

Rock art regionalism and identity: case studies from Trans-Pecos Texas and Mpumalanga Province, South Africa



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Preface

The work described in this dissertation was conducted under the auspices of the Department of Archaeology, University of Cambridge. This dissertation is the result of my own research, except where explicitly stated otherwise. No part of this dissertation has been submitted to any other university for any degree or diploma. The text does not exceed 80,000 words.

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This work addresses two key issues in current rock art research, the first theoretical, the second exemplary. Researchers often write of rock art regions without according the concept sufficient theoretical consideration. I argue that rock art regions are more usefully defined by the presence and absence of ethnographically informed motifs than by aesthetics.

I support my argument by reference to two understudied rock art regions: the Texas Trans-Pecos, USA, and Mpumalanga Province, South Africa. The parallels between the two regions are enlightening: both are cultural 'crossroads' with complex histories of migrations, group interactions, and colonial settlements. Both provide archaeological evidence of hunter-gatherer, herder, and farming peoples.

Moreover, both regions are adjacent to other, better-known rock art corpuses that have been explicated using ethnographic analogy and other anthropological approaches. Using these heuristic tools, I explain some of the motivations and meanings behind the production and consumption of rock art in the Trans-Pecos and Mpumalanga. I argue that the most effective method for understanding the significance of the motifs – many of which are also found in the neighbouring regions – is to focus on ritualism, embodiment, and shamanistic belief in supernatural potency and a tiered cosmos. In Mpumalanga, I concentrate on images in 49 hunter-gatherer San (Bushman) rock art sites in and around Kruger National Park. In Texas, I investigate interactions between indigenous hunter-gatherer groups and colonizers from Europe, from Mesoamerica, and from the Plains to the north; I focus on 44 rock art sites as manifestations of indigenous ideologies.

Because rock art sites are implicated in cultural identity formation, I argue that lack of theoretically informed presentation perpetuates misleading stereotypes of rock art and the indigenous people who made it. I conclude by demonstrating that presentation of rock art can and does change people's attitudes towards the past.

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PROLOGUE

Interpreting rock art in understudied regions

In this dissertation I adopt an anthropological approach to rock art to elucidate past ideologies. I aim to

- recover some of the meaning(s) and motivation(s) behind the production and consumption of rock art in Trans-Pecos Texas (USA), and Kruger National Park, Mpumalanga Province (South Africa).
- interrogate previously held notions of rock art regions, both theoretically and in practice.
- contribute to sets of rock art data in specific regions of Trans-Pecos Texas and Mpumalanga Province, South Africa.
- raise the profile of rock art studies, particularly in understudied regions.

Rock art is notoriously difficult to define. Rock art certainly includes images, or motifs, placed on natural surfaces (Whitley 2005: 3). Moreover, rock art is also “par excellence, an artifact of past ideologies and world views” (Schaafsma 1997: 7).¹

Unlike rock art, most of the cultural material surviving as archaeological evidence is both portable and reticent. Through the centuries, stones and pots are moved so often that discovering their place of origin is a substantial research issue. Rock art is both different and special: added to or cut into rocks as paintings (pictographs) or engravings (petroglyphs), rock art usually remains static in perpetuity. To go to a rock art site today – however great the cultural gulf that separates the viewer from the artist – is to go to the self-same spot of its creation (Chippindale & Taçon 1998: 285; Chippindale 2001).

Moreover, rock art appears to speak in a way that stones and pots do not: here is a

¹ See Whitley (2001) and Bradley (2009: 3) for further definitions of rock art. Although some researchers and indigenous groups prefer the term ‘rock imagery’, many do not and so I retain the traditional term ‘rock art’. The *Oxford English Dictionary* defines a motif as a “distinctive feature or element of a design or composition; a particular type of subject”. I use this definition.

picture of a deer, here an image of a bow and arrow, here a half-man, half-animal therianthrope motif (Fig. 0.1). These images appear to be records people made of their own worlds. Yet the directness of visual recognition may be deceiving: the painting may take the *form* of a deer, but is it a picture *of* a deer? More importantly, what did deer, or that particular picture of a deer, *mean* to the painter? Why did he or she create the painting?



Fig. 0.1. Therianthrope figure (c. 18 cm tall) from Kruger National Park, South Africa. Note the antelope head and human body. Black represents red pigment; stipple represents light red. Courtesy of C. de Rosner.

Some researchers have argued that without directly relevant ethnography, rock art inspires unwarranted confidence in interpreting and understanding; how can we be certain that what we see today actually captures the meaning immanent in images when they were created? I reject this argument from ‘ethnographic despair’. My first goal in this thesis is to show instead that there are many ways, both archaeological and anthropological, of accessing the past in order to investigate and explain – at least in part – the *significance* of rock art motifs.

Most of the images in this dissertation are from the Trans-Pecos region of far west Texas, an understudied archaeological region of North America. In order to interrogate notions of rock art regionalism I use a methodology that colleagues and I

developed in Mpumalanga Province, a similarly understudied region of northeastern South Africa. Given that we can explain at least some of the meanings and motivations behind the production and ‘consumption’ of rock art by using ethnographic texts and analogy, how then should we interrogate previously held notions of rock art regions? How do meanings and motivations change as one moves from the heartland of an archaeological region towards its boundaries? My second aim is to highlight the importance of regional rock art studies and regional variations by focusing on the ethnographically informed content rather than the aesthetics of motifs.

Anthropologist Megan Biesele (in press: 5) has recently made clear that, on a large scale, both Texas and southern Africa are cultural ‘crossroads’ with complex histories of migrations, territorial expansions, and settlements. The parallels between the two larger regions – and how researchers approach their work in Texas and southern Africa – are enlightening. Both feature archaeological evidence of hunter-gatherer, herder, and farming peoples, and both have been settled by Europeans in the last 500 years. Moreover, both areas feature prehistoric and historic rock art. I therefore offer two case studies, one from the Texas Trans-Pecos, and one from Mpumalanga Province, South Africa.

My third goal – which underscores the first two – is to augment rock art data sets for both these regions. Importantly, although little has been published on the archaeological deposits or rock art of the Trans-Pecos or Mpumalanga, neighbouring areas are famous for their rich archaeology, impressive rock art corpuses, and academic publications. Mpumalanga is adjacent to well-known regions in which the rock art has been convincingly situated in an overarching, shamanistic framework; we know why many specific images were created, and by whom. In Texas, the Trans-Pecos is adjacent to several regions that also share many definitive characteristics through time and across space, including belief in a tiered cosmos.

A fourth goal – one that follows naturally from the first three – is to bring rock art and the methods to investigate its significance to the attention of other archaeologists and anthropologists. Although many social scientists have “overcome their prejudices against the recognition of religious symbolism in indigenous art” (Turpin pers. comm.), there remains a need to raise the profile of rock art studies.

Rock art is still an undervalued resource and often, where rock art *has* been investigated alongside archaeological deposits, it is still expected to 'fit' the frameworks developed according to excavated archaeological data. Rock art is rarely studied in its own right.

This dissertation is *not* an attempt to decipher one indigenous 'system' of art and then explicate how it differs worldwide (Dowson 2007; 2009). Nor is it an explicit comparison of South African and west Texas rock art motifs. Rather, it is a contribution to the broader field of rock art historiography and cultural identity, where the question of indigenous hunter-gatherer interaction with herder and farming groups is often treated simplistically and cursorily, and in a mode that is inconsistent with postcolonial studies (Blundell 2004). Throughout this thesis, I remain cognizant of postcolonial principles and ideals in the social sciences (Blundell 2004: 28), and stress that researchers should focus on the colonized rather than the colonizers. Awareness of concepts of creolization and hybridity may help researchers avoid the pejorative implication that pre-colonial contact peoples were isolated or frozen in time. Moreover, following recent rock art studies in southern Africa (e.g., Lewis-Williams 1981; Lewis-Williams & Dowson 1989; Ouzman 1995; Smith 1997; Blundell 2004; Hollmann 2005; Challis 2008) and in Texas (e.g., Turpin 1982; 2001; 2004; Boyd 2003), I focus on rock art and other manifestations of the ideologies of the colonized rather than on simple political economy or technologies of the past.

After outlining the historiography of rock art research in North America alongside enlightening examples from southern African research (Chapter 1), I introduce the archaeological and environmental contexts of the west Texas Trans-Pecos (Chapter 2). In Chapter 3, I describe and illustrate rock art motifs at 44 sites in the Texas study area, with a view to investigating the significance of the rock art corpus; I then do the same for 49 sites in Mpumalanga in Chapter 4. Almost all of the rock art data in these two chapters have not been published. I stress here that I do not argue by simple analogy from the USA to South Africa. Rather, I propose complementary hypotheses that can be evaluated independently. In both regions, I chose the rock art sites because of their heuristic potential.

Also in Chapter 4, I introduce a methodological framework for clarifying nuances within and between rock art regions, and ask how motifs and ideologies change through time and across space as one moves away from a region's centre towards its putative cultural boundaries. I suggest that we can learn more about regional rock art corpuses if we define both regions and styles according to the presence and absence of ethnographically informed, diagnostic, and intelligible motifs rather than by formal aesthetic analysis.

Concentrating on the Trans-Pecos rock art corpus, I answer in Chapters 5 and 6 the primary question that permeates the entire dissertation: Given what is known through archaeological excavation and ethnographic analogy about the ideologies and lifeways of indigenous peoples in west Texas, what can we say about the significance of the region's rock art? How useful are shamanistic anthropological frameworks and neuropsychological models as analytical tools to explicate the significance of rock art corpuses?

In Chapter 7, I employ embodiment theory – another anthropological and sociological approach – to underscore these findings. Many of the motifs in the Texas Trans-Pecos feature somatic distortions or emphases that can be explained using embodiment theory within a shamanistic and ritualistic framework, where the *process* of creating the art was as important as the product.

Despite the special nature of rock art as a class of archaeological evidence, it is an undervalued resource, not only academically, but also from the perspective of tourism developers and heritage managers. In Appendix A, I move from an analysis of the significance of rock art in the past in order to address its significance in the present: What does rock art mean to people – indigenous and non-indigenous – in South Africa and Texas today? Having shown, in Chapters 1 to 8, that rock art was important to various groups in the past, and given that we understand at least in part the role that rock art played in identity formation, how should we present rock art to the public today? In the appendix, I concentrate on public presentation of rock art in South Africa. In a postcolonial world, to what extent will these presentations change people's attitudes towards the past, and towards the indigenous people who created the rock art? I conclude by considering how agency, cultural identity, and the consumption or *use* of rock art changes through time.

CHAPTER 1

The historiography of rock art research in west Texas, the Greater Southwest, and North America

1.1 *Picture-writing, evolution, and the 'inspiration and requirements of religion': 1880s – 1920s*

1.2 *Empiricism, typology, and 'guides to necessities of life': 1930s – 1960s*

1.3 *From empiricism and ecological adaptation towards a heuristic approach: 1970s – 1990s*

1.4 *Problem-oriented and interpretive research in the twenty-first century*

Histories of both North American and worldwide archaeology (e.g., Willey & Sabloff 1974; Meltzer 1979; Fowler 1980; Trigger 1989; Fagan 1995; Kehoe 1998; Murray & Evans 2008) often imply that, until recently, there were no systematic studies of rock art. Some (e.g., Trigger 1989: 101, 351, 395; Kehoe 1998: 163, 202–203) devote two or three pages to rock art studies; others (Willey & Sabloff 1974) fail to mention rock art at all. Historiographically, implicit theoretical biases within the discipline of North American archaeology – itself an academic sub-category of anthropology – led to the privileging of stratigraphic excavation. Ironically echoing the notion that “American archaeology is anthropology or it is nothing” (Willey & Phillips 1958: 2), the implication in these histories is that without *stratigraphy*, archaeology is nothing.

As early as the nineteenth century, rock art researchers not only gathered both archaeological and anthropological data but were also pioneers in defining the intellectual concepts that continue to drive cognitive, heuristic, and problem-oriented archaeological research today (see, e.g., Whitley 2001: 10–21). I do not suggest that there is a single factor that united rock art researchers; nor do I claim there is a neat evolutionary tale running through the history of rock art research. In this chapter, however, by outlining the aims and successes of some of the early North American studies, both chronologically and thematically, I demonstrate that rock art researchers helped shape the discipline of archaeology. I situate the few studies that focus on the rock art of west Texas within the broader, continent-wide historiography, and explain how these studies influenced my fieldwork and research (Chapter 3).

1.1 Picture-writing, evolution, and the “inspiration and requirements of religion”: 1880s – 1920s

Colonel Garrick Mallery (1831–1894) was one of the first North American rock art researchers. Although he rarely ventured into the field, relying instead on descriptions and illustrations from dozens of individual correspondents (Hinsley 1981: 169; Robinson 2006), his contribution to North American archaeology is justifiably lauded. Working in Washington, D. C. for the Bureau of Ethnology (founded in 1879, later renamed the Bureau of American Ethnology; hereafter referred to as BAE), Mallery collated thousands of observational data relating to North American “gesture-language” or “picture-writing” – what we today call rock art. His influence can be clearly seen in the title of A. T. Jackson’s seminal 1938 work for the Greater Southwest or Gran Chichimeca,¹ *The picture-writing of Texas Indians* (below).

The primary goal of the nineteenth-century BAE was to ‘map’ the anthropology of the native peoples within the borders of the United States, just as earlier geographical expeditions had mapped the allegedly uninhabited Western frontier. Mallery (1886; 1893) went beyond this primary goal, attempting to “ascertain the laws governing the direct visible expression of ideas between men” (Mallery 1886: xxviii). Drawing on Cotton Mather’s illustrations and statements from the early 1700s,² Mallery employed an epigraphic or philological approach to indigenous rock art, based on the assumption that the enigmatic images were an early form of writing (Robinson 2006). Here was a stage of evolution where “primitive people” conveyed their ideas through bodily movements, “gesture-language”, and then re-created those movements onto rock surfaces as “picture-writing”. Mallery was thus one of the first researchers to consider rock art as a form of embodiment, a theory not fully developed until advanced in the social sciences almost a century later. I consider this theoretical framework in more detail below (Chapter 7).

¹ The Gran Chichimeca is defined as a region on the northern periphery of Mesoamerica, and is roughly synonymous with the American Greater Southwest (Kelley 1966; Kelley & Abbott 1966; Di Peso *et al.* 1974: 48; 1979: 152; Boyd 1996: 153).

² For information on the Dighton Rock (Massachusetts) engravings, see Mallery (1893: plate LIV).

Alongside this nineteenth-century unilinear evolutionary perspective, which was explicitly adopted by the US government to justify ‘civilizing’ the indigenous peoples and seizing their land, Mallery championed the fact that rock art interpretations should address issues of hunter-gatherer beliefs and lifeways – a key point that underscores my own research. Mallery (1893: 770) also stressed the *religious nature* of the rock art: “A large proportion of the petroglyphs³ in America are legitimately connected with myths and the religious practices of the authors.” As Mallery (1893: 770; my emphasis) makes clear, tribes such as the Zuni, Hopi, Navajo and Ojibwa

have kept up on the one hand their old religious practices and on the other that of picture writing. ... The rites and ceremonies of these tribes are to some extent shown pictorially on the rocks, some of the characters of which have until lately been wholly meaningless,⁴ but are now identified as drawings of the paraphernalia used in or diagrams of the drama of their rituals. *Unless those rituals with the creeds and cosmologies connected with them had been learned, the petroglyphs would never have been interpreted.*

Mallery was not the first researcher to champion the efficacy, or, indeed, the necessity of *ethnography*. In the 1850s, Henry Schoolcraft (1851: 135–136) had interviewed indigenous Native Americans⁵ in Ohio and attributed at least some of the rock art in North America to “priests” versed in “magic medicine”, but Mallery’s project was the first to apply ethnographic evidence to large bodies of rock art throughout the continent. Robinson (2006: 9) writes that Mallery included rock art from several states – including Texas – in a “continent-wide set of indigenous practices from mnemonics to clan designation to shamanism to his favorite, gesture speech”. Paradoxically, however, Mallery’s call for ethnographic analysis

³ In this dissertation, I use “engravings” and “petroglyphs” synonymously, regardless of technique – petroglyphs can be pecked, engraved, carved, incised, abraded, or a combination of these techniques. Unlike pictographs (paintings), where material is *added* to the rock, the production of petroglyphs involves *removing* material.

⁴ “[M]eaningless” to researchers, perhaps, but not to the original artists; this quote highlights the difference between emic anthropological approaches (relating to cultures in terms of their internal elements and perspectives) and etic approaches (relating to cultures externally).

⁵ In this thesis, I use Native Americans and Indians interchangeably; I reject any pejorative connotations for either. I discuss the term indigenous in Appendix A.

unwittingly led to the decision by archaeologists in the burgeoning academic discipline to ignore rock art on the grounds that it was an ethnological⁶ – rather than archaeological – topic.

Despite anecdotal evidence within the archaeological community to the contrary, rock art was not marginalized originally because it was considered irrelevant or trivial, or because it could not be studied using archaeological techniques; rock art research in Europe flourished precisely with the onset of the ‘stratigraphic revolution’ and, later, as a result of improved dating techniques. Rock art was ignored because it did not fall within the remit of archaeology (Whitley & Clottes 2005). Put simply, although rock art is undoubtedly a form of material culture, it was not considered archaeological. This makes Charles Peabody’s⁷ 1909 article, *A reconnaissance trip in western Texas*, and his keen interest in pictographs (paintings), remarkable.

Published by the prestigious journal *American Anthropologist*, Peabody (1909: 202) made clear his reasons for embarking on the arduous journey to the Texas Trans-Pecos (Fig. 1.1), across the Pecos River: “From the point of view of science, business, or pleasure, the region is little known.”

⁶ Ethnology is defined as the study of the characteristics of various peoples and the differences and relationships between them, whereas ethnography is the description of those characteristics and relationships.

⁷ Charles Peabody graduated from Harvard University with a PhD in archaeology. Charles’s great-uncle was George Peabody, founder of the Peabody Museums at Harvard and Yale Universities. Charles’s father Robert Peabody founded the Department of Archaeology at Philips Academy in Andover, Massachusetts.



Fig. 1.1. The eastern Trans-Pecos region of west Texas delineated by the Pecos River and state boundary on the north, the Rio Grande on the south, and archaeologically defined cultural areas – the Lower Pecos (east) and Jornada Mogollon (west). ‘Trans’ refers to Anglo-American pioneers crossing the Pecos from east to west. El Paso is indicated in the inset.

Courtesy of Center for Big Bend Studies, Sul Ross State University, Texas.

After describing the weather, fauna, and geology, Peabody (1909: 209) sets out his main hypothesis. Despite the fact that prior to settlement by Anglo-American ranchers in the nineteenth century no one lived in west Texas permanently, there is evidence of earlier migratory people traversing the arid land:

Of the archaeology of the trans-Pecos territory little is known, and with one exception no extended scientific exploration has been attempted. Pueblo Indians do not seem to have occupied it; the inhospitable character of the land does not invite permanent settlement; tribes, however, passing through on errands of migration, or hunting, or by reason of their warfare with Americans or Mexicans or with other Indians, have left traces at their stopping places.

By discussing the identity of these tribes, Peabody – like Schoolcraft fifty years before – tacitly acknowledged the effect that archaeological research can have on socio-political issues. (Mallery, who worked for the US government, was more explicit: more often than not, indigenous land claims could and should be ignored.) Whereas Schoolcraft, contributing to the Moundbuilder debate, pointed out that it was highly probable that ancestors of modern-day Native Americans constructed the monumental and impressive earth structures (Willey & Sabloff 1974), Peabody (1909: 209) refers to the relationship between historical tribes, Anglo-American settlers, and the land:

These [tribes] may with some certainty be referred to the Apache (Athapascan) and probably later to the Comanche (Shoshonean); these tribes as allies made trouble for the white settlers during the last century. The entire district is included in the overlapping Apache and Comanche-Kiowa claims.

Given the lack of archaeological investigations in west Texas, it is no surprise that Peabody suggested that no one lived permanently in the region prior to c. AD 1650 and the arrival of Apache and Comanche groups from the north. It was not until the 1920s, and Victor Smith's (1923) ground-breaking suggestion that some rock art images might pre-date the Apache ingress, that researchers began seriously to contemplate the possible deep antiquity of the region's human past.

Following Franz Boas and other eminent North American anthropologists, several 'salvage ethnographies' and anthropological syntheses (e.g., Morgan 1877; Cushing 1890; Stevenson 1894; 1904; Teit 1896; Lumholtz 1900; 1902; see also Molyneux 1977) were conducted in the Greater Southwest in the late 1800s and early 1900s. Peabody, however, implied that salvage ethnography in west Texas would yield no

meaningful results, simply because he believed that there was no ethnography to salvage.

Despite the fact that rock art was considered an ethnological – rather than archaeological – topic of research, Peabody devoted a quarter of his article to images in six rock shelters. He (Peabody 1909: 214) mentions pictographs and

innumerable grooves, sometimes parallel, sometimes crossing, and cut to a maximum depth of a third of an inch. ... They [the pictographs and grooves] may certainly be divided into (a) sharpening grooves, (b) tally marks, (c) symbolic designs, (d) unrecognizable forms. ... Under [symbolic designs] is an interesting sun or star with a hollow center and nineteen rays; and ... a complicated figure (turtle) stippled, not cut[,] so as to appear light on the dark rock-surface.

Here are early suggestions not only of criteria for categorizing west Texas rock art motifs, but also – and more importantly – indications of the potential success of investigating symbolism and the significance of varying techniques of production. Peabody did not explicitly share Mallery's belief in the cultural evolutionary paradigm, but he, like Mallery, *did* acknowledge that the art was – in some unspecified way – *symbolic*.

The report on the final rock art site of Peabody's reconnaissance trip – also included in my 2008 and 2009 Project, Chapter 3 – is more detailed than that of the previous five. Peabody (1909: 215) states that San Esteban's

pictographs are quite celebrated. They include a set of figures, human and not human, in black; an outlined Greek cross in red; a headless human figure, eight inches long; many parallel lines in red; six black marks over a small recess; a scalp-shaped figure, in black, and ... lines in red, a rude arrow in orange, nine horned animals pointing the same way, and some modern initials.

Peabody concludes by briefly mentioning other archaeological material, including a ceremonial (and possibly unique) arrowhead cache discovered on Mount Livermore

in the Davis Mountains. Once again, it is clear that Peabody did more than simply describe; he also suggested possible avenues of future research within an interpretive framework, stressing the possibility of complex religious and ceremonial capabilities of early Texas man.

Unfortunately, however, by the 1920s the value of ethnographic research and its applicability to North American archaeology was being questioned more frequently and in greater depth. This is well illustrated by Julian Steward's development as an anthropologist in the University of California in Berkeley. As a young graduate student, Steward was heavily influenced by Robert Lowie and Alfred Kroeber's salvage anthropologies; Steward was duly optimistic about what we could learn from and about the past. By 1929, however, when Steward published his *Petroglyphs of California and adjoining states*, although he was developing ideas of cultural ecology and multilineal evolution,⁸ and although he continued to contribute much to anthropological theory, his ethnographic despair was fully entrenched. Steward's (1929: 224) chapter, "Meaning and purpose", starts:

Innumerable attempts have been made to ascertain the meanings of petroglyphs and pictographs from Indians living at present in the regions where they occur. These have invariably met with failure. The Indians disclaim all knowledge of their meaning and origin.

This was clearly and simply wrong, as evidenced by the salvage ethnographies cited above, and indeed by Steward's own examples of ethnographic rock art data that follow later in the chapter, regarding, for example, puberty rituals and mythical water monsters seen in visions. Admittedly, some Native American informants *did* and do disclaim any knowledge of rock art, but this is a well known methodological rather than an epistemological problem; informants are understandably reluctant to answer sensitive questions (Whitley & Clottes 2005: 169). Steward ignored his own data – or implied they were little more than anecdotal trivia – for theoretical reasons: like many researchers worldwide, he wanted to show that the ideal (or typical)

⁸ Steward hypothesized that environment influenced technological adaptations, which in turn influenced 'culture'; he therefore called for archaeologists "to compare specific cultural sequences in specific environmental settings in order to look for developmental regularities" (Willey & Sabloff 1993: 178).

primitive stage of socio-cultural evolution, as evidenced by Numic (i.e., Shoshone and Paiute) people, demonstrated no capacity for socio-political organization, religion, art, or symbolism. Later, he famously referred to the Numic-speaker culture as essentially “gastric” or “practical” in nature (Steward 1938: 46). Steward’s influence, or “shadow” (Whitley & Clottes 2005), influenced North American archaeologists for decades.

It is telling that the two 1920s’ articles (Smith 1923; 1925) that include west Texas rock art were published by a folklore – rather than an archaeological – society, and written by an amateur archaeologist. Victor J. Smith was Professor of Industrial Arts at Sul Ross Normal College (now a State University) in Alpine, Texas. Smith employed parts of Mallery’s evolutionary, Peabody’s diffusionist (or migratory), and Steward’s ecological frameworks, but he was also interested in the symbolism and deeper meanings of the rock art – more than most eminent, academic anthropologists of the 1920s, including Kroeber and Steward. More importantly, there is a marked difference between the two articles; by 1925, Smith believed that ethnographic research was the key to understanding the symbolism and significance of both historic and prehistoric paintings and engravings.

In the 1923 publication, although Smith states that pictographs contain “little information of value regarding important points of aboriginal history [and] few such records preserve the story of ancient migrations or similar matters of *real scientific importance*” (Smith 1923: 1; my emphasis), he also swims against the academic current and, echoing Peabody, implies that rock art is not only symbolic but also once again a valid topic for archaeological study:

It should not be supposed, however, that such pictographs ... are mere idle scrawls. ... [A]s deeper studies of symbolism are developed, it is apparent that a careful record of all existing inscriptions is of great importance to *this branch of archaeology*.

Similar sentiments were expressed by George Dorsey of the Smithsonian⁹ when he wrote to Smith suggesting that it was “desirable that further work be done in your region since many of the drawings in Southwest Texas are of deep import and have religious symbolism” (Smith 1923: 1).

Unfortunately, like Peabody, and Smith in 1923, Dorsey did not suggest any means of further investigating this symbolism within an archaeological – or any other – framework. Indeed, in 1923, Mallery’s (1893: 770) advice – to consider the ethnographic “rituals with the creeds and cosmologies connected with them” – had still not been followed, in Texas or elsewhere in North America.

Smith’s 1923 article includes several suggestions that, from a historiographical perspective, appear at first to be relatively unimportant. Upon closer inspection, however, many of these comments are indicative of deep-rooted and unstated theoretical biases that influenced rock art research throughout the twentieth century, and, in some cases, continue to influence researchers today. Some of these comments downplay the importance of indigenous knowledge structures; others – despite ignoring ethnographic or ethno-historic avenues of research – hint at the complex nature of rock art and how its study might be used to understand (at least partially) the emic worldviews of the original artists and the *motivations* and *meanings* of the art. I briefly consider each illuminating point of the 1923 article in turn, and provide more details in following chapters.

Empiricism and quantitative studies: 14 of the 65 archaeological sites that Smith visited include rock art (Smith 1923: 1). How significant is this percentage? Although Smith himself does not over-emphasize the importance of statistics *per se*, in the 1920s archaeologists worldwide were beginning to do so more and more. It took many decades, and a close appraisal of the philosophy of science, before many researchers – rock art specialists and otherwise – decided that *by themselves*, numbers in archaeology are meaningless. In any rock art corpus, for example, just because a certain animal is painted or engraved numerous times, does not necessarily mean it was important to the artists or their communities. The inverse is also true: if a certain

⁹ Dorsey was the first person to graduate from Harvard University with a PhD in Anthropology. He was also a founding member of the American Anthropological Association and Curator of (what is now) the National Museum of Natural History.

animal features in a rock art corpus only once or twice, this does not necessarily mean that that animal was unimportant to the artists or their communities.

Taphonomic complexity has also muddied many rock art projects; we should remember that densely painted or engraved regions do not necessarily indicate the flourishing of rock art production at specific points in time: some images survive far longer than others.¹⁰

Environmental adaptation/determinism: Smith (1923: 1) states that although the region is arid, there is water “within a reasonable distance of each site”. This is not surprising, given that all 14 of the sites are situated along the Rio Grande. Again, this does not explain *why* the artist painted or engraved the rock surface; it does, however, imply (misleadingly) that environmental conditions and geological features determined the positioning of the rock art in the landscape. Indeed, in early reports worldwide, rock art was often portrayed as “embellishing, or marking, parts of a landscape that conditioned the daily lives of the painters. Researchers therefore emphasized the closeness of paintings to material sustenance – food sources, water, shelter and so on.” (Smith & Blundell 2004: 241.)

Territoriality and landscape studies: “A few places that seem to show maps or directions are isolated; the others are near former camps or villages.” (Smith 1923: 1.) While context is undoubtedly important (e.g., Bradley 1997; 2000; 2009; Nash & Chippindale 2002), the suggestion that rock art maps and marks important places in the landscape needs to be demonstrated rather than merely assumed. What do researchers mean exactly by *marks*? In what precise way is a particular place in the landscape important? I return to these themes later, but note here that there is no evidence that rock art motifs in west Texas are maps. Peabody (1909: 209) commented presciently on the subject of landscape and context when pointing out that “rock-shelters occur whenever an eroded rim or scarp gives opportunity”, implying that the positioning of rock art sites is often primarily a function of geology rather than culturally determined. Peabody thus avoided the common but implicit assumptions about the significance of images that are, in turn, used implicitly to infer the cultural significance of a landscape in the past. Researchers develop the flawed argument by

¹⁰ In general, red pigment (iron oxide ochre) adheres well, yellow pigment (also ochre) is transient, and white pigment (usually kaolinite clay) is fugitive. Binding agents – including water, human and animal bodily fluids, plant saps, and egg yolk – increase longevity.

using the cultural significance of the landscape to explain the existence of the images in their specific locations. As Smith & Blundell (2004: 254) make clear, the argument “thus becomes a circular, self-fulfilling prophecy about the images”.

Antiquity: the c. 200 paintings at the 14 sites are ascribed to the Mescalero Apache, “though research may in time reveal that some of the rock inscriptions antedate the Apache” (Smith 1923: 2). Smith was the first researcher in west Texas to imply that some of the rock art might be thousands rather than hundreds of years old.

Social conditions necessary for the production and re-production of art: Smith (1923: 3; my emphasis) suggests that most of the paintings were produced “during the fairly peaceful period between 1670 and 1780, though there is evidence to show that a much earlier date ... might be estimated if the permanence of the pigments is admitted or the possibility of renewal (*on important drawings of religious significance*) is granted”. Is art produced in times of stress (including war), or in times of peace? Researchers are divided on this point. More importantly, the “possibility of renewal” acknowledges for the first time in Texas rock art historiography that the superpositioning of paintings or engravings is not necessarily vandalism (discussed further in Chapter 7).

Conventionalization and symbolism: Smith suggests that cross-like depictions may represent the cardinal points of the compass rather than a Christian influence. Additionally, “Stars and other forms in nature may have been conventionalized into simple cross designs ... with both symbolic and decorative intent.” (Smith 1923: 5.) Note here that Smith was aware that just because something *looks like* a Christian cross it does not mean that it necessarily *is* or *was* a Christian cross.

Color symbolism, pigment processing, and value thereof: Smith (1923: 7) states that continent-wide, Native Americans developed an elaborate system of colour symbolism, but “Little or no use of this system has been observed in the Big Bend. This omission is probably due to a lack of variety of colors.” In the Big Bend region of west Texas,¹¹ this is partially untrue; there are plenty of colours available, but as we shall see in following chapters, very few rock art panels are polychromatic. In

¹¹ The Big Bend region is named after the large bend in the Rio Grande in the southern part of the eastern Trans-Pecos (see Fig. 1.1). Some writers use Big Bend more broadly to refer to larger areas of west Texas. See Chapter 2 for further details.

addition, Smith (1923: 7) notes that “many small pot holes have been observed which are suitable in size for the mixing of paints”. No evidence of pigment however was found in these cupules, which I analyze in Chapter 7. Smith (1923: 6) also states that early “settlers say that the Indians treasured paint materials very highly and that a high rate of exchange was received for pigments traded”. Paint had symbolic as well as practical value.

Comparative studies and the desire for narrative: Smith points out that there are similar rock art motifs in New Mexico, Idaho, and California: “Interpretations of a symbolic nature are, therefore, uncertain except where a series of pictures may recount the story of a hunt or single event of interest to the artist.” (Smith 1923: 7.) Smith’s logic is weakened here by his desire to discover narratives, a misplaced obsession that is prominent in many rock art historiographies worldwide. Smith (1923: 10, figs 5–6) describes and illustrates a “hunting expedition” with “an enumeration of dots (the warriors), and symbols which indicate provisions”. Continuing, Smith (1923: 10) refers to a besieged woman who is “rescued” by a man; “he, I trust, settled the difficulty in a manner satisfactory to all”. Smith supplies no evidence to justify these conclusions. Elsewhere (e.g., Lewis-Williams 2006: 358), this has been referred to as the ‘gaze-and-guess’ approach.

Symbolism, cognition, and the origins of rock art: geometrical forms “are sometimes easily interpreted by reference to authorities and sometimes by the likeness of the symbol to the thing it represents” (Smith 1923: 8). Examples include “the sun, the snake, lightning, water, a village, an enclosure, weapons ... etc. All such picture writing originated in the reproduction of articles just as the artist saw them.” (Smith 1923: 8.) Although Smith is vague – and incorrect – regarding the origins of symbolism, he was one of the first archaeologists working in Texas to consider hunter-gatherer cognition.

Myth: intriguingly, Smith then attempts to link the Big Bend pictographs to Goddard’s (1904; 1907; 1911) Southwestern Native American myths, but does not fully develop this ethnographic approach until 1925 (below). In Goddard’s reading of the Southwestern myths (Smith 1923: 11) there are figures “lifting up the sky” – according to Smith, this vignette is from an unspecified Big Bend panel. Perhaps he was thinking of Agua Fria (Fig. 1.2). Although attempts to link rock art images to specific myths are unconvincing (*cf.* Solomon 1997; 2008; Boyd pers. comm.) and Smith’s early use of

ethnographic analogy is logically flawed, his broad anthropological approach is compelling and laudable.

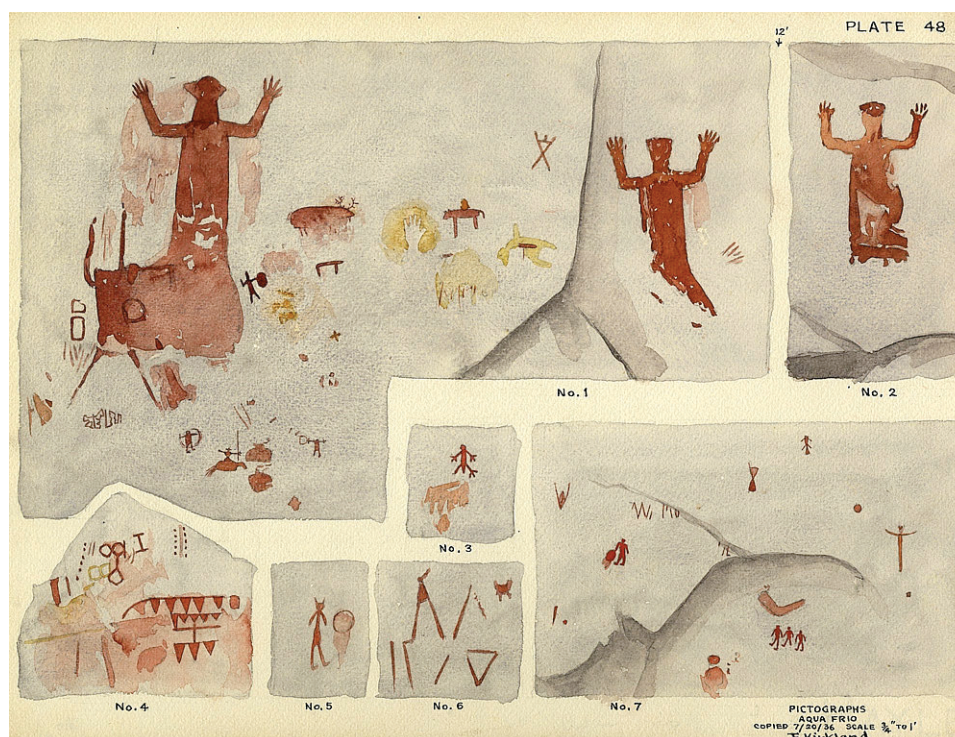


Fig. 1.2. Forrest Kirkland's 1936 watercolour shows raised arms at Agua Fria site in the Big Bend. Kirkland aimed to reproduce each panel "exactly as it was made by the original artist" (Kirkland & Newcomb 1967: 6). Original scale is 1:32. Courtesy of Texas Archaeological Research Laboratory.

I do not discuss philosophical nuances of analogy in this dissertation. I do, however, follow Willey & Sabloff's (1993: 246) definition that

analogy in archaeology is the mode of inference by which the residues of human behavior are translated into the original terms of that behavior. ... Hypotheses about the past cannot be framed without it, nor can inductive or deductive reasoning be brought into play to test these hypotheses until the analogies have been made.

Motivation for, and production of, rock art: "It is especially probable that the rock inscriptions were *inspired by religious zeal*, for much time and laborious effort were required in their production." (Smith 1923: 11; my emphasis.) This is key: contrary to

the opinions of many archaeologists worldwide, Smith makes clear that rock art motifs were not idle doodles, or evidence for 'art for art's sake'. Moreover, by allowing the possibility of religious inspiration, Smith implies that the artists were not 'primitive' or 'noble savages'.¹²

Rock art within the evolutionary paradigm: contradictorily, Smith (1923: 11) continues:

While I admit that such drawings as I have described will not yield information of great value, yet I think that careful records of such work are worth while because it represents a typical stage in the development of primitive people toward a higher culture. The step between barbarism and civilization is admittedly the invention of alphabetic writing. The first step in the invention of an alphabet was the drawing of the objects and events as the artist actually saw them. Next came symbolic figures and drawings which represented syllable sounds, a series of which might make up a complex word. The final development was that of a symbol representing a yet smaller sound division – the letter. Hence, as an indication of the Indian's progress toward a higher civilization, the study of his effort to express his thoughts in picture-writing is of value.

