to religious or cosmological beliefs, it is the political and religious elite, most particularly chiefs and their close retainers, who use and control these motif-bearing objects and places to increase their individual and associated group prestige and status. Religious or symbolic imagery used to further political-religious goals is effective if everyone (or nearly so) in the culture realizes that this person or group has control over spiritual forces, and that this control is

signaled via such visual forms as certain designs on rock art, ceramics, and sculpted stone items. It may be precisely the chiefly intersecting religious and political roles or the political nature of religious roles that at least in part accounts for the apparent increasing structure of Late Ceramic Caribbean religious organization.

The continued production of small three-pointers into this period further suggests the operation of dual modes of organization. The apparently successful attempts at restructuring the religious organization (doctrinal mode) took place at the subregional or the regional levels involving sizeable public or closed but chiefly led communally oriented ceremonies, largely leaving unregulated local and individual rituals and practices (imagistic mode).

Our position is not entirely new. Others including Siegel (1999), Roe (2004), Oliver (1998, 2005, 2009), and Walker (1993) have proposed intensification of the religious organization by the end of the Late Ceramic, while Roe (2004) considers that cross-media isomorphism or art style redundancy is linked to increasing sociopolitical organization, though not specifically to the religious structure. We differ from the foregoing investigators in our employment of Whitehouse's theoretical framework to frame the research and interpret the results.

Our argument is also meant to be tested. Further testing avenues include the identification of additional repeating design themes which can and have been identified (see Walker 1993); the identification and delineation of the circle-dot-flanking-triangle layout on other media; the undertaking of a design analysis of Sued-Badillo's (2001) stone collar sample that should provide corresponding data and insights; and expanding intersecting design themes when paring large three-pointers onto stone collars begun by Oliver (2009).

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Chapter 14
Communication and Thought in Rock Art: A Discussion of the Spiritual World of Rock Art in Colombia

Guillermo C. Muñoz

Introduction

This study synthesizes and integrates investigations by Grupo de Investigación de Arte Rupestre Indígena [Investigation Group of Indigenous Rock Art] (GIPRI) a Colombian research group dedicated to studying rock art interpretations as reflected in communication and thought. Through the years we have become accustomed to accepting trends in rock art research that associate it with expressions or intellectual demonstrations of sacred sites, gods, origin myths, and teachers of culture. In general rock art is thought to depict persons or entities who were important to a culture and who were instrumental in constructing religions, as if this were the most sophisticated form of human thought. However, through finding and documenting an ever larger number of rock art sites, GIPRI has found evidence to support objections to religion being the most sophisticated form of human thought contrary to what has been proposed by researchers both inside and outside of Colombia (Muñoz 2006a). The current state of style classifications and debates about inconsistencies of traditional interpretations come together to form a less optimistic view of the sacred character of rock art designs than was originally thought (Rosenfeld and Bahn 1991). Here I suggest that some rock art images may represent refined communication systems with complex intellectual structures, but not all are necessarily metaphysical representations associated with religion. Instead many depictions are communication systems with a potential to express a view of the world that refers to a variety of possible relationships between humans and between humans and nature. Thus, religion is one aspect of rock art images, but not the only one.

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Myths and Gods of the Cundinamarca–Boyaca High Plains Area

Many myths have been recorded in the traditions of the ethnic groups that lived in the Colombian high plains of Cundinamarca and Boyaca, and many of these stories were preserved by early Spanish scribe historians recording pre-Hispanic South American history. Historians found that many of these myths refer to persons of high social rank or to creators of natural features who transformed the environment, made space for humans, or were famous people who changed the way of life and relationships between people.

Here I am concerned with the Muisca ethnic group. They are part of the Chibcha linguistic group whose culture was destroyed by the European invasion of the sixteenth century and whose cultural details were mentioned by the *Conquistadores* and by governmental scribe historians during the Conquest and Colonial period (Castellanos 1874; Quesada-Friede 1960). The Muisca culture was organized into different levels and social classes (González de Pérez 1996; Langebaek 1992; Lleras 2005). They were a chiefdom society located in the central part of western Colombia in the departments of Cundinamarca, Boyaca, and Santander (Fig. 14.1). Most of our knowledge about this culture comes from records made by scribes, priests, notaries, and historians of the invading culture who wrote about some aspects of the life of the Muiscas (Castellanos 1874; Férnandez De Piedrahita 1688; Simón 1981). They reported some traditions of the Muisca including their ideas about creation of the world and its people. However, descriptions by Spanish historians are problematic because they were written by people who did not know the culture and the accounts recorded by the historians were subjected to a censorship committee. In the end, the only part of Muisca culture that survived was that which did not go against Catholic Church doctrine or put the education of future readers in danger (Gamboa 2010). Most of the cultural traditions of the Muisca were considered extravagant and many were considered heretical and were deleted from the Spanish records. On the other hand, it is interesting to note that many Indians, in spite of the destruction of their culture, traditions, and their territorial boundaries, resisted the various means of acculturation, and this was mainly accomplished by hiding their beliefs "in plain sight" inside the formal structure of the Catholic religion. There are many accounts of how the high plains Indians integrated their religious beliefs with those of the Catholic arrivals.

One document in particular shows how the country people jealously guarded their symbols within Christian icons:

> I have seen them take some keys and images from our rosaries: Also a priest of our religion in the town of Cogua (Cundinamarca) 8–10 leagues from the city of Santa Fe, said that an Indian who had been practicing the principles of our Christian religion, was sick on his death bed; had visited the priest various times, and was very close to death. In order to help him at this time of death, the priest related-that a nephew of the sick man was holding a cross-made of Palm Sunday palm fronds (Fig. 14.2). When the priest lifted them and exhorted God to inspire him, it seemed that the fronds weighed more than they should weigh. Turning them over he found a gold idol representing the god Bochica that the sick

Fig. 14.1 Map of Muisca territory, about 1539 as drawn by Luis Alberto Acuña (Camargo Pérez 1937)

> man adored and worshiped. The man died soon afterwards, not paying much attention to the prayers of the priest, preferring to honor Bochica. The priest chastised the nephew because he let the man die in that state (Simón 1981:295).

The above account was recorded by one of the most important historians in this territory, and it indicates that the Muisca quickly understood the necessity to conform their beliefs to formal Christian structures and social celebrations while at the same time they protected their own language and spiritual beliefs. According to current archaeological data, the ancestors of the inhabitants of this area have lived here for at least 10,000 years. Modern demographic investigations (Correal and Van der Hammen 1977) as well as data from physical anthropology (Rodriquez 2007)

Fig. 14.2 The palm fronds of Palm Sunday are woven and sown into the crop to assure good yields (photo from GIPRI archive, 1980)

indicate that during various periods and stages of development, those groups established connections and interactions with nature, which allowed them to slowly build diverse forms of language and systems of perception. However, what is most important about the Muisca is not their material constructions but their intellectual development.

> …a culture can have aspects of complexity without building permanent monuments to impress archaeologists. In reality the aspects of the Chibcha culture that the historians like to highlight as being complex are precisely those that one cannot hope to find archaeologically speaking; that is to say, the socio-political organization and religion; and in material culture, objects that don't last long such as textiles and wooden structures (Broadbent 1965:32).

Distinctions of all kinds, including chiefdoms and qualitative relations, allow a refined knowledge of one's surroundings and a capacity to systematically observe the distinct seasons of the year. With that information cultures can interact intelligently with nature. Various theoretical structures help them establish precise counts to record months and years, transform natural humanized space, and anthropomorphize nature. One of the most interesting vestiges corresponding to a particular system of representations is shown in different artistic manifestations associated with ceramics, stone, ceremonial objects, weaving, and rock art. Many of these objects have a variety of painted or engraved motifs indicating a wide spectrum of themes and variations. We know little about the meaning and function of the images, but investigations have established links with other ethnic groups that aid in the

explanation through the use of analogy. Most of these other groups are in the same macro-Chibcha linguistic family as the Muisca and have been studied by anthropologists and archeologists during the past 60 years. These studies allow us to advance our knowledge of certain themes related to the origin of communication, which can be applied to our studies of the reasons for making rock art. By studying the Kogui, Arhuakos, Arzarios, and Cancuamos and understanding some of their characteristics, an attempt has been made understand how the Muisca of the Cundinamarca–Boyaca high plains lived. Some shamans of the macro-Chibcha family continued into the Republic period, and consequently their rites and sacred sites survived, although many of them have Christian influences. Kogui *Mamos* intellectuals in the northern part of Colombia still read the sun in their ceremonial hut, which lets them know when to plant and harvest based on teachings passed down from their ancestors. They also know their sacred histories and how they obligated them to have celebrations, make payments, and make offerings. Various stories and myths were created around natural phenomena that involve the climate and its effect on economic conditions, and these are reflected in communication systems such as rock art.

The shamans (*Jeques*, *chiquis*, or high plains priests) were in charge of educating the youth who were to inherit their power to make it rain when needed and cure or prevent illness (González de Pérez 1996). In ancient times during the early settlement phase, these religious leaders dressed as animals (possibly birds), and disguised as animals, they established a bond with the animals to obtain the respect and admiration of the animals. During other types of ceremonies they changed the style of their shawls (*mantas*) by choosing a different color according to the occasion or by making drawings painted with a brush on the mantas. These shamans abided by precise rules and decided on behalf of the community what was to be done during the upcoming year. These ceremonies show knowledge of the climate and contain recommendations concerning crop management. It is possible to reconstruct some of their ideas about their beliefs in the origin of nature and mankind, and in the same way know something about their gods, who acted as civilizing agents.