Here, Smith draws directly from Mallery in an apologetic manner; despite his and Dorsey's earlier assertions about the importance of the work, Smith is not sure whether or not his studies will "yield information of great value". The evolutionist and diffusionist paradigms still dominated the academic *milieu*.

In conclusion, however, Smith (1923: 13; my emphasis) states pithily that by studying rock art "additional graphic evidence of the *religious beliefs* of the Southwestern Indian may grow out of further investigations in Texas". As Smith made clear in his introduction, and in his passages on inspiration and religious zeal, the depictions in west Texas are not "mere idle scrawls". Nor was the study of parochial importance only: findings in Texas – and in other relatively understudied and isolated regions –

¹² Following Rousseau, researchers and members of the public often attest that the 'noble savage' lived effortlessly in a world of plenty; by extension, artistic creativity is putatively associated with free time and abundance.

could and did help researchers increase their knowledge of the worldviews of Native Americans throughout the Greater Southwest and North America.

In his second article of the 1920s, Smith (1925) focuses on an allegedly early form of rock art – that of the human hand – but broadens the geographical range of his enquiry. For the first time in the history of Texas rock art research, Mallery's nineteenth-century plea is heeded, and ethnographic analogies widely applied. Moreover, Smith (1925: 7) considers ethnographic analogies to be even more effective than the archaeological evidence itself! His justification is simple:

[W]e must look to the customs and habits of existing and historically recorded primitive peoples in order to throw light upon a subject which otherwise may be known only from the argumentative evidence of archaeological finds.

Smith was aware that ethnographic evidence helps researchers avoid the trap of circularity: we need not and should not infer meaning from the images and archaeological data themselves.

Smith draws parallels from the histories *and* prehistories of dozens of countries, and although some of his ethnographic analogies are weaker than others – sometimes little more than a form of ethnographic 'snap' – his overarching theoretical and methodological frameworks were sound. For instance (Smith 1925: 12):

That the universal use of human hand representations in prehistoric and later works of primitive art was of more significance than mere idle purposeless drawing is quite evident from the study of symbolic meanings of similar representations made in historic times and still being made today among primitive peoples.

Fascinatingly, Smith (1925: 7; my emphasis) employs ethnographic analogies to discuss universality and symbolism; he again makes clear that the images were not 'art for art's sake', one of the most prevalent arguments of the time despite its patent circularity:

In reviewing the available material which refers to the use of the hand motif in primitive art, it is at once evident not only that such markings were *universally used* in the arts of primitive peoples but that such use carried with it a *large amount of symbolic meaning*.

Several of the promising themes from Smith's 1923 article are re-iterated and developed. I consider each in turn.

Origins and the production and 'consumption' of rock art: Smith (1925: 1, 6) suggests that the depiction of the human hand is

one of the earliest artistic efforts of prehistoric and primitive man. ... Once an accidental print of this sort [i.e., in sand, clay, or mud] was observed, it was quite natural that the idea should be played with. Possibly a muddy hand was used to produce the first prints. Such a trick of reproducing the hand might easily spread and assume more permanent form as it became identified with the idea of magic.

Although Smith does not develop this notion of 'magic', he clearly considers handprints to be both symbolic and significant. In addition, he (Smith 1925: 7; my emphasis) states that "as an artistic work these designs probably excited emotion, curiosity, and *sometimes even terror*. Civilized man speaks of the "magic of art." Primitive man actually believed in it." Here, Smith suggests that the function of rock art was not only to maintain cohesion and stability within the group. A *work* of art could be and was indeed consumed or *used* by individuals and groups, both at the moment of its creation and subsequently.

Production, aesthetics, and 'Is it art?': "That the imprint of the individual hand was true art for its time and that the primitive man who did such work took real pride in its production is reflected in the preparation of the materials for painting and in the provision for light in the dark caverns." (Smith 1925: 6.) Again, Smith (1925: 7) suggests that these were no 'idle doodles' before paraphrasing lines from Miles Burkitt's (1921) *Prehistory*: "Beauty does not consist so much in the thing represented as in the need one has had of expressing it." Although Smith does not elucidate the slippery concept of the *need* to express one's self, or whether such a need is

“natural”, he does address the fact that Western concepts of aesthetics – and the complementary Kantian ideas of inherent beauty – might not apply to prehistoric art (Gosden 2001; Renfrew *et al.* 2004).

Technique: Smith suggests that, as in South Australia, grooves in rocks were used for sharpening tools to make petroglyphs. In the Big Bend, Smith (1925: 8–9) had noticed that “sharpening surfaces were ... clearly confined to a single rock or area” and that “no similar marks were to be found on neighboring rocks”. Smith also mentions another noteworthy technique: scraping soot from the ceilings of shelters to create unusual hand stencils (Chapter 7; Smith 1925: figs 5c, 11).

Ethnography, analogy, shamanistic¹³ power, and symbolism: depictions of arms (rather than just hands) are often decorated with zigzags. Smith (1925: fig. 17) shows a “Symbolic hand and arm [from an Algonkian rock art site] ... reaching beyond the sky for power from Ki’tshi Man’dio [the Great Spirit]. The waving line [i.e., a zigzag] upon the arm denotes mysterious power.” Smith (1925: 16) points out that similar zigzags can be seen on a decorated reindeer horn from La Madeleine in France.

Smith (1925: 16; my emphasis) further develops the significance of his figure 17 and the efficacy of indirect ethnographic analogy; he believes that the depiction is

symbolical of the shaman’s arm raised in supplication to the great spirit. A similar Indian design is that of the arm combined with the sky, which is intended to signify power. *In cases where direct observation has not definitely established the fact of symbolic meaning, it is safe to assume from known cases and from the laborious work necessary to produce some of the drawings that the prehistoric records likewise have genuine significance.*

This is one of Smith’s most important but overlooked contributions to Texas and indeed North American archaeology: even without region-specific or recent ethnography, there is no need for despair or resignation.

Motivation and meaning: earlier in the article, Smith (1925: 1) implied that the first depictions of handprints were accidental: only later (at an unspecified time in the

¹³ I discuss shamanism, animism, and ritualism in Chapter 5.

history of mankind) were they associated with 'magic'. Later in the article, however, Smith (1925: 16) suggests that handprints were made as a result of either a) "that instinct which seems to impel the human animal to make his mark", or b)

with a religious or magical intent. The use of the hand as a synecdoche, substituting a part for a whole, was doubtless involved in both cases. In the former, however, the hand was used as a manifestation of personality and ego; a boast of personal power or strength.

Smith (1925: 17) boldly opines that b) was the more probable motivation:

We may safely conclude, however, that matters concerning religion, magic, and the supernatural prompted most of the hand drawings. In such cases this design was used to denote supplication to the Great Spirit or Master of Life, and stands, in the Indian system of picture writing, as a symbol for strength, power, and desire for the mastery of a thing which may be beyond the power of the individual to achieve without divine aid.

Here are further hints that shamanism *in some form* may essentially have provided a framework for the production and consumption of rock art in North America. I develop this key theme further in Chapters 5 and 6.

Also laudable is Smith's return to ideas of the (near-) universality and the religious origins of rock art. Indeed, he (Smith 1925: 17; my emphasis) was remarkably prescient:

Granted that the caves of Europe yield evidence of man's first esthetic achievements, it follows that such works are due primarily to the *inspiration and requirements of religion*, since practically all such achievements of mankind have been prompted by the same motives.

Once again, this has important implications in rock art research today. After briefly discussing the unlikely occurrence of finger mutilation, Smith (1925: 22) concludes:

Like the universality of gesture language or picture-writing itself, the use of the hand motif lends much to prove that the mind of primitive man works in much the same fashion at all times and places. There is no intention here to claim cultural identity or the original unity of peoples because of the occurrence of such designs as the human hand in world-wide distribution, extending into several stages of culture. Such universal distribution, however, may indicate the probability of parallel development of superstitions and practices in places widely separated but similar in conditions of culture ... like conditions of environment tending to produce like cultures.

In this often-overlooked but patently groundbreaking article, Smith skillfully justifies the use of ethnographic analogy as a tool to uncover some of the deeply veiled symbolism of prehistoric rock art in west Texas and elsewhere. Unfortunately for the development of rock art research, Smith was an academic anomaly throughout his tenure at Sul Ross; empiricist, ecological determinism was becoming increasingly more entrenched as a dominant theoretical framework. Indeed, the next researcher of Texas rock art was an empiricist *par excellence*.

1.2 Empiricism, typology, and “guides to necessities of life”: 1930s – 1960s

Like Smith before him, A. T. Jackson was influenced by Mallery’s terminology, as evidenced by the title of the seminal *Picture-writing of Texas Indians*, published in 1938 by the University of Texas (UT) Press in Austin. Importantly, Jackson was a trained archaeologist employed by UT for over twenty years, and known for developing field methods and excavation techniques.

Although the handsome 518-page volume contains numerous methodological problems, and a theoretical framework that is at times ill defined and unsupportable, no one would wish to question the value of the vast amount of data that Jackson collected. His was a massive and laborious undertaking, and *Picture-writing of Texas Indians* is indispensable to any rock art researcher working in Texas or the Greater Southwest; the book is the result of *empirical* research of the highest standard.

It is necessary here to distinguish between empiricism and empirical research. Empirical research involves observation and meticulous collection of data in the

field, library, or laboratory: no one decries these techniques. Empiricism, on the other hand, is a method – or mode of argument – often adopted by archaeologists, and one that usually (but not always) involves four stages (Hempel 1962; 1965; 1966: 11; Lewis-Williams & Loubser 1986: 254; lineation added):

- a) observation and recording of all facts,
- b) analysis and classification of these facts,
- c) inductive derivation of generalizations from them, and
- d) further testing of the generalizations.

Philosophers of science (e.g., Hempel 1962; 1965; 1966; Copi 1982; Wylie 1982; 1989; Lloyd 1988; Chalmers 1990; 1999), however, have demonstrated that, a) it is possible to record only observations that seem relevant to a hypothesis (i.e., we cannot record *everything*), b) the classification of observations *cannot* be derived from the data alone, c) reliable inductive reasoning from (necessarily) subjectively recorded observations is impossible, and, d) further testing is in danger of circularity because the data against which inferences are to be tested have (necessarily) been collected subjectively and in the same manner as the original data (Lewis-Williams 2006: 361).

In practice, quantitative studies and inductions from necessarily *a priori* categories are problematic in both the laboratory and the field; researchers often have difficulty imposing preconceived categories on the motifs they find in rock shelters. Before returning to Jackson and west Texas, I employ an example from the 1960s in southern Africa to illustrate these difficulties – both theoretical and methodological – that have had an adverse effect on rock art studies worldwide.

Patricia Vinnicombe (1967) nobly attempted not only to investigate the social complexities and behaviour of the peoples responsible for rock paintings in the Maloti Drakensberg Mountains of South Africa – the San, or Bushmen¹⁴ – but also to produce a ‘scientific’ study that would help integrate rock art research into ‘mainstream’ archaeology in university departments. Vinnicombe’s quantitative research was not simply counting for the sake of counting.

¹⁴ I use the terms San and Bushman interchangeably, and reject any pejorative connotations of either. Importantly, people of Khoesan descent use both terms today; some prefer San, others Bushman (see also Lewis-Williams & Dowson 1989: 9).

Seven of her 20 categories comprised “scene description” and included “hunting”, “fighting”, “domestic activities”, “dancing or acrobatics”, “ceremonial”, “ritual”, and “mythical” (Vinnicombe 1967). As David Lewis-Williams (2006: 361) has shown, in the empiricist research programme

categorization is supposed [to] take place *after* unbiased collection of ‘raw’ data and to be a *prelude* to induction of explanations; but the examples of ‘scene description’ categories [given above] show that each image has to be interpreted *before* it is allocated to a category.

This leads to a related question: Where did Vinnicombe’s categories come from? Clearly they stem from deep-rooted notions about the motivations and meanings of San rock art in South Africa. These notions (as espoused by, e.g., Tindall 1856: 26; Balfour 1893; Burkitt 1928: 111; Goodwin 1953: 127; Willcox 1956; Lee & Woodhouse 1970) suggested that the paintings and engravings illustrate quotidian, historical, and sometimes mythical or ceremonial ‘scenes and events’.

Aside from the logical problems of inductive reasoning (e.g., Chalmers 1999), and the ill-defined notion of ‘illustration’, it is obvious that here is another glitch in the empiricist paradigm: because there are more prosaic categories than ones relating to beliefs or ideological outlooks, researchers making numerical statements about rock art logically conclude that there are more scenes representing ‘daily life’ than those representing religious experiences. The implication is that the artists were capable of little more than painting a ‘menu’ – or replicating what they saw in their daily lives (Fig. 1.3).



Fig. 1.3. Berger & Wyse cartoon from *The Guardian*, 30th May 2009, implying that rock art is little more than a menu. Note brown paper bag (far right).

In sum, when considering the impetus behind supposedly objective archaeological categorization, it is important to remember that “because an underlying concept of the very nature of the art governs the definition of categories, it is impossible to induce any new interpretation from the categories” (Lewis-Williams 2006: 362). Indeed, because theory governs the formation of categories, it cannot emerge from them. This is one of the reasons why empiricist rock art studies cannot spur interpretive advances, regardless of how sophisticated the archaeological techniques employed. The problem of induction pushes the empiricist programme into an inescapable impasse.

In Texas in the 1930s, Jackson (1938: 6) explicitly acknowledged his debt to Steward and his theoretically empiricist frameworks, including his method of categorization, so it is no surprise that he (Jackson) downplayed the possibility that rock art images were indicative of early man’s cognitive capacities. For example, in a patronizing manner, deliberately missing an opportunity to discuss symbolism and non-realism, Jackson (1938: 6; my emphasis) stated that in numerous cases

the rock pictures appear deliberately to have been left incomplete, mutilated or distorted. ... Certain cases of exaggeration may have been the result of a *sense of humor* of the primitive artist.

Jackson (1938: 4; my emphasis) favoured Steward’s ecological and environmentally adaptive theories, and pointed out that the majority of sites were in the semi-arid

region of the state, “possibly because [the paintings were] helpful as *guides to necessities of life*”. Once again this misleading and overly simplistic viewpoint – that rock art panels are handy guides for ‘happy’ hunters (Dowson 1994) – is still commonly held worldwide.

Like Steward, Jackson was a firm believer in quantification and statistics decades before these techniques were employed systematically in other countries. The ten driest counties in west Texas, for example, “include 72 per cent of the pictograph sites”; 34% of the approximately 6,500 design elements¹⁵ in Texas are in Val Verde County; and 2% of the pictograph sites are “entirely historic” (Jackson 1938: 3–5). As mentioned earlier, however, numerical studies are justified “only when important, meaningful questions about specific features of images can be formulated in numerical terms *before recording commences*” (Lewis-Williams 2006: 363). By themselves, numerical statements are irrelevant to the understanding of meaning. Because numbers do not ‘speak to us’ or automatically provide explanations, quantification is the apogee of empiricism.

Although Jackson adopted descriptive rather than interpretive terms, and naively championed the importance of statistics throughout his *magnum opus*, he was perhaps not quite as pessimistic as Steward when trying to understand motivation and meaning. He wrote (Jackson 1938: 6), for instance, of the need for comparison with adjacent regions “if much of value in the interpretation of primitive mentality is to be gleaned from the picture-writings”; here at least is the possibility that researchers could learn *something* from rock art, and also a hint of the importance of regional studies (Chapter 4). Jackson asked several penetrating questions. When describing a site in Culberson County, for example, and an image showing a “so-called map of the region” (Jackson 1938: 72–73), he astutely declared: “But why the necessity of a map of a small area, when to see it one must be on the ground and could look around for himself?”

Part VIII of *Picture-writing of Texas Indians*, titled “Meaning, purpose and importance” – strikingly similar to Steward’s (1929: 224) chapter “Meaning and purpose” – illustrates the tension Jackson undoubtedly felt between the (increasingly

¹⁵ I use motif and element interchangeably. Some researchers use element to mean an attribute of – or part of – a motif, e.g., the arm of a human figure (see Boyd 2003: 27; Whitley 2005: 46).

dominant) empiricist and the (rapidly forgotten, or increasingly overlooked) interpretive paradigms. Perhaps the most interesting section to the modern reader, it is – tellingly – less than two pages long.

Jackson (1938: 464) starts by declaring: “The meanings of a few of the pictures are self-evident; some are suggested in the paintings and carvings; many will never be known.” But he does not tell the reader on what grounds he makes this important distinction. Why are some of the meanings *self-evident* and others only *suggested*? As in South Africa and elsewhere, the preconceived notion that rock art illustrates quotidian activities almost certainly underlies this putative distinction. This is an important issue, not least because it has pervaded rock art research in many countries and through many decades (e.g., Lee & Woodhouse 1970). Apart from the inherent difficulties with induction and categorization, it is important to ask why the notion of rock art as a reflection of ‘daily life’ – with its alleged scenes and events – is so seductive to so many researchers. The idea is convenient: if features or distortions of rock art images do not point distinctly to supernatural elements, it is easy – but often erroneous – to place those images into the ‘bottom line’ category of ‘daily life’. Indeed, researchers often neglect to demonstrate the quotidian status of images as much as they have to demonstrate supernatural contexts (Lewis-Williams 2006: 355).

Jackson (1938: 464) continues by stating that: “No interpretation can be accepted finally as scientifically accurate that has not been verified by comparison with the habits, customs and symbolism of the historic Indians of the region.” Unfortunately, the optimism generated by this teasing statement is quashed in the next paragraph (Jackson 1938: 464; my emphasis): “Since the Texas Indians were driven out of the state more than 50 years ago, and before any scientific interest in ethnology had appeared in Texas, *or elsewhere* for that matter, the opportunity for such comparative study is gone.” In a few words, and drawing heavily from Steward, Jackson appears to dismiss all ethnological (and ethnographic) work undertaken prior to the 1880s as unscientific, and all such work since as irrelevant! The possibility of ethnographic analogy is ignored, and it seems that Mallery’s (1893) and Smith’s (1923; 1925) contributions will be deliberately overlooked.

Although Jackson, like all rock art researchers, categorized motifs according to *a priori* concepts regarding the meanings and motivations behind the art – there are

more categories for weapons, for example, than mythical (“Fantastic”) animals (Jackson 1938: v) – he for the most part avoided categorization according to ‘narratives’ or ‘scenes’. Jackson (1938: 464) states:

The pictures were made for various purposes. Many, no doubt, had a ceremonial or religious significance. ... Some of the animal and other figures probably were clan totems or signatures of migratory bands ... Other pictures may have been for the purpose of recording personal exploits of bravery in battle or prowess in the chase. ... It is possible that some animal pictures may have been drawn to serve as charms, or in the practice of sympathetic or imitative magic.

Here, Jackson cites most of the purported motivations for the creation of rock art in Europe, South Africa, Australia, and worldwide; interestingly, religious impetus heads his list despite the fact that – as in Steward’s work – it was downplayed throughout the previous 463 pages. Even the most sceptical researchers of the first half of the nineteenth century, it seems, acknowledged the *essentially religious nature of rock art*.

Jackson (1938: 465) concludes his section on “Meaning, purpose and importance” by suggesting that rock art designs be considered alongside those on pottery as a diagnostic tool:

The local differences and “styles” indicate a special significance for many of the design elements. These, showing up amid the styles of adjacent regions, often bespeak migration and thereby supplement archaeological evidence in tracing race and culture movements.

This return to the importance of Boasian diffusionism – and implication that not only pots but also rock art designs equal people – in turn leads to another discussion on universality and, once again, the complementary and profound implications regarding the applicability of ethnographic analogies. According to Jackson (1938: 465), the widespread distribution of many design elements throughout not only the Greater Southwest but also into Middle and South America “means a *widespread distribution of fundamental common ideas and concepts*. These facts illustrate beautifully

and, perhaps, more forcefully than any other line of study could, the *fundamental unity in the prehistoric civilizations in the Americas*.” Despite the aridity of the empiricist agendas prevalent at the time, and his own admission (Jackson 1938: 473) that he was more interested in documentation (as a form of preservation) than interpretation, Jackson emphasizes the high probability that a) *fundamental common ideas and concepts* were extant throughout much of the Americas, and b) at least some of the rock art was connected with indigenous beliefs and worldviews.

Before addressing the next publication featuring the rock art of west Texas – Kirkland & Newcomb’s 1967 *The rock art of Texas Indians* – I consider the impact of other prominent rock art researchers in North America in the 1930s and beyond, and assess their contribution to the increasingly professional academic discipline.

Luther Cressman, who published extensively on Oregon rock art, was influenced by both Boas’s historical particularism (e.g., Cressman 1937: 74) and also Steward’s ecological approach. Like Steward, and also Jackson, Cressman mapped motif distributions and attempted to identify distributional patterns. To Cressman especially, prehistory was essentially a diffusionist question, and it was he who introduced the concept of the ‘style area’ in rock art studies. I discuss style in more detail below, asking whether rock art regions should be defined according to aesthetics, or by the presence or absence of motifs.

Cressman also ignored ethnography. He agreed with Boas and Steward that meaning – defined primarily as ‘historical relationships’ – would eventually ‘emerge’ by carefully comparing proximal traits (Whitley & Clottes 2005: 171). Cressman argued that there was no need for ethnographic consultants because they were unable to answer questions about historical relationships, migrations, and diffusions. Researchers were less and less interested in the symbolism, function, or meaning of the art.

These circumstances would usually be wholly acceptable; there is nothing illogical about excluding analytical approaches that cannot answer the kinds of questions a researcher raises. But, as David Whitley & Jean Clottes (2005: 172) make clear, in Cressman’s case, he reified Steward’s “false and illogical claim that Native

Americans knew nothing about rock art". This reification has ever since provoked severe social and political controversies.

The advent of World War II precipitated the end of the primary era of American salvage ethnography. Prominent and regional *archaeologists* such as Cressman and Jackson had begun to develop more of an interest in rock art – it was, after all, a form of material culture and present at many of the excavated sites. Slowly, rock art was increasingly seen as more archaeological than anthropological. Unfortunately, as we saw with Jackson, the empiricist theoretical framework that dominated archaeology from the 1930s was not conducive to discovering the motivation and meanings behind the production and consumption of rock art. In any case, few researchers were interested in discovering those motivations and meanings. As a result, almost all rock art studies continued to be relegated to the margins of academic investigations.

Even when rock art research was considered an *anthropological* topic, it was never a central one. Ironically, anthropologists – who were more concerned with linguistics and social relations – marginalized rock art in their studies because it was clearly a kind of material culture, and therefore *archaeological*. Kroeber (1925), for instance, discussed rock art only in the final chapter of his book; and Harold Driver (1937) asked informants about the origins of motifs but relegated rock art to his "Archaeological residuum" category (Whitley & Clottes 2005: 170). Even more surprisingly, Boas's (1927) *Primitive art* rarely mentions petroglyphs or pictographs. Despite this, it is important to note that Kroeber (1925) was the first to suggest that Californian Chumash rock art was probably shamanistic in origin and also that it depicted hallucinatory imagery (Chapter 5); Driver (1937) also quoted an indigenous informant who stated that rock art represents the spirits that a shaman perceives in the supernatural world (Whitley 2006: 1).

Worldwide, empiricist archaeologists grew increasingly concerned with lithics, stratigraphy, typology, and 'systematic science'. In rock art studies, stratigraphy could – and still can – be replaced by 'superpositioning' of images, and typology by (Cressman's) 'styles'. If rock art researchers in the 1930s and beyond wished to enter the professional archaeological fold, they had to emulate lithic researchers and produce 'objective' sequences and the accompanying graphs, histograms, and

statistics. Even these tactics – and the adoption of quantitative studies – could not promote rock art to a central role in the archaeological discipline; because its meaning was considered self-evident – illustrative of daily life and, increasingly, of gastric and ecologically adaptive needs – there was no need to study it in depth. Rock art was seen as nothing more than a diverting and parenthetical aside.

An example of the consolidation of the simplistic gastric hypothesis is provided by John Goodwin's 1953 handbook *Method in prehistory*. The South African Goodwin (1953: 128) reaffirmed a popular notion concerning European Upper Palaeolithic cave art: "Primitive art expressed man's most insistent need; to the hunter this meant fresh, tender meat." Indeed, the middle decades of the twentieth century saw the entrenchment of the complementary and much lauded notion of 'hunting' – or 'sympathetic' – magic: the vaguely defined idea that the production of rock art ensured a successful hunt.¹⁶ Before and after World War II the influential Abbé Henri Breuil (1948; 1955) was a keen proponent of this putatively self-evident and all-encompassing explanation for the production of much of the rock art in Europe. As early as 1953 Goodwin (1953: 127) referred to the approach as being "much-overworked".

In the far west USA, Robert Heizer and Martin Baumhoff championed the hunting magic explanation throughout the 1960s. Earlier in his academic career, and in stark contrast to Steward and Cressman, Heizer (1953) had hinted at the potential value of ethnographic research while investigating the pit-and-groove cupule rocks of northern California. Indeed, he demonstrated that Native Americans had made the pit-and-grooves in the recent past. Similarly, he used ethnography to suggest (in an unpublished document) that certain Nevada petroglyphs were related to shamanistic vision-questing (Whitley & Clottes 2005: 173). By 1962, however, Heizer began to develop the argument that Numic-speakers' rock art sites in the Great Basin were almost always found on migratory animal game trails – a claim that Whitley (2000) and others later discredited – and, ultimately, that the rock art itself would influence the outcome of hunting expeditions. Exercising faulty logic, Heizer & Baumhoff (1962) asserted that Great Basin rock art must pre-date the ethnographic

¹⁶ Sympathetic magic is defined as "primitive or magical ritual using objects or actions resembling or symbolically associated with the event or person over which influence is sought" (*Oxford English Dictionary*).

period because hunting magic, as a motivation for creating the images, was categorically denied by all Native American consultants. The complementary suggestion that pit-and-groove rock art was the earliest form of art in the far western USA contradicted what Heizer had published in 1953. As Whitley & Clottes (2005: 173) make clear, “Ethnography and its implications had been eliminated in the direct and indirect sense.”

Why did the hunting and sympathetic magic models dominate rock art research for so many years, despite the lack of panels depicting animals impaled by weapons?¹⁷ Partly, I argue, because of the individual researchers’ academic dominance; partly because, contrary to Cressman and others before, here at least was an attempt to suggest possible motivations behind creating rock art; and partly (perhaps most importantly) because the model fitted the theoretical bias of Americanist archaeology during the middle decades of the twentieth century: hunter-gatherers were concerned with food and ecological adaptation. Leslie White’s definition of culture as man’s extra-somatic (or exomatic) ‘means of adaptation’ had been adopted in the 1960s by Lewis Binford and other proponents of the New Archaeology – which originally, and ironically, championed anthropological research – and it followed that ritual necessity, symbolism, and art would be closely tied to the food quest. According to Whitley & Clottes (2005: 173):

Since art and belief from this perspective were epiphenomenal, the only way to make them intellectually palatable as a research topic was to reduce them to an aspect of diet.

So much for nuances in meaning and purpose!

Almost thirty years elapsed between Jackson’s pioneering work in the 1930s and the next publication featuring rock art from west Texas. The fieldwork that resulted in stunning colour reproductions of scores of sites in Kirkland & Newcomb’s 1967 *The rock art of Texas Indians*, however, was conducted by an artist, Forrest Kirkland, between 1934 and 1941. William Newcomb did not write the text until 1966.

¹⁷ In the South African Drakensberg, for example, Pager (1971) identified only 29 ‘hunting scenes’ in 3909 individual paintings, and only one animal has been hit with an arrow.

Compared with Jackson's *Picture-writing of Texas Indians*, Kirkland & Newcomb's volume brought a change in North American terminology: by the 1960s, "picture-writing" had become "rock art". More important were the major but unfortunate developments in archaeological theory outlined above. Given these wide-ranging shifts, and the continued lack of interest in ethnographic research, it is no surprise that Newcomb repeatedly suggests (e.g., Kirkland & Newcomb 1967: 30) that the meaning of the rock art in Texas is self-evident: hunter-gatherers' "favorite subjects ... were also apparently the principal game animals in their diet". Despite this suggestion, and the predominance of ecological adaptive theories, Newcomb attributes the motivation behind at least some of the rock art as religious.¹⁸ It is, at times, difficult to grasp the logic underlying the conflicting hypotheses.

By considering Newcomb's attitude towards 'primitive' hunter-gatherers living 'close to nature', we can perhaps understand why researchers were reluctant to engage with ethnographic sources. According to Kirkland & Newcomb (1967: 15), because prehistoric groups in Texas were "too isolated and provincial", they apparently had no "wealth of artistic diversity and choice to draw upon". This provincial isolation and the lack of artistic precedents seems reason enough for interpretive despair, but, instead, Kirkland & Newcomb (1967: 15) considered it a boon for researchers: the art is "less encumbered, less complex, and its basic nature is more easily perceived". Here again is an unsubstantiated claim that the meaning of the rock art is largely self-evident.

Similarly, according to Kirkland & Newcomb (1967: 17), early man in Texas also needed "entertainment" in addition to food. Thus, rock art "turns a drab and cheerless existence into one charged with drama and excitement"; without specific evidence, this circular argument – found in many countries as a 'gaze-and-guess' extension of the ill-defined and unhelpful notion of 'art for art's sake' – is patently meaningless.

¹⁸ Kirkland & Newcomb (1967: 65–80) discuss the possibility of shamanistic societies in the Lower Pecos region at length. Although I agree with Kirkland and Newcomb that many of the human figures there are depictions of shamans rather than depictions of gods, I do not agree with their reasons (see Chapter 5).

Newcomb included a chapter on the rock art of other countries. Upon first encountering European rock art, for instance, viewers apparently ask “Why?” (Kirkland & Newcomb 1967: 31). In contrast (Kirkland & Newcomb 1967: 31; my emphasis), and as a prime example of the pitfalls of the ‘gaze-and-guess’ approach:

[T]he import of Bushman art is quite different. The observer is immediately seized with the realization that this is an art which boldly *reflects the nature* of a Stone Age people. It is an ebullient, effervescent, merry art, recording a life lived joyously as part of and *hand in hand with the natural world*.

By reducing the Bushmen to primitive, albeit sometimes noble, savages living ‘close to nature’, as some kind of early environmentalists, researchers implicitly – and sometimes explicitly – deny modern-day hunter-gatherers their full humanity.¹⁹

Similarly telling is Kirkland & Newcomb’s (1967: 31) statement that: “Inquiries into [the art’s] purpose seem almost superfluous; the viewer is tempted to share its delights rather than wonder at its rationale.” This contradicts a rhetorical question asked by Kirkland & Newcomb (1967: 14) at the outset: “how could the art of any people be anything but a reflection of the physical and cultural world in which they are immersed?” In other words, we *are* able to “wonder at [an art’s] rationale” (Kirkland & Newcomb 1967: 31), and, indeed, Newcomb repeatedly does. He suggests many motivations for creating rock art (e.g., Kirkland & Newcomb 1967: 31), including an ambiguously defined sense of narrative and commemoration, “in the sense that [paintings and engravings] recount events, or tell stories about hunting incidents”. Similarly (Kirkland & Newcomb 1967: 14):

The way peoples exploit their environments, the ways they are organized to make their technological systems work, and the means by which they explain and interpret their experiencing of the world and the cosmos, find expression in their art.

Here, Newcomb hints at more illuminating questions – *How* exactly did early man explain and interpret their “experiencing of the world and the cosmos”? – but is

¹⁹ In Appendix A I consider how agency and the presentation of rock art today influences notions of cultural identity.

rarely explicit as to which paintings depict environmental exploitation, and which, for example, depict worldviews. Kirkland & Newcomb (1967: 16) state boldly that “the cliché that man does not live by bread alone is an understatement”. Referring to mythological beasts, superposition, and the possible sacredness of rock shelter walls in southern Africa, Newcomb opines that “the art was in part a magical or *religious* one, or that the *act* of painting rather than the result itself was important” (Kirkland & Newcomb 1967: 31; my emphasis). This last point is pivotal; I return to it in following chapters.

Recognizing the need to impress proponents of the New Archaeology, Kirkland & Newcomb (1967: 22) suggest correctly that rock art is “amenable to scientific study and analysis just as are spear points, pottery vessels, marriage customs, and political habits”. Moreover, this is true even if rock art is a material residue of ceremonial behaviour (Kirkland & Newcomb 1967: 17):

[M]any rock paintings and petroglyphs are analogous to the fossilized bones ... in that they are all that survives of ancient ceremonies, rituals, and other activities. They are the bare bones of something once fuller and fleshed out.

Newcomb devotes one of his five data chapters to the Big Bend and eastern Trans-Pecos. Commenting on Kirkland’s superb watercolour recreations of 13 sites, Kirkland & Newcomb (1967: 111) refer to the Big Bend rock art as being varied but “less complex” than that of the Lower Pecos, 160 km (100 miles) and more to the east, and suggests that this variety might be due to the diversity of the different peoples who have occupied or passed through the Big Bend through the centuries.

Kirkland and Newcomb (1967: 217) both believed that the “elaborate” rock art of the Lower Pecos was painted for “magico-religious reasons” and that it was clearly “part of ceremonial or cult activities”. Similarly, “there can be little doubt that the paintings are religious art which was part of an Archaic culture’s attempts to influence and gain assistance from supernatural powers” (Kirkland & Newcomb 1967: 80). Why did they not believe the same was true of the rock art in the Big Bend? They noted that at some sites in the Big Bend, because of their location in hard-to-access places, several polychrome paintings “must have represented more than idle daubing” (Kirkland & Newcomb 1967: 135). The same theoretical and

methodological frameworks were employed in each region, and potentially illuminating ethnographic sources for both the Lower Pecos and the Big Bend ignored. Perhaps it was a matter of aesthetics. According to Kirkland & Newcomb (1967: 127), in the Big Bend “the rock art sites are widely scattered and the art rather rudimentary”. Despite earlier comments (Kirkland & Newcomb 1967: 16) about the dangers of interpreting according to aesthetic style, Newcomb suggests that ‘simpler’ motifs (as defined by Western researchers, a dangerous notion in itself) are incapable of possessing the same symbolic depth as more complex ones. This is another key point, and one that I return to in Chapter 5.

In short, despite the inclusion of conflicting and sometimes irresolvable hypotheses, Newcomb raised and addressed interesting issues about the scientific nature of archaeological research, ceremonialism, and regional variations. Many of these topics would be explored in the later decades of the twentieth century, but not before the (unfortunate) consolidation of empiricism and (at last) the epiphany that in order to reach meaningful conclusions about west Texas rock art, meaningful questions had to be asked.

1.3 From empiricism and ecological adaptation towards a heuristic approach: 1970s – 1990s

When Miriam Lowrance took up a lectureship in the Art Department of Sul Ross State University in 1963, only 38 Big Bend and eastern Trans-Pecos rock art sites were known (Lowrance 1998: 119). Between 1967 and her retirement in 1984, Lowrance documented a further 189 sites, bringing the total in Presidio, Brewster, and Jeff Davis counties to 227 (Lowrance 1998: 121). Although her empirical work has been criticized as “unscientific” (Tegarden 2005: 25), in part because her sketches lack scales, Lowrance’s determination to alert people to the rich variety of west Texas rock art sites is admirable. Numerous weekends spent in the field led to the production of over 12,000 individual drawings (Lowrance 1998: 121) and nine articles in *The Artifact*, the journal of the El Paso Archaeological Society (Lowrance 1982a; 1982b; 1986a; 1986b; 1986c; 1987a; 1987b; 1988a; 1988b).

Lowrance (1982a: 11) introduces her first *Artifact* publication with the unambiguous statement that the “purpose of the study was simply to record the art so that it might

be evaluated later”; but despite the quantitative, empiricist framework she often speculates about the meaning and significance of the rock art and its position in the landscape. Her concluding sentence in her introduction (Lowrance 1982a: 11), for instance, refers to chronology, alleged narrative, and access: “Both prehistoric and historic stories were painted for all to see.” Some of the speculation is less cautious: Lowrance (1982a: 126) suggests that a line of dots “perhaps referred to a journey with the number of days or the number of warriors who went along tabulated”. Gaze-and-guess was still the dominant methodology. More importantly, Lowrance catalogued more than 12,000 rock art elements but was still unable to establish “definite patterns of style or migration” (Lowrance 1982b: 174). As Reeda Peel (in press) points out, “the present lack of identification of indigenous as well as intrusive rock art styles in the Eastern Trans Pecos hampers regional rock art researchers”. I discuss this alleged hampering in Chapters 3 and 4.

In contrast to Lowrance, Bob Mallouf, former State Archaeologist for Texas, and the director of the Center for Big Bend Studies (CBBS) at Sul Ross State University from 1995–2008, mentions the rock art of west Texas – and the important fact that it might be a manifestation of complex religious beliefs – in several publications. I consider each in turn.

Remarkably, Mallouf & Tunnell (1977: 45) discovered only one rock art site in their 1973 reconnaissance in the Lower Canyons of the southeastern Big Bend. Even more surprising was the fact that site M-128 is engraved rather than painted. Discussing technique and the regional distribution of rock art, Mallouf & Tunnell (1977: 54) find this particularly perplexing given the impressive array of pictographs in the Lower Pecos only a few kilometres downstream. Importantly, the authors (Mallouf & Tunnell 1977: 54) believe the contrasting patterns are determined by taxonomy rather than “cultural or territorial cohesiveness that might be necessary to spawn a complex art form”. By the 1970s, despite the continuing academic emphasis on environmental adaptation, it is clear that researchers were becoming more and more aware of the complexity of the art. Indeed, rock art was increasingly referred to (e.g., Mallouf & Tunnell 1977: 54) as both “complex” and “sophisticated”.