Some of the Muisca traditions were preserved because they were familiar to the Conquistadors. For example, the legend of Bochica resonated with the Spaniards. The capacity of Bochica to organize the morality of the Indians, his capacity to walk on water, his theoretical teachings (baptism), and his other practices were familiar themes to the Spanish, and they attributed them to the arrival of an apostle (Bochica) who civilized the Muisca. Bochica's clothes, his symbols (crosses on his arms and forehead), and the special way he honored sacred things were interpreted for many years as unequivocal examples of Christian evangelism. Because this story survived the persecution, it was believed to be Christian. The story about Bochica is very explicit:

> Take it as truth that an apostle or holy man passed through the New Kingdom, land of those Muisca Indians and that he preached things of the church, the immortality of souls, the eternal glory and he let them know God, and he duplicated the holy baptism. And wanting to cross the river at Cota that is three leagues from this city of Santa Fe,

> from Cota to Suba he threw his cloak on the water and crossed on it, and from that point on the Indians highly respected him and in memory of him and because of this feat there are some roads that the Indians are accustomed to make in the fields of which there are many throughout the New Kingdom, these roads are made by hand and there are many who have the opinion that there are many gold treasures and sanctuaries, and this river that is called Bogota or Tunja has a tall waterfall over some cliffs more than five hundred "*estados*" tall and the Indians wanted to keep him there so they took him and threw his clothes in the water. Before arriving at the top, he passed to the other side and seeing this miracle the Indians went to a flat plain to shoot arrows at him, and the arrows they shot at him did not touch him, and many fell back on the same Indians who shot them and killed them; and the Indians were very impressed with this miracle, and the holy man then went to Sogamoso, that today is within the jurisdiction of Tunja, an Indian town of the Spanish Crown and there he died and is buried, and along with this tale came a fear of the Sogamoso chief by the Muisca, who threatened them saying that he had the power to take their food and burn them (Asencio 1950:1).

The above quote from Asencio shows why, in the high plains area of Cundinamarca–Boyaca, it was easy to confuse Bochica with a biblical Christian. The similarity of his appearance and teachings allowed Bochica to be perpetuated in Santa Fe (today Bogota) history to the point that some of the ancient attributes and their symbols were portrayed as if they were European. During this fusion of beliefs, some of Bochica's characteristics disappeared when they were superimposed on other Christian saints, but unquestionably this cultural history was perpetuated to the present day because of analogies that were made with Western culture. Until a few years ago it would have been impossible to imagine that this history had any truth associated with it. People would have thought it the result of an inventive mind without any facts to support it or that it was simply an intellectual construct of a mythical legend that told about a fantastic event where Bochica, who had supernatural powers like Moses, could destroy a large rock in the southwest area of the Bogota Savannah and drain the flooded plains that had damaged all the crops in the affected area, a phenomenon occurring during "*La Niña*" climatic episodes, which generated these conditions in the areas along the Bogota River. Today we know the complexity of their hydraulic systems and the different control systems for management of the streams and springs that come from the east and flowed into canals, impeding the fast dispersion of water (Boada 2006; Etayo 2002). The wide area of crops, the high temperature, and the presence of different varieties of fish give objective meaning to the history of a supposed god who civilized the Muisca by providing advanced techniques to control nature and transform a large lake and its wetlands into intensive agricultural zones. Without archaeological and ethnohistorical evidence it would be impossible to confirm this period in the socioeconomic history of these people.

The Muisca and Chibcha groups created stories that survive as oral traditions about the stages of creation and the origin of what exists today, but we still do not know if all the ethnic Muisca and Chibcha language groups shared the same creation beliefs. Historical records of the Muiscas relate that there was one moment when the entire world was illuminated and created by an entity that made all nature. Chiminigagua (the force of creation for the ancient Muisca; before there was anything in this world, when darkness filled everything, this powerful creater existed)

created some black birds that scattered light through the sky using their beaks to peck holes in the darkness, thus leaving the earth in its present state. It is very similar to the tradition of the flight of the *Tijeretas* birds (*Elanoides forficatus*) of the Uwa communities (Osborn 1985) and the journey of the Sun God of the Kogui and Arhuaca (Reichel-Dolmatof 1951). There are different versions in other Chibcha groups. One of these Muisca origin myths was recorded by historians in the town of Ramiriqui, Boyaca, where an Indian priest (*jeque*) was transformed into the sun (Férnandez 1688; Simón 1981). The birth of this sun is celebrated every December during the Huan festival near the winter solstice.

How these groups developed through time and how influences passed between these groups is unknown, and I leave it for future investigators to discover exactly when and where, and under what conditions their metaphysical constructs were formed, to explain their everyday activities and determine when they started, and reveal the basis of their dynamic social structures. At some point, these metaphysical structures no longer remembered their origins and were converted into intellectual structures, with qualities that controlled actions and systems of perception, including the simplest ones of everyday life. The historic strength of such communication systems and their qualities were by nature so stable that many of them (even the simplest practices) have been continued in country towns to the present, as levels of knowledge that can be observed in the customs of today's communities. Visitors to the highland towns in the Cundinamarca–Boyaca highlands are surprised to see that some country people continue spinning wool while they are caring for their cattle or moving them from place to place. Spinning is done in the same way it has been done from time immemorial. In the Kogui and Arhuaca zone country people weave handbags (*mochilas*) while they are walking, incorporating designs that indicate that they know the meaning of many symbols and designs. Some of these images show traditional content relating to each family and territory, while others show both male and female characteristics with various and simplified figures, both of which are also present in some rock art. Spinning and weaving are not simply recent useful activities engaged in once sheep were imported, since they also weave other fibers into various designs, some of which can be observed in petroglyphs in the Sierra Nevada de Santa Marta mountains in the Colombian Caribbean coast (Fig. 14.3).

In the Colonial era, historians wrote that they spun cotton and made a variety of shawls in different sizes and qualities. These were given to the Spaniards to pay a Colonial tax, but this custom dates back to ancient times when an economic payment was given to the chiefs (Colmenares 1999). This form of tax apparently has its roots in the teachings of Bochica. The dress, the way they made the shawls, and the way they made the mantas and their designs, mainly crosses and sacred drawings (Fig. 14.4), reminded the Spaniards of the ancient presence of a supposed apostle.

> This person taught the natives how to spin cotton and weave shawls, because before this time they only covered themselves with small pieces of matted cotton from the plant, tied with strings made of "*fique*" [century plant fibers] and loosely fixed together, all badly aligned and looking like it was done by primitive people: when he left a town he left weaving

Fig. 14.3 Arhuacan Mochilas designs resembling those seen in some petroglyphs (photo from GIPRI archive, 2011)

Fig. 14.4 Pictographs in the highland zone (Sibate, Cundinamarca) with motifs suggestive of weaving designs and crosses that, according to historians, were teachings Bochica left on the rocks (photo from GIPRI archive, 1980)

> designs painted on smooth polished rocks, as can be seen in some places, in case the people forgot what he taught them, as they forgot many other good things he told them preaching in their own language in each town, and leaving them with admiration. Teaching them to make crosses and to use them on "*manta*" (shawl) designs that they use to cover themselves, and for the future telling them about their mysteries and those about the re-incarnation and death of Christ…. (Simón 1981:284).

Rock art of the highlands and the textile tradition according to this version were the result of evangelism. Many years after they received his teachings, people forgot

Fig. 14.5 Pictographs in the high plains zone (Sutatausa, Cundinamarca) with motifs suggesting weaving draws and lessons that Bochica left on the rocks (photo from GIPRI archive, 1980)

where they learned these skills and confused the motifs and their meaning. About "meaning" the priest Pedro Simon has this to say:

> Also they confuse the doctrine of the cross, as the first evangelist told them when he told them to put them on their shawls, they began to change the perfect forms, placing rays from the ends making them today appear more like signs made by scribes than anything else (Simón 1981:286).

Another version shows the same thing:

> There were four ages, that were named by Bxogonoa, a man who looked and dressed the same; he came to the lands of Bogota, and evangelized and taught many good things, leaving remnants that can be seen today; they are so blind that they barely know them; the sign of the cross on the head and arms, and in this mixture he carried a club in his hand; calling him with three names: Sadigua was one heard, that means our parent and holy father Sugumonxe, who is invisible, and Sugunsua, that means man that disappeared… (Simón 1981:314).

It is not clear how the rock art sites where Bochica left paintings of his principles and teachings were used, but they appear to be instructions for how to weave and make clothes, and they gave lessons about moral rules of behavior (Fig. 14.5). Father Pedro Simon tells that in Iza, Boyaca women scraped sacred rocks that showed the sign of the presence of Bochica to help with birthing.

> …teaching them also to spin cotton and weave shawls, and other things about political life, such as those about Bogota, during the time he was with them, which was not short, afterwards arriving at the town of Iza, and having predicated to them and taught them the same thing as the others, he disappeared, never more being seen, leaving a footprint stamped into a rock that is worshiped by the Indians, specially the pregnant ones, who go to scrape that rock and then drink it mixed with water to have an easy birth. …Also we found, as was

> described by the Conquistador Gonzalo Jimenez de Quesada in a notebook written by him that they placed (painted) crosses on the tombs of those who had been bitten by poisonous snakes or other snakes, however the reason for doing so is not known or why it was not done on other tombs. It was also found that this same figure of the Holy Cross, well made and painted with a red ochre so strong that neither time nor rain has been able to erase them on some tall rocks, were found by the Spaniards when they entered and I have seen some near the towns of Bosa and Suacha. The Pijao Indians, and some in Tunja district, had figures in their sanctuaries with three heads or with three faces on one body that they say are three people with one heart (Simón 1981:283).

Today, in order to assure an easy birth that is fast and without pain, country people from the high plains burn a holy branch mixed with the urine of a child's father. The complex designs of the woven holy branches are undoubtedly related to the Bochica solar tradition, where the solar god protects humans and creators of all arts (Fig. 14.5).

Another reference by the same author is even more explicit in explaining how the population was educated.

> And still as primitive people when he left a town he left them weaving designs painted on a smooth polished rock as now is seen in several places, so that they do not forget what they were taught, since they have forgotten many other good things that he taught them in their own language going to each town leaving them admiring him (Simón 1981:285).

According to a Guane tradition, Bochica left his teachings engraved in the form of petroglyphs showing chalices near the great Sogamoso River (Fig. 14.6). Some sacred symbols on the rocks are also on their tombs, and depending on the reason for death, other objects formed by the intertwining of different colored threads were left there. According to ethnohistorians, these objects are similar to flowery signatures on documents written by scribes. There are also sacred sites or anthropomorphized sites corresponding to particular lakes and some hills. Some rocks appear to be a recording of origin themes. Guatavita Lake, Siecha, Pedro Palo, Fuquene, and Tota have a sacred tradition associated with them recorded by historians and passed down to today's country people.

Early historians wrote about the legend of Guatavita Lake. Many expeditions searching for gold were motivated to explore Muisca territory when they heard that a communal chief covered his body with gold powder and adorned himself with gold objects. Accompanied by much whistling, shouts, and applause, he presented himself to the community and dove into the water, probably to celebrate an origin theme or possibly the return of the sun to its northerly path after darkness at the winter solstice. This ceremony may have also occurred in the ancient Fuquene Lake, which was guarded by priests and shamans. At the baths of the Baganique chief in Boyaca and also at Chia, the ancient Cana family had places to meet and places where they had rock art (this is also the case in other areas such as in Fusca). Today many Colombian museums and private collections have ceramic pieces, metal effigies, and textiles with painted or incised designs of different shapes that suggest there was a graphic communication system associated with the pre-Columbian intellectual world (Fig. 14.7).

Fig. 14.6 Pictographs (Mongua, Boyaca) and petroglyphs (Sasaima, Cundinamarca) with similar form of chalices (photo from GIPRI archive, 2011)

Triangular heads, three-fingered frogs, and crosses or X's are the most common designs on water jugs (*mucuras*), other ceramics, and rock art murals. Archaeological studies generally support a distinction between domestic and ceremonial objects, but from other perspectives, it may be possible to make other distinctions using ethnohistorical sources that show the diversity that existed in complex societies, that is to say, to show that different groups recognized different levels of power symbols.

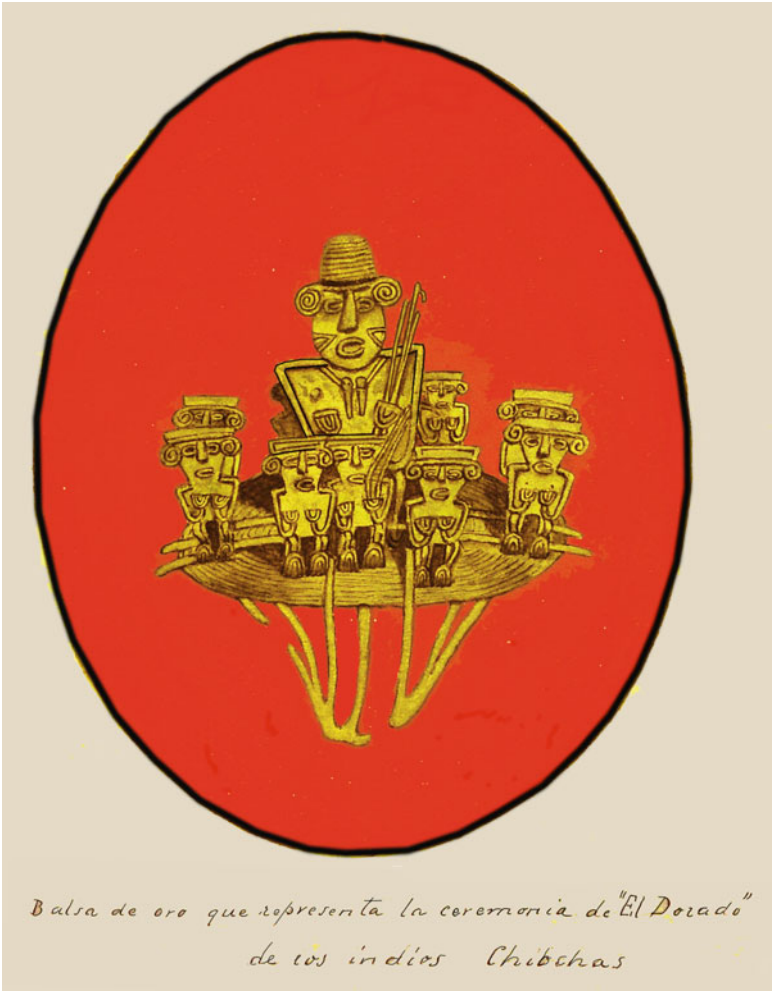

Fig. 14.7 Photograph of the Muisca raft at the Gold's Museum of Bogota by Julio Racines. Balsa gold represents the ceremony of "El Dorado" of the Chibcha Indians. National Museum of Colombia, reg. 4862, 1892

Thus, certain images appear to indicate a social hierarchy and cultural distinctions associated with ancient power (oldest inhabitants of the area) or associated with direct access to specific resources, specialization of certain jobs and activities, or their importance to the community.

For many years, a sacred site was understood to be simply a physical place constructed by a particular culture using objects from nature that symbolized their relationship with certain spiritual entities. Using this concept, sites were described and techniques were refined to analyze their characteristics, but in a wider context, a sacred site can be described as a communication system linked directly to the forces of a spirit who can understand it.

If the sacred is seen from this Cartesian perspective as a communication system, it automatically ceases being a simple visible object and becomes an integral part of the study of the qualities that are synthesized there. Things observed, measured, and structured in the language of science and collected do not contain the same sacredness, and it is necessary to study the thoughts and cultural qualities that give meaning to those objects in order to understand in-depth the way that these representations of the sacred existed in an unknown communication system of an ancient society. Only from this precise cultural and historical plane do empirical objects acquire meaning, and the most important traditional descriptions should acquire a new level of meaning. There they are made real with precise words that give meaning to things. A sacred place is basically an intellectual construction and not a specific spot, that is to say an empirical spot.

Investigation of communication places should begin with the search for the earliest evidence of an empirical description of the places, instruments, and associated objects. A study begins with a detailed collection, but the basis of the explanation must progress beyond this. Ritual ceramic, sacred object, and instrument of a religious cult are only abstract definitions that scarcely suggest their sacred significance. Cultural *a priories* are basic goals, but those are not anything more than organic rules of human communication, a class and a grade of this universal speech.

The search for the meaning of an object of any epoch should be done with wider objectivity. A search in a wider sphere needs to be accomplished without being confined to the world of things, but it should include the infinite capacity of thought. Investigation should try to reproduce the qualities that articulate and gave the condition to certain objects and their hierarchies in order to permit their expression and empirical presence. We cannot forget that the meaning given to an object in all cultures depends on a wider vision of objectivity, in which everything is related, so that each human construction, though simple as it may seem, is a quality produced by multiple historic processes. An object is then a *synthesis* and a unit of complex qualities. The central proposal is that which is human is communication and all of that which is configured by it is characteristic of its system of perception and the basis of human creations. The sacred, by itself, is communication, and it is original meaning, explanation, and a system of social cohesion. Sacred is a system of perception, a condition of order and ranking of the world. Religion is a system of synthesis that imposes a manner of resolving things such as the general destiny of a society, and aspects of life that have to do with daily living. It is for this reason that communities repeat sacred acts in their workplaces and other common places in order to guarantee to be impregnated by the same sacred communication each time. The repetition of the original acts, the acts of the gods, of the perfect life of those who made order out of chaos and made language is paradigmatic and explains why each action, as elemental as it may appear, is impregnated by this sacred order. If humans did not do this, they would lose their true role and would find each act was arbitrary in a profane way, but that does not mean to say it is without meaning, not human, not sacred, and without language. Modern humans, by contrast, have abandoned many ways of thinking that do not meet mathematical parameters and have thereby destroyed the option of encountering its ancient origin. The crisis of

modern thought cannot be attributed simply to its limited capacity to resolve adequately its proposals and promises, but it has to be seen from the point of view of ancient cultural forms that were waiting for fissures to be reborn in order to reinstall its objectives.

In Third World countries these ancient forms reappeared with more vigor the instant colonial religious powers began to lose the control they had during colonization. This left an opening for people (first Indians, now country residents) to relate openly to their most ancient histories and act out their 1,000-year-old practices in a natural setting. The first surprise to researchers is that the ancient beliefs were not destroyed by modern life. These ancient forms of thinking and communication (rock art) are full of representations that reflect the diverse relations of humans with nature configured in the past, which articulated and regulated the various objects and practices. These alternate forms stayed alive in the population, especially in communities that were distant from the process of desacralization and modernization of nature. Here they were able to perpetuate their culture, and a historical millennium force was awaiting resurgence. They had not been greatly influenced by modern thought nor incorporated popular knowledge in the ways of science as its processes. Instead, lurking in the background of all those people was the integral form of the meanings of the religions and premodern perceptions, as if they were at the beginning of the disintegration of the system of explanation and the reality of social modernism. Not having designed a useful view of the world produced by science and not having socialized its capacity and been taught its origin, the door was left open for breaking down the world and using archaic forms of thinking that are capable of unifying reality. They were given a second chance not only to alter the order but to create in its movements a supposed richness and capacity to restore its old and always convincing forms of expressing the truth. These are forms of thought and forms of explanation that are undoubtedly proven and are capable of creating social cohesion. It is interesting to see that it is possible for certain forms of perception and living to be present, although they were thought to be outdated. Thus, the existence of sacred places that contain ancient attributes remain in the mentality of the people and change the decisions that each individual makes, making one believe that it is treated as a progressive autonomous attitude, including the past, and using the disguise of what is supposedly real in order to perpetuate itself (Muñoz 2007).