Although primarily concerned in the 1980s and 1990s with surface finds and archaeological excavation, Mallouf (1993) recorded three rock art sites in the Cienega

Mountains, south of the town of Marfa and immediately north of Big Bend Ranch State Park. In his stylistic analysis, Mallouf (1993: 38) notes the resemblance of the pictographs at Bravo Bluff (41PS567), Three-Shaman(41PS564), and Abraded Rockshelter (41PS565) to those in surrounding regions – including the Lower Pecos to the east, northern Chihuahua (Mexico) to the south, the El Paso district to the west, and the Southern Plains to the northeast. He also posits an affiliation with the (loosely defined) Abstract Style of the Chihuahuan Desert, believed by Polly Schaafsma (1980: 43–54) to have Archaic roots.²⁰ Drawing partly on earlier diffusionist and migratory hypotheses (e.g., Kelley *et al.* 1940), Mallouf (1993: 42) suggests that the rock art in the Cienega Mountains is evidence that the Big Bend was a kind of “cultural crossroads”²¹ – and perhaps a trade and migration route in both historic and prehistoric eras between the Marfa Plain to the north and the semi-agricultural La Junta de los Ríos to the south. (La Junta, or junction, is the confluence of the Rio Grande and the Río Conchos at the towns of Ojinaga and Presidio; see Fig. 1.1 above).

Mallouf (1993) also remarks that, as in the Lower Pecos region, most sites in Big Bend Ranch State Park are pictographs, whereas most in Big Bend National Park are petroglyphs. The possible significance of this pattern – first suggested by Barbara Baskin (1976) in her publication on the Bofecillos Mountains in Big Bend Ranch State Park – is not discussed. More important is Mallouf’s (1993: 7) employment of ethno-historical resources on the Jumano and Cibolo Native Americans. Despite these resources, and the facts that one of the shelters is named Three-Shaman, and Bravo Bluff has a ‘starburst’ or possible “peyote button motif” (Mallouf 1993: 24), Mallouf deliberately avoided a discussion of possible ritualistic attributes in the Cienega Mountains rock art (Mallouf pers. comm.). As evidenced by publications in the 1970s and 1980s (e.g., Mallouf & Tunnell 1977; Mallouf 1981; 1985; 1987), ecological adaptation was considered a far more important archaeological topic until the 1990s. Ritualism, symbolism, and archaeologies of religion were still considered irresolvable, and sometimes even antithetical to the ‘scientific’ discipline of archaeology.

²⁰ Schaafsma’s contribution to Southwestern rock art and archaeology is prolific and laudable; I refer often to her 1980 publication *Indian rock art of the Southwest*. I consider her work and rock art categorization more fully in Chapter 5.

²¹ As early as 1958, Willey & Phillips (1958: 126) suggested that the Trans-Pecos might be a “bridge between the Archaic cultures of the East and the Desert cultures [also Archaic] in the Southwest”.

After the creation of Big Bend Ranch State Park in 1988, and the Center for Big Bend Studies in 1995, archaeological reconnaissance in the area accelerated. A key publication resulting from this work is David Ing *et al.*'s 1996 report. Three pages (Ing *et al.* 1996: 87–89) are devoted exclusively to the 29 rock art sites in the park, and although most of the text is descriptive, potentially interpretive frameworks are mooted and lauded. In the historiography of rock art research in west Texas, this is a pivotal moment.

For instance, after noting the presence of “shaman-like figures” with raised arms and “eared, single feathered, or horned headdress”, and also the “intentional omission” of various elements, Ing *et al.* (1996: 89) champion the recent move away from evolutionary and ecological explanations towards more illuminating anthropological perspectives. They cite David Whitley & Larry Loendorf's (1994: xv) belief that:

New fields of inquiry are opening in semiotics, gender studies, and neuropsychology and, in fact, these new explanatory approaches have placed rock art studies at the forefront of hunter-gatherer research.

A century after Mallery's pioneering research, it seemed that researchers had come full circle. Unfortunately, however, the explanatory approaches championed by Whitley & Loendorf (1994: xv) were not fully addressed until the twenty-first century (below). Four of the eight papers in Sheron Smith-Savage & Mallouf's (1988) edited volume are concerned with regional surveys and the definition of styles according to aesthetics. Importantly, five of the papers focus on the rock art of northern Mexico (e.g., Sayther 1998), a region studied even less than west Texas (but see Turpin 2010). Fish & Fish (1994: 6), stressing the inappropriate and artificial concept of the Rio Grande as a barrier, state that:

Cultural interrelationships that span the southern Southwest of the United States and northwestern Mexico are of a nature and scale transcending individual archaeological cultures, ethnic identities, or linguistic affiliations during any period of history or prehistory. The area can be culturally defined as an analytical entity by means of broad contrasts with neighboring areas, although boundaries are variable over time, consistently permeable, and always subject to exceptions.

Recognizing the permeable nature of the Mexico-USA border, Francisco Mendiola Galván and Polly Schaafsma (1998) collaboratively surveyed parts of Chihuahua (Mexico) and New Mexico (USA) in the mid-1990s and defined a new style (Paquime) south of the border. As we shall see in Chapter 5, to Schaafsma (e.g., 1980), because styles – defined by aesthetics *and* the presence or absence of motifs – are indicative of natural and cultural contexts, and because human behavior is patterned and not capricious, “it is possible to develop hypotheses of the ideologies and world views of the diverse groups that created the styles” (Mendiola Galván 1998: 9) – bearing in mind that hypotheses inevitably come *before* categorization. Schaafsma (1998: 33) states that the location of the Paquime style sites at or near springs suggests a “symbolic perception and ritual use of the landscape” away from the monumental architecture of nearby Paquime or Casas Grandes. Schaafsma also suggests that the Paquime style is a product of the Casas Grandes culture, and part of a broader Jornada-esque style that extends into New Mexico from the south.²² Others (e.g., Lazalde Montoya 1987: 158–160) have suggested that quartered cartouche designs, for example – also present at several sites in the Big Bend (Chapter 3) – are perhaps symbolic “renderings of cosmic concepts” that spread north from Mesoamerica. Clearly, it is possible to make successful interpretive advances within a diffusionist framework, providing effective ethnographic analogies are made. Schaafsma’s anthropological analyses in particular – along with those of others such as Whitley, Loendorf, and Turpin²³ – has encouraged meaningful questions and thus spurred significant heuristic research in the new millennium.

1.4 Problem-oriented and interpretive research in the twenty-first century

In the last ten years, Mallouf and colleagues have published several short articles on the rock art of the Big Bend and eastern Trans-Pecos. Two (Mallouf 2001; Jensen *et al.* 2004) focus on the documentation and dating of the spectacular polychromatic Tall

²² Casas Grandes was a major redistribution centre of the Gran Chichimeca in north-central Chihuahua (Mexico) during the Late Prehistoric period (Di Peso *et al.* 1974; Fagan 1995: 343–344; Schaafsma & Riley 1999; Cloud 2004: 3–4). The Mogollon people, including the Jornada branch, lived in the high-altitude deserts of the Greater Southwest through the first and into the second millennium AD (Schaafsma 1980: 183–186). See Chapter 2.

²³ Solveig Turpin *et al.*’s (1998) article addresses the ritualistic origins of another style (Chiquihuitillos) in northern Mexico.

Rockshelter in the Davis Mountains, and several others (e.g., Mallouf 2007; 2008; 2009) summarize rock art research conducted under the auspices of the Trans-Pecos Archaeological Program. Most remarkable, however, is Mallouf's (2002) *Musings on Trans-Pecos rock art*.

This short article is important because it explicitly addresses why archaeologists in the Trans-Pecos largely ignored rock art for so many years. According to Mallouf (2002: 1) there was "little or no ... analysis, interpretation, or development of theory" in earlier decades because archaeologists feared potential accusations of "ignoring the scientific method". Obsession with typology and empiricism has indeed cast a long shadow, despite Kirkland & Newcomb's (1967: 22) suggestion in the 1960s that rock art is "amenable to scientific study and analysis just as are spear points, pottery vessels, marriage customs, and political habits".

Mallouf (2002: 1) believes that a "seemingly insurmountable problem" in the study of rock art in the Trans-Pecos, and, indeed, "virtually everywhere else, has to do with association and dating. ... From an interpretive standpoint, rock art has tended to float in time and space." This statement once again raises important issues regarding rock art regionalism, suggesting that if we cannot relate the art of specific regions to buried cultural deposits, the artists will remain "mysterious and unknown" (Mallouf 2002: 1). Perhaps this is indeed the case when researchers attempt to identify individual artists – another persistent and particularly Western concern – but if we consider broader groups, the statement is less convincing. Despite the lack of firm chronological sequencing and control in South Africa, for instance, we know that the San produced almost all of the sub-continent's prehistoric art – and we can identify motifs that were made by groups *other than* the San (Chapter 4). Indeed, with ethnographic insight, even though we may not be able to pinpoint a specific group, the artists are neither entirely mysterious nor entirely unknown. Dating usually only becomes a primary concern when ethnography is lacking.²⁴ Mallouf (2002: 1) rightly acknowledges the limitations of relating style and aesthetics with "a few poorly-known prehistoric cultures", but does not elucidate whether the limitations stem from problems inherent in such a notion, or from the

²⁴ Although it is easier to radiocarbon date pictographs (in essence, material added to the rock) than petroglyphs (material removed), the process is often prohibitively expensive and nearly always controversial (Chippindale & Taçon 1998; Rowe 2001; 2005; Whitley 2005: 67).

fact that the prehistoric cultures are poorly known. I argue that the inability to accurately date rock art is not as debilitating as some researchers would have us believe.

Mallouf (2002: 1) rightly acknowledges the contributions of several rock art “aficionados” who have devoted a large part of their academic careers to the relationship between shamanism and the origins of rock art: namely, David Whitley in California, David Lewis-Williams in South Africa and Europe, and, more briefly, Solveig Turpin and Carolyn Boyd, both of whom work in the Lower Pecos region of Texas. I discuss the utility of the neuropsychological models and shamanistic theories developed by Lewis-Williams & Thomas Dowson in more detail in Chapters 5 and 6; I believe that in association with embodiment theory (Chapter 7) they are the most useful frameworks for understanding the rock art of the Trans-Pecos.

The most recent substantial study of west Texas rock art is an unpublished Masters thesis (Tegarden 2005) that focuses on seven petroglyph sites in the southern Big Bend, four of which are in – or immediately adjacent to – Big Bend National Park.²⁵ Andrew Tegarden studied both anthropology and archaeology as an undergraduate at Sul Ross State University but deliberately adopts an aesthetic, art historical approach to rock art. In the second half of his thesis he ambitiously attempts to situate prehistoric engravings within the broader sweep of human artistic development, with particular reference to modern twentieth-century Western art. Tegarden (2005: 3) rightly explicates the difference between, on one hand, art in Western museums and art galleries, both of which “sanction art off from the natural world”, and, on the other, art in its original landscape setting – or, to employ modern art parlance, art that is patently *site-specific*. I discuss the display and consumption of rock art by the public in more detail in Appendix A.

In the first half of his thesis, Tegarden (e.g., 2005: 1, 22) is interested in interpreting the origins – the “psychological impetus” and neurological sources – of rock art, but thereafter attempts at archaeological interpretation end. Because “only indirect ethnography exists” in the Big Bend, Tegarden (2005: 2) explicitly does not try to “determine the meaning or purpose of the petroglyphs”. Any attempt to attribute the

²⁵ One of the sites, Indian Head (41BS23), is on an interpretive trail that leads to and from the park boundary. See Chapter 3.

rock art to a limited time period and cultural group would apparently – and echoing Newcomb and earlier researchers – be “only conjecture” (Tegarden 2005: 2).²⁶

In an interesting section on the use of ethnography worldwide, Tegarden (2005: 21) rightly cautions against the use of naïve ethnographic ‘snap’, but confuses inference and interpretation:

Whatever the case, the role that rock art played in these respective cultures [including, e.g., Californian Native Americans and southern African San] can only be *inferred* through ethnographic methods, and not solidly interpreted.

This misunderstanding of the nuances of hypothesis testing, inference, and ‘proof’ leads (Tegarden 2005: 17–18) to support a combination of stylistic and statistical approaches:

Rock art can be categorized on the basis of definable types such as mediums, colors, size ranges, motifs, compositional relationships, and other qualities. ... Style can be approached somewhat scientifically when a typological and/or taxonomic system is employed. It is human nature to classify, and if not by chronology, it is by type. As types are defined, it is possible to discuss type association and distribution. However, if conclusions are based on style, false conclusions can result.

The last line is key. Meaningful conclusions cannot be reached unless meaningful questions are asked. For this reason, Schaafsma (1980: 8) prefers to look at styles within ‘interaction spheres’, which, in turn, can be used to describe regional configurations in an archaeological context; both result from a “panregional information exchange network. ... A shared repertoire of rock art elements, figure types, figure complexes, and aesthetic modes – hence *style* – thus signifies participation in a given ideographic system and, in turn, in a given communication network.” A crucial question remains: What is the goal of a researcher when he or she defines rock art regions according to aesthetic style, rather than the presence or absence of motifs? The usual answer is: “So we can ask more specific questions in the

²⁶ Somewhat contradictorily, Tegarden (2005: 116) later defines how the petroglyphs are “meaningful ... by describing their intrinsically artistic characteristics”.

future, and answer them by referring to the stylistically defined data sets.” Often, such arguments become circular, for, as David Penney (2004: 44) asks, “If objects define culture, how then could I find a plausible cultural context for study of the objects?”; the word ‘objects’ can easily be replaced with ‘styles’, and the problems of circularity are patent.

One of Tegarden’s (2005: 35) primary questions, *pace* Lowrance and Peel, is: Does a style or set of styles exist in the petroglyphs of the Big Bend? Given that the production of human artefacts is never entirely random or capricious, whenever this question is posed the answer is inevitably yes. Because archaeological data sets can *always* be categorized in an infinite number of ways, there will always be definable sub-styles, and sub-sub-styles, until we are left with individual rock art elements.²⁷ Tegarden’s (2005: 35–36) solid empirical work led to a list (with frequencies) of “common motifs” including “long meandering lines, circles, dots, even-sided crosses, interconnected chaotic lines, dumbbells, rakes, stick-figure anthropomorphs, yoke-like forms, and bird track-like forms ... commonly arranged in large, well-composed panels”. Many of these descriptions – for example, “chaotic” or “well-composed” – are subjective, as Tegarden himself acknowledges. From an archaeological perspective, other than declaring that these motifs collectively constitute a new style named ‘Big Bend Abstract Petroglyphs’, few conclusions are offered.

Towards the end of the thesis, the emphasis shifts to the relationship between rock art and art history. Tegarden (2005: 27) states that:

Art history is the neglected side of rock art research. When it is considered at all, it is discussed only minimally. ... Paleolithic cave art is often discussed in comprehensive art history surveys, but only limitedly.

Tegarden’s words in the first sentence could, therefore, be reversed: rock art is neglected by art historians. In schools and universities, Art History’s primary concern is *still* the story of Western art; rock art is usually just a “convenient introductory device” which tantalizes archaeologists and “fascinates students of

²⁷ Another researcher currently working on the definition of Trans-Pecos sub-styles includes Tim Roberts, who works for Texas Parks and Wildlife; see Chapter 3.

aesthetic form” (Dowson 2007: 50).²⁸ As Tegarden (2005: 27) points out, indigenous groups often lack a term for ‘art’; I discuss this further in Chapter 7.

Importantly, when Tegarden (2005: 28) interrogates the *function* of art from an art historical viewpoint, he comes close to the avowedly taboo notion of *meaning* by suggesting that aesthetic considerations were “less important” than others, including “conveying information, taking part in a ritual exercise, or making political or social statements” (Penney 2004: 10). Rock art is truly a *work* of art, with affective power – the capacity to “focus attention, enhance memorability, or increase ritual efficacy” (Berlo & Phillips 1998: 7; see also Boyd 2003: 5–8). The potency of rock art images is a key consideration in my use of specific methodologies and hypotheses.

Tegarden’s (2005: 36) final and most interesting overarching question addresses cultural and artistic identity. By answering the query “What are the significance, implications, and ramifications of [rock art] styles for people today?”, Tegarden (2005: 36) correctly claims to have made a “contribution to art history, theory and criticism”. Because the hard-wiring of the human brain has remained relatively unchanged for thousands – if not tens of thousands – of years (Mithen 1996; Glynn 1999; Newberg & d’Aquili 2001), modern artists today produce similar motifs and employ many of the same techniques used in the creation of prehistoric petroglyphs in the Big Bend. I develop this crucial argument further, but from an anthropological perspective, in the section on neuropsychology in Chapter 5.

Having charted academic and theoretical developments in Texas and beyond, and demonstrated that rock art research helped shape the disciplines of cognitive archaeology and anthropology, I turn now to the archaeological features and people of the Trans-Pecos (Chapter 2), and then to the rock art itself (Chapter 3).

²⁸ Dowson (2007: 50) also points out that ‘grand’ narratives of art do “more to justify the present than provide any understanding of the ‘past’, or the ‘other’”. Rock art can be and is used for socio-political negotiations in both the past and the present (Appendix A).

CHAPTER 2

Archaeology and people of the Texas Trans-Pecos

2.1 *The eastern Trans-Pecos core study area: geography and culture*

2.2 *Geology, flora, and fauna*

2.3 *People and artefacts through time*

Paleoindian period, c. 10000 – 6500 BC

Archaic period, c. 6500 BC – AD 700

Late Prehistoric period, c. AD 700 – 1535

Historic period, c. AD 1535 – present

In Chapter 1, I outlined the aims, omissions, and successes of rock art research in North America, the Greater Southwest, and west Texas. I turn now to the archaeology and people of the Trans-Pecos, focusing on the *eastern* Trans-Pecos and topics that interlace with study of the region's rock art. I also introduce and develop concepts of historiographical and archaeological regionalism, and consider how these concepts and the regions themselves change over time, before addressing (in Chapter 3) the corpus of Trans-Pecos rock art and my fieldwork of 2008 and 2009.

Apart from minor re-arrangements (Mallouf 1985; 1999; 2005; Cloud 2004), the general framework for Trans-Pecos culture history has remained essentially intact since the 1930s, partly due to the paucity of data and limited excavations (cf. Kelley *et al.* 1940; Kelley 1951; 1966; Suhm *et al.* 1954; Lehmer 1958; Newcomb 1961; Campbell 1970). Unfortunately, cognitive archaeological approaches to the cultural material of the Trans-Pecos are also scarce, or marginalized. Nonetheless, it is important to consider the environmentally-driven time-space 'grid', not least because rock art discoveries and analyses are (unhelpfully) supposed to 'fit' or 'confirm' the stratigraphic work that led to the grid's formulation. Although I challenge this supposition – the study of rock art in itself can and does yield important information about the past – in following chapters I employ the general Trans-Pecos culture-history framework in order to ask and answer questions about the significance of the region's rock art.

2.1 The eastern Trans-Pecos core study area: geography and culture

The eastern Trans-Pecos region of Texas comprises approximately 80,000 sq. km (31,000 sq. miles) of the northern Chihuahuan Desert, extending from the New Mexico state boundary and the Guadalupe Mountains in the north to the Rio Grande in the south, and from the Salt Basin in Hudspeth County in the west to the Pecos River in the east (see Fig. 1.1). These borders are of course in many ways both capricious and flexible – prehistoric inhabitants of this culturally dynamic region would not have considered the eastern Trans-Pecos ‘bounded’. Certainly, cultures and cultural remains occur on continuums with ill-defined bounds, and any temporal or spatial divisions drawn up today are necessarily arbitrary; in order to deal with vast amounts of information, however, researchers impose artificial divisions onto the remaining material culture that is both available and accessible (Ohl 2008: 1).

The boundary between the western and eastern Trans-Pecos is certainly contested but, *pace* Miller & Kenmotsu (2004), most researchers agree from an interpretive standpoint – at least at certain points in time – that the eastern Trans-Pecos includes at least part of the Salt Basin in Hudspeth County and perhaps parts of the Sierra Diablo and Van Horn Mountains to the west (Mallouf 1999: 9–10).¹ Similarly, *pace* Shafer (1986), most researchers (e.g., Bement 1989; Turpin 1996a; 2004; Ohl 2008; Peel in prep. b) suggest that the eastern Trans-Pecos stretches east to the Pecos River, despite the presence of Pecos River Style rock art at certain sites – including Meyers Springs, Chapter 3 – in the eastern portion of Terrell County.

The Lower Pecos region, east of the Pecos River, is justifiably famous; it contains a vast array of colourful pictographs, mostly from the Archaic era (Jackson 1938; Taylor 1948; Gebhard 1965; Kirkland & Newcomb 1967; Kelley 1974; Shafer 1986; Bass 1989; Turpin 1990; 1994; 1995; 2001; 2004; Boyd 2003). The Pecos River style pictographs (c. 2100 – 1200 BC) include ritualistic anthropomorphs, often with elaborate paraphernalia, zoomorphs, and geometric motifs (see, e.g., Kirkland & Newcomb 1967; Turpin 2001).

Importantly for concepts of archaeological regionalism in the Greater Southwest, both the eastern and western boundaries of the eastern Trans-Pecos have been

¹ Even when less land is included (e.g., Miller & Kenmotsu 2004), the eastern Trans-Pecos comprises at least 57,000 sq. km (22,000 sq. miles).

defined in part according to the presence or absence of certain rock art motifs. Indeed, from c. 1,000 AD, if not earlier (Sutherland 2006: 12; Wiseman pers. comm.), the *western* Trans-Pecos is characterized by the agriculturalist Jornada Mogollon culture and its artefacts such as pottery, pithouse villages, and, above all, rock art. As we shall see in following chapters, western Trans-Pecos petroglyphs and pictographs include ‘mask’ motifs, ‘stepped-fret’ and ‘blanket’ designs, and other evidence of Mogollon and Mesoamerican influences such as Tlaloc, Quetzalcoatl, and other supernatural figures (Martin & Plog 1973: 277; Schaafsma 1975; 1980: 183–186, 198; 1992: 60–72; 2003: 8; Plog 1997; Schaafsma & Riley 1999). The Mogollon later formed the nucleus of many of the Puebloan peoples in the Greater Southwest, including the Hopi and Zuni with their *kachinas*, or deified supernatural beings.² Persistent rock art motifs and iconography from other media also confirm the link between the two peoples (e.g., Schaafsma & Schaafsma 1974; Schaafsma 1975; 1980; 1992; 1994a; 2003; Sutherland 1998; 2006; Schaafsma & Riley 1999; Walter & Fridman 2004).

2.2 Geology, flora, and fauna

Geologically, the Trans-Pecos is complex, with strata ranging from the Precambrian to the Cenozoic; there are igneous and limestone plateaus and outliers, and elevations ranging from broad desert basins (550 m or 1800 ft) to tree-clad mountain peaks (2590 m or 8500 ft) (Mallouf 2005: 220). Most of the mountains lie essentially along a north-south axis. The Rio Grande and Pecos Rivers are the largest and only perennial streams in the region, but there are numerous springs. At the lower elevations there are common plant assemblages of the Chihuahuan Desert Basin-and-Range physiographic province; creosote (*Larrea tridentata*) thrives in the basins, but in the foothills are desert succulents such as sotol (*Dasylirion* sp.), lechuguilla (*Agave lechuguilla*) and other agaves, prickly pear (*Opuntia* sp.) and yucca (*Yucca* sp.), as well as ocotillo (*Fouquieria splendens*), bear grass (*Nolina* sp.), mesquite (*Prosopis glandulosa*), catclaw (*Mimosa biuncifera*), buckeye (*Ungnadia speciosa*), chollo (*Cylindropuntia* sp.), and many others. The higher elevations often feature oak (*Quercus* sp.), juniper (*Juniperus* sp.), and piñon (*Pinus cembroides*), and there are a variety of grasses in upland plateau areas such as the Marfa Plain (Mallouf 2005: 221).

² The word *kachina* is of Keres origin and means ‘supernatural’. I consider *kachina*-esque rock art motifs in Chapter 6.

Modern fauna includes several large mammals: mule deer (*Odocoileus hemionus*) and white-tailed deer (*Odocoileus virginianus*), pronghorn antelope (*Antilocapra americana*), mountain lion (*Felis concolor*), black bear (*Ursus americanus*), coyote (*Canis latrans*), bobcat (*Lynx rufus*), badger (*Taxidea taxus*), gray fox (*Urocyon cinereoargenteus*), raccoon (*Procyon lotor*), ring-tailed cat (*Bassariscus astutus*), cottontail rabbits (*Sylvilagus auduboni* and *robustus*), black-tailed jackrabbit (*Lepus californicus*), skunk (*Mephitis mephitis*), porcupine (*Erethizon dorsatum*), and other smaller mammals (Dixon 1987; Davis & Schmidly 1994; Mallouf 2005: 221). Other large mammals once native to the eastern Trans-Pecos but no longer extant include the grizzly bear (*Ursus arctos*), gray wolf (*Canis lupus*), bison (*Bos bison*), elk (*Cervus elaphus*), and possibly mountain sheep (*Ovis canadensis*); recent attempts to re-introduce some of these species to the region have been largely unsuccessful. Also present in the Trans-Pecos are numerous amphibians, reptiles (including land turtles, e.g., *Terrapene ornate*), fish, and insects (Jameson & Flury 1949; Dixon 1987; Davis & Schmidly 1994; Mallouf 2005: 221–222).

I turn now to the traditional chronological divisions in west Texas and briefly outline each era, noting explicitly that, *pace* earlier researchers, divisions such as Paleoindian and Archaic are more temporal than cultural constructs. Throughout the culture-history sequence, similarities among toolkits, for instance, may have been due to common subsistence patterns among socially distinctive peoples, or to a loose affiliation of socially and linguistically related bands; as with similarities among rock art styles, similarities among toolkits do not necessarily indicate a single wide-ranging social or even ethnic group (Mallouf 1999; pers. comm.). Indeed, Mallouf (1999: 78) astutely points out that archaeological and historical constructs such as eras or ‘phases’, even when appropriately applied (e.g., Johnson 1987), “inexorably tie interpretive efforts into a rigid temporal framework based on similarities in artifact styles, while masking our understanding of the very cultural processes and causal factors that we hope to detect”. Similarly, Flannery (1986: 507) reports that we are therefore confronted with a paradox: “the processes we wish to document proceed as a series of logistic curves, while our chronologies are composed of linear phases based on stylistic changes in artifacts that may have little or nothing to do with those processes”. For these reasons, following Mallouf (1999: 78), I use a lower-case ‘p’ for phase (or replace phase with complex), and stress again that the

framework outlined below is a hermeneutic device I use in following chapters to address the significance of the Trans-Pecos rock art corpus. In particular, address the dangers of determining units according to style in Chapter 4.

2.3 People and artefacts through time

Paleoindian period, c. 10000 – 6500 BC

The enigmatic Clovis and Folsom Paleoindian nomadic cultures, defined by lithic technological sequences from adjacent regions, practiced a broad-spectrum hunting and gathering economy (Campbell 1970; Mallouf 1981; 1985; Largent 1995; Mallouf & Seebach 2006; Seebach 2011). The climate in west Texas was significantly wetter than it is today (Mallouf 1985: 16).

There are well known examples of early ‘art’ in adjacent regions, including geometrically incised pebbles at the Gault Site in central Texas (Collins *et al.* 1992; Bradley pers. comm.), and red ochre zigzags on a bison skull at the Cooper Site in Oklahoma (Bement & Carter 1999). Unfortunately, the implication in many overviews (e.g., Tegarden 2005: 7) is that as time progressed, art ‘evolved’ from simple geometric forms to more complex ‘representative’ images; as outlined in Chapter 1, this notion – based in part on Western ideas of aesthetics – is demonstrably false.

Painted and etched pebbles – usually limestone, and dated in the Lower Pecos to c. 6000 BC and through to the Late Prehistoric – were certainly connected with some form of ritualism. Rarely found outside of Texas, decorated pebbles have been recovered from strata in the Trans-Pecos at the Fulcher site (Keller 2006: 3; Walters pers. comm.), at Arroyo de la Presa (Cloud 2004), at Wolf Den (Mallouf 2007: 3), at Bee Cave (Coffin 1932: 24), and other sites (Cloud pers. comm.; Roberts in prep.; pers. comm.; see also Sayles 1935: 68–69; Jackson 1938: 324–328; Jelks 1962: 55–59; Kirkland & Newcomb 1967: 110, plates 66–68; Parsons 1986; 1987; Mock 1987; Lowrance 1987a: 4–5; Turpin 1996b; 2004; Mallouf 2008: 6). I consider painted and etched pebbles and other forms of Trans-Pecos *art mobilier* – including clay figurines and painted bones – in more details in Chapters 5–7.

Archaic period, c. 6500 BC – AD 700

As the climate became warmer and drier, the population of the Trans-Pecos increased (especially after 1000 BC), and although the economy was still broad-based, people relied more upon smaller game and the gathering and processing of wild plant foods – sotol pits and ring middens appear in the Archaic period for the first time (Greer 1965; Mallouf 1985; Cloud 2004). There are sites in almost every ecological niche in the region, and at almost every elevation, from basins to mountaintops (Mallouf 1985; Cloud 2004: 9). Early Archaic (c. 6500 – 3000 BC) and Middle Archaic (c. 3000 – 1000 BC) artefacts include predominantly ‘functional’ tools such as stone dart points, manos (pestles), metates (grindstones), bedrock mortars,³ and hammerstones; bone awls, antler flaking tools, pointed sticks, and dart shafts; agave sandals and agave needles, basketry, cordage, matting, and netting; and also items that were almost certainly connected in some way with rituals, such as rattlesnake rattles and beads made from both shell and stone (Mallouf 1985: 102–115). Most of these artefacts are also found in Late Archaic contexts.

Mallouf (1985: 116) has suggested that in the Trans-Pecos Late Archaic (c. 1000 BC – AD 700), the appearance of central Texas dart point styles (including the Shumla point, discussed below) may in part stem from a temporary increase of moisture that attracted bison herds from the north and east (see also Cloud 2004: 11). (Later, in the thirteenth century AD, bison re-entered the Southern Plains (Mallouf 1999: 81), and, as we shall see in following chapters, there are bison in the Trans-Pecos rock art corpus.) Artefacts dated to the Late Archaic period – in addition to those outlined above – include atlatls (spear throwers)⁴ and attendant weights; throwing/ rabbit sticks, digging sticks, wooden tongs, split-yucca fireboards, cradle boards, and fire drills; agave knives and quids (partially chewed plant fibre); pouches and blankets of rabbit fur and sewed skins; and gourd vessels – many of these artefacts were probably used from Middle Archaic times too, but have not survived, or yet been discovered (Mallouf 1985: 117). There are also rock-lined storage pits, and a marked increase in the number of rock-lined ovens for cooking succulents (Mallouf 2005:

³ I discuss the possibility that bedrock mortars and cupules had more than merely an economic purpose in Chapter 7.

⁴ An atlatl is a straight stick about 80 cm in length with a hook or spur at one end, and a hand grip with notches or finger loops at the other. One or several stone weights were tied to the shaft; a spear, perhaps 1.5 m in length, with a conical depression at the back end, fitted into the hook or spur of the atlatl (Schaafsma 1980: 56–79; Patterson 1992: 44; Turpin 2002: 3).

230). Most interestingly for cognitive archaeologists, there are also flexed burials with burial furniture; occasional caches of dart points; an increasing number of bone, shell, and seed beads; and marine and freshwater shell pendants (Mallouf 1985: 116–127; 2005: 230; Wulfkuhle 1990). Some of these possible indicators of ritualism – indicators that become more prevalent in the following Late Prehistoric period – are found on or near mountain peaks, far from water and other crucial economic resources (Mallouf 1985: 127; pers. comm.).

Towards the end of the Late Archaic, Mogollon groups entered the western Trans-Pecos from the northwest, bringing both ceramics and agriculture (Cloud 2004: 12). There is little evidence that these innovations profoundly impacted the nomadic hunter-gatherer lifeways in the *eastern* Trans-Pecos and Big Bend regions (Mallouf 1985: 127; 2005: 239) – the Mogollon people certainly did not bring their distinctive rock art (below). Incipient agriculture however was probably being practiced as a dietary supplement in certain portions of the eastern Trans-Pecos by AD 200 – 500, at the same time as smaller dart points appear in the archaeological record – importantly, these dart points probably represent the transition from use of the atlatl to the bow and arrow (Mallouf 1999: 60; 2005: 239; Cloud 2004). This transition is also evident in the rock art (Chapter 3).

In addition to the famous pictographs in the adjacent Lower Pecos region, there are also thousands of Archaic era rock art sites and motifs – both pictographs and petroglyphs – throughout the Greater Southwest and northern Mexico (e.g., Schaafsma 1980: 56; 1992; 2003; Turpin 2001: 382, 387).

Late Prehistoric period, c. AD 700 – 1535

The Late Prehistoric is characterized in parts of the Trans-Pecos by the development of more intensive agriculture and the continued introduction of ceramics (especially in the western Trans-Pecos), and the superseding of the atlatl by the bow and arrow. Again, the cultural-historic framework for the Late Prehistoric has been fleshed out according to projectile point sequences (Cloud 2004: 13). Confusingly, almost all of the Late Prehistoric point types have been unearthed in the villages at La Junta de los Ríos (hereafter, *La Junta*; farming is evident here from 1200 AD, if not earlier (Kelley 1952b: 259; Kenmotsu 1994; Mallouf 2005: 241)) and *also* in semi-sedentary and hunter-gatherer contexts in the region, making the relationships and cultural

interactions difficult to untangle. More positively, because excavations have yielded more information about the Late Prehistoric than any previous era, we are in a better position to investigate these relationships and cultural interactions. A danger to avoid is the ascription of undated rock art motifs to this period because of associated archaeological materials (Mallouf pers. comm.).

J. Charles Kelley's later work in the eastern Trans-Pecos (e.g., Kelley 1949a; 1949b; 1951; 1952b) included investigations of Puebloan-esque rectangular and circular pithouses at La Junta, and his seminal Ph.D. dissertation (Kelley 1986) focused on the relationships between what he referred to as settled Patarabueye and nomadic Jumano groups (for approximate geographic locations of tribes, see Fig. 2.1 below).

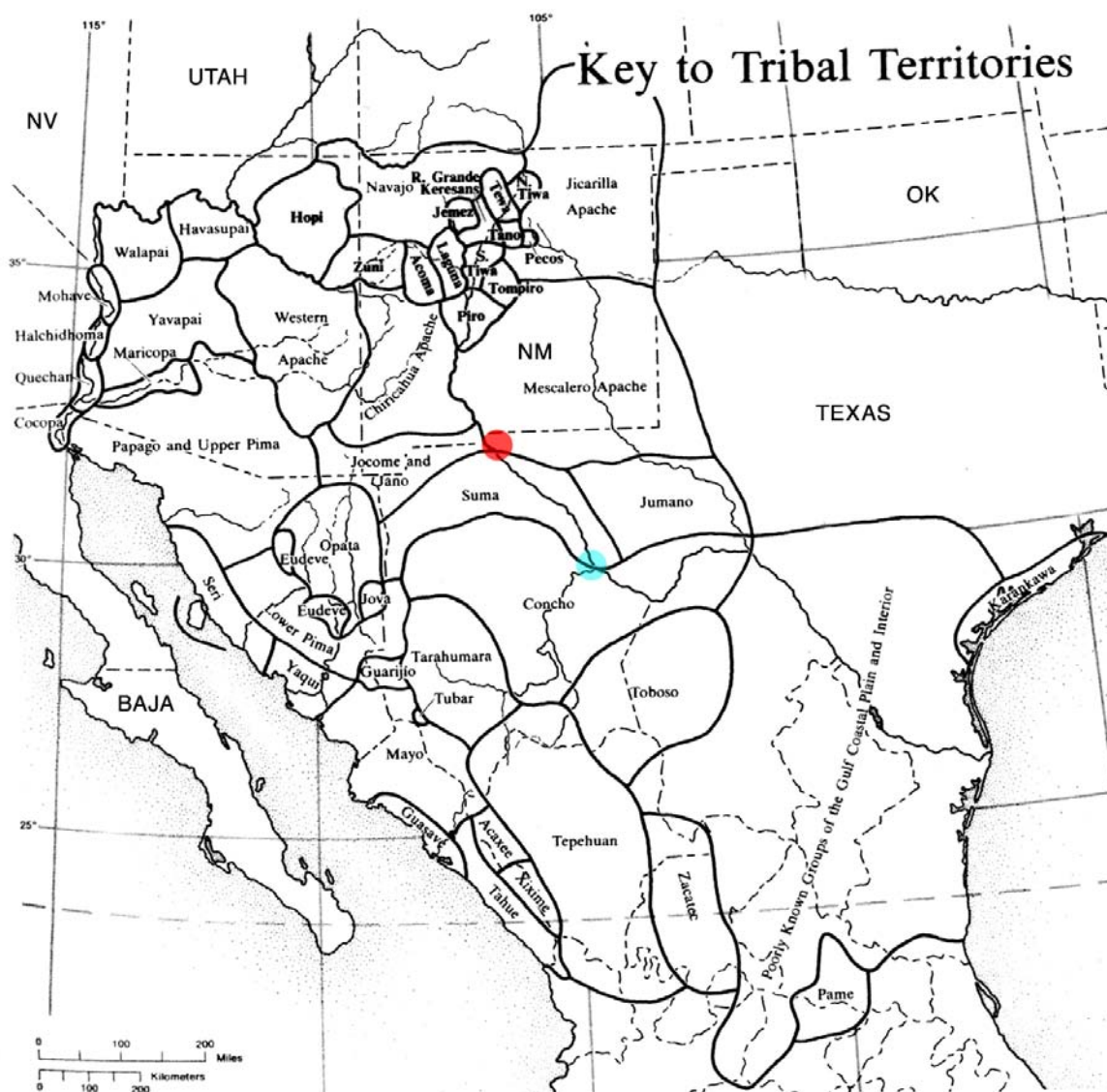


Fig. 2.1 Map of the Greater Southwest from Ortiz (1979: ix). This is a diagrammatic and diachronic guide to tribal territories at the earliest period for which evidence is available, so the ranges of different tribes often refer to different eras. In general, the Puebloan groups (e.g., Hopi, Zuni, Tiwa, shown in bold) are simplifications of 16th century AD locations; surrounding groups (mostly Athapaskan) are approximately as in the 17th and 18th centuries. La Junta is indicated with a blue dot; the Jumano region is immediately to the east. The Jornada Mogollon region surrounded what is now El Paso (red dot); the greater Mogollon area stretched at least 250 km (155 miles) to the north and west.

The Jumano traders, however, are defined by Hickerson (1994: 213) in a broad sense as *semi-nomadic* people who inhabited discrete but socially related territories throughout what is now the state of Texas from the Late Prehistoric until perhaps

the nineteenth century AD.⁵ According to historical records from the sixteenth and seventeenth centuries AD, Jumano presence in the Greater Southwest was certainly “scattered, mobile, and ephemeral” (Hickerson 1994: xiv); there is evidence that the Jumano travelled on foot and on horseback as far as New Mexico and eastern Texas to trade, especially bison goods, bows and arrows, horses, and possibly peyote, in both prehistoric and historic eras (Hickerson 1994: 10–17, 218–219; see also Kenmotsu 1994; 2001; Hämäläinen 2003; and Chapters 5 and 6). It is likely that regardless how sedentary or how nomadic the Jumano people were, they produced at least some of the rock art close to La Junta – but as we shall see in following chapters, there is no distinct Jumano rock art ‘style’.

Throughout his career, Kelley argued that the settled agriculturalists at La Junta were ethnically and socially linked to sedentary (and proto-Puebloan) peoples of the Mogollon to the north and west – there are indeed many similarities to the El Paso phase of the Jornada Mogollon (see also Kenmotsu 1994; 2005). Kelley (1990) believed also that the La Junta villages may have provided food and other products to the people of Paquime or Casas Grandes – as introduced in Chapter 1, a major redistribution centre of the Gran Chichimeca during the late Prehistoric period (Cloud 2004: 3–4; see also Di Peso *et al.* 1974; Fagan 1995: 343–344; Schaafsma 1998).

Partly because of the lack of Jornada or Jumano styles in the rock art in the La Junta and eastern Trans-Pecos regions, Mallouf (1999) adopts a different stance to Kelley, suggesting that the La Junta agriculturalists were *not* ethnically related to the Mogollon; rather, the La Juntans were ‘indigenous’⁶ or possibly Southern Plains groups linked to sedentary cultures through a symbiotic trade relationship. An ethnographic parallel is the Antelope Creek phase people of the Canadian River in northern Texas, who adopted Puebloan cultural aspects from settlements in the west despite being indigenous hunter-gatherers in the Southern Plains – these groups also had a symbiotic trade relationship. Importantly, Mallouf argues that although the La Juntans used Mogollon and other non-local pottery (Kelley 1974: 25–37; Mallouf 1985: 129), and built Puebloan-*esque* structures from jacal placed in pits on terraces along the Rio Grande and lower Río Conchos, the La Junta agriculturalists never

⁵ Whereas Hickerson (1994) considers the Jumano as Tanoan-speakers, others describe the Jumano as Uto-Aztecan speakers; for brevity, I explicitly avoid the ‘Jumano problem’ of linguistic identity.

⁶ As introduced in Chapter 1, the term ‘indigenous’ is often hard to define; see Appendix A.

made the transition to a fully sedentary lifestyle. Instead, their artefacts “reflect a semi-sedentary lifeway with continued strong reliance on hunting and gathering as a means of supplementing their agricultural stores” (Mallouf 1999: 83; see also Seebach 2007: 119).

Kelley’s seminal 1952 paper explored the abandonment of agricultural villages throughout the La Junta district in c. AD 1400, and again, after re-settlement, in later centuries, suggesting that reduced rainfall and other pressures – including ingress of Plains groups, evidenced by rock art (Chapter 3) – were key factors (Kelley 1952a: 382–385; 1990: 39; see also Kenmotsu 1994; 2001; 2005; Cloud 2004: 3). Mallouf (1999: 84), on the other hand, believes that because the La Juntans were only semi-sedentary in the first place, after the collapse of Casas Grandes they simply reverted to a fully hunter-gatherer lifeway, as manifested archaeologically by what he terms the Cielo complex (c. AD 1330 – 1680).

Mallouf (1985; 1999) has recently identified manifestations of this other cultural group – the Cielo complex – in various sub-regions of the Trans-Pecos, and also south of the Mexican border. Dated to the Late Prehistoric and early historic periods, the Cielo complex is an aceramic cultural manifestation often evidenced by “locales of ritual” (Mallouf 1999: 65), including rock art, mortuary sites, and possibly ritual caches. Cielo sites are often located on well-elevated landforms with panoramic views (Mallouf 1999: 65–67; Cloud 2004: 5). Towards the end of the complex, the Cielo toolkit changed, possibly due to the arrival of the Apache and other Athapaskans in the Big Bend and northeastern Chihuahua in c. AD 1650 or earlier (Mallouf 1999: 69–73; Kenmotsu 2001; Kenmotsu & Wade 2002; Cloud 2004: 5).

Discussing complex Trans-Pecos identities, Mallouf (1999: 82, 85, fig. 14) believes that both the coeval La Junta phase and the Cielo complex are possibly ancestral manifestations of the historic period Jumano, and also that all three groups may have ethnic origins among “non-Athapaskan hunter-gatherers” of either the northwestern Chihuahuan Desert region or the Southern Plains. Archaeological evidence and ethnographic analogies suggest “successive southward waves through time of Plains-oriented Indians into adjacent physiographic regions” (Mallouf 1999: 81). As we shall see in following chapters, although it is difficult to match specific

rock art motifs with specific hunter-gatherer groups, broader patterns *can* be identified, especially after the ingress of Athapaskan peoples.

As mentioned above, the relationship between the La Junta agriculturalists – who never fully made the transition to a sedentary existence – and the Cielo complex hunter-gatherers is obscure, but Mallouf (1999: 75) suggests that although the two groups utilized different subsistence strategies, they were ethnically and linguistically related:

This “kissing cousin” model assumes that similarities in material assemblages are due to symbiotic interaction through time between socially distinct, but ethnically related, peoples. Possible ethnographic parallels can be drawn between the nomadic Chisos and the farming Conchos Indians, who are suspected by some researchers (e.g. Griffen 1969) to have had common linguistic and social roots.

As we shall see in Chapter 3, there are no meaningful differences between the lower-elevation rock art sites close to La Junta and the Rio Grande, and the higher elevation Cielo and Livermore sites (see below). I argue that elevation is not a primary factor in determining the meaning of rock art motifs.

Kelley and Mallouf also disagree over the earlier Livermore phase, centred on the Davis Mountains to the north of La Junta. Kelley *et al.* (1940: 162–163) hypothesized that the Livermore phase (c. AD 900 – 1200, possibly beginning earlier and ending later) and its specific new toolkit represented an influx of new peoples, perhaps Plains groups, into the region. Mallouf (pers. comm.), in contrast, has suggested that the group responsible for the ritualistic Livermore phase may, like the La Juntans, have been indigenous; further research is required for any definitive conclusions to be drawn.

Historic period, c. AD 1535 – present

By AD 1535, when Spaniard Cabeza de Vaca passed through La Junta, Spanish settlers were increasingly active in the province of Nueva Vizcaya to the south of the Rio Grande, mainly because of the establishment of haciendas and mines. Gradually, the need for slave labour began to push expeditions farther north. Much of what we

know about the early historic era is the result of Spanish *entradas*, notably those led by de Vaca (AD 1535), Coronado (1540–1541), Rodríguez (1581), Espejo (1582–1583), Sosa (1590–1591), Oñate (1598–1601), Mendoza (1683), and several more in the eighteenth century AD (Bandolier 1890; Hodge 1907; Bolton 1911; 1912; 1916; Hammond & Rey 1929; Sauer 1934; Kelley 1952b; 1986; 1990; Suhm 1957; Newcomb 1961; Griffen 1969; 1979; Mallouf 1985; 1993; Madrid 1992; Hickerson 1994; Ing *et al.* 1996; Kenmotsu 2001; 2005; Krieger 2002; Cloud 2004; Boren 2008).

Unsurprisingly, early ethnographic accounts do not cast indigenous groups in a favourable light. Most suggest that the population was large – there were, for example, thousands living at or near La Junta – and also that, although indigenous groups were relatively peaceful, they were culturally “rude” and “barbarous” (Griffen 1979: 37–38). Other reports reflect the Spanish realization that the region was rich in natural resources. Although none of the early accounts mentions rock art directly, several report the abundance of tattoos and painted bodies, particularly amongst the Suma and Mansos (Hammond & Rey 1929; Newcomb 1961).

As early as the 1570s, indigenous groups were not only acquiring horses and mules at a rate that the Spanish found alarming, but they were also rapidly honing their military skills (Forbes 1959: 193; see also Kenmotsu 1994; 2001; Mallouf 2005: 11). The two major indigenous revolts in seventeenth century west Texas, albeit short-lived and not as effective as the famous Pueblo Revolt in New Mexico, seriously threatened the colonial authorities (Griffen 1979).

By AD 1680, for various religious, political, and military reasons, the leader of the Jumano people, Juan Sabeata, travelled to El Paso to ask the authorities to send missionaries to La Junta. Several forts and missions were built in the vicinity of the confluence; the Spanish recognized its strategic importance, especially now that the Apaches were firmly established in the region (Castañeda 1976: 312; Griffen 1979; Kelley 1986: 26; Hickerson 1994: 127; Ing *et al.* 1996: 29; Kenmotsu 2001; 2005; Kenmotsu & Wade 2002).

According to most researchers, the Jumano disappeared from the written record as a separate identifiable group at about AD 1750 (Hammond & Rey 1929; Kelley 1952b; 1986; Griffen 1969; 1979; Hämäläinen 2003; Kenmotsu 2005; cf. Hickerson 1994); the

implication is that they were either driven from the region by Apaches, or assimilated to form a group now known as the Apache–Jumanos (Ing *et al.* 1996: 35; Hämäläinen 2003: 836). Indeed, a Spanish military map from AD 1773 identifies Apache–Jumanos east of the Pecos River.

Several residents in the La Junta area today are petitioning the US government for tribal recognition. According to these residents, the Jumano people never died out, and to suggest otherwise is insulting and untrue (Fig. 2.2; Madrid pers. comm.). Genetic research shows that 91% of people tested in Ojinaga (just south of La Junta, on the Mexican side of the Rio Grande) have Native American mtDNA (Green *et al.* 2000). Researchers working in west Texas and elsewhere (e.g., Bourdieu 1977; Lamar & Thompson 1981; Giddens 1984; Shennan 1989; Malkii 1992; Miller 1994; Rowlands 1994; Lightfoot 1995; Lightfoot & Martinez 1995: 471; Blundell 1996; 1998; Kenmotsu 2001; 2005; Hämäläinen 2003: 834; Hampson 2004; Challis 2008) have demonstrated that nuances of cultural identity and creolization – conceptually and in practice – are nearly always more complex than they at first appear (see also Appendix A).

In this chapter, I have introduced concepts of historiographical, archaeological, and ethno-historic regionalism in the Trans-Pecos, and demonstrated how these concepts and the regions themselves change over time. I turn now to the Trans-Pecos rock art corpus and my fieldwork of 2008 and 2009.



Fig. 2.2. One of the offices for the campaign for Jumano Apache recognition. Redford, Texas, east of La Junta.

CHAPTER 3

Trans-Pecos rock art: developing an interpretive framework*3.1 Fieldwork in the eastern Trans-Pecos: sites 1–41**3.2 Fieldwork in the western Trans-Pecos: sites 42–44*

In 2008 and 2009, with the assistance of west Texas colleagues, I photographed and sketched thousands of painted and pecked motifs at 44 rock art sites throughout the Trans-Pecos (Fig. 3.1); I present a synthesis of that field research here, and in Appendix B. The 44 sites were chosen for their heuristic potential as well as for logistical reasons.¹ With a few exceptions, I group the sites in this chapter by modern county boundaries, noting distributional patterns where relevant. Several of the 44 sites are on or peripheral to the eastern Trans-Pecos ‘boundaries’; I chose these sites in order to interrogate notions of cultural regionalism within and between rock art corpuses, and to consider how ideologies change across space as one moves away from a region’s heartland towards its putative cultural boundaries (Chapter 4; see also Hampson 2010). The final three sites described in this chapter are in the western Trans-Pecos.

¹ I am grateful to the private landlords who granted access to their rock art sites. They have requested that I do not reveal site coordinates. 17 of the 44 sites are in national or state parks and, except for three exceptions, their locations are also closely guarded in a bid to minimize vandalism (see Appendix A). 14 of the 44 sites are not in the Texas Historical Commission’s database. For the 30 sites that are, I give the trinomial, where 41 refers to Texas and the next two letters to the county (e.g., TE = Terrell County); the final numbers identify the specific site. For example, Meyers Springs is 41TE9.



Fig. 3.1. Map showing locations of 44 Trans-Pecos rock art sites. Refer to text below or Appendix B for site names. Map courtesy of Center for Big Bend Studies and S. Coleman.

The primary question remains: Given what is known through archaeological excavation and ethnographic analogy about the ideologies and lifeways of indigenous peoples in west Texas, what can we say about the significance of the region's rock art? What do the images *mean*? What motivated the artists? I suggest that we can learn more about regional rock art styles and traditions through space and time if we define these groupings according to the presence and absence of ethnographically informed motifs rather than by formal aesthetic analysis. Through

ethnography and the resulting anthropological, shamanistic, and embodied frameworks, researchers are now armed with powerful analytical tools. I address these key concepts and their relevance to the Trans-Pecos more fully in later chapters. Here, I stress that the 44 sites in my primary study area form a *representative* sample of eastern Trans-Pecos rock art and a springboard for answering the questions posed above.

As mentioned in Chapter 1, Lowrance (1998) documented 227 sites in Presidio, Brewster, and Jeff Davies counties alone, but concluded that there was no coherent intra- or inter-regional ‘pattern’ or definitive aesthetic ‘style’. More recently, Peel (in press: 7) concurred. Similarly, although I suggested earlier that fruitful questions have yet to be asked, I also stress that I am not attempting to prescribe a *definitive* eastern Trans-Pecos rock art corpus. Nor do I systematically compare the rock art in my study area to the rock art of other regions, but rather consider the affinities of a selection of eastern Trans-Pecos motifs to those in adjacent regions; I acknowledge that rock art regions are inevitably *constructed* (Chapter 4). Most importantly, I devote more space here to sites that contain motifs with greater heuristic potential; although this chapter necessarily contains empirical observations, it does not adhere to a strict empiricist agenda.

While answering questions about ideologies, meanings, motivations, and rock art regionalism, I also consider the importance of technique, *how* motifs were made, and on what surface: 21 of the 44 Trans-Pecos sites contain only pictographs; 6 of the 44 only petroglyphs; 17 have both pictographs and petroglyphs. Also in the study area are at least 15 recently discovered (or re-discovered) *petroforms* or rock alignments (below; Mallouf 2005; Keller 2008; pers. comm.), and many examples of truly portable art (*art mobilier*). I consider both these forms in less detail than the parietal art, noting, however, that in the broader west Texas region, portable art includes painted pebbles (Coffin 1932: 24; Sayles 1935: 68–69; Jackson 1938: 324–328; Jelks 1962: 55–59; Kirkland & Newcomb 1967: 110, plates 66–68; Parsons 1986; 1987; Lowrance 1987a: 4–5; Mock 1987; Turpin 1996b; Keller 2006: 3; Mallouf 2007: 3; 2008: 6; Cloud pers. comm.; Roberts pers. comm.; Walters pers. comm.), anthropomorphic clay effigies (Harrington 1928: 315; Coffin 1932: 24, 57–58; Madrid 1996), and painted deer scapulae (Jackson 1938: 336; Mallouf 1985: fig. 45; Turpin 1996b; Gray pers. comm.; see also Chapters 5–7). How does the subject matter at individual sites

differ? Is intra- or inter-regional subject matter determined by technique or media? Are certain colours used to depict certain subjects? I argue that different media, techniques, or colours do not necessarily influence the meanings of motifs, or the motivations for their production, re-production, and consumption. As we shall see, there is no pattern in the Trans-Pecos suggesting that, say, pictographs rather than petroglyphs or petroforms were chosen for producing certain motifs and not others; nor is there are discernible pattern in the choice of pictographic colours (Hampson 2010).

A more important factor is time. Wherever possible, noting the caveats discussed in Chapter 1, I discuss the antiquity of the images in the Trans-Pecos. Rock art motifs can usually be categorized confidently as hunter-gatherer; Jornada Mogollon (western Trans-Pecos only); or post-European contact.

Space does not permit an exhaustive account of each individual motif at each site, especially because many of the idiosyncratic and faded images are difficult to identify accurately – this, of course, hampers understanding (Blundell 2004: 49).² Instead, I describe certain illuminating and diagnostic individual motifs, and, where pertinent, outline how they relate to one another both spatially and conceptually. This enables me to concentrate in following chapters on the presence, recurrence, and absence of selected images as part of the regional patterning of rock art sites in the Trans-Pecos. I consider intra- and inter-regional affinities by categorizing and analyzing motifs according to a comparative framework that colleagues and I developed in South Africa (Chapter 4; see also Hampson *et al.* 2002). I stress here that I do *not* argue by simple analogy from southern Africa to west Texas. What I learned at southern African rock art sites and from southern African ethnography has helped me formulate hypotheses that can be evaluated independently of any southern African work.

² In this chapter I do not always describe all identifiable features at a site, e.g., topographical and geological formations, handprints, superpositioning, 'cut marks' (grooves), scratches, cupules, bedrock mortars, and various cultural deposits. Often, I also deliberately omit elevation and orientation of the site, nearest water, and other data which can be found in Appendix B or in the Center for Big Bend Studies archives at Sul Ross State University in Alpine, Texas.

Trans-Pecos rock art motifs and processes that I consider in more detail in Chapters 5–7 include:

- Cephalic emanations: horns and headdresses.
- Emphasis on deer and death.
- Entoptic geometric motifs.
- Projectile point/human conflations.
- Headless and limbless human figures.
- Skeletonized and zigzag human figures.
- Human figures with exaggerated features, including eyes.
- Files of human figures.
- Polymelia.
- Pilo-erection.
- Vulva motifs.
- Cupules.
- Handprints and stencils.
- Superpositioning of motifs.
- Grooves and ‘tally marks’.
- Smearing, rubbing, scratching, and chipping of pigment.
- Incorporation of natural inequalities of the rock surface into images.
- Liminal species: turtles and Thunderbirds.
- Mesoamerican and Mogollon motifs: Quetzalcoatl, Tlaloc, and ‘masks’.
- ‘Contact’ art: horses, cattle, guns, shields, and buildings.

3.1 Fieldwork in the eastern Trans-Pecos: sites 1–41

Site 1: Meyers Springs (41TE9)

The main painted panel at Meyers Springs, at the eastern edge of the Trans-Pecos region in Terrell County, is 81 m long and up to 2 m above the ground surface;³ the back of the shelter is formed by a relatively smooth limestone wall that is protected by overhanging rock (Fig. 3.2). A creek running alongside the site is separated from the bottom of the painted panel by a narrow rock ledge that contains more than a dozen large bedrock mortars. On the slope in front of the shelter are more mortars

³ All measurements (in miles, kilometres, and smaller units) in this and following chapters are approximate, often rounded up or down from a precise figure.

and two mounds of burnt rock. The springs that give the site its name seldom run dry.⁴



Fig. 3.2. The main panel at Meyers Springs is 81 m long. Note Thunderbird and 'sun symbol' (right). Courtesy of C. Harrell.

There are hundreds of discernible images on the limestone wall, in various shades of red, orange, yellow, and black pigment, and numerous remnants that attest to an even greater richness of paintings that have eroded. In places there are as many as four layers of paint. As with almost all rock art sites, we cannot be sure if successive superimposed layers were painted minutes or millennia apart, but it is likely that the oldest images at Meyers Springs are several thousand years old, and the most recent from the eighteenth and nineteenth centuries AD (Kirkland & Newcomb 1967: 112; Peel in prep. b). There is also modern graffiti dating back to AD 1876.

Both ubiquitous and rare images shed light on the meaning and significance of prehistoric and historic rock art in the Trans-Pecos. As several motifs from Meyers

⁴ See also Jackson (1938: 145–157); Kirkland & Newcomb (1967: 112); Peel (in prep. b). In total, there are at least 32 bedrock mortars, some submerged.

Springs feature in this and following chapters, I describe them in detail here; I devote less space to other Trans-Pecos sites.

Partly for practical reasons, but also to investigate regional variations and change through time, I follow Kirkland & Newcomb (1967) and divide the images at Meyers Springs (and Meyers Springs only) into three relative chronological periods based on superpositioning and the presence or absence of historic post-European ‘contact’ motifs: 1) Early hunter-gatherer; 2) Middle Period; 3) Historic.

1) Early figures at Meyers Springs are often faded and “very similar to if not actually Pecos River Style”⁵ (Kirkland & Newcomb 1967: 112) – the relative proximity of the confluence of the Pecos and the Rio Grande rivers (approximately 80 km/50 miles to the east) is one of the reasons I chose to document this site. Early figures, which almost certainly were painted in the Archaic era, include a Pecos River Style neck-less and elongated human figure (marked 1 on the right of Fig. 3.3), and a rotund, hirsute anthropomorph⁶ (Fig. 3.4). I discuss the significance of elongated and hirsute figures – and their connections with shamanistic hunter-gatherer ritualism – below.



⁵ For an analysis of the well-known Pecos River Style paintings, dated to the Middle Archaic era (4000 – 1000 BC), see Kirkland & Newcomb (1967: 37–80); Turpin (1990; 1994; 2001; 2004); Boyd (1998; 2003).

⁶ I use anthropomorph, anthropomorphic figure, and human figure interchangeably. If ‘human-like figure’ were less cumbersome, I would use it instead of ‘human figure’.



Fig. 3.3 includes a very faded Pecos River Style figure (marked 1) *under* a handprint and a triangular shape. Note Historic period bison (2), two mounted horsemen with long headdresses (3), Thunderbird (4), and 'sun symbol' (5, superimposed *over* a line of six figures with 'horned headdresses'). Also note grey turkey to right of men with guns (6). Many drawings in this chapter are from Kirkland's watercolours (original scale 1: 32; the Thunderbird is c. 1.6 m wide). Tracing is not possible in west Texas because of the fragile nature of rock surfaces. Colours in this and other photographs have been altered with Photoshop™ and Image-J / D-stretch™ software.

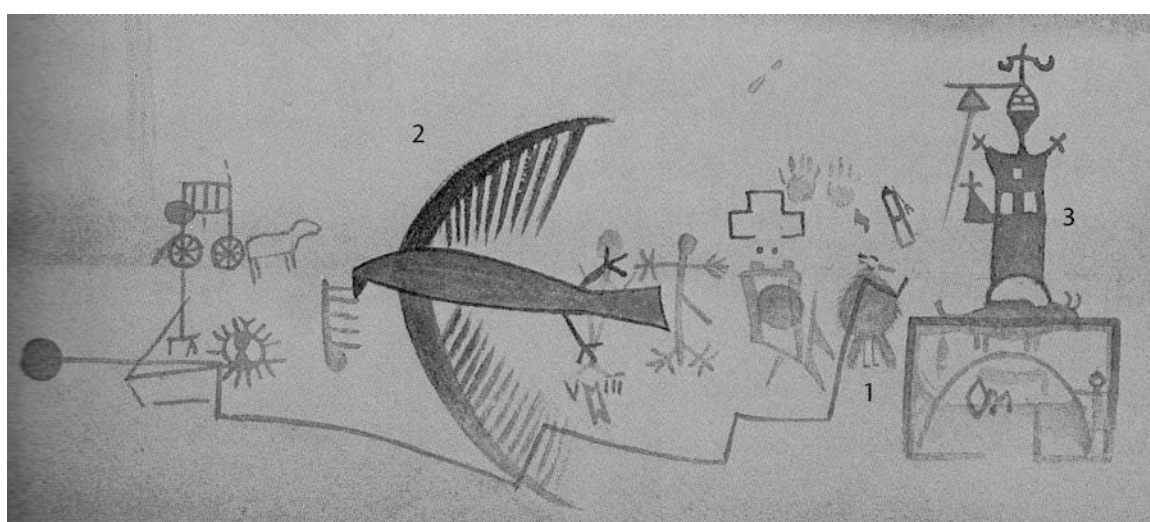


Fig. 3.4. Note rotund hirsute figure (1) below handprints and *under* zigzag line. Also note comparatively recent superimposed Thunderbird (2) and anthropomorphic ceremonial Gaan figure (3). For all Kirkland's black/ white plates, pigment is red unless indicated otherwise.

2) Kirkland & Newcomb's (1967) Middle Period figures are generally – but not always – painted in paler orange-red ochre, but this is not what defines them as Middle Period. More important criteria include subject matter and, to a lesser extent, superpositioning. A key question here – and wherever there is superpositioning at rock art sites – is whether or not these paintings were produced by a *different*, perhaps 'non-indigenous', group. As argued in Chapter 1, differences in colour and aesthetic 'styles' are not necessarily diagnostic of a different authorship or different motivations or meanings, especially when we consider that orange ochre sometimes turns to a darker red colour when exposed to water – a common event at Meyers Springs because of the positioning of the site in relation to the creek (Kirkland & Newcomb 1967: 119). At Meyers Springs, we do not know the authorship of the Middle Period figures.

Examples of Middle Period figures include the file or line of 11 human figures (Fig. 3.5, right), which are similar to the Red Monochrome anthropomorphs of the Lower Pecos Late Prehistoric (AD 700 – 1500) in that males are often portrayed in front view with an elongated body, short straight legs, a solid round circle for a head, and a prominent penis (Kirkland & Newcomb 1967: 113; Turpin 1986a; 1986b); I consider the significance of gender in Chapter 7.⁷ Unlike Red Monochrome paintings, however, the arms of Middle Period paintings at Meyers Springs are not always bent, and bows and arrows are not present. Additionally, hands and feet are seldom shown – the treatment of somatic images is, alongside ritualism, a recurring theme; I discuss its significance in Chapter 7. Note the horn-like emanations from the heads of the third and fourth figures (from the left) of the line of 11 figures (Kirkland & Newcomb 1967: 113); these cephalic emanations have also been interpreted as shamanistic indicators (Chapter 5). In certain images, they might also indicate a Plains and/or Puebloan influence.⁸

⁷ Files or lines of human figures are also found at the Manzanillo, Las Burras, Hueco Tanks, and Dancing Rocks sites. Files of human figures are found in rock art sites worldwide, but little is known about their significance (see Hampson *et al.* 2002: 22).

⁸ See Schaafsma (1980: 306–307) for examples of this motif in Gobernador Representational Style petroglyphs to the northwest.

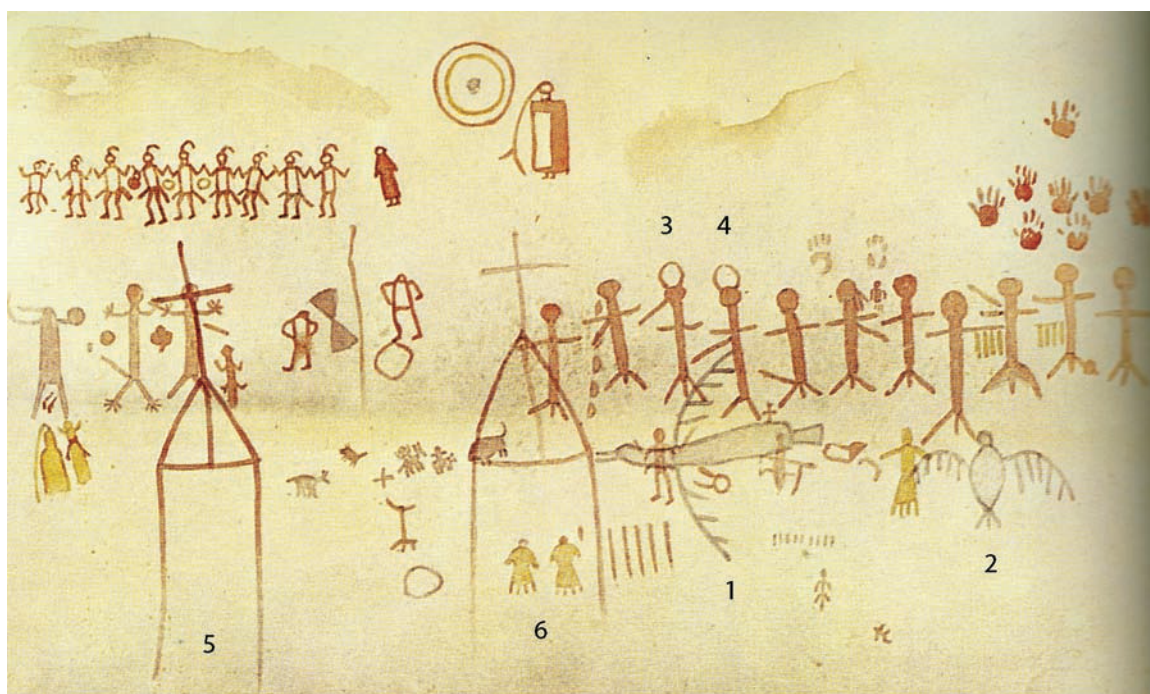


Fig. 3.5 includes a line of 11 human figures (right centre); the 3rd and 4th figures from the left have cephalic emanations. Note also line of 9 figures (top left) with linked hands and cephalic emanations, with details painted in yellow; both lines of figures are from the Middle Period at Meyers Springs. The two grey Thunderbirds (marked 1 & 2) are probably from the Historic period, as are the two superimposed buildings with crosses (5 & 6).

The three groups of red human figures at Meyers Springs that appear to be linked or holding hands are also from the Middle Period (Fig. 3.3, *under* the 'sun symbol'; Fig. 3.5; and Fig. 3.6 below). The five figures at the left of Figure 3.6 are similar to the unlinked line of 11 described above, except that none of the figures has any emanations from its head, only three of the figures are shown with penises, and all arms are bent and raised. Importantly, the final figure of this third set has been deliberately smeared; I consider this process in more detail in Chapter 7. Kirkland & Newcomb (1967: 121) believed that at least two of the three sets of linked human figures at Meyers Springs represent dancers – perhaps an “integral part of religious celebrations” – and also that they had no parallel in the Lower Pecos. I note here, however, that there are possible dancing figures at Dancing Rocks, a recently discovered site farther west (250 km/155 miles) along the Rio Grande close to La Junta; as we shall see in Chapter 5, the link between ritualistic dancing and shamanistic societies is strong. The nine human figures in the second set of linked human figures (Fig. 3.5, far left) have bent legs, bent and raised arms, some kind of

'skirt',⁹ and details painted in yellow; all nine figures have a single curved emanation from the top of their heads, perhaps a single-feather headdress – also a possible indicator of ritualism and shamanism (Chapter 5). The fact that some of the figures are painted in two colours is also remarkable: very few images in the Trans-Pecos are poly- or even bi-chrome. Three of the six of the first set of linked human figures (*under* the 'sun symbol' in Fig. 3.3) are depicted with no legs. All six of this set have bent and raised arms and horn-like emanations from their heads.

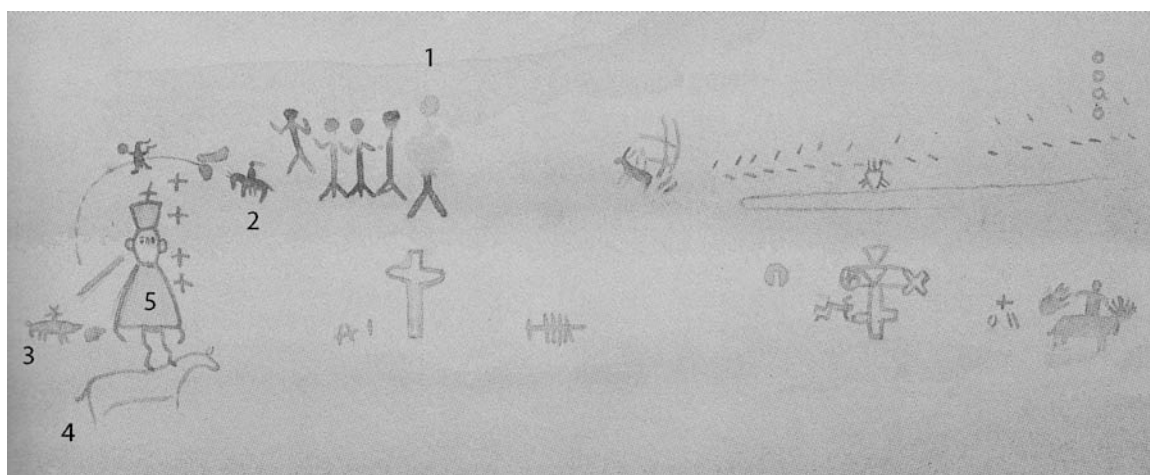


Fig. 3.6 includes five human figures in a row; the figure on the right (1) is smeared. On the far left are horses (2–4), small crosses and a possible priest (5), all from the Historic period.

Based on superpositioning, many of the 63 positive handprints (Fig. 3.7) fall into the Middle Period. There are also 5 negative (stencilled) handprints at Meyers Springs. As in other parts of the world, hand stencils were produced by placing a hand on the rock and blowing pigment either directly from the mouth, or through a tube fashioned from plant material, onto the hand and the adjacent rock surface. (For a second type of negative handprint, see Point of Rocks site, below.) As we shall see in Chapter 7, *pace* Kirkland & Newcomb and other researchers, the production of both positive and negative handprints has more to do with the *act* of applying paint and engaging with the rock face; it is certainly more than mere graffiti or the equivalent of 'I was here'. Intriguingly, some of the handprints have no thumbs. As at many Trans-Pecos sites, the ratio of right to left handprints at Meyers Springs is lopsided, 53 to 15, but the significance of these numbers is not clear.

⁹ Where the significance of a motif is not known, I use terms (in inverted commas, or single quotes) as descriptors, not necessarily as functional explanations or interpretations (Boyd 2006).



Fig. 3.7 includes five positive handprints, all of the right hand; the bottom one has faded. Note also Historic period outlined horse and human figure holding flintlock gun and shield.

Compare with Fig. 3.9 below.

3) The Historic period in the Trans-Pecos starts at AD 1535, the date when Spaniard Cabeza de Vaca travelled through the region. Unsurprisingly, Historic period paintings at Meyers Springs are clearer than those from the earlier periods. Some researchers have suggested they belong to the Plains *Biographic* Style or Tradition (my emphasis), perhaps partly because historic rock art is often considered – at least implicitly, and certainly vaguely – ‘less religious’, and therefore more secular, commemorative, or ‘narrative’, than older art (Keyser & Klassen 2001: 224, 244–253; see also Parsons 1987: 272). I do not doubt the Plains influence but am sceptical about labelling some of the images as ‘biographic’ – in certain instances, by doing so, researchers unwittingly strip the motifs of some of their polysemic complexity. Some of the images may have been made according to a narrative structure and intent, but the artists still considered themselves and the images to have been influenced by supernatural forces (Chapter 5; see also Whitley 2005: 99).

Historic rock art in general is defined by evidence of European influence, including, but not limited to, domesticated European animals (especially horses and cattle), European clothing, permanent or semi-permanent architecture (especially churches

and missions), and European weapons. As we shall see in Chapter 5, however, in west Texas and elsewhere in North America, Historic period rock art also includes motifs indicating Athapaskan and Plains influence. Both spatial and chronological boundaries are nuanced.

As outlined in Chapter 2, Athapaskan groups – ancestors of the Apaches – reached the Southern Plains of North America in the fifteenth and sixteenth centuries AD, and, the Big Bend and northeastern Chihuahua by c. AD 1650 (Schaafsma 1980: 301; Kelley 1986; Chipman 1992: 15; Mallouf 1999: 69–73). By AD 1730, Apaches were in control of the Rio Grande, only to be displaced by the Comanche and their allies. We know that nineteenth-century Apaches painted trees near the Rio Grande with depictions of imaginary battles against the US army (Turpin 2010); Apache rock art in general includes ‘sunbursts’ and ‘sun symbols’ (circles with appended lines), European animals, shields, bison, snakes, and stick-figure anthropomorphs (Kirkland & Newcomb 1967: 146–156; Schaafsma 1980: 333–342; see Chapter 5).

According to a military commander in Chihuahua, Comanches also had and “have a great affection for painting, they always carry their painted shields, as well as leaving samples of their rustic ability everywhere on rocks, hills and trees wherever they pass by, representing actions of war” (Langberg 1851). Comanche rock art includes not only weapons and warriors, but also horses, cattle, and bison (Kirkland & Newcomb 1967: 213–214; Cárdenas Villareal 1978; García Rejón & Gelo 1995). Both Apache and Comanche rock art include depictions of Thunderbirds and European Christian icons and buildings (Chapter 5).

Almost all the historic paintings at Meyers Springs are in red; some are in yellow. Examples include:

- Buildings, which, with associated geometric crosses, might be missions and churches (Fig. 3.5, and Fig. 3.8 below).



Fig. 3.8 includes a building with cross (1). Note the long cephalic emanation on the figure with bow and arrow (2), and also the red and yellow human figure wearing an unusual three-pronged 'headdress' and carrying a shield (3).

Kirkland & Newcomb (1967: 123) point out that because the church or mission was the

seat of the potent supernatural power of the Spaniard, it may have been reasoned that some of this power might be obtained by drawing such a building on the walls of a shelter. Such comments would apply as well to the cross.

Although this statement alludes to 'sympathetic magic', it clarifies the important point that, as with the paintings from earlier periods at Meyers Springs, and at other Trans-Pecos rock art sites, the Historic period images are not simple depictions – or even representations – of 'real' everyday items and events: they were and are powerful things in themselves. Note also:

- A human figure with a long cephalic emanation (Fig. 3.8) carrying a bow and arrow, which was not introduced into the eastern Trans-Pecos until c. AD 500; prior to this date, the primary weapon was the atlatl (Schaafsma 1980: 56–79; Turpin 2002: 3). See also headdresses on mounted horseman (Fig. 3.3).