Sacred Sites and Rock Art in the Cundinamarca–Boyaca High Plains Area

In 1985, GIPRI presented the results of a series of investigations at the Congress of Americanistas (Bogota, Los Andes University) where connections between the pictorial representations and origin myths or legends mentioned in early historical manuscripts were discussed. For many years Colombian archaeology has associated ethnohistorical data of the Colonial times with excavated discoveries, so it was easy to assume that rock art is a reflection of the mythic personalities and the pre-Columbian

Fig. 14.8 Pictograph murals (Une, Cundinamarca) and petroglyphs (San Antonio de Tequendama, Cundinamarca) are in almost all municipalities of Cundiboyacense High Plateau (photo from GIPRI archive, 2010)

histories of the territory and the new and numerous discoveries on the Cundinamarca–Boyaca high plains (Fig. 14.8). However, during the Congress of Americanistas sessions two presentations were made—one about Bochica and the other about Bachue—that are related to new materials associated with the recording of rock art in the southwest zone of the Bogota Savannah, in the towns of Soacha and Sibate.

Influenced by investigations during the early twentieth century, a search was made for a site with representations of Bochica and with representations of Bachué (Triana 1922). The first problem was determining the dates of many rock art images.

With increasing numbers of sites and images it became more difficult to solidify a relation between the known myths and existing depictions. Hundreds of rocks with thousands of designs were found to exist in an extraordinary variety of rock art manifestations. A second problem was the presence of at least 1,800 petroglyphs in the municipality of Mesitas de El Colegio, Cundinamarca, found between 1996 and 2005 (Muñoz 2006b). The original interpretation was that these were sacred sites, places of worship, and ceremonial spaces, and these ideas gave way to uncertainty and the thought that it was not possible that all these sites were sacred. Also, if everything was sacred, the differences between images and the indescribable objects were not explained. The resulting opinion was that sacredness did not explain everything. At the same time we realized that not all ethnic traditions had been recorded, and that there were European versions of indigenous practices made in the sixteenth century. Thus, accounts by the early historians about the gods and mythic beings were probably associated more with Western ideas than with the intellectual structure of the pre-Columbian communities because these early beliefs were considered false religions, whose demonic structures and myths were suspect and objectionable. It was at this stage that the investigative group became interested in oral tradition, which produced interesting results that were also problematic. Through interviews with country people and workers it was confirmed that interesting stories still exist, but these are based on a complex structure of combined Spanish and Indian traditions mixed to such a degree that it is difficult to separate the two. On the other hand, we were able to learn that when the Conquest Indians were displaced from their territories, many were forced to practice other regions, some of which we have studied. Consequently, it was difficult to establish the original beliefs of any area and determine what kinds of legends were conserved from pre-Columbian periods. In the end, the only certainty was that many of them were not strictly European and contained very complex metaphysical structures similar to those described by Levi Strauss in *The Savage Thought* (1997).

Today researchers routinely compare rock art sites that contain similar contexts with those that are described in religions from other latitudes. In general the organizational structure of the pre-Columbian community of my study area was shaped by a complex chiefdom that had different strata determining the power of certain groups that directed the economic possibilities, such as in the assignment of work tasks and subordination within the community. The control of such activities undoubtedly required a certain type of belief and with it systems of representation that are surely found in rock art motifs. The fundamental goal of the Colombian rock art investigation group in the Colombian highlands is to make reasonable and well thought out decisions about the stylistic typology and about the religious character of the rock art motifs. Although archaeological analysis only allows rough estimates about the density, concentration, and utilization of rock art sites, possible links of these sites with areas of cultivation and habitation, the complexity of pigments use and paint recipes, techniques to make petroglyphs, and the extraordinary variety of rock art motifs demonstrates that an advanced intellect, which has been extraordinarily refined, is present. In no case does it appear that these images were derived from mimicry or from the observation of nature.

Metaphysical and Religious Construction

It is difficult to show a relationship between rock art and religion, but in the attempt to do so a precise distinction between what is considered religion and the metaphysical construction needs to be made. Certainly all religions come from an intellectual metaphysical construction, but not all-metaphysical construction is religious. When and why did this distinction of origin become confused? What role did scientific archaeology play in this supposed unity between religion and rock art? What type of contradiction was generated from the methods and perspectives of geology, paleontology, and rock art images in the first caves discovered in France? When was it determined that Paleolithic rock art was religious and later shamanic?

Metaphysical structures in the Western world that have come to explain reality include premodern constructions that made reference to religious phenomenon and communication systems that are based on nature and have come to be known as ingenious objective realism. In both cases objectivity is not possible. This type of archaic thinking distorts and alienates the human intellectual capacity and makes it impossible to imagine that most of the organization of the objectivity, and objectivity itself, are the result of nature and thought not limited to following the rules of the external world. From the most primitive times onward communication systems have been invented, and throughout the history of human thought it was believed that experience and knowledge of reality came from a relationship with nature, where the content was derived from what the external world contained. Even today this way of understanding the relationship of humans with nature is used to explain human communication, and many interpretations of rock art are based on this idea, which is to say that the metaphysical would be a construct derived from the precariousness of the spiritualization of those absent. Including the common level of meaning it is easy to say what spiritual is, and that gods are the solidifying attributes of what one does not yet possess. However, in addition to this premodern intellectual structure, there exist other distinct ways of thinking about objectivity, and in this context the debates between the traditional metaphysical and the metaphysics of Kant produced a new way of confronting the origin of knowledge. He formulated the construction of a new objectivity and with it paths to a new esthetic. After the reflections derived from the study of thought during the seventeenth century a new way was found whereby that which characterized the rational in humans is precisely the capacity to construct communication systems. After communication is established, humans use it to form connections with the external world to have experiences, which is to say objects that result from these experiences are the consequence of its intellectual activities and that the experience is a synthesis of human conditions. Therefore, modern constructions, communication systems, and problems that are taken on-board during the study of the history of art and rock art have a particular characteristic and that is that they alone know they were made by humans.

During the past 20 years various objections have been made regarding the connection between rock art and religion. Starting with Max Raphael in 1946 and continuing to Michel Lorblanchet (2006) a variety of criticisms have been leveled

against conventional Breuil style conclusions that use interpretations initiated in a systematic manner during the early years of the twentieth century. Raphael (1946) believed that Paleolithic rock art was not only primitive, but he also believed that it was the earliest human expression made possible by esthetic communication to show a difference between man and animal. Painting an animal showed that it had been converted into an intellectual object. Raphael's criticism of the Breuil esthetic opened a number of arguments that over time have become unstructured, finding new paths from stylistic typologies and from the chronologies that have been constructed in his interpretation at the Paris Institute of Human Paleontology. Andre Leroi-Gourhan (1966) and Annette Laming-Emperaire (1964) presented a new way of studying these images by using a systematic reconstruction of the caves (mainly Lascaux) and in doing so came in conflict with the chronologies and traditional stylistic typologies. Besides the animals, their reconstruction placed abstract figures or synthetic forms, which according to the stylistic typology should correspond to older periods, in contemporary analysis fields. In Breuil's version it was assumed that humans in the upper Paleolithic, of the *Magdalenian*, did not have a set idea of space and that all the animals corresponded to isolated images. Calling the site sacred produced a cultural unraveling that increased the value of such vestiges from the Paleolithic. Those who considered the rock art motifs to be religious manifestations viewed them as sublime and placed them in the highest limits of intellectual development, as if gods were the highest forms of human intellect.

When Peter Ucko and Andree Rosenfeld (1967) investigated the Paleolithic they reflected historically about the inconsistencies of current theories in Europe, about the studies of the representations (mostly in the caves), and with that they presented all types of arguments that showed a lack of understanding of the basics. One of the strongest arguments expressed by Ucko and Rosenfeld is that in nearly all cases the interpretations were coming from a general hypothesis that aspired to explain everything in all cases and everywhere, as if it were possible to embrace the variety of human communication systems with one unified theory. One of the strongest objections was produced by the anti-stylists Lorblanchet and Bahn (1993), who accentuated the difficulty of the general hypothesis model and with it the religious hypothesis. They pointed out it is difficult to establish a single hypothesis due to the differences between ethnic groups that produced different interpretations. They emphasized the loss of information in archaeological documentation, which deals with investigations that have a rigid, formal structure with a lineal chronology that is only interested in verifying if the theory is good.

In his study about the origins of culture and the origins of art, Lorblanchet (2006) showed that three million years ago (*Australopithecus* time) there was an admiration of rock figures (Makapansgat) evident in the archaeological record. Two million years ago, according to recent investigations and finds in Africa, the hominid family had a certain attraction to spheres, and 1,700,000 years ago iron oxides were used. One million five hundred thousand years ago, the first bifacial objects were made, and over 1,000,200 years ago the archaeological record demonstrates that before they arrived to Europe humans collected stones and fossils (Lorblanchet 2006). This compilation of data made Lorblanchet confident that human development cannot be explained as a simple biological development, but that it was also

necessary to explain the origin of culture and art, and understand that those humanoids had esthetic leanings and interest in the symmetry and the proportion and the equilibrium of forms. These data also appear to support the idea that humans had a group of previously formed esthetic structures. Therefore, the artistic creation that the Institute of Human Paleontology assigned to *Homo sapiens* in the Upper Paleolithic period (*Magdalenian*) was not the first primitive art, but quite the contrary; it was the result of the development of a large number of processes of intellectual structures that started about three million years ago.

Conclusions

In conclusion, new pathways have been opened by researchers that remove the limits from traditional interpretations of certain representations and structure new arguments to differentiate rock art representations that correspond to esthetic communication systems as intellectual elaborations relating humans to nature from those that could be called religious or sacred. In the past few years it has become important to learn the history of reasoning behind why an investigator became interested in various fields of knowledge during their investigation into the origin theme or about questions that arose from asking about creation. In philosophy, as it is in anthropology and archaeology, it is important to understand these historic tendencies because in them are political connotations that insert themselves into studies of contexts, processes, and social relationships. These connotations play a role in human communication studies that occur under the guise of religion or simple shamanic themes, and if you look carefully, they are almost the same.

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Chapter 15
Spirituality in Rock Art Yesterday and Today: Reflections from the Northern Plains and Far Western United States

Donna L. Gillette and Mavis Greer

> *Landscape [is] a frame for discourse that encourages the development of metaphors, which enables the exploration of old topics in new ways, and which may provide the framework for the construction of new theories* (Morphy 1995:205).

Introduction

Since the 1960s many cultures throughout the world have become more aware of their heritage and are actively working to preserve it, if not revitalize it, and this is especially true of cultures that have undergone transformations or at least partial acculturations by invading governments, which began in colonial times. For these groups, heritage is no longer just associated with the past, but it is also relevant to the present, and the meaning of *sacred* as associated with past beliefs is reemerging and changing. Often places known as *sacred* to a culture are natural features of the landscape, such as mountain peaks, springs, rivers, woods, and caves (Carmichael et al. 1994:1). Rocks, and especially those where rock art is located, are particularly important spiritual and/or sacred places. These natural features might be a singular element or a larger landscape or viewshed. While all sacred landscapes are physical, not all physical landscapes are sacred, but all hold the potential for being so (Saunders 2004).

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Research associated with rock art is mostly conducted from an etic view, the common method associated with archaeological analyses. In most cases, the culture that made or used a site is unknown or is in such a changed state that an emic perspective of analysis is not possible. In these cases, the living cultures of the known direct descendants no longer know who created or used the rock art; the French cave art is a textbook example of this problem. As Bullen (Chap. 2, this volume) has noted, our brains and those of 30,000 years ago have much in common. Therefore, understanding rock art is not beyond our reach even when it is greatly separated from us in time and cultural connection. However, there are some places in the world where rock art retains close ties to present day people, and in these cases it is important for researchers of an ethnic group to which they do not belong to be cognizant of the emic view of sacred places and consider it in their analysis. When viewing rock art as part of the larger landscape early records (both ethnographies and ethnohistorical sources) provide information that allows a closer approximation of an emic perspective and can augment oral traditions of living descendants or act as an independent line of evidence. Emic views of sacred landscapes can be varied. For example, the following description of a Navajo sacred geography shows an all encompassing landscape view:

> The earth is not just a series of dramatically poised topographic features that incite the wonder of man or beckon for exploitation, but rather a living, breathing entity in an animate universe. The land with its water, plants, and animals is a spiritual creation put into motion by the gods in their wisdom. These elements are here to help, teach, and protect through an integrated system of beliefs that spell out man's relationship to man, nature, and the supernatural (McPherson 1992:11).

Another view of sacred landscape can be seen in the geography of the Wintu of northern California (Theodoratus and LaPena 1994). The religious cosmology of the Wintu interconnects with the environment so that the sacredness of the topographic features of the landscape provides further insight into their mythology. Otis Parrish, a Kashaya Pomo Elder, from Northern California (Parrish, personal communication 2004) has argued that to understand the Kashaya Pomo perspective it is necessary to view the landscape through their "lens." A short story of a family preparing to travel to Great Grandmother's birthplace in the Cherokee nation provides a modern perspective of a sacred landscape regarding what is placed on a map:

> Papa unfolded the Texaco map on the table and found where Tennessee and North Carolina and Georgia came together in three different pastel colors. Great Mam looked down at the colored lines and squinted, holding the sides of her glasses. "Is this the Hiwassee River?" she wanted to know. "No, now those lines are highways," he said. "Red is the interstate. Blue is river." "Well, what's this?" He looked. "That's the state line." "Now why would they put that on a map?" (Clarkson 1998:121).

As researchers, we cannot take for granted that past or present perceptions of the landscape, its uses, or meanings match our culture's view, but that is not to say we cannot strive for an emic understanding of the sacred landscapes of people not of our culture. People throughout the world left clues about their beliefs associated with spirituality and landscapes they found to be sacred. Among those clues, rock

art is one of the best preserved and most widespread, and it is the only artifact we can know for certain was left in the location where it was made to be used. The articles in this book recognize the uniqueness of this trait among archaeological remains, and all have used it to advance our knowledge about rock art and scared places.

Exploring the Term Sacred

When studying sacred, it is important to define what is sacred and what makes a landscape sacred as cultures recognize particular areas on the landscape as having sacredness and not others. A Dakota elder described the occurrence of this difference as "The rain falls in many places but only pools in certain places" (Thomas Sanders, personal communication 2013). The subject of sacredness is a cultural construct with different meanings to different peoples and cultures, and even at different times to the same culture. The dictionary defines sacred as "dedicated or set apart for the service or worship of a deity <a tree ~ to the gods>; entitled to reverence and respect; not secular or profane" (Merriam-Webster 2003:1093). Identifying a specific place as sacred is more than just describing a piece of land or a place on the landscape. It implies associations with religious or spiritual aspects of a culture, or a place where a ritual may have taken place. Additionally, a designation of sacred when associated with a site also carries the responsibility of rules and regulations concerning how people behave relative to it and "implies a set of beliefs to do with the non-empirical world, often in relation to the spirits of the ancestors, as well as more remote or powerful gods and spirits" (Carmichael et al. 1994:3).

Governments worldwide are being forced to consider and address the sacredness of land within their boundaries as viewed by all the ethnic groups that comprise their citizenship. Australia is foremost in understanding the existence of Aboriginal sacred sites (Ucko 1994:xv). In 1977, the Australian Institute of Aboriginal Studies made a policy decision to only record sites that the *Aboriginal custodians* wanted to be recorded, sanctifying a "secret" category of information and the inference of an "owned" by indigenous peoples (Ucko 1994:xvi–xvii). The United States has also addressed the issue of sacred land and ethnic groups. In 1996, then President Clinton signed an executive order (#13007), pertaining to federal land, which identified a sacred site in Section 1(b)(iii)as:

> "Sacred site" means any specific, discrete, narrowly delineated location on Federal land that is identified by an Indian tribe, or Indian individual determined to be an appropriately authoritative representative of an Indian religion, as sacred by virtue of its established religious significance to, or ceremonial use by, an Indian religion; provided that the tribe or appropriately authoritative representative of an Indian religion has informed the agency of the existence of such a site (National Park Service 1996).

In 2012, the United States Departments of Defense, the Interior, Agriculture, and Energy entered into a Memorandum of Understanding (MOU) with the Advisory

Council on Historic Preservation to improve the protection of and tribal access to Indian sacred sites through enhanced and improved interdepartmental coordination and collaboration. The MOU retained the definition of sacred sites found in the 1996 Executive Order #13007. These sacred sites may also be eligible for the National Register of Historic Places as historic properties of religious and cultural significance to Indian tribes. The purpose of this MOU was to improve the protection of and insure tribal access to Indian sacred sites on federal land. Although the United States government traditionally has only considered tribal concerns when defining sacred sites, recently other groups have argued that they also have places on the landscape that should have government protection as a sacred landscape, such as the Mormon movement to have the site of Martin's Cove in central Wyoming set aside under this designation (Riley 2005).

In California, the Native American Heritage Commission was established in 1976 with the government passing of AB 4239, with its primary responsibility to identify and catalogue Native American cultural resources, with the charge to thwart irreparable damage to designated sacred sites, as well as to prevent interference with the expression of Native American religion in California. An additional objective of the bill was to insure Native American access to sacred sites, and to inventory such sites on public lands, which continue to have traditional significance to peoples today. In addition to burial sites, these sites include sacred areas where religious ceremonies were or still are practiced or which are central to their origins as a people. They also include areas where Native Americans gather plants for food, medicinal, or economic purposes. A certain measure of protection is provided for such resources by California State Law (California Native American Heritage Commission 2013). In 2002, the California Governor vetoed a controversial bill (SB 1828) aimed at protecting California Indian sacred sites off tribal lands, citing that it gave too much power to tribes in local land-use issues, beyond that of other citizens. Although government recognition of sacred sites can be a positive move for protection and preservation, there is another side to this issue, as has been pointed out succinctly by Thomas King, who cautions "Be careful of what you ask for; you just might get it" (King 2002:1). In an article related to the passage of SB 1828, he notes that in asking for passage of the bill, tribes will be required to prove the sacredness of the site and prove that there will be adverse impact to it. In order to do this, tribes will need to document why a site is sacred, and this may necessitate disclosing information to outsiders that was previously confidential, spiritually powerful information. This bill also means that government agencies and courts of law will have the final say as to what is sacred to any tribe and what is damaging to the sanctity of that site. Before these kinds of bills are enacted groups requesting the sacred designations need to decide if the government protection and control is worth the high price of divulging tribal secrets to a larger audience.

The National Congress of American Indians passed a resolution on sacred sites in 2002 and defined such a site as "places that are sacred to practitioners of Native Traditional religions and that sacred places include land (surface and subsurface), water and air; burial grounds, massacre sites and battlefields; and spiritual commemoration, ceremonial, gathering, and worship areas" (McLeod 1999:4). Thorley

and Gunn (2008) suggested a working definition of a sacred site that transcends borders and is available to all cultural groups, allies and activists, and legislators and policymakers whereby indigenous peoples could recognize their own concept of sacred sites. Their operational definition is summarized as: "A sacred site is a place in the landscape, occasionally over or under water, which is especially revered by people, culture or cultural group as a focus for spiritual belief and practice and likely religious observance" (Thorley and Gunn 2008:5). Rock art sites, worldwide, if placed in a specific place as part of a ritual, would fit within this definition.

Declaring a location or extended landscape sacred is more easily accomplished than explaining why it is. For anthropology this has always been a central question and one that early ethnographers explored (Grinnell 1923; Kroeber 1902, 1908; Lowie 1924, 1935) when recording any culture they studied. However, as archaeology moved into the scientific realm with measurements and experiments dominating the recording process, sacredness fell into the ceremonial category of explanation, which was left behind as the science of the field moved forward. However, the study of sacredness needs to be incorporated into this realm of investigation as there is no better way to protect sacred landscapes and understand them than to study them with the detail we afford other archaeological artifacts. This allows an explanation of why they are sacred based on evidence that can be defended in courts of law, which is becoming more important as protection and preservation are pursued for these landscapes.