- A shield-bearing anthropomorph and quadruped surrounded by three human figures with shields and weapons at the bottom of Figure 3.9 (below); the anthropomorphic figure and quadruped almost certainly represent a Plains Indian on horseback. Shields are reliable historical indicators in post-European contact rock art (Turpin 1986b; 1991; 2010). Kirkland & Newcomb (1967: 120) believed the 'horned headdress' of the figure on horseback might indicate a Comanche.
- A human figure holding a shield and flintlock gun, close to an outlined horse (Fig. 3.9); I discuss outlined or 'hollow-bodied' figures in Chapter 7.

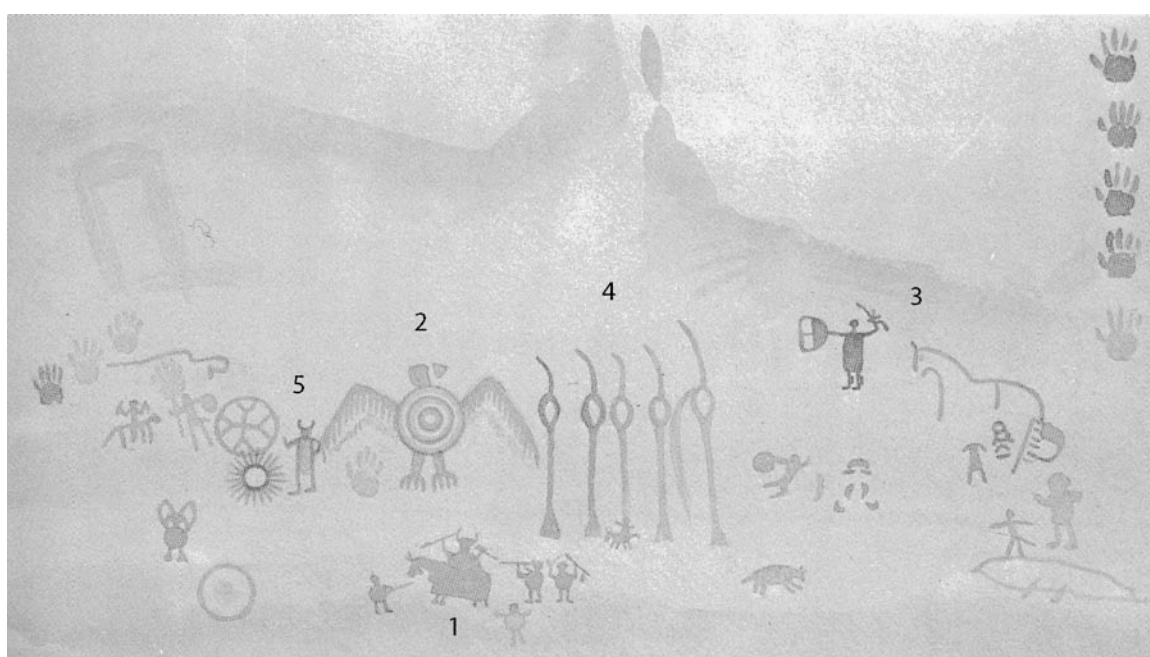


Fig. 3.9. Compare with photographs above (Fig. 3.7) and below (Fig. 3.10). Note 'horned headdress' figure on a horse (1) below the Thunderbird with a shield-like body (2); outlined horse and human figure with flintlock gun and shield (3); enigmatic vertical objects (4); and another human figure with cephalic emanations (5).



Fig. 3.10. The yellow Thunderbird with a red and yellow shield-like body (centre) is still clearly visible, as is the human figure with cephalic emanations to the left. The horseman below the Thunderbird is much harder to see. Compare with Fig. 3.9 drawing.

Other important figures include:

- The possible Apache or Plains historic *Gaan* or *Gaa'he* (mountain spirit) dancer (Fig. 3.4). *Gaan* dancers today wear masks and headdresses and carry wooden 'weapons' or wands with cross pieces (Opler 1941: 87; Lamphere 1983: 747–749; Peel pers. comm.).
- The yellow and red male human figure with an unusual three-pronged cephalic emanation, carrying a shield (Fig. 3.8) – for the reasons given above, his yellow body possibly links him (stylistically, but not necessarily chronologically) to other figures throughout the panel, including a Thunderbird on a shield (Fig. 3.11, below); and also to two unusual anthropomorphs (far left of Fig. 3.5); to the Thunderbird with the shield-like body (Fig. 3.9); and to the possible priest (Fig. 3.6).

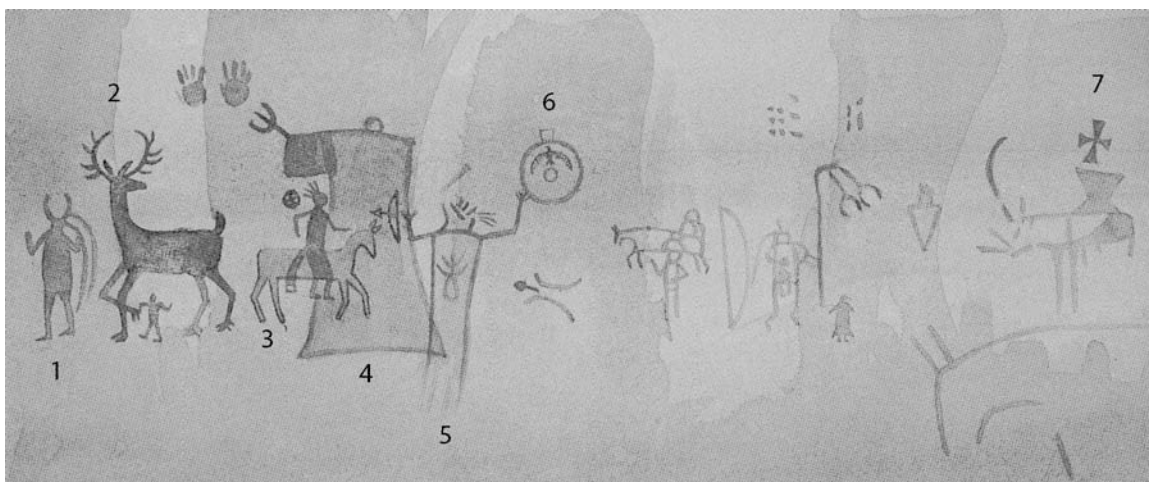


Fig. 3.11 includes a Thunderbird on a shield (6), with details in yellow. From left to right, note human figure with horns and other long cephalic emanations (1), deer with large antlers (2), mounted horseman (3) *over* large, one-armed anthropomorph (4), human figure with bow and arrow (5), and geometric cross (7).

Another interesting motif at Meyers Springs is the series of vertical lines with loops and curved extensions (Fig. 3.9). This repeated image, also present at San Esteban (below), is difficult to identify and to place confidently in any of the three relative time periods – it might be an atlatl (Jackson 1938; Grant 1968: 54).

Near the source of the springs at the southern end of the site is an unequivocal depiction of a bear with exaggerated claws (Fig. 3.12). As we shall see in Chapter 5, and as with other rock art corpuses worldwide, we know that artists selected animals through cultural and social filters; painted and engraved bestiaries were not simple reflections of the artists' diets, and species were carefully chosen on the basis of their roles in the "ideological structure" (Schaafsma 1980: 232). Bears are sacred to many groups (including the Kiowa, Comanche, and Apache), but in some contexts they are revered, in others feared (Meadows 2008).



Fig. 3.12. Bear with exaggerated claws and emanation from head. Courtesy of W. Cloud.

In addition to the presence of horned and headdress-wearing anthropomorphs, there are other indicators of ritualism and shamanism in the paintings of Meyers Springs; I discuss these in detail in following chapters. Three of the smeared, and, at first glance, anthropomorphic figures in the left centre of Fig. 3.13, for example, have zigzag appendages, as does a figure high above a large natural hole in the middle of the panel. The zigzags on these figures, which are therianthrope variations of Thunderbird motifs (Chapter 5), represent wings. Importantly, the edges of the large hole have been smeared with pigment (see Fig. 5.6 in Chapter 5). Note also the six-legged polymeliac (many- or extra-limbed) animal with erect hair (pilo-erection) in Figure 3.13 (discussed further in Chapter 7).

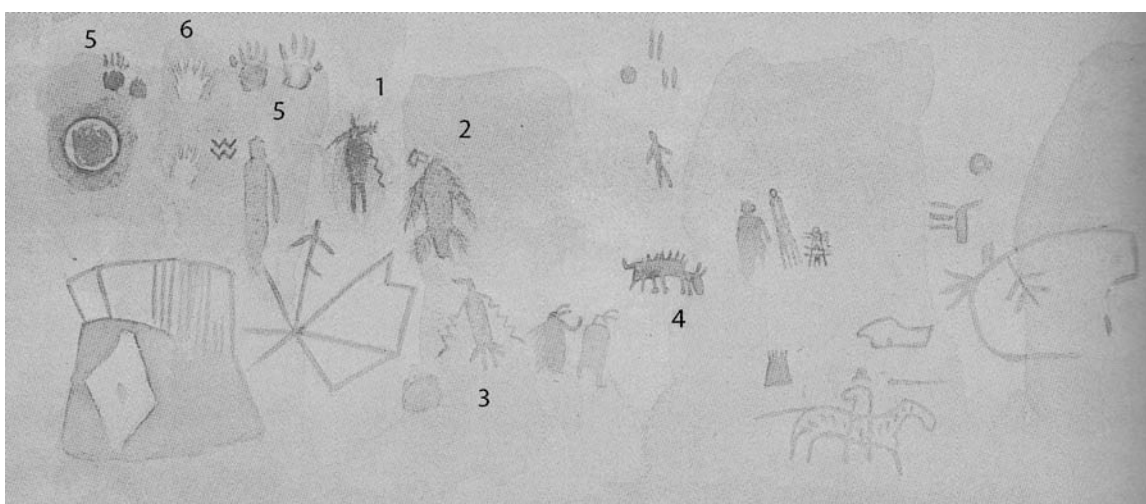


Fig. 3.13 shows anthropomorphic Thunderbirds (1–3) with zigzag arms/ wings, and a six-legged animal with erect hair (4). Also present are positive (5) and negative (6) handprints.

Site 2: San Esteban (41PS20 and 41PS99)

San Esteban is in the geographical centre of the eastern Trans-Pecos, south of the town of Marfa in Presidio County and close to Alamito Creek. The rock shelter is approximately 30 m long with a 9 m overhang; the roof is c. 6 m above the ground.¹⁰ Like many of the motifs at Meyers Springs, many at San Esteban also occur throughout the study area.

Series of painted vertical marks at San Esteban and other sites were probably applied with a finger rather than a brush; Kirkland & Newcomb (1967: 146) refer to these as possible “check” or “tally” marks to aid counting (Fig. 3.14).

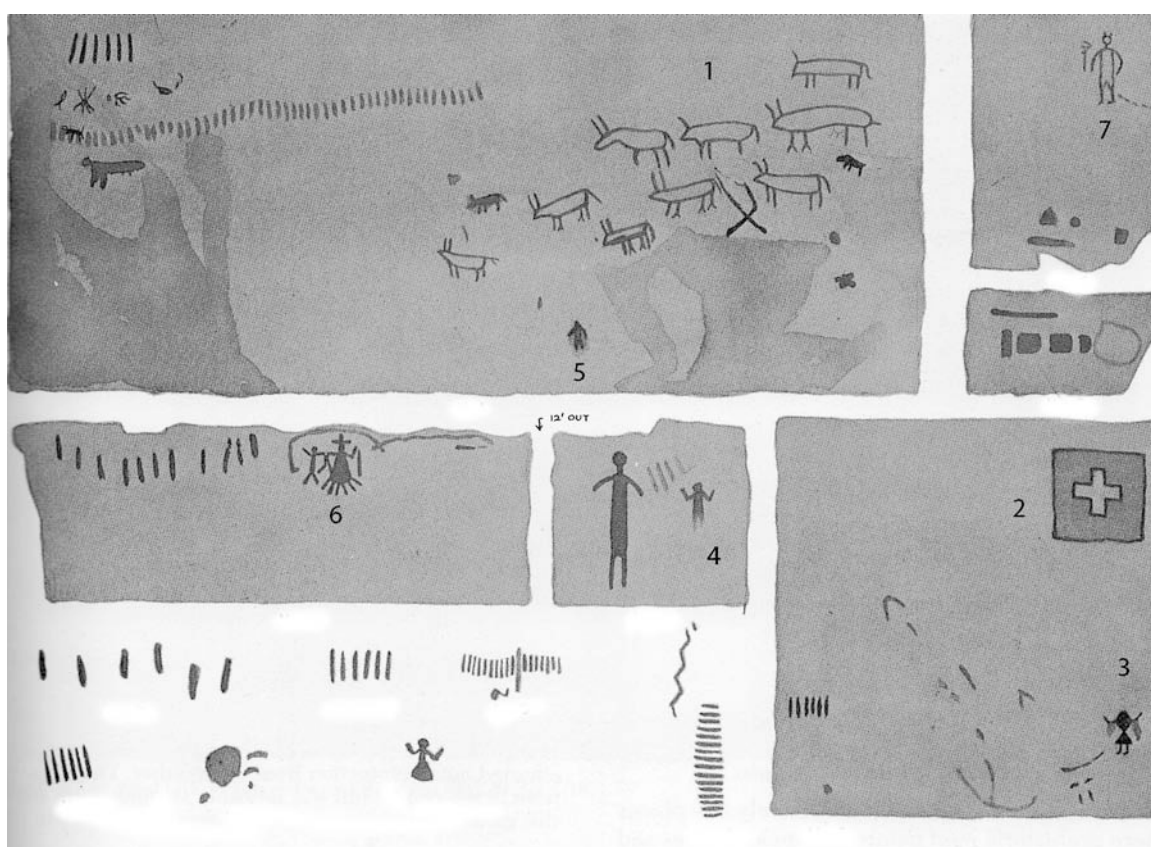


Fig. 3.14. Kirkland's plate depicting San Esteban pictographs includes quadrupeds (marked 1), human figures, 'tally marks', and other geometrics including a 40 x 40 cm 'boxed cross' (2). Note fringed appendages hanging from a headless figure's elbows, and the absence of hands (3). Also present is a legless figure with raised arms (4) and a smeared anthropomorph (5, also missing hands and feet) below the grouped quadrupeds.

¹⁰ See also Peabody (1909: 212–215); Jackson (1938: 99–106); Kirkland & Newcomb (1967: 127–129); Lowrance (1988a: 98–105); Boren (2008). This site has two Texas trinomials.



Fig. 3.15. One of nine possible cattle at San Esteban. Compare with drawing above.

As we shall see in following chapters, certain geometric patterns – including sets of parallel lines – are often experienced in altered states of consciousness as *entoptic motifs* (Fig. 3.16).¹¹ It was often the *act* of painting rather than the product that was important to non-Western artists; we know from ethnographic accounts that finger smears, handprints, and other marks were made in order to engage with the rock face and the spirit world beyond.

¹¹ Entoptic means ‘within vision’, and I use it here to include phosphenes (e.g., Hedges 1981; Walker 1981) and ‘form constants’ (e.g., Knoll *et al.* 1963; Siegel 1977) but not hallucinations, which have no foundation in the structure of the optic system itself (Klüver 1966; Horowitz 1964; 1975; Eichmeier & Höfer 1974; Siegel & Jarvik 1975; Siegel 1977; see also Lewis-Williams 2002: 127).


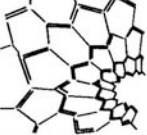
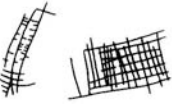






















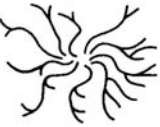
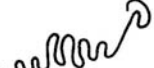


	ENTOPTIC PHENOMENA		SAN ROCK ART		COSO
	A	B	ENGRAVINGS	PAINTINGS	
			C	D	E
I					
II					
III					
IV					
V					
VI					

Fig. 3.16. Entoptic motifs from Lewis-Williams & Dowson (1988: fig. 1). Columns A and B are assessed against San (Bushman) rock art motifs from southern Africa (columns C and D) and Coso rock art motifs from California (column E).

In addition to finger smears, meandering lines, and dots – in red, orange, yellow, and black – there are other intriguing geometric paintings at San Esteban. A negative equilateral cross shape was produced by applying red pigment to all but the centre of a square ‘boxed’ area (approximately 40 sq. cm) on the rock face; the bare rock that forms the geometric cross in the middle of the square ‘stands out’ (Fig. 3.17).



Fig. 3.17. Geometric negative cross c. 40 x 40 cm. Compare with Fig. 3.14.

As at Meyers Springs, this cross might be connected with European settlers and their Christian missions (Boren 2008: 27). We know that de Vaca passed through La Junta, a mere 120 km (75 miles) to the south, with three men including a Moor named Estevanico in AD 1535 or 1536 (Ing *et al.* 1996; Boren 2008: 15) – which may explain the name of the site. More important is the fact that indigenous groups throughout Texas considered de Vaca and his compatriots to be medicine men or shamans (Bolton 1949; Castañeda 1976): as in other regions colonized by Europeans, Christian influences were incorporated into, and contested within, a shamanistic framework; this creolization was a complex, two-way, and dynamic process (e.g., Lamar & Thompson 1981; Lightfoot & Martinez 1995: 471; Hämäläinen 2003: 834; Challis 2008). An example of this often overlooked complexity is De Vaca's realization that it would be to his advantage to concur with the Native Americans' diagnosis of his elevated status: he 'cured' indigenes by making the sign of the Christian cross over the heads of the sick *and*, mimicking shamans, by blowing on their bodies (Castañeda 1976: 70). As the Spaniards journeyed from the east to the west of Texas, "their fame as medicine men increased till their progress was seriously impeded by crowds clamoring to be healed, or even to touch their garments" (Bolton 1949: 9–10).

Almost 150 years later, Captain Juan Dominguez de Mendoza's AD 1683 expedition from La Junta to the Davis Mountains and beyond passed along Alamito Creek, which runs to the west of San Esteban (Castañeda 1976: 271–272). Mendoza's diary states that he and several Native American guides camped at or near San Esteban and erected a wooden cross (Bolton 1916: 326–327). Boren (2008: 29) points out that through de Vaca, Mendoza, and other Europeans, the symbol of the cross was powerfully affective; Spaniards went out of their way to "present themselves to native peoples as immortal emissaries of heaven". As at Meyers Springs, perhaps the painter of the cross at San Esteban wished to harness the patent power of the Spanish explorers and the apparent vehicle of that power, their religion – certainly, the paintings are not mere reflections of things that people saw. I discuss crosses and other possible historic era imagery further in Chapter 6.

Other geometric motifs at San Esteban include a vertical series of ten black horizontal designs, some of which have loops and hook-like appendages at one or both ends (Boren 2008: 67). These motifs, similar to those at Meyers Springs (Fig. 3.9), might be atlatls, but they are probably related in some way to entoptic motifs experienced in altered states of consciousness (Chapter 5). Keyser & Klassen (2001: 236–237) note the frequent occurrence of vertical series of various replicated objects in their Plains Biographic Style, and refer once again to the possibility of tallying or counting, perhaps in relation to war trophies ('counting coup'). The Apache, Comanche, and Kiowa may indeed have brought this tradition with them when they entered the Big Bend region from the north.

There are also at least nine anthropomorphic figures at San Esteban. One is atop a quadruped (marked 6 in Fig. 3.14), possibly a horse – which means that the motif was produced no earlier than the sixteenth century AD (Chapter 5). Both of the first two human figures have what may be hats on their heads and one hand close to or on a hip, and both are 'enclosed' by an arch-like line (Kirkland & Newcomb 1967: 127–129; Boren 2008: 23). Even if the accoutrements on the figures' heads *are* hats, the human figures themselves do not necessarily 'represent' Europeans; West (1949: 83) makes it clear that European clothing, including hats, was sold to Native American labourers in the northern Mexican mines as early as the seventeenth century. Once again, I stress that creolization and identity formation on frontier societies are complex, dynamic, and two-way processes.

Another human figure (marked 4) has raised arms. This figure – like several at Meyers Springs – is depicted without legs, although in this instance this may be a result of weathering and not a deliberate omission by the artist. As with several of the human figures mentioned above, and many more throughout the Trans-Pecos, no hands are depicted.

An hourglass-shaped anthropomorphic figure with obvious feet but no hands is painted below the boxed cross (marked 3); the top half of the figure is smeared. Hourglass figures – both anthropomorphs and geometrics – are found throughout the Greater Southwest (e.g., Kirkland & Newcomb 1967: 141). Attempting to elucidate the motifs' *meaning*, Boren (2008: 44) looked at possible cultural influences from Hueco Tanks (below) and Puebloan peoples to the west, and from the Lower Pecos to the east. The Navajo (to the west), for example, believe that hourglass figures represent Born-for-Water, the younger of the War Twin deities (Schaafsma 1980: 306, 312–315, 335). More important perhaps is the fact that the hourglass figure at San Esteban is headless, and, like ritualistic figures in the Lower Pecos to the east, has fringed appendages hanging from its elbow – two features indicative of shamanistic ontologies (Kirkland & Newcomb 1967; Turpin 2001; Boyd 2003: 55). The argument that the artists were at least partly concerned with – and operating within – shamanistic ontologies is strengthened by the fact that there is a hole in the rock face immediately above the top of the anthropomorph's body. Like the cave itself, this hole – which possibly re-creates or rather *is* the figure's head – may have been considered a portal to the other world. I discuss this possibility further in Chapter 5.

Other anthropomorphic motifs at San Esteban also have ritualistic associations. For instance, Boren's (2008: 44) "rotund figure" has legs and feet that extend upwards, and antenna-like protrusions downwards; this figure is probably not a human figure bearing a shield. There are several examples of similar 'globular' figures throughout the Greater Southwest (including at Hueco Tanks and in the Lower Pecos), and even farther afield on the Plains; importantly, Boren (2008: 46–65) points out that such figures are often undergoing 'transformation'. I discuss the significance of transformation in Chapter 7.

Another anthropomorph (marked 7 in Fig. 3.14) is painted in red outline. In a similar manner to figures in the Gobernador Representational Style in New Mexico (Schaafsma 1980: 306–307), a staff-like object with emanations is painted close to the figure's right arm. Again, no hands are depicted, but, importantly, Kirkland's rendering shows two horn-like emanations (possibly a horned headdress) from the top of the figure's smeared head (Kirkland & Newcomb 1967: 129).

The final San Esteban anthropomorph (marked 5) I consider is painted close to a group of 11 quadrupeds, nine of which are probably cattle outlined in red (marked 1); the remaining two might be dogs in solid black – I consider these possibilities later. Because of the proximity of the anthropomorph and the quadrupeds, researchers have suggested, unconvincingly, that the human figure is a herdsman. Here again is the concept of rock art as a reflection of mundane scenes and events in the 'real' everyday world. Tellingly, however, the figure is painted without feet or legs, and the right half of the figure is smeared.

Other than the quadrupeds close to the smeared anthropomorph, the only other clear zoomorph is painted in black on an isolated boulder – it is almost certainly a pronghorn antelope (*Antilocapra americana*), rarely depicted in west Texas. The significance of this animal is unknown, but it is probably conceptually related to deer and other cervids (Chapter 5).

Site 3: Point of Rocks (41JD9 and 41JD161)

Point of Rocks refers to the series of granite boulders at the base of a large granite dome that rises some 120 m from the surrounding plain west of Fort Davis, in south-central Jeff Davis County; the site is 50 km (30 miles) north of San Esteban. Jackson (1938: 95–96) and Kirkland & Newcomb (1967: 130–134) refer to five painted overhangs and shelters;¹² I visited and documented two sub-sites including Handprint Rock, c. 6 m wide x 4 m deep x 2 m high (Fig. 3.18).

¹² See also Peabody (1909: 212, 214) and Lowrance (1987a: 75–88).

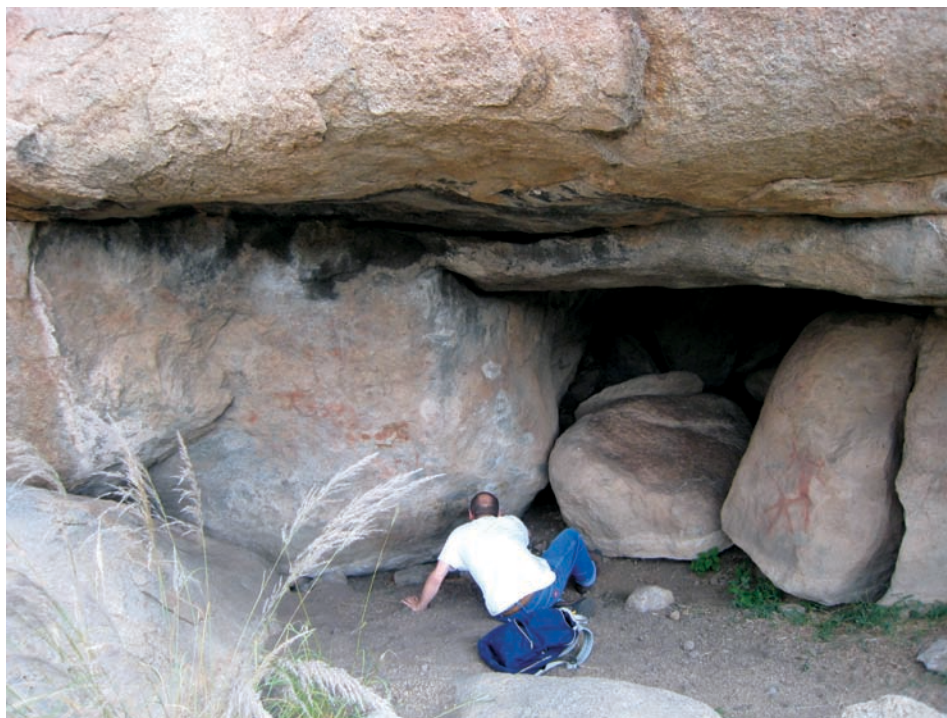


Fig. 3.18. This sub-site of Point of Rocks is known as Handprint Rock.

Most of the motifs are painted in monochrome red, orange-red, black, or white, but there are also some figures in red *and* black (including a black quadruped with red horns). At least nine of the 16 quadrupeds have antlers or horns (Fig. 3.19); 11 are probably cervids,¹³ but at least two might be bison. Three of the deer at sub-site 3 (Fig. 3.20) have exaggerated ears and appear to emerge from a step in the rock surface, an important contextual association that I discuss in following chapters. One of seven human figures (marked 1 in Fig. 3.19) is in what I define as the ‘spread-eagle’ posture – it has outstretched arms and legs with spread, exaggerated digits (fingers and toes). This figure is stylistically similar to those from the Red Monochrome period in the Lower Pecos region to the east (Turpin 1986a; 1989: 105), and in other rock art corpuses farther afield (e.g., Keyser & Klassen 2001: 116, fig. 8.9); I discuss the possible origin and significance of this anthropomorphic posture in Chapter 7. Geometrics at Point of Rocks include nested U-shapes and dots, a black arrow shape (on a white patch of paint), and bow-like figures. There are also finger smears that appear to transform into anthropomorphic figures.

¹³ I discuss this emphasis on deer – one of many animals that existed in the Trans-Pecos bestiary – in Chapter 6.



Fig. 3.19 includes a spread-eagle human figure (1) to the right of two antlered deer, one of which (2) has a raised tail. Note positive and negative handprints, and possible bison (3).



Fig. 3.20. Deer at Point of Rocks emerge from a crack in the rock face (1); compare the negative hand stencils (2) with photograph Fig. 3.21 below.

There are 25 handprints in red and white at Handprint Rock. Nine of these are negative stencils produced by blowing pigment around hands placed on the rock (Fig. 3.21) – or, possibly, in some instances, by scraping away the soot that has accumulated on the surrounding smoke-blackened surface (Smith 1925: figs 5c, 11; see also Kirkland & Newcomb 1967: 131). (In this dissertation, negative stencils are blown unless indicated otherwise.) At least one of the positive handprints is decorated (Fig. 3.22) – that is, a design was applied to the hand before it was pressed against the rock, or paint was deliberately scraped off the rock after the original application of the hand.



Fig. 3.21. Negative handprints and possible foot stencil (right) at Point of Rocks.



Fig. 3.22. Positive white handprint with geometric U-shape whorls.

Kirkland & Newcomb (1967: 133) declared that because of the relative inaccessibility and the “cramped quarters, it is reasonable to assume that these paintings were executed for good reason” – but, other than an oblique reference to “hunting magic, or perhaps a myth concerning deer” (Kirkland & Newcomb 1967: 134) do not suggest what this reason may have been. I discuss cramped quarters, micro-topography, and ‘immersion’ in Chapter 7.

There is also an upside-down deer. As we shall see in Chapter 5, this deer symbolizes the metaphorical death experienced in altered states of consciousness.

Site 4: Woulfter

Alongside the intermittent Garrett Draw creek and in the eastern foothills of the Davis Mountains in northern Jeff Davis County is a crumbling limestone bluff with at least 10 m of pictographs; many of these are remarkably small, often less than 5

cm (Fig. 3.23). I argue, however, *pace* Lowrance (1987a), that the size of motifs does not influence their meaning or the motivation behind their production.¹⁴



Fig. 3.23. Small deer (c. 3 cm long) with raised tail at Woulfter.

Almost all the pictographs at Woulfter are in black pigment (both wet and dry), but there is also a white geometric figure and parallel lines in red. Although there are no anthropomorphs, there are at least 24 quadrupeds, almost all deer, some with antlers. One has an unnaturally long tail (see Chapter 7). Geometric figures at Woulfter include various entoptic motifs (circles, zigzags, and sets of parallel lines (see Fig. 7.29), some of which are 'looped'). Unusually, there is pigment over several grooves or 'cut marks'.

Site 5: Gomez Peak

In Caloosa Canyon, only a few miles northwest of Woulfter, is a large (c. 80 m wide x 8 m at its deepest) crescent-shaped rock shelter, approximately 3 m high.

Importantly, this shelter is less than 1 m in places – here again are cramped quarters.¹⁵ The pictographs, which stretch at least 22 m along the back wall, are once

¹⁴ Lowrance (1987a: 41–48) notes the similarity with the relatively small motifs of the Painted Pebble Style, first defined by Gebhard (1960: 45–47), but does not explain the significance of this observation.

¹⁵ Lowrance (1987a: 29–40) again notes the similarity with the Painted Pebble Style, and also references Schaafsma's 'miniature paintings' from the Guadalupe Mountains to the north.

again almost exclusively in black, ranging in size from 5–80 cm. Unfortunately, and as at many sites in the Trans-Pecos, a mineral coating obscures most of the art. Unlike at Woulfter, both anthropomorphs and handprints are present, and there are also two ‘drawn’ hands. Other notable motifs and features include several human figures with bows and arrows (Fig. 3.24), ear-like protuberances on a human figure’s head, charcoal lines (some looped) that have been attributed to the Apache (Lowrance 1987a: 30), and pecking over just one of the 17 painted quadrupeds (again, mostly deer). Another important discovery was several sticks in a crack in the rock face. Were these sticks placed deliberately? If so, why? I return to these points in following chapters.



Fig. 3.24. Quadrupeds (c. 7 cm long) and human figure with bow and arrow at Gomez Peak.

Site 6: Graef (41RV50)

Although in many ways the extensive Graef site resembles the famous Lewis Canyon petroglyph site in the Lower Pecos region (Turpin 2005; Peel in prep. a), it is unique in the Trans-Pecos. Pecked and abraded into a horizontal limestone pavement approximately 50 km (30 miles) east of Woulfter and the Davis Mountain foothills are thousands of geometric petroglyphs that cover at least 350 sq. m of bedrock (Figs 3.25–3.26; see Willis 2007; Peel in prep. a). There is also a single

anthropomorph (Fig. 3.27), and several possible insects (perhaps dragonflies). As at Lewis Canyon, a large *tinaja* and at least 23 mortars are present (Figs 3.28–3.29). Two time-diagnostic projectile points are indicative of Late Archaic occupations (Mallouf pers. comm.).



Fig. 3.25. Petroglyphs at the Graef site cover at least 250 sq. m of horizontal bedrock. (The 10 cm arrow in this and other photographs is for scale; it does not point north.)

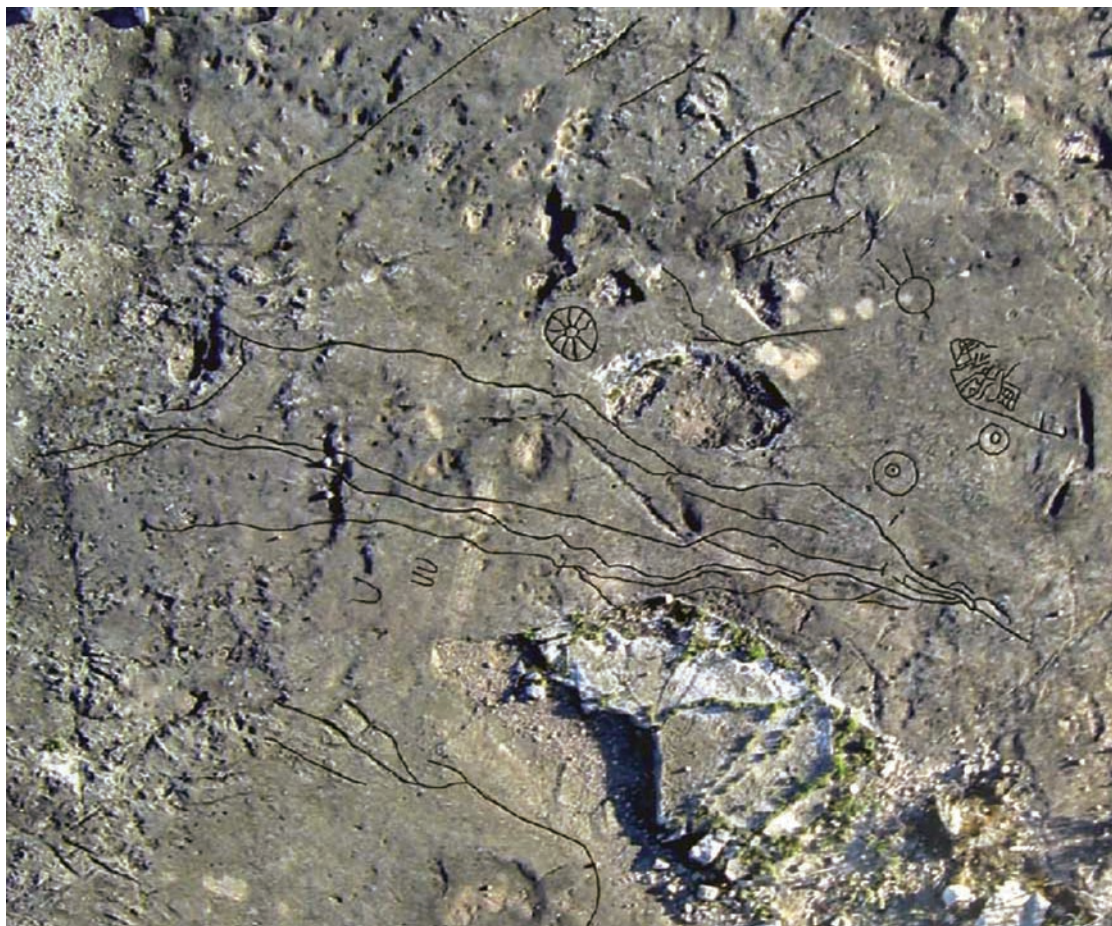


Fig. 3.26. Aerial view of the northwest portion of the Graef site. The engraved circles in this photograph are also visible in Fig. 3.25. Courtesy of M. Willis and CBBS.



Fig. 3.27. Anthropomorphic figure at Graef site. Note juxtaposition and incorporation of geometric motifs, exaggerated eyes, and cephalic emanations. Grids are 1 sq. m. Courtesy of R. Peel and CBBS.



Fig. 3.28. The tinaja at Graef site, surrounded by petroglyphs, is usually dry.



Fig. 3.29. Nested U-shape motifs (left centre, next to scale) and bedrock mortars.

Peel (pers. comm. and in prep. a) refers to several of the geometric circle motifs as owl-like figures (see Fig. 7.13). Although there are ethnographic references to owls (McAllister 1935; Young 1988; Meadows 2003: 214), the assertion that the petroglyphs are owls is, at present, unsubstantiated. More persuasive is Peel's suggestion that the numerous paired concentric circles might represent eyes – very few researchers doubt the symbolic importance of ocular motifs that embody the power of ritualistic vision and (fore)sight (Bleek 1933: 390; Eliade 1964: 42; Reichel-Dolmatoff 1971: 137; Hugh-Jones 1979: 121; see also Lewis-Williams & Pearce 2005: 72). This inference is strengthened by the fact that the single anthropomorph has relatively large concentric circles carved where, from an anatomical perspective, one would expect eyes. Similar ocular motifs are found at other sites in the study area (below, and Chapter 7).

Site 7: Balmorhea Shelter 1 aka Owl Mesa (41RV2)

2 km (1.5 miles) west of the Graef site is a narrow (1–2 m at the opening) but relatively deep (4 m) shelter below the rimrock of a mesa. Most of the pictographs here are small and black (similar aesthetically to the Woulfter and Gomez Peak sites), but there are also several that are larger and in red, as well as yellow daubed designs on the ceiling of the shelter. All seven common entoptic forms are present, including a concentric ovals ‘vortex’ design (Fig. 3.30, discussed further in Chapter 5), as are three handprints and superpositioning. There are other interesting geometric figures, but most notable are the unusual anthropomorphs: one, close to a series of dots, is headless with bent elbows and exaggerated hands; another, which has been scratched, has two lines (one short, one long) emanating from its head (Fig. 3.31).¹



Fig. 3.30. Pictographs at Owl Mesa include small concentric ovals, ‘diamond chains’, sinuous lines, and tally marks. Each tally mark is less than 1 cm in length.

¹ See also Jackson (1938: 80–86) and Lowrance (1986a: 96–108).