The Ethnographic Approach and Ethnographic Analogy

In parts of North America there are ethnohistorical and ethnographic records that discuss rock art's connection with spirituality and sacredness. Is this use of ethnographic analogy a pragmatic research tool in understanding archaeology and rock art? Ethnographic parallels have been used in rock art studies at least since late nineteenth century when they were introduced as a general way to interpret the Upper Paleolithic paintings (Spencer and Gillen 1899). The parallel for the most part was based on similarities in the presumed function (sympathetic magic) in the cave art of Europe with those of Australian cultures of the nineteenth century. While similar analogies have been applied to rock art in other geographic areas, and to the broader field of archaeological questions, the acceptance of ethnographic analogy as a viable interpretive tool still comes under scrutiny. Questions prevail regarding the determination of cultural continuity, the validity of ethnographic analogies for deep time, and the accuracy of the questioning and recording processes by the ethnographers whose observations are used for the analogies. Yet, ethnographic analogy, where available, is one of the most optimal tools we have for understanding rock art.

David Hurst Thomas defines *analogy* as "a means of reasoning based on the assumption that if two things are similar in some respects, then they must be similar in other respects" (Thomas 1989:648), while further defining *ethnographic* as "the study of contemporary peoples to determine processual relationships that will aid in

unraveling the archaeological record" (1989:654). Rock art studies are largely about "unraveling the past."

Chris Chippindale and Paul Taçon have called for rigorous methods to be employed in the study of rock art. They cite as essential research that includes study with *informed* and *formal* methods and by *analogy*. They identify an informed method as one that "depends on some source of insight passed on directly or indirectly from those who made and used the rock art" (Chippindale and Taçon 1998:6). In other words, the informed method can be applied through ethnographic or ethnohistoric analogy, and there are several examples of this use in the preceding chapters. The formal method applies where no outside information is available, and data are obtained through the attributes of the site itself, which in this case are the images themselves. The formal method is dependent on the archaeological context of the site. Arsenault and Zawadzka (Chap. 8, this volume) rely on both formal and informed approaches as a combination of archaeological and written records in their research. They argue here that this contextual approach allows them to convincingly reconstruct the ancestral spiritual contexts of sites in the Algonquian sacred landscape. An excellent example of the *informed* approach is Carol Patterson's dialogue with her coauthor Clifford Duncan, a Ute elder (Chap. 9, this volume). Maintenance of cultural continuity is displayed in his sharing of oral traditions passed down by his elders. The role of ethnography or oral tradition is also exemplified by Robert David, a Modoc, and his coauthor Melissa Morgan (Chap. 10, this volume). Being familiar with the oral traditions of his people, and specifically with the story about *Old Man Owl*, David, when unexpectedly being confronted in the field by the unmistakable face of an owl, was able to connect the various attributes of the owl (such as the eyes, and their ability to see what others cannot see) with the familiar belief that his people have traditionally used for accessing power during gambling.

Daniel Arsenault in his studies of the Canadian Shield has suggested a formal method that can be applied to rock art studies directed at the sacred landscape. His approach involves examination of how specific ethnic groups think about and designate their natural landscape and then integrate other aspects of the context, such as "social actor's intentions, interests and capacity for symbolism" (Arsenault 2004:80). In addition, he advocates resurveying the physical context and considering such things as interesting rock formations. He also promotes developing new tools to look at the available information regarding aboriginal religious tradition, standardizing field methods, and establishing usable data banks that are accessible to both researchers and indigenous communities. Arsenault suggests that this formal method may help identify new sacred sites.

Robert Layton (2001) examined the work of several prominent rock art researchers, including Polly Schaafsma, David Lewis-Williams, David Whitley, and James Keyser, who have consulted ethnographic accounts to establish an informed interpretation, which in several instances corrected earlier misinterpretations. The entoptic model of David Lewis-Williams and Thomas Dowson (1988) has been embraced in the studies of researchers around the world working with several different cultures (Clottes and Lewis-Williams 1996; Greer and Greer 2003; Whitley 1994a, b, 1998, 2000). Centered on the role of shamanism in the creation of rock art, and

employing the entopic neuropsychological their model provides an analogy to explain the universality of many rock art elements. Whitley has continued to involve the ethnographic approach in his studies of the rock art in the Coso Range of southern California, specifying that vital to his approach is the understanding and interpretation of metaphors, or the transfer of meaning from one object to another (Whitley, personal communication 2004).

Robert Bednarik (2003), an Australian rock art researcher with a strong empirical approach to research, advocates caution when using analogy in rock art interpretation. Working in Australia, a region with some of the longest known cultural continuity, he outlines several areas of concern based on the etic relationship of those collecting ethnographic information. He offers his own analogy in the example of a set of wooden Russian dolls, where when one is opened, another is always inside it, which implies that there are always explanations within explanations and indicating how difficult, if not impossible, it is to get at the true meaning.

Thus, researchers have used several approaches to define and identify sacred sites associated with rock art. In the following sections we present examples from the Northern Plains and adjacent mountains and from California in the far western United States (Fig. 15.1) to demonstrate how rock art as part of sacred landscapes was viewed by different cultures at different points in time. Although uses and beliefs associated with rock art differed from one tribe to another prior to westernization of the continent, for most tribes today, regardless of the function of a rock art site in the past, these locations are considered spiritual places by these ethnic groups. How and why this change occurred and under what circumstances reflects the larger cultural landscape within America and how spirituality and rock art serve as an important link to cultural identity. Jamie Hampson (Chap. 7, this volume) through ethnographic literature has shown us not only that some beliefs are widespread, but also that many *persist*. He instructs researchers not to assume a change through space and over time, but their responsibility is to demonstrate such change.

A View from the Northern Plains

The rock art of the North American Northern Plains and adjacent mountains was made for a variety of purposes through time, but association with religion has always been recognized as the function of some of the sites (Conner and Conner 1971; Francis and Loendorf 2002; Greer 1995; Greer and Greer 2003; Keyser 1977, 1979, 1984; Keyser and Klassen 2001). Rock art in this region spans a time depth from Paleoindian, about 11,000 BC to early historic times, mid-1800s (Francis and Loendorf 2002; Greer 1995; Keyser and Klassen 2001; Tratebas 1993), so ethnographic and ethnohistorical information about rock art covers only a small percentage of that made and only at the very end of the timeline. Unlike other places in the world, this region has limited written records directly related to rock art production and use, so archaeological analysis methods have been necessary for functional determination. For these early sites, made by cultures whose users are from the deep past and whose

Fig. 15.1 Map of North America showing the locations of the Northern Plains and the state of California in the far western United States

descendants no longer know and practice those beliefs, the site's place on the landscape plays an instrumental role in determining a sacred function for a site.

When landscape is teamed with site contents a function model can be created with a high level of confidence. For the Northern Plains a *Ceremonial Function Model* includes all sites used for any kind of activity associated with the

supernatural (Greer 1995:208). Sites within this category could have been used for a variety of activities associated with religious practices including shaman activities, vision quests, fertility rituals, hunting magic, or burial ceremonies. Based on analogy these rock art sites may have served as mnemonic devises for rituals or songs, depictions of visions experienced during a trance whether for a shamanistic ceremony or a coming-of-age vision quest for a guardian spirit, or tributes to a particular supernatural entity for help with or in payment for aid with a personal or group problem. Images associated with religious activities in this region include headdresses, anthropomorphs with upraised arms, skeleton figures, heart lines, bears and bear paws, snakes, and anthropomorphs in a flying position. Geometric and abstract designs are known to be associated with ceremonial activities in later times, and this function for these figures may be pushed back in time based on the setting in which they occur. Sites associated with religious or ceremonial activities in this region are most likely to be in landscapes with east-facing caves or rockshelters, impressive distance views from either an open cliff or the mouth of a cave or rockshelter, and difficult access to the site. Within this region early religious sites encompass a wide range of public and private activities, and private religious activities can either be for the public good or private power (Greer 1995:246–247). In all these cases, the rock art in these settings results in the landscape being sacred at these site locations.

The above characteristics suggest that sites in this region that most fit the religious model are painted sites located in the mountain island areas within the general plains topographic environment, such as the Little Rockies, Little Belt Mountains, Bighorn Mountains, Pryor Mountains, and Black Hills. These landscapes provide caves and rockshelters in isolated locations with grand vistas and difficult access. Crystal Cave (24CA102) in the Little Belt Mountains of central Montana is an excellent example of such a site. The location in a cliff above the river provides a commanding view of the mountain valley both up and down stream, and it is accessed by a walk along a narrow ledge (Figs. 15.2 and 15.3). Analysis of the sites in the Smith River drainage of central Montana (Greer 1995) supports this theory of how to identify a site associated with ceremony and ritual on the Northern Plains and adjacent mountains, which would have been considered a sacred landscape at the time of use. However, at that time, it is unlikely that rock art sites made for other functions within this region, such as those marking territory or recording events, were considered sacred by the cultures that made and used them. However, by the time early traders and trappers entered the area in the 1800s and began recording their observances of the tribes in the area and by the time ethnographers start to record the memories of those still living in the changed social environment of the early 1900s, rock art of all functions was moving into the sacred realm.

First person accounts made at the time of early white contact with tribes on the Northern Plains and adjacent mountains were written mainly by traders and trappers. Although there are many government records from this time period reporting on the distribution of annuities and relationships with various tribes, these are of little help in learning about sacred sites since their orientation was toward material goods and warfare and often centered around life at a fort. During these early years, this area received little attention from missionaries, so records from these people, who are assumed to have been more attuned to the spiritual beliefs of the people

Fig. 15.2 Crystal Cave (24CA102), Montana. People are standing in the entrance to the painted cave located in the cliff face. Photo by John Greer, 2000

they were working among, are also scarce. Thus, for this region, there are few references that refer directly to people making or interacting with rock art, and these mostly discuss rock art sites that already exist and not about the creation of them.