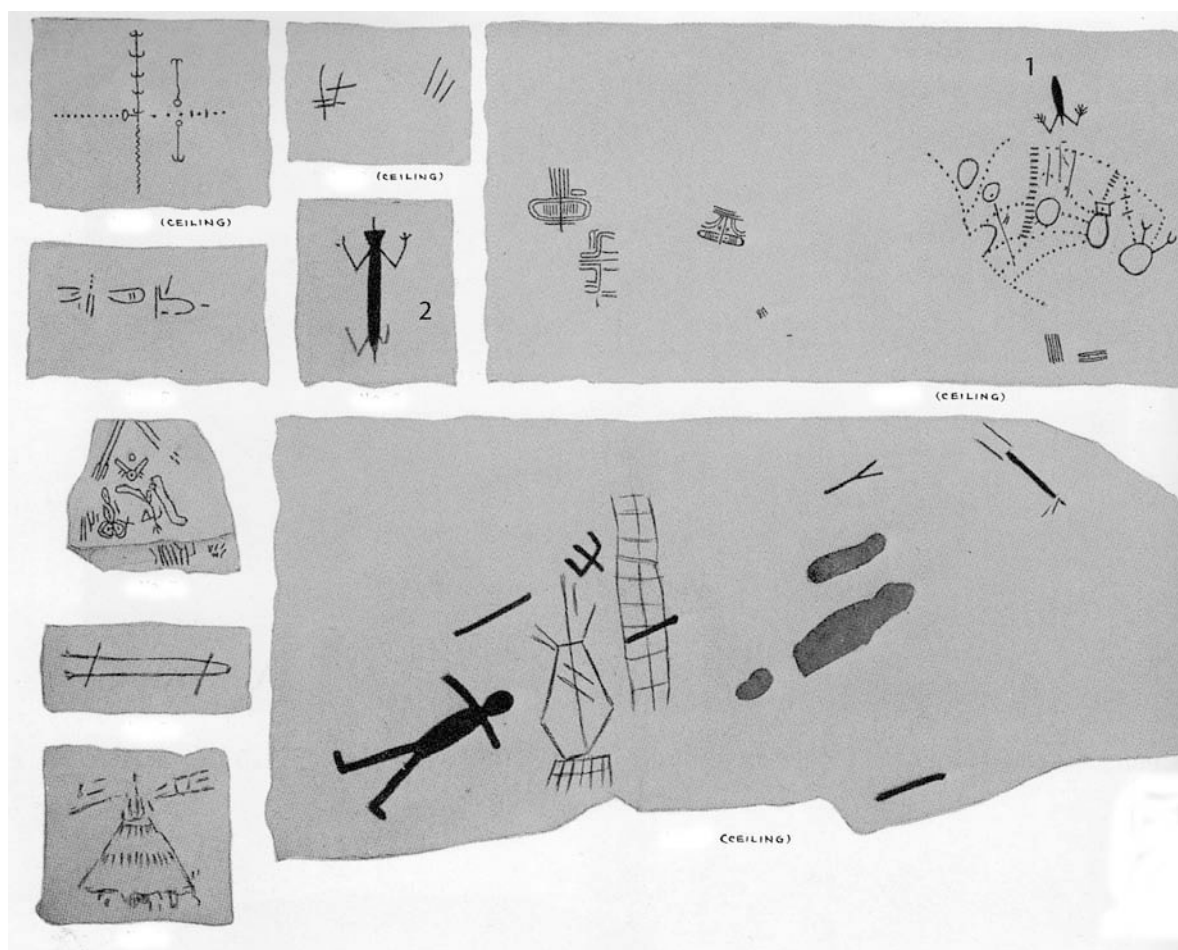


Fig. 3.31 includes two anthropomorphs with bent elbows; one is headless (1), the other (2) has a short line emanating from its head and a longer sinuous line omitted by Kirkland.

Site 8: Bee Cave (41BS8)

With its deep tinaja (Fig. 3.32), Bee Cave canyon (Fig. 3.33) is close to Santiago Peak in Brewster County, in the south of the study area.² In addition to petroglyphs, red pictographs, and red, yellow, white, and black dry 'crayon' marks, there are also grooves and scratches (including some over pictographs, and a scratched Pecos River Style shamanic figure that I suspect is a twentieth-century Anglo-American addition), plus cupules and mortars. There are no zoomorphs at Bee Cave, but several anthropomorphs exhibit interesting traits probably diagnostic of some form of embodied shamanism; one human figure (marked D in Fig. 3.34) is painted without a head but with exaggerated spread-eagle posture hands; three are outlined, 'skeletonized', or 'centrastyled' (marked A–C); several are deliberately smeared; and one of the two petroglyphs has exaggerated spread-eagle posture feet.

² See also Coffin (1932); Jackson (1938: 125–130); Kirkland & Newcomb (1967: 123–124); Lowrance (1982a: 30–50); Peel *et al.* (in prep.).



Figs 3.32 and 3.33. The tinaja and large (> 1 m) crack (left) are close to the main panel (right) at Bee Cave. Roger Boren (in blue shirt) for scale.

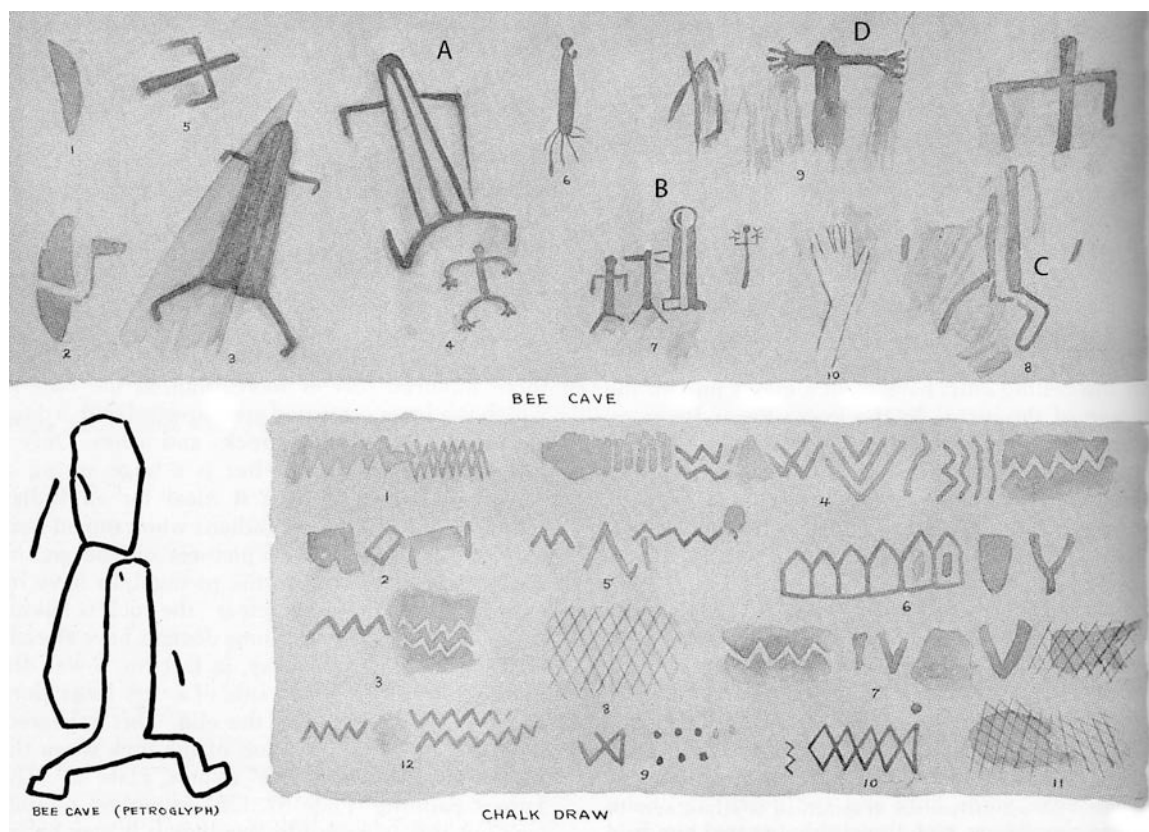


Fig. 3.34. Motifs at Bee Cave include an anthropomorphic petroglyph (bottom left, c. 1 m tall), and other outlined, 'skeletonized', or 'centrystyled' anthropomorphic figures (marked A, B, and C; ignore Kirkland's numbers). Also note headless figure (D).

Bee Cave is one of the few rock art sites in the study area that has been excavated professionally; work in the late 1920s yielded important finds that also attest to some form of ritualism (Harrington 1928; Coffin 1932; Peel *et al.* in press). Recovered artefacts include a grooved and painted bone, notched and painted sticks, painted metates and pebbles (in black, red, and yellow), stone and shell pendants, reed and seed beads, reed pipes, stones wrapped with plant material, and anthropomorphic clay figurines (see Chapter 7; Harrington 1928: 315; Coffin 1932: 24, 57–58; Peel *et al.* in press; Boren pers. comm.; Cloud pers. comm.). Living Rock Cactus (*Ariocarpus fissuratus*) – known as False Peyote – was also found here in the 1920s (Fletcher 1930: 40; Coffin 1932: 59; Bousman & Rohrt 1974: 56, 70; see also Tegarden 2005: 119).

Sites 9–11: Beehive, Pumpkin Vine, and Hidden Panel

Beehive, Pumpkin Vine, and Hidden Panel are all small boulder shelters in the Black Hills, close to Bee Cave.³ Tegarden (2005: 46–50, plates 10, 15, 18) chose to document these sites partly because of their lack of anthropomorphs and zoomorphs, as in many of the engraved panels in the southern Big Bend; he was keen to define a sub-style, Big Bend Abstract. Many of the geometric figures that Tegarden lists are entoptic forms (grids, ‘rakes’, dotted lines, various circles (including concentric circles, Fig. 3.35), chevrons, zigzags, and meanders), but also present are vulva motifs (Fig. 3.36), ‘X-incurved’ motifs (Fig. 3.37; see also Patterson 1992: 212), and ‘shumla’ and ‘squid’ motifs (discussed below).

³ See also Peel *et al.* (in prep.).



Figs 3.35 and 3.36. Concentric circle petroglyphs (left) in the Black Hills; note geometric pecking above the checked 5 cm scale arrow. In the bottom centre of the photograph on the right is a deeply etched vulva motif. Compare all three Black Hills photographs with drawing below (Fig. 3.38).



Fig. 3.37 includes two 'X-incurred' motifs (centre), circles, and other geometrics.

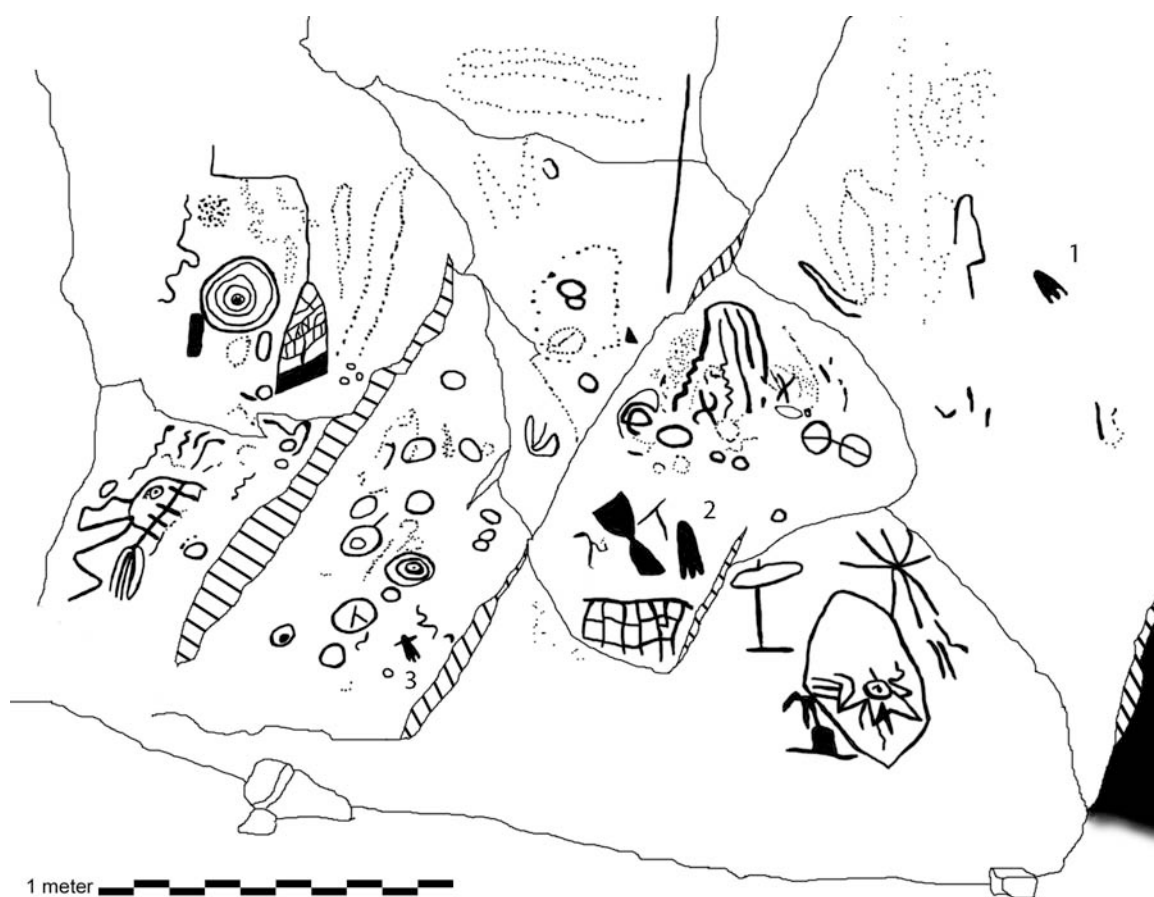


Fig. 3.38. Tegarden (2005: plate 18) depicts motifs from the photographs above. ‘Shumla’ projectile point motifs are marked 1–3.

The ‘shumla’ motif is named after an item of material culture found throughout the study area: the stylistically similar Late Archaic shumla point (Fig. 3.39), dated to c. 1000 – 200 BC (Suhm & Jelks 1962: 247; Turner & Hester 1999: 186; Mallouf pers. comm.). Here, I use the term ‘shumla’ when describing motifs in the rock art while simultaneously and explicitly acknowledging that even in the unlikely event that the motif ‘reflects’ a simple item of material culture, that item may in fact be one of several three-tanged projectile points.⁴ In the Big Bend rock art corpus there are several variations, including extra ‘toes’ at the proximal end or ‘arms’ at the distal end, “suggesting a transformation or anthropomorphic association” (Tegarden 2005: 70, plates 17, 36; see also Bilbo & Sutherland 1986: 15). In New Mexico, Schaafsma (1992) has identified a similar “narrow-heeled track” motif at Desert Abstract rock art sites (below). Tegarden’s (2005: 69–71) strict definition prescribes the Big Bend shumla motif as “free-floating”, that is “in association with abstract motifs rather

⁴ The rock art motif often resembles *Middle* Archaic points (e.g., Bell, Calf Creek, and Andice points); and also other Late Archaic (e.g., Castroville) points (Mallouf 1999: 59).

than anthropomorphs or zoomorphs”; he identifies the motif at ten rock art sites and suggests that it is “so pervasive in Southern Big Bend that it might represent a clan ‘signature’ expressing identity” (Tegarden 2005: 124). He does not suggest whether this putatively totemistic motif might represent or ‘mean’ something else when it is found in other areas in association with human figures and animals rather than abstract motifs – that is, when it is not “free-floating”. Moreover, in those other areas, Tegarden does not address the ‘need’ to depict an item of material culture.



Fig. 3.39. Shumla projectile point (c. 5 cm long) from Big Bend National Park. The right barb is broken. Courtesy of CBBS.

Some of the other shumla variants at Hidden Panel in the Black Hills are particularly noteworthy; on occasion, the appendaged anthropomorphic ‘arms’ are zigzag shaped. There is also evidence in the Black Hills’ sites of pecked lines *over* red pigment; contrary to an implicit, widely held maxim, pictographs are *not* necessarily more recent than petroglyphs.

Sites 12 and 13: Charles Burr and Tranquil (41BS1494 and 41BS1513)

Like the sites in the Black Hills, 40 km (25 miles) to the west, there are no anthropomorphs or zoomorphs at either Charles Burr or Tranquil. The Burr site

features three negative red handprints on the low ceiling of a boulder shelter (Fig. 3.40); the top of the boulder is covered with pecked dots, and lines of pecked dots. There are also hundreds of cupules and mortars. In contrast, the rock shelter at Tranquil has no petroglyphs, but sinuous lines, chevrons, and a circle in red pigment.



Fig. 3.40. Negative red handprint at Burr site.

Site 14: Indianhead (BS23)

Close to the small town of Study Butte, still in Brewster County but only a few miles north of the Rio Grande in the southern Big Bend, lies the igneous intrusion of Indian Head Mountain; large boulders with both pictographs and petroglyphs litter its talus slopes (Fig. 3.41).⁵ There are springs at both the southwestern and southeastern corners of the site, which is approximately 1 km (0.6 miles) from west to east, and just inside the Big Bend National Park boundary. There is lithic debitage throughout the site, but mostly at the springs and in the main boulder shelter half way between them (Jackson 1938: 120–124; Tegarden 2005: plate 30). There are at

⁵ See also Jackson (1938: 120–124); Kirkland & Newcomb (1967: 126); Lowrance (1982b: 22–65); Tegarden (2005: 53–60).

least 20 hearth sites, at least 23 bedrock mortars, and at least 11 basin-shaped grinding surfaces (metates) (Alex pers. comm.).



Fig. 3.41. Large (> 5 m wide) boulders at Indianhead. See Fig. 7.9 for drawing of petroglyphs on this boulder.

Pictographs in black, red, and yellow at the western end of the site include anthropomorphs and entoptics (parallel lines, circles, chevrons, zigzags, and meanders); there are also unusual geometric configurations including sets of pendant triangles (Fig. 3.42) and 'fan-like' lines, plus sunbursts, arched lines, and six positive handprints (Kirkland & Newcomb 1967: plate 84; Tegarden 2005: 56).



Fig. 3.42. Geometric pictographs at Indianhead. Each small triangular motif is c. 5 cm tall.
Courtesy of C. Harrell.

The thousands of petroglyphs at Indianhead include possible anthropomorphs (Fig. 3.43), entoptic forms (including spirals; Fig. 3.44), and many other geometric forms (shumlas, squids, an outlined cross, 'dumbbells', sunbursts, 'turkey tracks', 'ball-and-chain' motifs, 'yoke' motifs, and, intriguingly, a hand with the index finger extending upwards as a meandering zigzag line (Tegarden 2005: plates 37, 39, 47). Note once again the absence of zoomorphs.



Fig. 3.43. Two possible anthropomorphic figures at Indianhead.



Fig. 3.44. Rake and spiral motifs at Indianhead.

Site 15: Bundy

Bundy's site – another narrow shelter below the rimrock, and close to Big Bend National Park – has many grooves, cupules, pictographs in red, orange, and yellow, and one petroglyph (a sunburst motif). Three of the pictographs are possible anthropomorphs; the others are geometrics, including all seven entoptic forms (Fig. 3.45), and dumbbells. Some of these geometrics are in two colours, rare for the Big Bend region. One motif, in a protected alcove, has been deliberately rubbed and smeared. There is also evidence of superpositioning, and one drawn handprint.

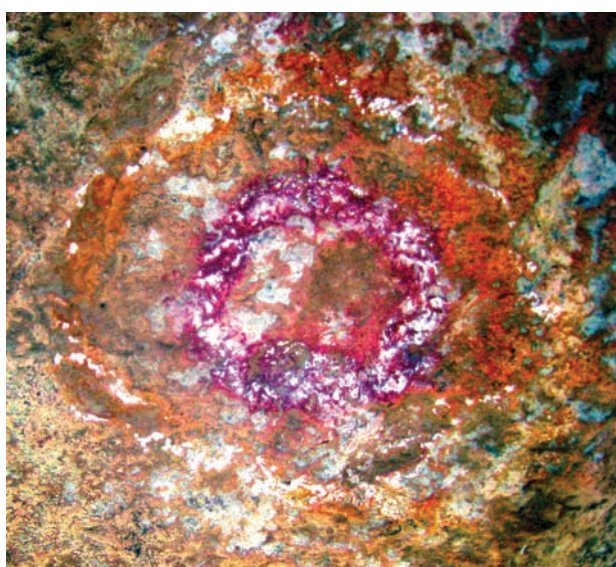


Fig. 3.45. Many of the purple-red and orange concentric circles at Bundy have been chalked by modern visitors. The outer circle is approx. 8 cm in diameter.

Site 16: Hot Springs (41BS440)

On the north bank of the Rio Grande, inside Big Bend National Park and close to famous thermal springs, are pictographs and petroglyphs on a limestone bluff.⁶ There are at least two possible red anthropomorphs (one deliberately smeared and headless, discussed in Chapter 7); many red geometric entoptics (rakes, ovals and circles, chevrons and pendant triangles); and at least five pecked and abraded shumla motifs, with remnants of pigment over them (Fig. 3.46). There are neither zoomorphs nor handprints at the site, which is visited daily by tourists because of the springs and historic homesteads (Fig. 3.47).



Fig. 3.46. Two of at least five 'shumla' point motifs (c. 5–10 cm in length) at Hot Springs site. Red pigment (bottom right) is *over* the petroglyphs. Compare with Fig. 3.39 above.

⁶ See also Kirkland & Newcomb (1967: 126–127).



Fig. 3.47. Close to the Rio Grande, the historic homestead and store at Hot Springs attract many visitors each year.

Site 17: Tres Yonis

Also in Big Bend National Park, the recently discovered boulder shelter site of Tres Yonis features pictographs (including a red looped line), and, on a vertical face and on the top of a small boulder, several geometric petroglyphs (lines, dots, ovals), six vulva motifs, and, strikingly, at least 275 cupules (Figs 3.48–3.49; Alex pers. comm.; see also Willis 2010). The positioning and abundance of these cupules immediately rules out the idea that they were created for utilitarian grinding purposes only.



Fig. 3.48. Cupule-ridden boulder with three visible vulva motifs at Tres Yonis.



Fig. 3.49. The top of the main boulder at Tres Yonis has both cupules and mortars.

Site 18: Red Buffalo

Pictographs and petroglyphs are present on a large boulder (c. 10 x 8 x 4 m) situated next to an intermittent arroyo in the north of Big Bend National Park. In addition to a white anthropomorph (and possibly a second human figure, pecked), there is also a red bison (Fig. 3.50) and at least nine geometrics at the site (grids, rakes, circles, and concentric circles; all but two of these geometrics are pecked). As at Hot Springs and the Black Hills sites, some of the red lines are *under* engravings.



Fig. 3.50. Buffalo (bison) at Red Buffalo site.

Site 19: Jose's Cantina

Named by Tom Alex, this Big Bend National Park site has pictographs in several rockshelters approximately 200 m above the desert floor (just below the rimrock of the Chisos Mountains), and, downslope from the shelters, several boulders covered in petroglyphs (Tegarden 2005: 61–64, plates 56–62; see also Lowrance 1982b: 93–112). Also present is a large midden, chert flakes, charcoal, a mortar, and several metates.

The largest boulder has a flat, vertical surface upon which are pecked squids and shumlas, ball-and-chain motifs, and many cupules (Fig. 3.51). Interestingly, but not uniquely (see Lobo Valley, below), there is a series of grooves carved into the upper edge of the boulder face.

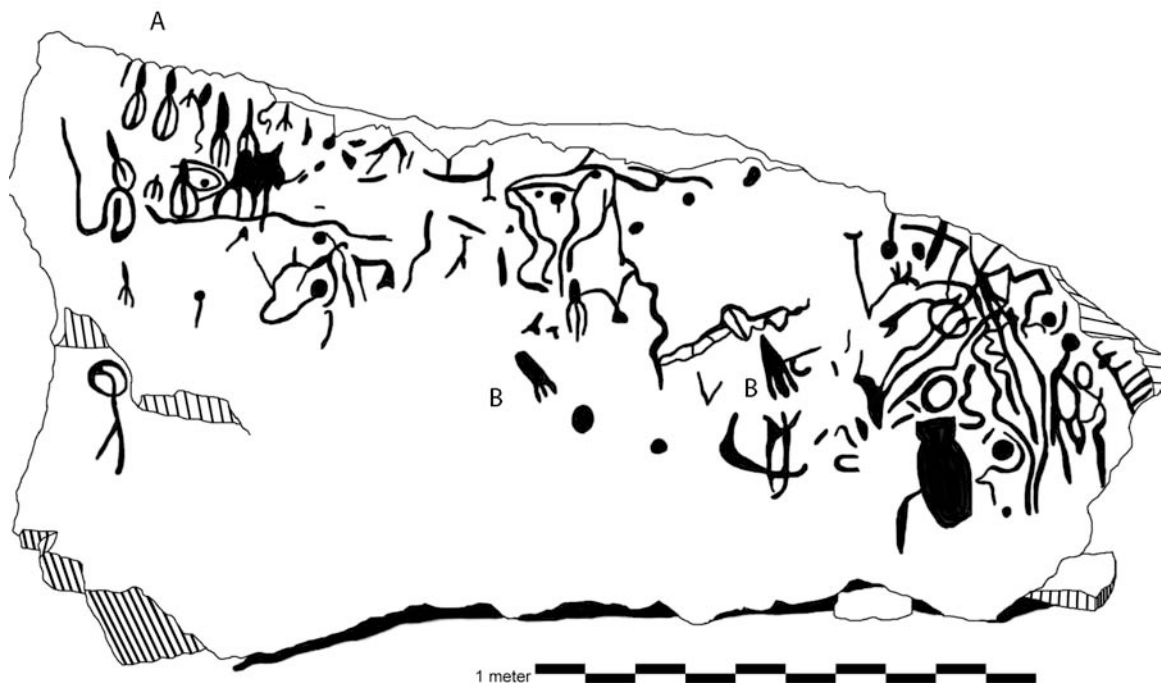


Fig. 3.51. The main boulder at Jose's Cantina includes pecked 'squids' (marked A), shumlas (B), and many cupules. Drawing courtesy of A. Tegarden (2005: plate 59).

Other boulders at Jose's Cantina include entoptic forms (including concentric circles), and more shumla and squid motifs. In the rockshelters, pictographs include

c. 10 m of horizontal and alternating red and yellow stripes on the back wall, punctuated by rows of circles, a vulva motif, and a shumla motif. The eastern section of the shelter has yellow 'fan-like' forms and a set of white zigzags next to a yellow lizard-like zoomorph.

Site 20: Glenn Springs (BS272)

A boulder that lies at the base of a talus slope at the southwest end of Chilicotal Mountain in Big Bend National Park has both pictographs and petroglyphs (Kirkland & Newcomb 1967: 126–127; Tegarden 2005: 52–53, plates 23, 27). The site – which includes lithic debitage, at least four bedrock mortars, and three stacked stone circles – sits on a flat saddle crossed by a drainage located less than half a kilometer to the south. Glenn Springs itself is a short walk to the southeast; there is also a historic candelaria wax camp nearby.

The southern face of the large boulder has red pictographs including a figure-of-8 motif and other geometric lines. Pecked into the northern side of the boulder are shumla and squid motifs, meanders, and circles.

Based on seven petroglyph sites, Tegarden (2005: 73) proposed a Big Bend Abstract Style featuring solely geometric motifs in the southern Big Bend. Notably, most of Tegarden's commonest motifs are entoptic forms, but there are also shumla, squid, and vulva motifs, crosses, dumbbells, and other geometrics.

A comparison with Schaafsma's (e.g., 1980: 56–79; 1992) and Turpin's (2001: 382–388; 2002: 2–3) regional rock art styles and traditions, first defined in the 1970s and 1980s, reveals many motifs present in the older, broader styles and also in Tegarden's (2005: 67) recently proposed Big Bend Abstract. The widespread and long-lasting Desert Abstract Style, for example, includes handprints (sometimes with fingers that extend into longer lines), grids, parallel lines/rakes, concentric circles, sunbursts, meanders, zigzags, spirals, and possible projectile points. Turpin's (2001: 387–388; 2010) reading of the Desert Abstract Style in northern Mexico and into southwest Texas includes many of these elements, and, like many researchers, Turpin (2002: 2–3) considers the overarching Desert Archaic as an umbrella tradition for the Desert Abstract and also the strikingly similar Candelaria, Diablo Dam, and Shumla Styles (see Alamo Canyon sites below).

I turn now to nine sites in Big Bend Ranch State Park, adjacent to Big Bend National Park.

Site 21: Manzanillo (PS24 and PS486)

Three overhanging ceilings along an intermittent creek have pictographs in red, orange, and yellow; some of the pigment is more than 2 m from the ground. Some of the paintings are bi-chrome, and superimposed. There are ten remarkable human figures at Manzanillo: three with cephalic emanations and hands-on-hips (see Fig. 5.5), and two in a chain, with joined hands. Tim Roberts (pers. comm.) has suggested that the aesthetic and postural similarities shared by many of the red human figures in the State Park may justify recognition of a new style, Big Bend Red Monochrome, akin to the Lower Pecos Red Monochrome Style (Turpin 1986a; 1989).

The anthropomorph on the main panel at Manzanillo has been deliberately smeared. Although there are no zoomorphs, there are 32 geometrics including entoptic forms (grids (Fig. 3.52), tally marks, dots, zigzags, chevrons, diamond chains, pendant triangles), and other enigmatic motifs including 'cartouches' (Fig. 3.53) – what Ing *et al.* (1996: 89) refer to as 'hourglasses' and 'boxes' – and curvilinear forms. Cultural deposits include only three metates and one flake; once again, there is no correlation between the size of rock art panels (or the number of motifs) and the presence or quantity of cultural deposits.

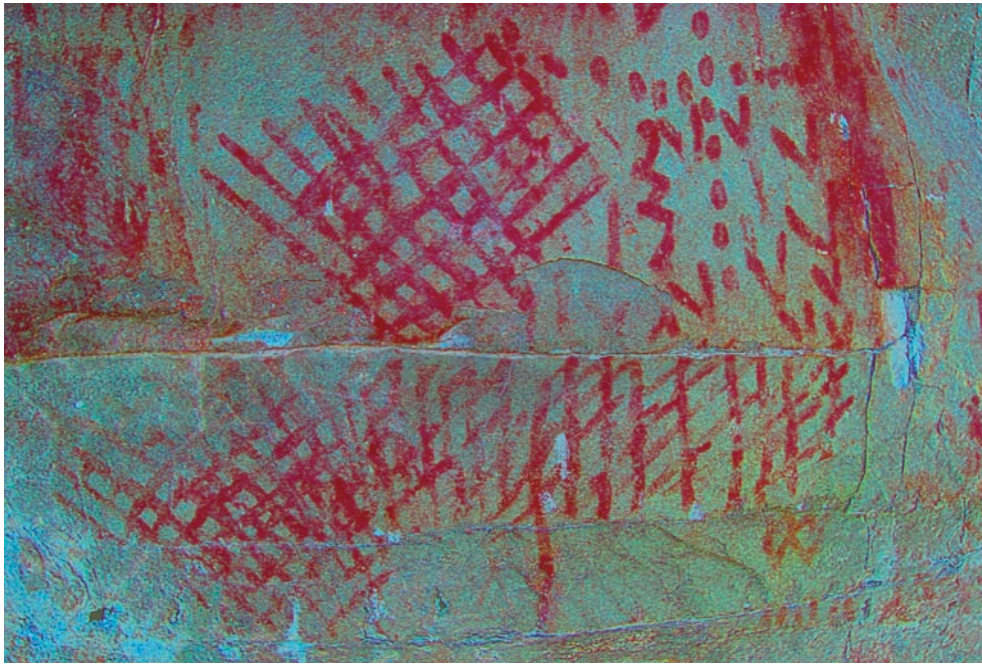


Fig. 3.52. Entoptic grid motifs, chevrons, and dots at Manzanillo.



Fig. 3.53. Yellow boxed hourglass 'cartouche' at Manzanillo.

Site 22: Cuevas Amarillas (PS201)

Pictographs in three shelters in the yellow volcanic tuff at Cuevas Amarillas include human figures and geometrics in red and orange, and at least 27 white hand- and arm-prints, all but five of which are negative stencils (Fig. 3.54).



Fig. 3.54. Negative hand-, wrist-, and lower arm-stencil at Cuevas Amarillas.

Two of the anthropomorphs are well known in the region, and even feature on a postcard for sale at nearby Fort Leaton. Outlined in red pigment, the figures have raised arms and single-line emanations from the top of their heads (see Fig. 7.1). Another anthropomorph is painted with one leg deliberately missing; this absence is not the result of differential weathering. Also present are many cupules, mortars, and cultural deposits dated to the Late Archaic through the Late Prehistoric to the Historic (Beene 1994: 16, 25; see also Ing *et al.* 1996). Exotic items that suggest a sophisticated trade system include turquoise, *Olivella* species shell, obsidian, ceramics, and glass beads (Beene 1994).

Sites 23 and 24: Agua Adentro and Bison (PS436 and PS187)

Agua Adentro and Bison sites are both close to Cuevas Amarillas, in shelters in the same volcanic tuff rock formation. The possible anthropomorphs and zoomorphs (including a possible horse-and-rider) at Agua Adentro are in black (part of another proposed style, Big Bend Bold (Roberts 2010), but there are also geometric lines in red and dots in yellow. The possible human figures at the Bison site are also hard to discern, but the eponymous bison, in red, is clear. Entoptic motifs include a rake with dots above, meanders, and a bisected circle with 'tail'. Remarkably, at Bison there are cupules carved into an almost vertical wall, and a rare quartz point was recently discovered here (Roberts pers. comm.) As we shall see below and in Chapter 5, quartz is significant for reasons beyond its technological functionality.

Site 25: Leyva Canyon (PS456)

Also in Big Bend Ranch State Park is a large boulder shelter in Leyva Canyon. The 19 discernible pictographs are in red, although one human figure is also partly in yellow (Fig. 3.55). Notable anthropomorphs include a mounted horseman and two figures with exaggerated hands and feet. One of these figures (Fig. 7.4) is also missing its right leg, as at Cuevas Amarillas, and the other (Fig. 7.8) has vertical emanations, perhaps hair, from its horizontally outstretched limbs. All but two of the eight anthropomorphs have outstretched and raised arms. Other than the horse, there are two other quadrupeds. Unusually, none of the 7 geometric forms (including an outlined cross) are entoptic.



Fig. 3.55. Spread-eagle human figure (c. 30 cm tall) at Leyva Canyon with yellow pigment either side of torso. See bottom left of Fig. 7.4 for drawing.

Site 26: Cueva Larga (PS941)

As the name suggests, Cueva Larga is a large cave (Fig. 3.56). Most of the pictographs in the cave are in red, but there is also orange, black, and white pigment, and many examples of motifs superimposed over one another (Fig. 3.57). In addition to human figures (some with arms raised), zoomorphs, and entoptic motifs, there are at least 13 handprints (both positive and negative), including at least six depicting

the wrist and lower arms as well as the hand. Cultural deposits in the cave include manos and metates, various points, and ceramic sherds (Roberts pers. comm.).



Fig. 3.56. Cueva Larga. Tim Roberts is on right, in front of main panel.



Fig. 3.57. Main panel at Cueva Larga. At least six of the 13 handprints at Cueva Larga include the wrist and lower arm as well as the hand.

Site 27: Fresno Canyon (PS40)

In the eastern portion of Big Bend Ranch State Park, Fresno Canyon contains several boulder shelters. On the ceiling of one of these are 25 handprints, 22 of which are blown or scraped negatives – many of the handprints overlap (Fig. 3.58). Other than one red looped line, there are no other paintings in the relatively small shelter, the ceiling of which is rarely more than 1 m from the ground. There are, however, dozens of scratches, grooves, cupules, and mortars.



Fig. 3.58. Handprints and stencils on the ceiling of Fresno Canyon shelter.

Site 28: Auras Canyon (PS191)

Under several contiguous overhangs at the base of a large bluff in Auras Canyon are petroglyphs and hundreds of pictographs in red and black. In addition to human figures and zoomorphs (including a possible longhorn cow, a possible javelina, and at least six horse-and-rider figures; see Chapter 5), there are various geometrics – including entoptic forms, dumbbells, and, on a high ceiling at least 5 m above the shelter floor, 15 crosses that have been interpreted by several researchers, albeit unconvincingly, as archaeo-astronomical phenomena (Roberts pers. comm.).

Also notable is a cupule to which has been added short red ‘rayed’ lines (Fig. 7.24), and a human figure with extra legs (polymelia). Most important is a densely painted panel featuring an anthropomorph with a cephalic emanation, a human figure and shield (Fig. 3.59), and deliberate scraping of individual painted motifs (‘ritual removal’; see Chapter 7). This panel is close to several veins of quartz-like calcite crystal at the eastern end of the site. In Chapter 5, I argue that this proximity was significant and non-random.

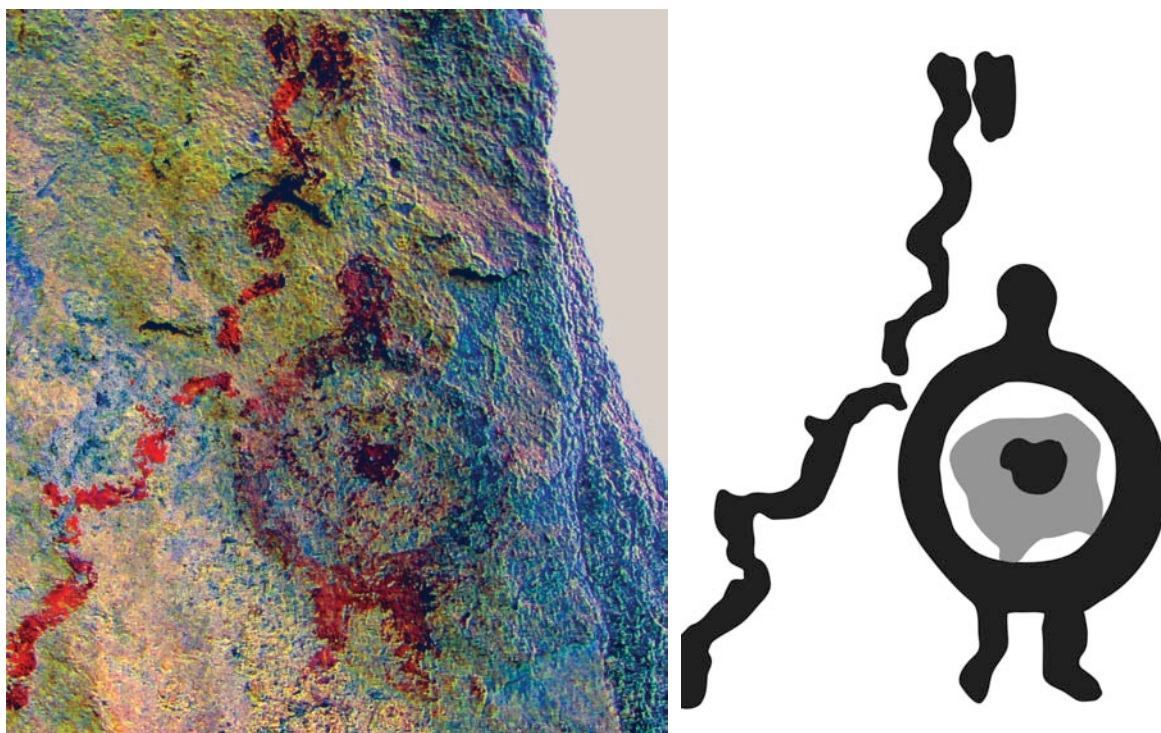


Fig. 3.59. Human figure with shield (c. 8 cm diameter) to right of sinuous line at Auras Canyon. A quartz-like calcite crystal vein is close by.

There are cupules, mortars, and many cultural deposits throughout the site. Recovered from the shelter floor in the late 1970s were two clay effigies, considered by Madrid (1996) to be therianthrope fish–human effigies (Chapter 7).

Site 29: Las Burras (PS114)

In the southern section of Big Bend Ranch State Park, close to the Rio Grande, is a large cave below the rimrock (Ing *et al.* 1996; Green 1997). The approach to the cave is steep, and the cave floor itself at an approximately 45-degree angle. Pictographs, all of which are black and painted at approximately the same height along the back wall of the cave, include six human figures (three of which are side by side), four

zoomorphs, a positive handprint, and 20 geometrics including a dumbbell and possible 'vortex' design (Fig. 3.60). Other notable motifs include a canid with six legs (polymelia) close to a legless human figure (Fig. 7.19); an anthropomorph with cephalic emanations; another legless human figure; and a lizard-like figure that may be therianthrope (Fig. 6.10).



Fig. 3.60. Nested geometric design at Las Burras.

Spalled pigment at Las Burras was dated to the Late Prehistoric, but unreliably; the spalls contained as much carbon as the unpainted background samples (Ilger *et al.* 1995: 2; Roberts pers. comm.). Loric acid – probably from animal fat used as a binder – was also found here in the 1990s (Roberts pers. comm.).

Site 30: Cosmic (PS954)

Farther west in Presidio County are the Sierra Vieja 'Breaks', sparsely inhabited badlands between the Rio Grande and the towering Sierra Vieja peaks. High up a canyon wall and just below the sandstone rimrock north of Pinto Canyon and the Chinati Mountains lies the relatively small Cosmic rock shelter (c. 10 m wide x 4 m deep x 2.5 m high at the dripline, but tapering down to the back wall). Cosmic has both pictographs and petroglyphs. Both techniques include entoptic geometrics (Fig. 3.61), and, again, it cannot be assumed that the choice of different techniques or media necessarily reflects a different meaning or motivation.



Fig. 3.61. Black crayon and white pictographs on naturally red Cosmic shelter ceiling. Note hole outlined with white pigment below row of white hourglass cartouches.

Other pictographic geometrics in various shades of red, black, and white (and in both wet and dry pigment) include grids, 'one-pole ladders', and other rectilinear motifs. It has been suggested that some of the geometrics represent insects (below; Peel in press). There are also handprints – some of which are polymeliac (six-fingered) and decorated – and possible zoomorphs and anthropomorphs.

One red anthropomorph has unusual frog-like legs (Fig. 3.62; see also Peel in press). A relatively large proportion of the motifs at Cosmic are superimposed, and, intriguingly, a thin white film of pigment has, in places, been deliberately wiped (Fig. 7.32). In other areas, natural features have been outlined and accentuated with pigment. Other than the rock art and several cupules, there are no other cultural features at Cosmic.



Fig. 3.62. Anthropomorph with frog-like legs at Cosmic. Courtesy of R. Peel and CBBS.

Site 31: Cascade (PS953)

Cascade and the next eight sites are also close to Pinto Canyon in western Presidio County. Cascade is a small wedge-shaped shelter formed by boulders and an overhanging bluff high up a canyon wall; access is best attained through a boulder tunnel from the sandstone rimrock above. Other than seemingly random black lines and flecks, and an amorphous patch of white paint, there are only four clear motifs at Cascade, all anthropomorphic. Close to a headless human figure in red is an unusual grey figure with large hands and splayed fingers, three-toed feet, and short spiked hair (Fig. 7.20; see also Peel in press). Near by is a strikingly bright yellow male figure with large hands and splayed, smeared fingers, large feet (with five toes), a rounded belly, and a single cephalic emanation (Fig. 7.10). The fourth anthropomorph at Cascade, in a small alcove, also painted with bright yellow pigment, is in what Peel (in press: 7) refers to as an “anatomically impossible position” (Fig. 3.63). The figure, which Peel (in press: 7) suggests might be female, has three-toed bird-like feet and raised arms extending into a semi-circular arc above its head. There are similar figures, sometimes called ‘receptive female motifs’, in the Colorado River Plateau and Reserve Petroglyph styles to the north (Schaafsma 1980: 191; Malotki 2002: 170). In addition to Late Prehistoric points and a groundstone bowl in Cascade shelter, there are bedrock mortars in the sandstone floor and cupules on the ceiling.



Fig. 3.63. Anthropomorph with bird-like feet and raised arms at Cascade. Each 'toe' is c. 4–5 cm long. The colour has *not* been digitally altered.

Site 32: Flamingo Shelter (PS208) is a moderately sized (c. 15 m wide x 8 m deep) rockshelter at the base of a high bluff. The ceiling is smoke blackened. Pictographs, in red and yellow, include an anthropomorph, meanders, and dots. Also present are three incipient bedrock mortars, and several manos and metates.

Site 33: New, or **PCR 281**, is a small overhang above an intermittent creek. Images in orange/red cover approximately 1 m x 0.5 m and include an anthropomorph, linear series of dots, and chevrons.

Site 34: Cerro Chino (PS896) is located on the south side of an arroyo on a gravel terrace at the base of a low sandstone ridge that is set back from and parallels the course of the creek. Impressive petroglyphs include looped lines, zigzags, and 'horseshoe' or vulva-like motifs. In two painted overhang shelters are smears, flecks, and zigzags in red and yellow, and possibly a black anthropomorph. Cultural artifacts recovered at the site date back to the Early Archaic (Mallouf 2002; pers. comm.; see also Willis 2009).

Site 35: Pourover, a tuffaceous sandstone shelter, is c. 18 m long x 7 m deep x 2.5 m high, just above an intermittent arroyo floor. On the back wall are dozens of grooves and cupules, sometimes superimposed. There are also small red and orange pigment dots.

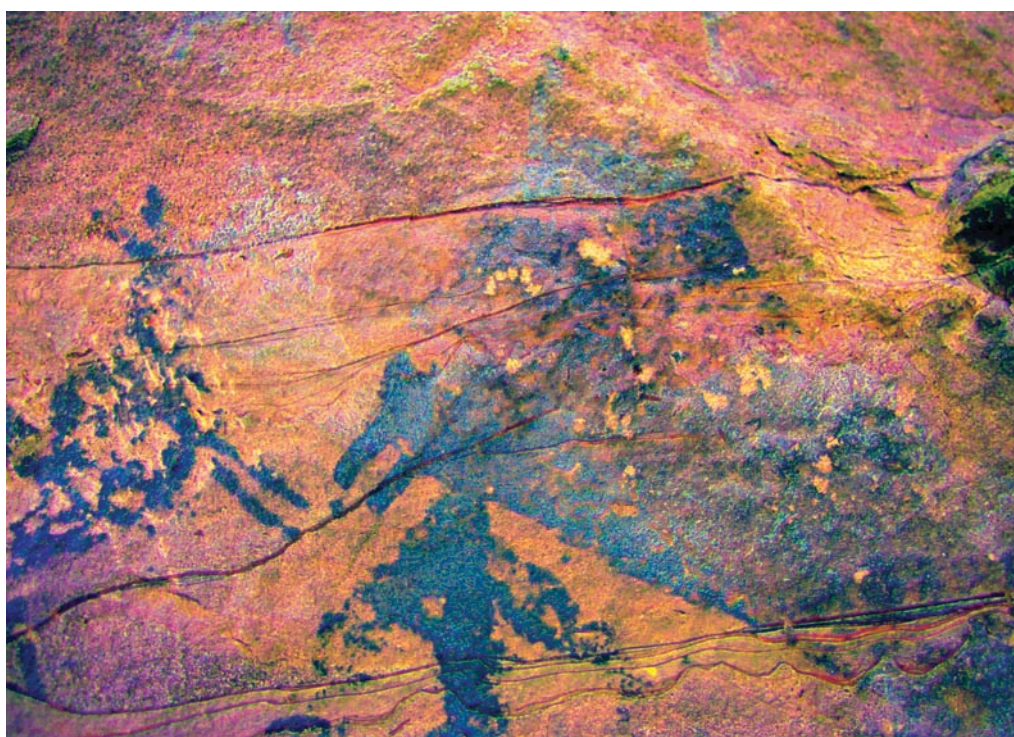
Sites 36 and 37: Red Deer and Chimney are two relatively shallow and almost contiguous rockshelters (17 m long x 5 m deep, and 15 m x 7 m respectively) in tuffaceous sandstone, just below the rimrock. Chimney has many grooves and scratches in the red, baked clay surfaces, and a few red smudges on the sandstone wall. There is also a large cultural talus in front of shelter. At Red Deer, there are more grooves and two red eponymous pictographs, but no cultural deposits (Mallouf pers. comm.; Seebach pers. comm.).

Site 38: Tablecloth is a boulder overhang (Fig. 3.64) under which the faded black and white images are never more than c. 1 m from the ground. Even on a cloudless day they are hard to see, because of their positioning, their diminutive size, the colour of the background rock, and complex superpositioning.



Fig. 3.64. Tablecloth site boulder.

In the main panel, which covers c. 2 m x 1 m, there are at least 31 quadrupeds – mostly deer, one with an open mouth (Fig. 3.65), comparable with cervids in the Early Hunting Tradition of the northern Plains (Keyser & Klassen 2001: fig. 84) – and up to 12 human figures. One of the human figures holds a bow and arrow, and there are two more bow and arrow sets associated with human figures. Several figures – both zoomorphs and anthropomorphs – are painted in black, others in white, and some, unusually, in both black *and* white. This was probably a deliberate choice by the artists, although we cannot discount the possibility of the pigment changing colours due to natural weathering processes. Perhaps the most interesting feature at Tablecloth is the precise pecking over 14 of the deer and two of the human figures.



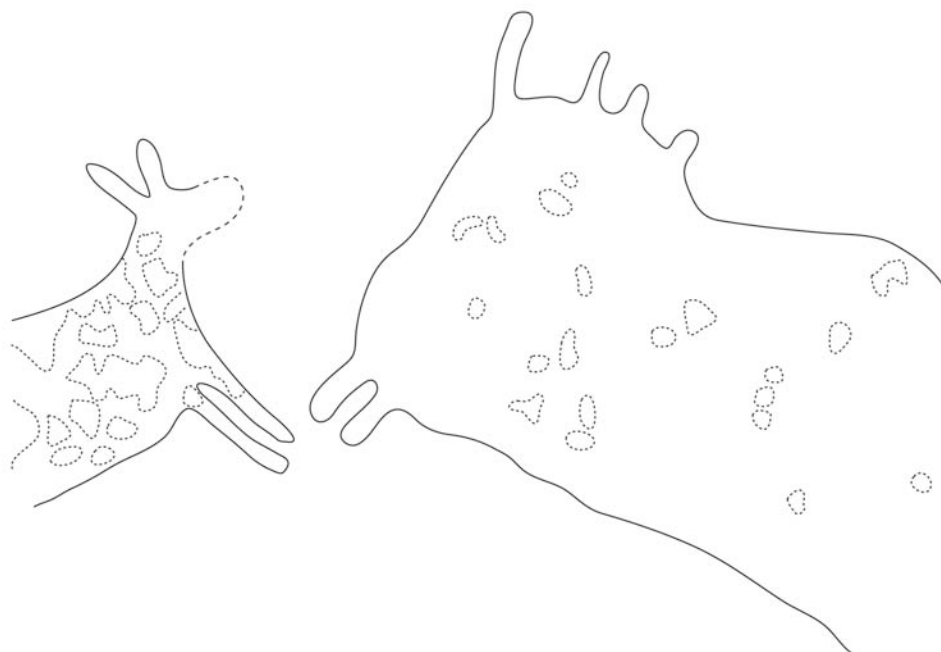


Fig. 3.65. Deer at Tablecloth; compare with photograph above. Note precise pecking (indicated with small dots) and open mouth of larger deer. Width of the drawing is c. 15 cm.

Approximately 300 m southwest of Tablecloth is a small rockshelter with a red handprint and several meandering lines. Notably, the only surface find other than a metate was a small piece of quartz with short etched lines (Seebach pers. comm.).

Before describing sites in Culberson, Hudspeth, and El Paso counties – on the border with, and in, the western Trans-Pecos – I turn now to petroforms.

Dancing Rocks (41PS592)

The Dancing Rocks site near Pinto Canyon features a unique combination of petroglyphs and petroforms.¹ Petroforms are defined as deliberate arrangements of stones on the ground, often depicting human or animal figures as well as geometric and abstract shapes (Steinbring 1970; Whitley 2005: 15; Keller 2008: 1). In contrast, geoglyphs and intaglios are created by scraping and removing earth – thus, geoglyphs and intaglios are negative, whereas petroforms or rock alignments are positive.

¹ Dancing Rocks and other petroform sites are not in my list of 44 pictograph and petroglyph sites. I deliberately leave the petroform sites un-numbered and un-plotted on the map.

Mallouf (in press: 1) has suggested that the rock art at Dancing Rocks – located near a spring in the Sierra Vieja Breaks – was made by Historic era horse nomads “within a ritual context”. Before discussing this important “ritual context” and the local topography, I outline previous rock art research and ethno-historical accounts in the Breaks before describing the site.

Miriam Lowrance (1988a), who worked in the Pinto Canyon region in the 1960s, reported Historic era horse-and-rider pictographs in at least five rock art sites, all of which are remote from any surviving trails. Both Lowrance (1988a) and Mallouf (in press) have suggested that, collectively, rock art in the Breaks – as, indeed, throughout most of the Big Bend region and west Texas – implies a continuum of occupation from prehistory into the Historic era. As we shall see in following chapters, ethno-historical accounts of interactions between hunter-gatherer, nomadic, and agriculturalist groups in the area (e.g., Bolton 1911; 1912; Hammond & Rey 1929; Kelley 1952a; 1986; Griffen 1969; 1979) bolster this hypothesis.

Importantly, throughout the seventeenth century AD, and after the arrival of the Apache and Comanche, the rugged western Presidio County Breaks became both an escape route and a refuge for horse nomads in conflict with European settlers. After a loose alliance of Apaches and La Junta Indians attacked the presidio at Presidio de Norte (modern-day Ojinaga, Chihuahua, Mexico) in AD 1760, for example, those that were not captured or killed fled the vengeful Spanish and hid in the sparsely inhabited mountains and Breaks (Mallouf pers. comm.). Lightfoot (1995: 201) notes that inaccessible places throughout North America often became refuges for groups with many different origins coming together for mutual protection on or beyond the frontier; these groups included “runaway slaves, escaped neophytes, criminals, and disenfranchised peoples ... members of different native tribes ... especially those involved in raiding colonial settlements”. I discuss other ethno-historical accounts later.

Dancing Rocks consists of 24 small, similarly sized igneous boulders across an 8 x 9 m area that forms a ‘bench’ some 4 m above the arroyo floor; the canyon wall forms a backdrop to the site (Fig. 3.66). Although erosion has certainly altered the configuration of the site, it seems that many of the individual boulders were carried by humans onto the bench, or were moved from their natural positions on the bench

and “subsequently placed in some kind of meaningful arrangement” (Mallouf in press: 7). The spacing between the boulders – which form, roughly, concentric circles, or parts of circles – is remarkably uniform, as are the boulders themselves. It was these observations coupled with the presence of engravings on five of the 24 boulders that led Mallouf to suggest that the Dancing Rocks site was both a petroglyph and petroform site.



Fig. 3.66. Arrow marks Dancing Rocks site. Courtesy of R. Mallouf and CBBS.

The first of the five boulders with pecked or ground motifs includes a rider on horseback, a riderless horse, and a pair of anthropomorphs that appear to be holding hands; their free arms extend upwards (Fig. 3.67). The second boulder features a second pair of hand-holding anthropomorphs (Fig. 3.68).



Figs 3.67 and 3.68. Human figures (c. 15–25 cm tall) at Dancing Rocks appear to be hand in hand; the figures' other hands are raised or outstretched. The bottom images are digitally enhanced versions of the original photographs. Courtesy of R. Mallouf and CBBS.

The other three boulders with petroglyphs feature another quadruped, another anthropomorph, and other man-made remnants including smoothed patches of rock.

Other petroforms in the Trans-Pecos

David Keller of the Center for Big Bend Studies and Tom Alex at Big Bend National Park have identified 14 additional petroforms in or near to the park, at least 130 km (80 miles) east of the Sierra Vieja mountains. Unlike Dancing Rocks, none of these petroforms includes petroglyphs on any of the constituent rocks. Most of the 14 sites are clustered in a relatively small area, but there are almost certainly many more undiscovered petroforms in the region (Keller pers. comm.). Arbitrary sub-divisions for petroforms in and around the national park include 1) geometric rock alignments, 2) 'medicine wheels', and 3) animal effigies.

1) Lizard Hill, one of five known geometric rock alignments sites in the Trans-Pecos, features two intersecting serpentine lines of stones, each line about 20–25 m in

length. Also present are three limestone cobble clusters, 2–5 m in diameter; the entire site covers a c. 120 sq. m area (Keller 2008). Significantly, Lizard Hill contains a cache of various dart points diagnostic of the Middle Archaic. Found in the cache alongside these lithics were two open halves of freshwater musselshell and a smooth river cobble, objects that strongly suggest that the cache was ritualistic (Keller 2008; pers. comm.).

2) 'Medicine wheels' consist of a central hub in the form of a cairn or rock circle, and radiating 'spokes'. Until the discovery of three medicine wheels (The Spider, Spoked Pit, and Riverview) in the Big Bend, the Bighorn Medicine Wheel in Wyoming was believed to be the most southerly example of these impressive archaeological features (Keller pers. comm.).

Despite the fact that they are found within a relatively small (80 sq. km / 30 sq. mile) area, the three medicine wheels in the Big Bend vary in shape and materials. The Spider, comprising dark brown sandstone rocks, has spokes that vary from 10–45 m in length (Keller 2008). With its remarkably uniform berm, Spoked Pit is much smaller, with a maximum diameter of c. 20 m (Keller 2008). The third medicine wheel, Riverview, is particularly difficult to see, partly because it is composed of the same gravels upon which it rests (Keller 2008).²

3) The impressive turtle effigy at the Turtle Ridge site (41BS1518) in west-central Brewster County is almost 2 m long (Fig. 3.69). According to Keller (pers. comm.), the turtle's head seems to point to Dark Canyon, a geological feature that contains tinajas.

² See Lowrance (1982b: 174) for another 'spider' west of Hot Springs.



Fig. 3.69. Turtle petroform (head at right). Nose to tail measures almost 2 m. Compare with drawing and aerial photograph (Fig. 6.9). Courtesy of D. Keller.

A second turtle effigy, approximately 4 m in diameter, is made from more than 100 cobbles that were carried upslope from a stone source area below (Keller 2008). Interestingly, the turtle's neck is made of black vesicular basalt; compared to the other stones, the neck contrasts starkly with the desert pavement.

A third turtle effigy consists of another large (3 m maximum diameter) cluster of rocks. On the downslope side of the cluster is a roughly triangular boulder that forms the turtle's head. Just as the turtle's head at Turtle Ridge seems to point to Dark Canyon and its tinajas, Keller (2008) believes that the head of the third turtle also "points directly to a prominent desert spring". I discuss the putative role of petroforms as 'signposts' – and the ritualistic significance of springs and other water sources – in Chapter 5.

Site 39: Lobo Valley (CU9) is in Culberson County, north of Presidio County's Pinto Canyon and just east of the boundary with the western Trans-Pecos. Hundreds of motifs are carved into at least 20 scattered sandstone boulders at the base of the Van Horn Mountains. Motifs at Lobo include shumla points (Fig. 3.70) and possible atlatls. There are also anthropomorphs, including one holding what may be a bow, and several with one or more of the following characteristics: zigzag legs, trapezoidal and triangular bodies, elongated arms, and a variety of unusual cephalic emanations, some of which display possible Jornada Mogollon and Mesoamerican

influence.³ Also present are two-horned mountain sheep; a footprint next to a large crack on top of the largest boulder; and all seven entoptic motifs.



Fig. 3.70. 'Shumla' motifs, c. 10–12 cm long, at Lobo Valley site.

Several pecked and abraded lines extend beyond the top of boulders onto adjacent facets (Fig. 3.71); this 'disregard' for the boundaries of the natural rock surfaces is found in many North America rock art traditions (e.g., Northwestern Plains Pecked Abstract; see Sundstrom 1990; Keyser & Klassen 2001: 148). On several of the engraved boulders at Lobo and other sites in the Trans-Pecos, there is often very little unused space; this feature – a by-product of polyopsia, when single images multiply into a series of repeated images – is common in rock art corpuses worldwide, and almost certainly ritualistic (Lewis-Williams & Pearce 2005: 273). Other petroglyphs at Lobo accentuate nodules and holes in the rock face; as we shall see in Chapter 5, this is also a ritualistic feature.

³ Conical headgear at Lobo may represent the Mesoamerican deity Quetzalcoatl, discussed below and in Chapter 6.



Fig. 3.71. Several pecked and abraded lines at Lobo reach the top of boulders and continue onto adjacent facets; note how little unaltered rock remains.

Although the relative lack of re-patination at Lobo suggests a relatively recent date for the petroglyphs, there is no evidence of historic influence other than carved initials and other modern graffiti. Diagnostic artefacts in the deposits have been dated to the Late Archaic and Late Prehistoric eras (Mallouf pers. comm.); also present are numerous cupules, mortars, grooves, and scratches.

Sites 40 and 41: White Deer (CU408) and Circus Deer are also in Culberson County, 33 km (20 miles) north of the Lobo Valley site. White Deer shelter is just below the sandstone rimrock in a low overhang on the ceiling of which is the large eponymous white deer pictograph (Fig. 3.72). The deer's tail is raised, and its head lowered, with open mouth; significantly, all of these characteristics point to the death of the animal.



Fig. 3.72. Large deer at White Deer shelter, c. 1 m from antlers to tail. Note open mouth and absence of pigment over the scored left ear.

Intriguingly, only one of the deer's ears is painted, but there are score marks outlining the second, un-painted ear. Indeed, there is scoring underneath all of the white pigment, probably in part to increase surface area to ensure more efficient binding of paint to rock, but also because the act of scoring was meaningful in itself (Chapter 7). We do not know why pigment was added to just one of the scored ears, but this presumably deliberate omission confirms that the precise or 'realistic' portrayal of animals in the Trans-Pecos natural environment was not of fundamental importance.

Samples of pigment removed from the deer's body returned tentative dates of 600 BP (McVay pers. comm.). Unusually, there are no other pictographs or petroglyphs at White Deer shelter. Circus Deer shelter, 1.5 km (1 mile) south of White Deer, features both pictographs and petroglyphs, including at least nine quadrupeds and several geometrics.

3.2 Fieldwork in the western Trans-Pecos: sites 42–44

Sites 42 and 43: Storyteller (HZ377) and Jaguar Cave (HZ375) are close to Diablo Dam in Alamo Canyon, approximately 25 km (15 miles) north of Fort Hancock in Hudspeth County. Both sites exhibit clear Jornada Mogollon and Mesoamerican influence; they are considered 'type sites' by Schaafsma (1980: 56–79) and others (e.g., Sutherland & Steed 1974: 3, 11). Because of the abundance (>124) of petroglyphs depicting projectile points – including possible shumla points – the Diablo Dam Style is now more commonly (but perhaps less accurately) known as the Shumla Style (Turpin 2001: 380–388; 2002).

More importantly, Schaafsma (1980: 56; 1997: 18–19) draws attention to the supernatural attributes of the trapezoidal anthropomorphic figures and associated projectile points: some of the raised-arm human figures have horn-like emanations (Fig. 3.73) while others have shumla motifs emerging from the top of their heads (see Fig. 6.3). On several panels, "The man becomes the point, or vice versa, and again shamanic power is implicit." (Schaafsma 1980: 56.)

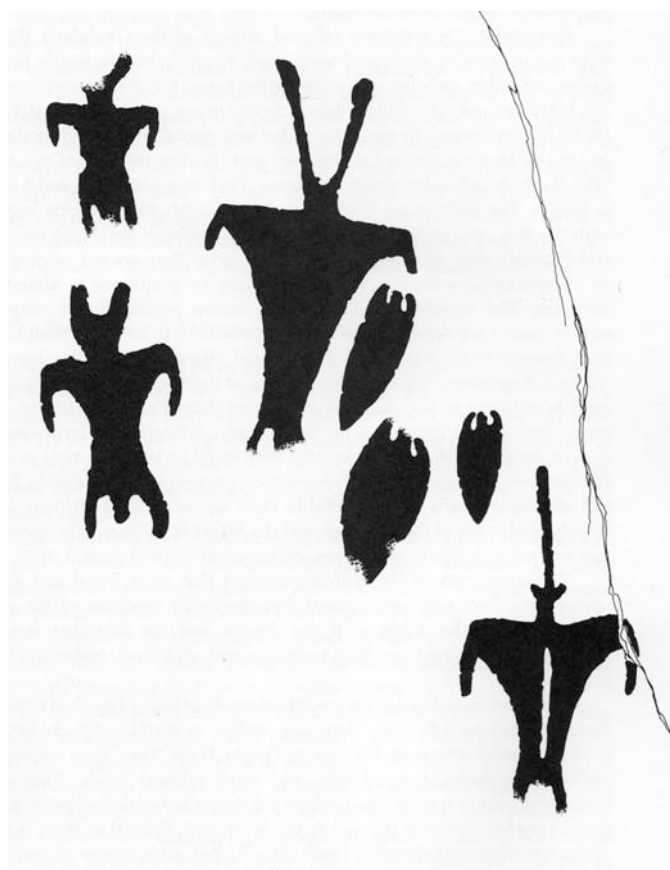


Fig. 3.73. Trapezoidal and hourglass anthropomorphs from Schaafsma (1980: fig. 35). The V-shaped cephalic emanations are similar to those at sites in the Red Hills of Hudspeth County and Candelaria in Chihuahua (Turpin 2002; pers. comm.).

A similar sense of transformation is evident in panels in which the approximately triangular or trapezoidal points themselves are anthropomorphic – the two outside tangs can be seen as raised arms, and the central tang as the anthropomorph's head (Fig. 3.74; see also Figs 6.5–6.6). At several sites in Hudspeth County and in northern Mexico, the outside tangs/raised arms extend into wing-like protrusions.



Fig. 3.74. The projectile point on the right is anthropomorphic and 'connected' with a sinuous line to a point that in turn is connected to an atlatl with loops.

Two panels in particular demonstrate the conceptual link between projectile point and human figures (Fig. 3.74 above and Fig. 3.75 below); both these panels include lines that 'connect' anthropomorphs with points.



Fig. 3.75. Human figures with cephalic emanations, and anthropomorphic point 'connected' to a human figure (marked P). Sutherland & Steed's (1974: 25) drawing re-groups and re-sizes motifs according to publishers' wishes and omits the crack visible in the photograph.

A third panel (Fig. 3.76) features a horned human figure associated with an anthropomorphic projectile point and possible atlatl; and a fourth panel (Fig. 3.77) includes another shumla variation, reminiscent of Tegarden's squid motif – a variation of the shumla motif with three appendages that often re-connect to form two hollow and un-pecked areas that often resemble eyes.



Fig. 3.76. Horned human figure with anthropomorphic projectile point and possible atlatl (below scale); note how it is hard to see where the arm ends and the projectile point begins.

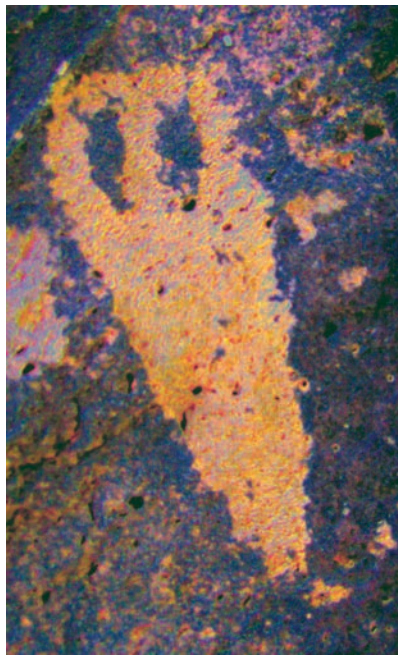


Fig. 3.77. Shumla point variation (c. 12 cm tall) reminiscent of Tegarden's 'squid' motif. The two patches of bare rock within the figure resemble eyes.

At both of the Alamo Canyon sites there are also numerous square- and hollow-bodied deer (Fig. 3.78), antelope, and mountain sheep (Figs 3.79–3.80). Although these zoomorphic figures are sometimes pierced by a spear (Fig. 3.81), vague concepts of ‘hunting magic’ are (once again) inappropriate.



Fig. 3.78. The main panel at Storyteller site is c. 9 m wide.



Fig. 3.79. Mountain sheep at Storyteller site with detailed eye and pecked dots within torso.



Fig. 3.80. Mountain sheep at Jaguar Cave. Note Jornada anthropomorph, in profile (right).



Fig. 3.81. Pierced deer with raised tail and geometric patterning within torso; note also prone anthropomorph above (c. 30 cm long). The arc between deer and human might be a bow.

Often, the heads and horns of mountain sheep are exaggerated, and sometimes bicephalic (Fig. 7.12). There are also examples of disembodied antlers (Fig. 6.8). Occasionally, bodies of zoomorphs are 'decorated' with geometric motifs (Figs 3.82–3.83). I consider the significance of all these features below.

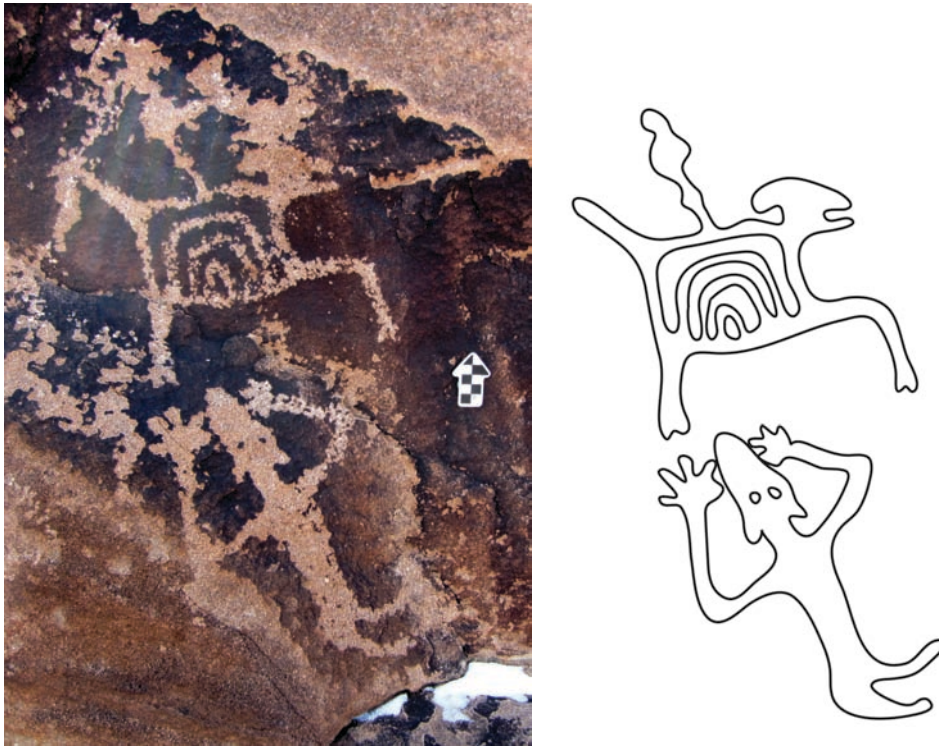


Fig. 3.82. Nested geometrics in body of pierced, open-mouthed quadruped. Note eyes, exaggerated fingers, raised arms, and strange point-like head of the anthropomorph below.



Fig. 3.83. Mountain sheep with dots, raised tail, and exaggerated head.

Geometric figures at both sites include grids, rakes and parallel lines, circles and dots, chevrons and zigzags, catenary curves, spirals and concentric circles (Fig. 3.84), meanders and filigrees, and other non-entoptic geometrics (dumbbells, Jornada Mogollon 'stepped-fret' motifs). In places, some of these geometrics seem to disappear into (or emerge from) the ground, but this may be the result of accumulating sediment. There are also carved hands, approximately life-sized.



Fig. 3.84. Concentric circles at Storyteller site.

In addition to the hundreds of petroglyphs, many of which are in almost inaccessible niches, there are also cupules, mortars, and pictographs at both Alamo Canyon sites, including a headless anthropomorph with exaggerated fingers, various geometrics, and a possible Thunderbird next to a small human figure with cephalic emanations, all in red. The white zoomorphic pictographs in Jaguar Cave (c. 2 m high x 4 m wide x 5 m deep) are celebrated and remarkable, and almost certainly Jornada Mogollon; figures include a bear (painted over meandering red lines, probably a snake; Fig. 3.85), a coyote (Fig. 5.7), a deer, a possible jaguar (Fig. 3.86), and a large plumed serpent (Quetzalcoatl, discussed below) with elaborate 'stepped' body decoration (Fig. 6.14; Sutherland & Steed 1974: 39–45). All of these figures have dots and other entoptics inside and outside their bodies.



Fig. 3.85. Bear on ceiling of Jaguar Cave.



Fig. 3.86. The possible jaguar on the ceiling of Jaguar Cave has dots within its torso and an exaggerated eye.

As discussed in Chapter 2, the role of Jornada Mogollon people and their relationships with both the later Puebloan kachina cults and earlier Mesoamerican groups is complex and contested (Martin & Plog 1973; Schaafsma 1980; 1992; 1994a; 1997; 2003; Fagan 1995; Plog 1997; Walter & Fridman 2004). Perhaps as long ago as the fifth century AD, however, there is evidence that polytheistic Mesoamerican religion influences diffused from the south throughout the western Trans-Pecos and Greater Southwest, and, in time, became a nucleus of Puebloan beliefs (Schaafsma 1980; 1992; 2003; Sutherland 1998; 2006: 8). Certainly, the Jornada rock art style is concurrent with changes in cultural systems after c. AD 1000, including a rise in population that led to more people moving into villages and relying more and more on irrigation agriculture (Schaafsma 1980: 241). Ideologically, one of the most important deities of Mesoamerican cultures that also features in the rock art corpus (at Jaguar Cave, Hueco Tanks, and possibly Lobo) is Quetzalcoatl, a plumed serpent discussed in detail in Chapter 6.

Equal in influence to Quetzalcoatl was Tlaloc, a rain deity who was both beneficial and destructive, and associated with caves, springs, and sacred mountains. Tlaloc-like motifs, found in the rock art of Alamo Canyon, Hueco Tanks, and other sites in the western Trans-Pecos, are characterized by 'goggle' eyes and a limbless rectilinear body that sometimes contains geometric motifs (see Figs 6.16–6.18; see also Sutherland 1998: 72; 2006: 12–13; Schaafsma 1992: 64; 2003: 7).

Other Jornada Mogollon figures in Alamo Canyon include open-mouthed deer (Fig. 3.87), profiled heads (Fig. 3.88), and unusual anthropomorphs including the eponymous so-called 'storytellers', all three of which, *pace* Apostolides (1984: 15) are clearly male, and ithyphallic (Fig. 3.89). Many of the anthropomorphs' eyes are accentuated.



Fig. 3.87. Jornada Mogollon open-mouthed deer at Jaguar Cave.



Fig. 3.88. Profiled anthropomorph with accentuated eye and cephalic emanations at Storyteller.



Fig. 3.89. 'Storyteller' anthropomorph with antler-like cephalic emanations, accentuated eyes, erect penis, and possible second foot or bird (bottom). Note that some areas (e.g., penis, neck) are fully abraded, while the torso is pecked outline.

Site 44: Hueco Tanks (41EP2)

Hueco Tanks, in El Paso County in the western Trans-Pecos, is a world-famous rock art site with thousands of pictographs. I offer a précis of its extensive imagery here not only because it features some of the best examples of the Jornada Mogollon Style, but also because the site is often used as a case study for researchers to interrogate the complex relationships between rock art and landscape. Indeed, the three clustered hills that rise approximately 270 m above the surrounding desert at Hueco Tanks include numerous caves, passages, cracks, and overhangs – and also the *huecos* (or tinajas) that give the site its name.