Carved glacial boulders occur in the north-central portion of the Northern Plains and are found primarily in northeastern Montana, northwestern North Dakota, southeastern Alberta, and southwestern Saskatchewan. By the time these boulders occur in the ethnohistorical literature, they are all known as shrines (Ewers 1952). The boulders were carved either completely into the shape of a bison or were covered with individual images, dominated by hoof prints. Ethnographically some were described as "A complete buffalo of stone, with hump, horns, ribs, and other parts, half of it underground, has been seen by the Gros Ventres, and many offerings and prayers have been made to it" (Kroeber 1908:281). Thus, it is quite likely that these carved boulders, some of which were subsequently painted, were made only for religious purposes. Excavations around the bases of carved boulders have revealed offerings, including Avonlea arrow points (Steinbring 2012), which date AD 600–800 and are some of the most beautiful and finely made points ever produced. A tooth found at the base of one boulder yielded a C14 date within the Avonlea age bracket, and a bone at the base of another boulder also dated to the Avonlea era. Although this does not confirm that the boulders were made by Avonlea people, it does suggest they used the boulders as sacred locations where offerings were left.

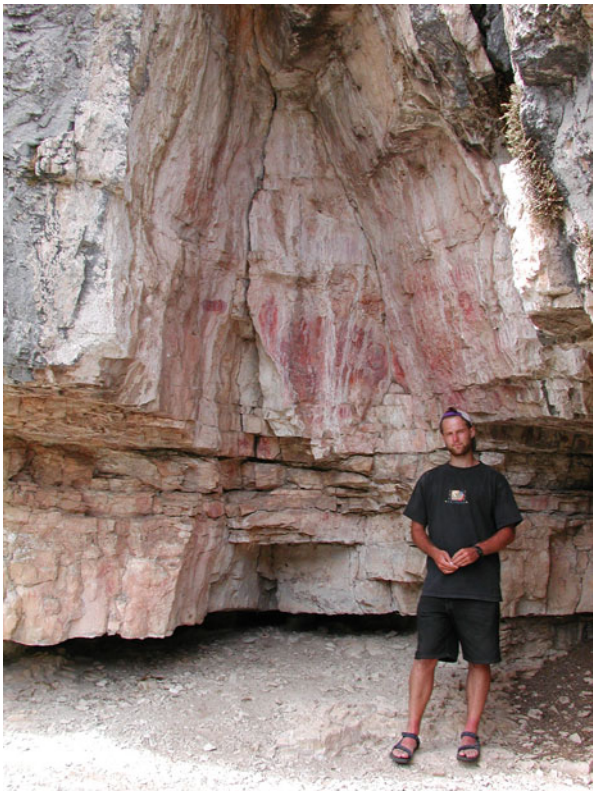

Fig. 15.3 Images in Crystal Cave (24CA102), Montana. The superimposed images are dominated by abstract designs, most of which are high on the wall; Brian Greer, shown in the photo, is over 6 ft (1.8 m) tall. Photo by John Greer, 2000

Thus, the Avonlea culture may have found rock art made for an unknown function in the past and deemed it to be worthy of sacredness in their time. By the 1800s onward these carvings were considered sacred and offerings were left at them to the supernatural by the Blackfoot (Ewers 1952:51), the Cheyenne (Grinnell 1925:263), and the Gros Ventres (Cooper 1956; Kroeber 1908:281).

Images placed on rock were also placed on other media within the region such as hides, tipi covers, clothing, horses, and people. Studies of these designs in other media have been used as an interpretive guide for understanding what the images represent and the stories they tell (Keyser 1987, 1989; Keyser and Klassen 2001). For example, in the early 1900s Kroeber (1907:311–313) talked with a middle-aged northern Arapaho man who had two pieces of painted hides with designs on them referring to stories of creation and tribal ceremonies. One strip contained figures in blue with two red spots. He told Kroeber that a straight line diagonal along the length of the buckskin strip represented the extent of the world and the course of the sun. On it were shown both the sun and the moon. The sun was a small solid circle,

and the moon was an arc of a circle. Four blue dots, two on each side of the line, represented four old men, and beyond the end of the line a blue outlined ovate figure represented a mountain-goat horn spoon from which the four old men were fed. A solid blue circle represented the heart, and around the heart were four short lines forming an outlined square. The four lines represented the lines painted around the wrists and ankles of the old men in the tribal ceremonies. The four old men were thought to maintain the life of the people, and the four bars depicted the men themselves. Just beyond them is a small crescent representing the half-moon, and near it is an outlined circle representing either the sun or a sundog, while an oval red spot denotes paint. The symbols described are at one end of the larger strip of skin and show how complicated interpretation of any panel of geometric images can be. However, it helps us understand that the geometric symbols within a rock art site, especially one in a landscape setting known to support a sacred site, have meaning beyond their literal descriptions.

Hoebel describes the Northern Cheyenne holy men as priests more than shaman because the way they mainly obtained power was through acquisition of knowledge regarding rituals, which were learned from someone who was already a priest, and not through vision quests, although that was occasionally done, especially in times of distress. Hoebel (1960:86) records that the Cheyenne are action oriented in their pursuit of spirituality and not introspective as many eastern religions are, and rock art associated with such views would result in more public oriented displays than private.

Among the Northern Cheyenne "the greatness of the major spirits is not in their ability supernaturally to create and manage things, but in their wisdom about the working of things" (Hoebel 1960:83). In order to keep the group strong and compatible with their environment, it was necessary to perform sacred acts correctly and in the proper order (Hoebel 1960:84). Rock art is ideal for serving this purpose. Placing it in a site used for religious rituals, the information will not be misplaced during a nomadic lifestyle or forgotten should the people who conduct these ceremonies die, and they would be safe within a sacred landscape.

Sleeping near rock art panels to communicate with the supernatural was a use of these sites in historic times. In about the 1870s, Curley Head, a Gros Ventres, had the following experience:

> Then we crossed the Missouri River and camped at the mouth of a creek, which empties into the river. Here the Little People had made paintings on the cliffs and in the caves nearby. I decided to sleep near one of these cliffs to see if I could obtain some power. I prayed and cried until I fell asleep. I had a dream that the Little People were coming for me with a big kettle of boiling water and each one was picking a part of my body that he wanted to eat. I woke up and left that place right away. People always have bad dreams when they sleep near painted cliffs (Pohrt 1937).

A Blackfoot woman passed down another story about sleeping at a rock art site that was told to her by her father, Old Man Mandan (Clark 1966:295–297). As a boy her father slept at the base of a rock art panel at Writing-on-Stone in southern Alberta for several nights as part of his vision quest. His vision granted him the power to become a brave warrior and a chief. It also gave him the power to heal the

Fig. 15.4 Monument Boulder (24PH1005), Montana, was moved to a roadside display shelter, but it is still considered a sacred rock art site by local tribes. Many people visit it to leave offerings of tobacco (in the form of commercial cigarettes), pieces of red cloth, coins, and even utilitarian items. The black tube is part of a tire snow chain used in this northern area throughout the winter; it represents an important modern winter necessity. The boulder is covered with petroglyphs, including many bear paws. Photo by John Greer, 1994

sick and to foretell the future. As part of his vision Old Man Mandan was told that the drawings were made by birds of different colors.

A Gros Ventres informant discussed rock art site locations and meanings with John Cooper in the late 1930s, and Cooper (1956:20, 418–419) reports that they distinguished between pictographs made by spirit beings and those made by Indians. From the information available it appears that rock art made by spirit beings (Little People, birds, etc.) were probably those panels that were not event records, such as the Biographic style of the Northern Plains that tell of horse raids, capturing of other tribe members (mainly women), and warfare. Panels that predate the style of the historic period, placed on the landscape in areas deemed sacred by the tribes of the region and containing images known in other contexts to be religious, were those attributed to artists of the other world, who were probably the religious practitioners of their tribes.

Thus, by the mid-1800s rock art sites of the Northern Plains and adjacent mountains had become sacred to the tribes of the region. This sacredness continues in the area to the present time, and it is often demonstrated to the public by leaving offerings at the site. For example, at Monument Boulder (24PH1005) it is not uncommon to see offerings of coins, tobacco (in the form of commercial cigarettes), pieces of red cloth, and other more practical utilitarian items (Fig. 15.4). These offerings are

left despite being housed in a roadside highway display in northeastern Montana, which indicates that a sacred landscape does not necessarily mean a pristine landscape. Another example in the Americas of this practice of retaining a landscape as sacred through conducting rituals or leaving offerings at the site is offered by Turpin and Eling (Chap. 11, this volume) for northern Mexico.

A View from the Far West (California)

At the time of contact in California the landscape supported indigenous groups that reached a population of approximately 300,000, speaking nearly 90 languages representing at least 23 language families, and belonging to perhaps 500 distinct ethnic groups. With the diversity of languages—referred to by Moratto (2004:530) as the "Babel of ancient America"—the rock art of California reflects a variety of styles or traditions, including painted and engraved sites, and represents a broad spectrum of time. Whitley (2000:47–69) argues that by referring to different types of rock art as a "tradition," the classification of rock art according to ethnolinguistic groups where style is defined by "terms of formal and technical attributes" and is often time limited, is removed (Whitley 2000:126). The use of the term tradition recognizes the ability for variability in the production and use of rock art within an ethnographic group. The use of the term "tradition" also allows similar appearing rock art to transcend cultural boundaries. The understanding of rock art in California is often dependent on the use of ethnography.

Thanks to the Department of Anthropology of the University of California, Berkeley, and the visionary work of Alfred E. Kroeber (1876–1960), with the support of Phoebe A. Hearst, who saw the indigenous cultures of California disappearing and changing at an alarming rate, California has an extensive and rich collected works of ethnographic literature available to researchers. Between 1903 and 1964 the university published the *University of California Publications in American Archaeology and Ethnology*, which provides a wealth of ethnographic data. Hearst is known for her generous donations to the anthropological museum and for her funding of the *Ethnological and Archaeological Survey of California*, providing invaluable contributions to the ethnography of the region. The University of California between 1937 and 1973 also published *The Anthropological Record*, whose first issues contained the listings of the Cultural Distribution Elements. These lists, compiled under Kroeber's direction, investigated various California tribes and identified the presence or absence of material culture traits, with little emphasis on social organization.

Credit is also due to John P. Harrington (1884–1961), who began collecting ethnographic and linguistic data on California Indians in 1915, under the auspices of the Smithsonian Museum Bureau of Ethnography. Harrington did extensive field research during the first half of the twentieth century. Many others also contributed to the ethnographic record in California (Aginsky 1939; Barrett 1908, 1952b; Gifford 1928; Gifford and Kroeber 1937; Kniffen 1939; Loeb 1926; Stewart 1943).

Not all ethnographic work in California was by professional anthropologists. While not academically trained in ethnography, others have made significant contributions through recording Native American cultures in the central California area. John W. N. Hudson (1857–1936), married to an artist who specialized in indigenous paintings, gave up a medical practice in Ukiah, California, to collect Pomo baskets. Both Hudson and his wife, Grace Carpenter (Davis), could be considered ethnographers, due to the information she documented in her paintings with most of her subjects being local Pomos from Ukiah, and with the data he amassed in his dealings with the local indigenous population. After just a few years, Hudson gave up his medical practice and focused on collecting Pomo baskets for the Field Museum in Chicago and the Fred Harvey Company. Amassing thousands of notes, he passed away before he was able to publish. Hudson's notes are available to researchers at the Grace Hudson Museum in Ukiah. The Lakeport Museum in Lake Country contains the archives of Henry Mauldin (1900–1981) and an unpublished collection of 10,000 index cards and over 50 binders of typed oral histories, including information on informants, giving much insight into the indigenous population of Lake County.

The numerous ethnographies in California have provided an informed approach to understanding rock art found throughout the state. The ubiquitous cupule, which is especially prevalent in California, provides an example of the multiple uses and interpretations of this basic element by different groups of indigenous peoples. Among the uses addressed are weather control, girl's puberty rites, and fertility rites. Breck Parkman (1993a) has explored rock art (cupules on boulders) as part of the rain making process in Northern California. A Shasta petroglyph boulder, known as the Gottville "rain rock" was covered with pits and grooves, with the cupules (pits) believed to bring rain and wind, and the grooves to bring snow (Heizer 1953:35). Heizer relied on ethnographic work of Roland Dixon (1907), who reported that cupules were made from pounding on the boulder with a pestle to make thunder sounds. Parkman (1993a) also found several other culture groups statewide with examples of "rain-rocks." Cupules are worldwide, and Zhang (Chap. 6, this volume) discusses a variety of suggested functions for cupules associated with ritual and spirituality in China. Functions include seeking help from the supernatural to increase fertility (reproductive worship), access points to the celestial world where ancient alters await, and use as containers for sacrificial blood.

The Luiseño Girls Ceremony or puberty rites are the subject of several ethnographic accounts (DuBois 1908; Sparkman 1908). These recordings include the painting of rocks (pictographs) in their descriptions of the ceremony. Joan Oxendine (1980:37–48) reported on two early unpublished ethnographic accounts from the National Anthropological Archives at the Smithsonian, by H. W. Henshaw (1884 or 1892) and by John P. Harrington (about 1933). These recordings report that the puberty rites conclude at the end of the several days of ceremonies with a race or running to a boulder where the girls paint on a boulder. The designs they paint are the same as those they painted on their faces during the ceremonies. The traditional territories of the Luiseños (and sites of nearby groups) have many boulders on the landscape that contain red marks (especially diamond chains) similar to those reported by Harrington.

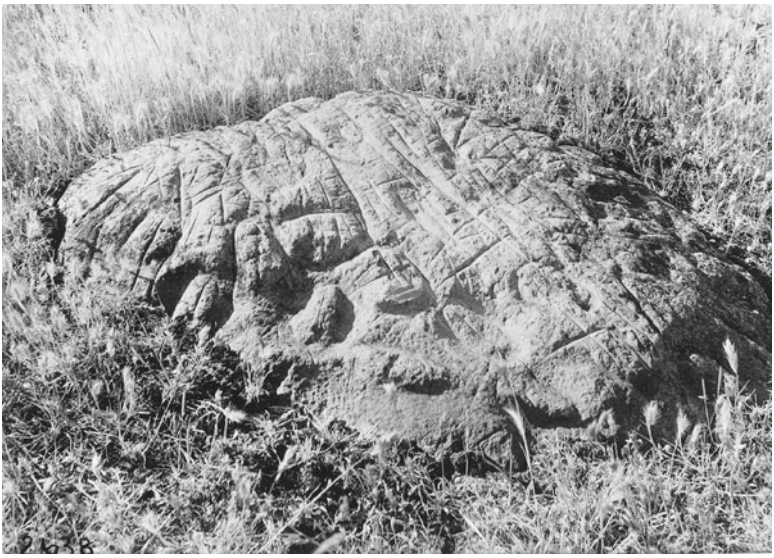

Fig. 15.5 The Pomo Baby Rock, in Knight's Valley, California, 1904 photo. Courtesy of the Phoebe A. Hearst Museum of Anthropology and the Regents of the University of California—photographed by Samuel A. Barrett (Catalogue #15-2638)

The Coastal Ranges of California from Oregon to Santa Barbara (and perhaps beyond) contain over 120 identified sites of marked boulders that are part of the PCN Tradition (Gillette 2011:2–3). Analysis of this rock art style has benefited from the use of ethnographic information. The PCN (*P*ecked *C*urvilinear *N*ucleated) name was assigned to this kind of marked boulder by Teresa Miller (1977), PCNs are characterized by oval or circular grooves, which produce a raised center, and are pecked into high-talc blue/green schist-like boulders which are part of the Franciscan Formation. Many of these sites have cupules and grooves associated with the PCNs. Whether these marks retained the same meaning through time cannot be determined, and perhaps fertility referred to the fertility of the world or world renewal. The ritual uses of these boulders (perhaps for quarrying powder for use in the rituals) are explained in several ethnographies. Testament to the power of these rocks can be seen in the following quote about a man who had no children with seven wives, but his luck changed when he visited the rock with his eighth wife and performed the following ritual:

> The sterile pair went to one of these rocks and there first a prayer for fertility was made. Then, by means of a pecking stone, some small fragments were chipped from the sides of one of the grooves or cuppings in its surface. These were then ground to a very fine powder which was wrapped in some leaves and taken to some secluded spot. Here the powder was made into a paste and with it the woman's abdomen was painted with two lines, one running from the top of the sternum to the pubes, the other transversely across the middle of the abdomen. Some of this paste was also inserted into the female. Intercourse at this time positively assured fertility, due to the magic properties of this rock (Barrett 1952b:387).

These marked boulders are believed to date from 5,000 to 8,000 years BP based in part by their geographic distribution and that the PCNs are always the lowest elements stratigraphically (Gillette 1996, 2011; Miller 1977; Parkman 1993b). The addition of cupules, grooves, and incised lines (sometimes superimposed over the PCNs) may indicate a change in a fertility ritual over time (it is easier to remove powder from a groove). One of the PCN sites known as the Knights Valley Pomo Baby Rock (Fig. 15.5) was explained by an informant of Samuel A. Barrett providing insight into the making and meaning of the marks:

> The girl sat down near one of these rocks and remained there in a pensive mood for a long time. Her brother endeavored to find out what made her do this, and to ascertain what she wanted, enumerating beads and other valuables. Finally he asked if she wanted him, to which she nodded. He then made upon the surface of the stone a large carving representing a genital. This, even yet, is the most prominent of the many marks upon this rock. Since that day this, and other similar rocks, have been employed in the cure of sterility (Barrett 1952a:386–387).

It was explained by the informant that the couple sitting on the rock were mythical bird people from the nearby village of *mu'yamaya*, and are a part of Pomo oral tradition. This and other accounts from the area refer to the ritual use of similar boulders as cures for sterility or to assure fertility. By using a reference to mythical birds, the Pomo were able to explain their presence of the marked boulder on the landscape, perhaps as needing to explain the inexplicable. This marking was done long ago and no one knew when because it had always been there. Linguistically, the Pomo are recognized as maintaining a cultural continuity within the area. The viability of linking ethnographic information into deep-time, as mentioned earlier, is problematic, but it does provide an explanation that may be applicable to prehistoric people as they endeavored to understand the world around them.

Although creating petroglyphs and pictographs was widely practiced in the past, we know the tradition continues in various places around the world, especially in Australia and Africa. Rock art is not made by most ethnic groups in the United States today, but recently there have been second-hand reports of the current use of a "baby rock" in Mendocino County. However, these reports have been confirmed by a young man at a meeting of the Society for California Archaeology, who shared that he had personally gone to a specific boulder and made a cupule in the surface of the rock "to carry on his tribal tradition." Thus, this spiritual belief and ritual are active just as they are in Africa as Zubieta reports (Chap. 4, this volume) regarding a rites of passage ceremony in Africa, although this practice has changed from the past and earlier elements (including the creating of rock art) are no longer present, but much of the symbolism remains.

Conclusions

Sacred landscapes are often associated with rock art throughout the world. Examples in this book clearly indicate that a location that is sacred at one point in time by one culture is not necessarily a location that will remain a sacred site throughout time

and associated with all cultures. However, rock art can help to change a landscape into sacred ground, and its presence influences later cultures to continue viewing that environmental setting in that light. This is clearly the case with many sites in the Americas as well as in examples from ancient China and southeastern Asia (Chaps. 5 and 6, this volume) where even though there is a change in the culture of the area and the deities being worshiped, the same landscapes continue to be sacred. Although the meaning associated with a sacred site may not be an exact copy of what it was in the past, it does not make the site less sacred when the new group occupies the area.

The definition of a sacred site can impact the use of the site in the future from a legal perspective today as well as a spiritual perspective. Throughout the world people work to keep their sacred landscapes from changing, and to do this they must allow their beliefs to have a public audience even if it was a closed society in the past. Views of religion from only an etic standpoint cannot elicit the same level of empathy for protection as those viewed emically, so it is necessary to allow people in when there is no other means of preservation. Religion is an important link to cultural identity for people of all cultures and for many of them rock art serves as an important link to the manifestation of their religion.

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