Hueco Tanks is open to the public and has been a highly visited State Park since 1970; visitor figures are regularly higher than 30,000 per annum (Roberts pers. comm.). Controversially, groups that claim affiliation with Hueco Tanks – and in

some cases, authorship of the pictographs – include Tigua (of Ysleta del Sur and Isleta), Mescalero Apache, Comanche, Kiowa, Navajo, and two groups that are not recognized by the federal government (Kalpulli Tlalteca and Tonal) (Roberts pers. comm.). I discuss controversial heritage and ownership issues in Appendix A.

As at Meyers Springs, several periods of painting are evident at Hueco Tanks. Archaic era paintings (prior to AD 450 in this portion of the western Trans-Pecos) include geometric motifs, mountain sheep and deer, anthropomorphs with cephalic emanations, and projectile points, sometimes associated with human figures as at Alamo Canyon (Sutherland 2006: 8).

Jornada Mogollon (AD 450 – 1400) motifs at Hueco Tanks include at least 24 Tlaloc motifs (see Chapter 6), some of which have projectile point-like bodies, and more than 300 painted kachina-esque ‘masks’ or rain-bringing, supernatural, ancestral beings (Fig. 3.90). Most of these masks are situated inside recesses in the walls of caves and rock shelters, locations in themselves “symbolic of the access to the watery underworld and dwellings of the rain-bringing ancestral spirits represented by the masks” (Schaafsma 2003: 8). There are also Quetzalcoatl motifs (Fig. 3.91). I discuss Quetzalcoatl, Tlaloc, kachina-esque masks, and other rain-related motifs further in Chapter 6.



Fig. 3.90. ‘Masks’ or supernatural beings at Hueco Tanks. Note joined eyes (left) and missing eye (right figure). Courtesy of J. McCulloch.

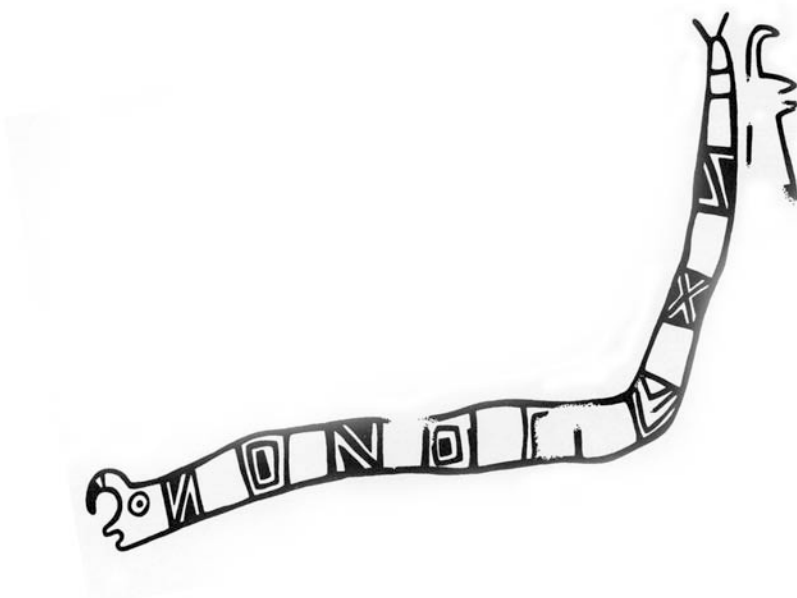


Fig. 3.91. Quetzalcoatl motif in red at Hueco Mountains from Schaafsma (1980: fig. 176).

Historic era figures at Hueco Tanks range from c. AD 1500 to the present (Sutherland 2006: 23). Apache figures are often white, curvilinear, and produced in what Sutherland (2006: 23) calls a “fluid” manner (see Chapter 5). Kirkland & Newcomb (1967: 199–203) attributed many ‘scenes’ in this aesthetic style to mounted Mescalero Apache. These putative ‘scenes’ include ceremonial ‘victory’ dances, with snakes, horses, musical instruments, and sexual acts as well as dancers. Other historic motifs include cattle, missions, and people in European dress, some of which may have been painted by the Comanche or other Plains groups as well as the Apache (Sutherland 2006). Most Historic era Plains groups’ and Anglo-European (post-1849 AD) motifs are found in open and relatively accessible shelters, in stark contrast to the earlier Jornada Mogollon and Archaic era images.

Having outlined motifs at 44 sites in Trans-Pecos Texas, I turn to a second case study: Mpumalanga Province in South Africa. There, colleagues and I developed a framework to interrogate notions of cultural regionalism within and between rock art corpora. I stress that *I do not argue by simple analogy from the Trans-Pecos to Mpumalanga*; instead, I propose complementary hypotheses that can be evaluated independently. I chose rock art sites in both regions according to heuristic potential. In Chapters 5–7, I employ the regional framework developed in Mpumalanga to augment what we have just learned about the diverse rock art of the Trans-Pecos.

CHAPTER 4

Rock art regions in theory and in practice: a comparative case study from Mpumalanga Province, South Africa

4.1 *Regional rock art studies: an introduction*

4.2 *Bongani Game Reserve and Kruger National Park, Mpumalanga*

4.3 *Rock art motifs and categorization in Bongani and Kruger*

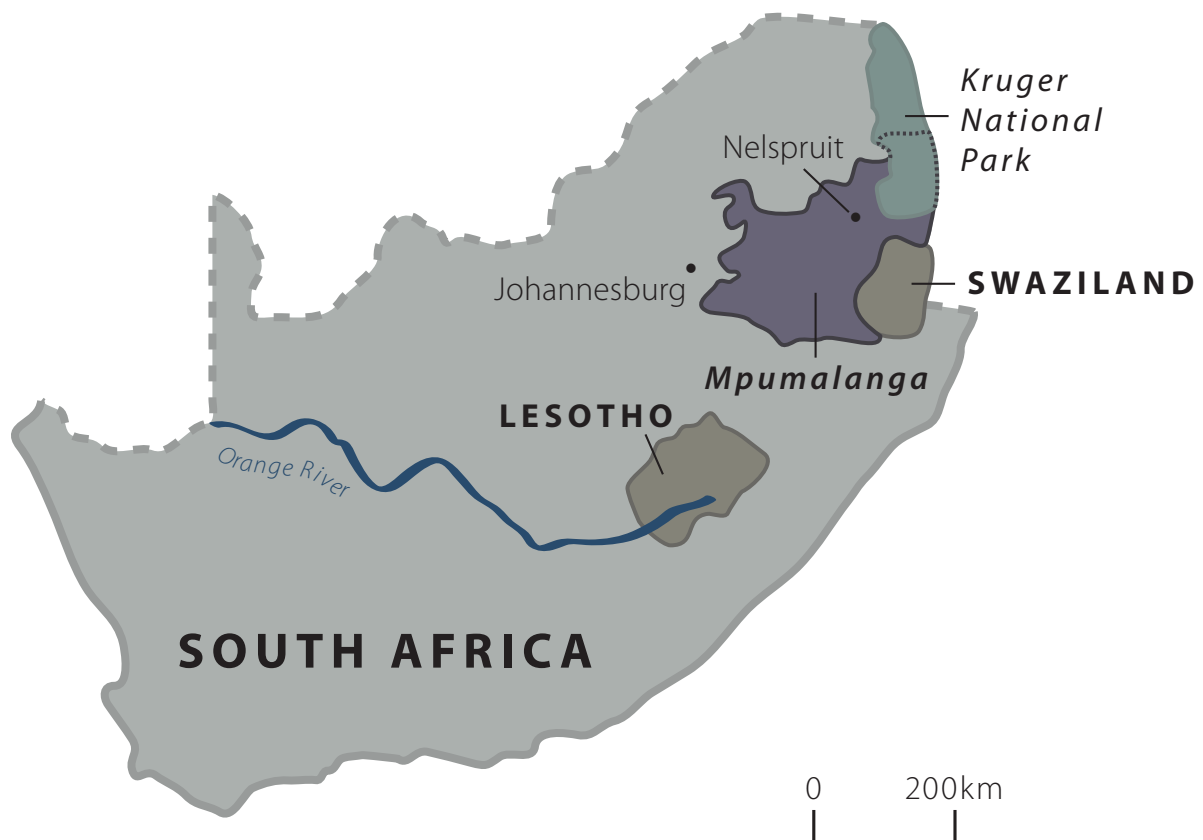
4.4 *Conclusion: intelligible motifs and rock art regionalism*

As in North America, the rock art in some comparatively restricted parts of southern Africa has been intensively studied for many years (e.g., Maggs 1967; Pager 1971; Vinnicombe 1976; Lewis-Williams 1981; 1995c; Halkett 1987; Lewis-Williams & Dowson 1989; Yates *et al.* 1990; Hollmann 1993; 2005; Ouzman 1995; Smith 1997; Hampson *et al.* 2002; Blundell 2004; Eastwood 2006; Smith & Zubieta 2007; Challis 2008; Hampson 2009; Pearce 2009; Rusch & Parkington 2010). As a result, what is now known about these regions tends to inform overall concepts of rock art regions in the subcontinent; contrasts between the art of the Cederberg and of the Drakensberg mountains, for example, are frequently noted. Less studied areas remain comparatively *terrae incognitae*; their potential impact on broader concepts of regions and what those regions may signify cannot yet be assessed. When researchers attempt to fit the art of little known areas into the generally accepted and broadly defined rock art regions, questions are inevitably raised about what exactly constitutes a rock art region and how such regions should be defined. A fundamental question is whether regions should be defined by stylistic criteria or by the presence and absence of motifs, that is, by repeated and definable elements of content.

Since the same key issues of regionalism arise in Texas, and indeed in North America as a whole – where several well-studied areas provide general models – it is useful, even necessary, to explore them. A comparative methodological study with southern Africa follows.

One little-studied area in South Africa centres on southern Kruger National Park and Bongani Mountain Lodge Game Reserve (hereafter, Bongani) in Mpumalanga

Province (Fig. 4.1). I first visited Bongani while working for the Rock Art Research Institute (RARI) in Johannesburg. My and others' work in Bongani and environs (Hampson *et al.* 2002; Smith & Zubieta 2007; de Rosner 2009; Hampson 2009) prompted us to think about the assumptions that implicitly govern notions of rock art regionalism. In 2002, we (Hampson *et al.* 2002) presented a tentative framework for considering conceptual relations between rock art regions. After summarizing and developing this work in light of further research that I undertook in South Africa in 2009 (Hampson 2009), I test the utility of the framework by addressing issues of rock art regionalism within a shamanistic framework in west Texas (Chapters 5–7).



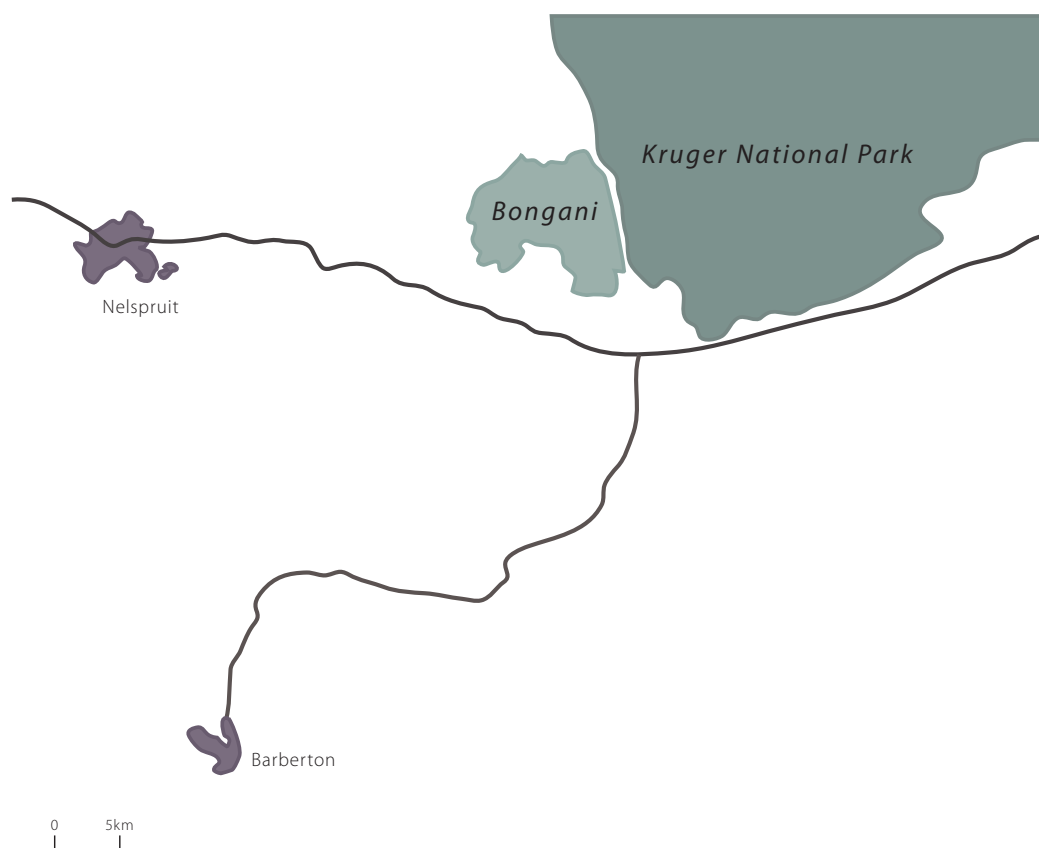


Fig. 4.1. Maps of South Africa showing Kruger National Park and Bongani. The southern half of Kruger is in Mpumalanga Province, the northern half in Limpopo Province. Nelspruit and Barberton are towns.

4.1 Regional rock art studies: an introduction

Regionality has been a tacit theme for many decades in rock art research, a theme that requires closer scrutiny. Miles Burkitt (1928), lecturer at the University of Cambridge, was the first trained archaeologist to outline rock art regions in southern Africa. His work – though valuable and groundbreaking – was based on a hurried tour of archaeological sites throughout the subcontinent. This swift, and necessarily superficial, approach – and his archaeological background in lithic typology (Schrire *et al.* 1986) – led Burkitt to concentrate more on *stylistic impressions* than on recurring motifs. With his emphasis on style rather than content, Burkitt, like many North American researchers, used phrases such as “naturalistic” and “vigorous” to describe the images or motifs of particular regions in South Africa (Burkitt 1928), and wrote of “major geographical art groups”, each with a “limited vogue in time but a wide distribution in space” (Burkitt 1928). His general stylistic impressions were also very much the result of the filtering of the art through the perspective of a Western

mind and Western concepts of art (as discussed in Chapter 1).

In South Africa, other researchers followed Burkitt's example. Some adopted not only his overall geographical framework but also his commitment to style as the principal criterion for regional comparisons (Van Riet Lowe 1952; Willcox 1963; Malan 1965). Others, such as the Rudners, followed Burkitt's overall scheme in a general way but preferred to speak of different schools of rock art, distinguishing between the 'Formal School' of the Western Cape Province and the 'Dynamic School' of the Drakensberg (Rudner & Rudner 1970). Working at a time when quantitative studies were pursued in various parts of southern Africa (e.g., Maggs 1967; Vinnicombe 1967; 1976; Pager 1971; Lewis-Williams 1972; 1974), the Rudners appended a table of quantified motifs and features of style for some areas within their regional schools (Rudner & Rudner 1970). The motifs listed there did not, however, constitute criteria for the definition and geographical delineation of schools; their numerical tables were instead to illustrate *previously conceived* regions. Their criteria for both motifs and stylistic elements derived from Vinnicombe (1967).

All regions are constructs. The delineation of regions is posited on the selection of criteria: change the criteria and the boundaries of the regions will change. Stylistic regions will therefore be different from motif regions; one chooses criteria according to the type of region one wishes to create. For instance, in South Africa, regions delineated by the proportion of eland to other antelope species will cross-cut regions based on technique (whether engraved or painted images) or on style ("static" or "lively", for example, in Rudner & Rudner 1970). The selection of criteria should depend on the questions being explicitly asked, not on ill-formulated and *a priori* notions of what a region may be. Wherever one works, it is thus unwise to combine style and content in the delineation of regions; they are two different things.

Moreover, distinct cultural traditions are often evident in rock art: alongside the hunter-gatherer San (Bushman) tradition in South Africa are images made by Khoe herders and Bantu-speaking agriculturalists – two groups that moved into southern Africa in the last 2,000 years (Parkington *et al.* 1986; Lewis-Williams & Dowson 1989; Smith & Ouzman 2004; for an overview of South African archaeology in general, see Mitchell 2002). More recently, Khoe-speaking hunter-gatherer rock art has also been identified (Eastwood pers. comm.). The geographical distribution of all these traditions was determined by historical and ecological factors.

Until the time of the Rudners' research a major obstacle in South Africa was that the (different kinds of) *meanings* of specific rock art motifs were unknown; this is still the case for many images in west Texas. Until the 1970s in South Africa, and perhaps more recently in the Greater Southwest USA, researchers could not therefore explore the *significance* of a motif being present or absent. Furthermore, since the significance of the regional motifs being compared was unknown, so was the meaning of the comparison. If researchers were to define regions by motifs rather than styles, they could not then say *what* the regions meant. In the 1960s, in both South Africa and North America, these difficulties appeared insurmountable. Then, as a result of a revival of ethnographic studies in the 1970s – and their application to the rock art of southern Africa and other countries worldwide (see Chapter 1) – the circumstances of rock art research began to change: researchers are now in a position to investigate the nature of rock art regions from a more informed perspective. This situation, so clear in South Africa, is also apparent in west Texas and North America. *Rock art regions no longer need be defined in terms of subjectively defined styles or schools:* especially in South Africa, no suitable stylistic criteria to delineate regions have been suggested since the 1970s in any case.

All these informing and cross-cutting factors – content (motifs), technique, style, cultural tradition, changes through time – need to be sorted out before the delineation of rock art regions can proceed (Chippindale & Taçon 1998; Hampson *et al.* 2002; Chippindale pers. comm.). I stress, however, that such delineations need not be – perhaps cannot be – entirely rigid. As one looks either side of a boundary, one should not expect to see the sudden disappearance of certain motifs at that very line; rather, one finds that specific images become less and less common. Nevertheless, it is clear that there are regions of distinctive rock art; the art of the Matopos and the art of the Drakensberg is visibly different, as is the art of the Lower Pecos and the art of Hueco Tanks. What is at issue, then, is to what degree these different regions of art reflect or manifest different cosmologies or cultural belief systems.

While I do not exclude style altogether from my choice of criteria in either South Africa or Texas, I focus rather on the presence or absence of motifs in both places, for many of which the significance is now known. Advances in understanding what certain motifs may have meant to their makers and original viewers introduce a new

era in notions of rock art regions, since the significance of a region becomes clearer when intelligible (or partially intelligible) features occur.

4.2 Bongani Game Reserve and Kruger National Park, Mpumalanga

Although rock art images in the adjacent Kruger National Park (hereafter, Kruger) were first recorded in the 1980s, little was known about sites in the immediate environs of Bongani – or, for that matter, in Mpumalanga Province as a whole – until the stalwart work of ranger Conraad de Rosner and his colleagues (de Rosner 2009; see also Smith & Zubieta 2007). Since 1998, de Rosner has documented an unexpected wealth of rock art sites in both Kruger and Bongani.¹

The Kruger area receives approximately 700 mm of rainfall annually, and the tributaries of the Makhomane, Luphisi and Nsikazi rivers provide perennial water. The loam soils between the distinctive granite outcrops support a plant life that is predominantly sour lowveld bushveld or Malelane mountain bushveld (Low & Rebelo 1996). The area would certainly have provided a rich habitat for hunter-gatherers and pastoralists.

There is a need for excavation at rock art sites in Bongani. Many have already been seriously damaged by illegal attempts to discover the burial places of the legendary gold that Paul Kruger is said to have cached during his flight at the end of the Anglo-Boer War in AD 1902. It is not uncommon to find sites where the entire stratigraphy has been completely destroyed.

Fortunately, Bongani rock art and its study – above the ground, not in the ground – does not seem to have suffered the same fate, but there has been no long-term monitoring. Many painted images in Bongani are extremely faded, although granite is comparatively resistant to weathering and annual rainfall relatively low. Van Riet Lowe's (1952) catalogue of rock art sites in South Africa lists only 10 in the neighbouring Barberton and Nelspruit districts (south and west of Bongani), and a

¹ The area immediately to the southwest of Kruger comprises Mthethomusha Game Reserve, within which Bongani is situated, and several thousand sq. kilometres of state land. This state land is occupied by siSwati (Swazi)- and xiTsonga (Tsonga)-speaking people, most of whom originally lived in what is now the southern area of Kruger (Van Riet *et al.* 1997; Meskell 2005a; 2005b; de Rosner pers. comm.). To the east of Kruger are the Lebombo Mountains that form the border with Mozambique.

mere four in Kruger. More recently, Michael English located over 110 sites within the park boundaries but published few of his finds (English 1990). Following this work, Israel Nemaheni, during his term as a cultural officer in Kruger, documented sites in its southern areas. Unsurprisingly, the features of the Kruger art are similar to those found in neighbouring Bongani.

In this chapter, I discuss the 49 sites in Bongani that have been thoroughly photographed and traced, and situate the images in a theoretical framework that can be employed in west Texas and, indeed, other rock art regions worldwide. I argue that regions should be delineated according to content rather than aesthetic style. Work in the area is continuing and new finds made monthly (de Rosner pers. comm.); the large number of sites already located shows that this part of southern Africa deserves to be as well known as the more intensively studied regions. Almost all of the rock art motifs and commentaries thereon have not been published before. The 49 sites constitute a significant representative sample from which to make preliminary and general observations about rock art in the area; more importantly, they have been used to develop the theoretical framework outlined below.

First, all the images in the 49 sample sites appear to belong to the hunter-gatherer painted tradition, although a few open sites with agriculturist engravings are recorded in the broader region (Maggs 1995; Smith & Zubieta 2007). In other rock shelter sites not yet documented, a few 'finger paintings' and geometric designs in thick red (and sometimes white) pigment probably belong to the Khoe herder art tradition (e.g., Smith & Ouzman 2004; cf. Mitchell pers. comm.). I do not consider either of these rock art traditions here because they are intelligible in terms different to those employed for understanding San art. This scarcity in Bongani may seem surprising given the relative proximity of the Limpopo-Shashe Confluence Area and the central Limpopo basin as a whole, where herder art is common. Yet, art of the hunter-gatherer tradition is the most extensive and, surprisingly, shows unexpected parallels with more distant and seemingly unrelated regions. An in-depth comparative study with those other regions must, however, be approached with caution, partly because of the particularly poor chronological resolution of Bongani rock art. As in west Texas (Chapters 5–7), although regions *can* be defined by chronological as well as spatial criteria, researchers are, for good reasons, reluctant to assign firm dates to rock art motifs (see also Chapter 1; cf. Blundell 2004; Mazel

2009; pers. comm.).

Given that Bongani rock art is on granite, however, its poor state of preservation – coupled with the absence of historic ‘contact’ images, such as sheep, cattle, pastoralists and Europeans – suggests that the images are relatively old. I fear that the sort of chronological connection made between the art and deposits by archaeologists in the Matopos in Zimbabwe (Walker 1995; 1996), the Eastern Cape Province (Hall 1994; Pearce pers. comm.), and Limpopo Province (Hall & Smith 2000; Smith pers. comm.) – and, indeed, the Lower Pecos in west Texas (Turpin 1982) – may not be possible in Bongani, given the disaster of wide-scale destruction of archaeological sequences. Urgent excavation of the few sites still intact is required if this area is not to become a permanent lacuna in our understanding, and if the art and archaeology of Bongani are to find their proper place in the regional puzzle of southern Africa’s past.

4.3 Rock art motifs and categorization in Bongani and Kruger

To assess the significance of motifs in the rock art of Bongani, my colleague (Sam Challis) and I devised a framework of motif categories (Hampson *et al.* 2002). When setting out to discuss regionality it is tempting to describe the images in a particular region (or regions) first, and then to create categories. This is logically impossible: categories must be theoretically established; they cannot be inferred from data. So, it is impossible to describe the rock art of Bongani without *a priori* categories, bearing in mind that categorization without purpose is valueless (cf. Skotnes 1996).

Our 2002 framework and its constituent categories were created as a heuristic device for Africa south of the Zambezi, and as a contribution towards debate, not as a rigid, immutable straightjacket. Researchers seem always to approach new regions with motifs and nuances from other, often better-known, regions already in mind – this has certainly been true in west Texas (see Chapter 1). The categories researchers propose should therefore be overt and not covert, and, where possible, they should depend on cognitive rather than stylistic criteria. Later (Chapters 5–7), I develop the 2002 framework and test its utility with the rock art corpus in west Texas.

Self-reflexive researchers are aware of methodological problems when employing quantitative methods for research. Such methods by themselves cannot, of course,

tell us anything about the meaning of the art, but may influence our interpretations. Since it is physically impossible to document all the images in a region one must take some kind of sample; this is what I did in both South Africa and west Texas (Chapter 3). Depending on whether the sample is numerical or according to size or type of site, say, percentages indicating occurrences of a particular motif in relation to the total number of motifs in the sample will vary. With this in mind, my proposed framework comprises three quantitative categories that are tacitly employed by many researchers. Percentiles can be applied to these categories if necessary, though I have not attempted to do so. I anticipate that, as in west Texas, both the framework and the categories will be modified in the light of further research.

The three categories – each subdivided into Intelligible and Unintelligible – are:

- 1) Widely distributed rock art motifs.
- 2) Regional rock art motifs.
- 3) Extremely rare or unique rock art motifs.

The categories are defined as follows (Hampson *et al.* 2002):

1) Widely distributed motifs

Several rock art motifs are found throughout South Africa (albeit in various forms). Some of these motifs are intelligible, or partially intelligible, and comprise subcategory 1A: *we know at least some of the specific areas of San belief and cosmology to which they refer*. They are intelligible, interpreted, and diagnostic, and their presence thus provides insights into the cognitive production of the art. Figures with both human and animal attributes (therianthropes) are examples of this category (Vinnicombe 1976; Lewis-Williams 1981).

Other motifs are equally widespread but categorized as *unintelligible* or '*uninterpreted*' (subcategory 1B) because researchers do not yet know their significance. Files of walking or running human figures fall into this category, even though some of the figures within these files have intelligible features (cf. Smuts 1999), because we do not know the significance of their being ordered in files.

2) *Regional motifs*

Some motifs seem to be restricted to one region or several specific regions; they are absent from, or extremely rare in, other regions. Sometimes such features are at least partly intelligible (subcategory 2A). The significance of a region tends to become clearer if intelligible (or partially intelligible) features are present in that particular region. 'Formlings', for example, are widespread in Zimbabwe and in parts of northern South Africa. Elsewhere they are uncommon or absent; there are none, for example, in the Cederberg. The significance of formlings has been debated (see below), but ethnographic evidence is beginning to unravel their association with San beliefs about supernatural potency (Garlake 1990; 1995; Mguni 2002; 2004).

By contrast, there are motifs that are characteristic of a region but which remain enigmatic (subcategory 2B). For example, it has recently been argued that the Y-shapes found in the central Limpopo basin and in the Tsodilo Hills in Botswana represent men's loincloths (Blundell & Eastwood 2001; Eastwood pers. comm.) but researchers are not yet aware of the significance of such a motif. Another example is infibulation of the penis (see below). I allow that similar motifs in different regions do not necessarily mean the same thing; some motifs are less intelligible than others.

3) *Extremely rare or unique motifs*

Some motifs are so rare that they cannot be said to characterize any region. Some are understandable in the light of San beliefs (subcategory 3A); others are opaque and categorized as unintelligible (subcategory 3B). The Free State Province rock painting of crabs – termed "idiosyncratic" by Thomas Dowson – can be understood in terms of San beliefs about underwater experience: as a variation on a theme usually represented by images of fish (Dowson 1988), they are placed in subcategory 3A. Some images in Bongani, not understood at present, are in subcategory 3B. In some cases we find several depictions of an extremely rare motif but in an extremely localized area; those motifs are too restricted in distribution to be regional, or a candidate for category 2.

This heuristic framework facilitates comparison of motifs that are characteristic of, or absent from, specific regions. The present placement of certain Bongani (and other) motifs in these categories must be provisional. As work progresses, certain regional motifs (subcategories 2A and 2B) may turn out to be more widespread – and less

regional – than originally thought. Noting the methodological problems connected with quantitative studies outlined above, such motifs would then be promoted to subcategory 1A or 1B. Similarly, as more is learned about the significance of a motif it may move from an unintelligible subcategory to an intelligible one.

In Bongani and its environs, we documented the following classes of motifs:

- 1 Widely distributed southern African rock art motifs:
 - A. Intelligible (or partially intelligible): emphasis on ‘red meat’ antelope.
 - B. Unintelligible: files of human figures.

- 2 Regional motifs:
 - A. Intelligible (or partially intelligible): human figures holding arrows, ‘formlings’, the Linton (supine) posture, rain-animals, ‘palettes’.
 - B. Unintelligible: infibulation of the penis, animal skin aprons, T-shaped equipment.

- 3 Extremely rare, idiosyncratic, or unique motifs:
 - A. Intelligible (or partially intelligible): none.
 - B. Unintelligible: hares/rabbits, ‘curved-trails’, shoulder ‘spines’ / flywhisks.

It is important to note that some of the intelligible motifs are more intelligible than others. I discuss each category in turn.

Category 1A: Widely distributed intelligible/interpreted motifs

Throughout southern Africa, artists in different regions seem to have numerically emphasized particular animals; for example, the eland in the Drakensberg (e.g., Vinnicombe 1972; 1976; Lewis-Williams 1981), the kudu in parts of Zimbabwe (Garlake 1987) and the Limpopo-Shashe Confluence Area (Eastwood & Cnoops 1999a; 1999b), the springbok in the Brandberg (Lenssen-Erz 1994) and the hartebeest in the Waterberg (Laue 2000). This feature of San rock art has attracted much comment.

Although the diversity of animal species depicted in the Malelane and Lebombo mountains is far greater than in, say, the Drakensberg (Vinnicombe 1976; Lewis-

Williams 1981), depictions of antelope, as in most regions of southern Africa, are more common than those of other animals: roan and sable, eland, kudu and reedbuck (or rhebuck – see below), among others, can be identified.

It is the *emphasis* on a particular animal that was crucial, and not simply the species. It was not merely the ecology of a region that determined which animal – nearly always a species of antelope – was depicted most frequently. If so, we would expect to see more paintings of species that were abundant in particular regions; wildebeest, for example were abundant in the Free State Province, yet there are few images of them. Similarly, very few depictions of tortoises or rock hyraxes (dassies) are known although in certain regions these animals are (and were) common. Clearly, cultural selection by the artists rather than the number of animals of a particular species in a particular area was the deciding factor in determining which animals were painted – a point long recognized in the bestiary of Upper Palaeolithic European rock art.

It seems that throughout southern Africa there was an emphasis on ‘red meat’ antelope (Bieseke 1993) and often, although not always, on large antelope.² The Ju/’hoan San categorize animals according to the perceived colour of their meat (Bieseke 1975), distinguishing red, white and black meat animals. ‘Red meat’ animals (the sub-group *deꞤxe*) comprise several antelope: kudu, eland, gemsbok, springbok, hartebeest, tsessebe, as well as giraffe. ‘White meat’, closely associated with carnivores, includes lion, leopard and leguaan (the monitor lizard); it is generally avoided. ‘Black meat’ animals include warthog, bat-eared fox and wildebeest, the only large antelope that does not fall into the ‘red meat’ category (Bieseke 1975). In another list, the roan antelope is included as a ‘great meat’ animal (Bieseke 1993).

Although little has been said about the significance of any antelope species other than the eland (Vinnicombe 1976; Lewis-Williams 1981; Lewis-Williams & Dowson 1989; Parkington 1996; cf. Challis 2005), which according to San ethnography possesses the most supernatural potency or *n/om* (discussed further in Chapter 5), we can note the painted emphasis on species in the ‘red/great meat’ category. An important association of ‘red meat’ animals is the quantity of *n/om* they are said to possess. Although animals such as snakes (‘white meat’) also possess *n/om* (Bieseke

² In many areas of North America, including west Texas, the emphasis is on deer (Chapter 6).

1978; Katz 1982), it is the 'red meat' species that are especially invoked in the San healing or medicine dance. Hence the depictions of roan and sable must fall – at least provisionally – into the nationwide intelligible category (1A): it is not so much the specific species that is significant as the emphasized antelope being a large and/or 'red meat' animal.

In Bongani one depiction of a roan antelope, with its distinctive horns, is painted in red (Fig. 4.2). Whilst there are many paintings of roan in Zimbabwe (Garlake 1987) and elsewhere to the north of Bongani, researchers know of few in the Drakensberg (Lewis-Williams pers. comm.) or in the Western Cape Province (Hollmann pers. comm.). Often roan- and sable-like animals are identified as roan/sable (Garlake 1987), as these are similar large antelope, with manes. The sable has distinctive, longer horns, almost parallel to each other and strongly ridged (Fig. 4.3), a bushier tail, relatively shorter, chestnut-coloured ears and a continuous, longer stripe from eyes to nose (Smithers 1983; de Rosner pers. comm.). The roan is generally a reddish fawn colour, the sable glossy black (Smithers 1983; de Rosner pers. comm.). Despite such detailed differences, it is not always easy to be sure which species is depicted; formal analysis, though useful, has its limitations (cf. Smith 1998; Chippindale pers. comm.). As in North American rock art, the colours and proportions used by the artists do not necessarily conform to those of the actual species. Sable, absent from the region in which Biesele conducted her research, do not feature in her lists. In areas where sable *do* occur, such as the Okavango swamps in Botswana, they surely would feature in a local 'red/great meat' list since it is a large antelope species similar to the roan (Biesele pers. comm.). For the reasons outlined above, depictions of roan and sable are placed in category 1A.



Fig. 4.2. Roan antelope from Cluster site. Scale bar here and elsewhere (unless indicated) in 1 cm units. Colour here and elsewhere (unless indicated) is red.

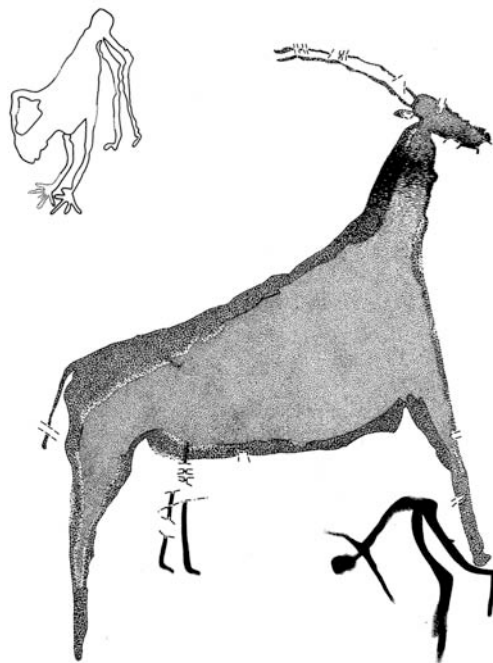


Fig. 4.3. Sable antelope from Mahugupe site. Note the human figure bending forward (bottom right) – a posture associated with the San healing dance – and also the unusual white figure (top left) with long emaciated arms. Courtesy of C. de Rosner.

In the Drakensberg, where annual rainfall is relatively high, it is possible that the rehbuck takes the place in Biesele's 'red meat' list of the springbok, prominent in ethnographic records from the semi-arid central Cape as well as the Kalahari. Both are small antelope that feature prominently in San beliefs (Orpen 1874; Lewis-

Williams 1980; Lenssen-Erz 1994), and in the art itself. In the Drakensberg the reedbuck is the second most frequently painted species (Challis 2005).

A striking panel in Bongani features four reedbuck (or possibly rhebuck) of varying size, all painted in red (Fig. 4.4). These animals do not have horns. Again, it is difficult to be definite about the species, especially since females (without horns) are depicted. The mountain reedbuck (*Redunca fulvorufula*) and grey rhebuck (*Pelea capreolus*) have relatively longer and narrower ears than the southern (or common) reedbuck (*Redunca arundinum*). The grey rhebuck, unlike the other two species, has underparts scarcely paler than its back; the other two species have white bellies (Smithers 1983). So the panel seems to illustrate grey rhebuck. The mountain reedbuck, however, is the only species of the three without black markings on its legs, and it is heavier and more thick-set than the rhebuck. For these reasons – and the reasons regarding formal analysis outlined above – I exercise caution.



Fig. 4.4. Four reedbuck (or possibly rhebuck) at Lion Boma site. Courtesy of W. Challis.

Particular care also needs to be taken when exploring San beliefs about these species. Although researchers know little about the significance of rhebuck (and even less about reedbuck) in the art (although see Challis 2005), it seems likely that depictions of these smaller buck were conceptually associated in ways not perfectly clear with the same pattern of thought as the large, 'red meat' antelope; so rhebuck/reedbuck are placed in category 1A.

Commenting in 1873 on depictions of rhebuck in the Drakensberg, Joseph Orpen's

San guide, Qing, spoke of a myth involving the 'chief' named Qwanciqutshaa, (one of the three 'chiefs' who lived in the sky, the others being /Kaggen and Cogaz, /Kaggen's son) and the killing of a rhebuck: "Qwanciqutshaa had killed a red rhebuck and was skinning it when he saw his elands [sic] running about and wondered what had startled them. He left the meat and took the skin and went home" (Orpen 1874). Later, I consider the connection between smaller buck and skins depicted in the art.

Qing also explained to Orpen that the men with "rhebuck heads ... live mostly underwater ... they tame elands and snakes ... they are people spoilt by the – dance, because their noses bleed" (Orpen 1874: 10). Qing later reiterated part of this statement, saying the depictions of men with rhebuck heads represented medicine people (shamans) who had been "spoilt ... by the dances" (Orpen 1874). These passages can be translated within a shamanistic framework (introduced in Chapter 1, and discussed further in Chapter 5): each statement can be read as a metaphor for a shamanic trance-related experience or belief (Lewis-Williams 1980; 1981; Lewis-Williams & Dowson 1989; Challis 2005). Both Qing's statements suggest that the medicine men entered altered states of consciousness by the means of the healing dance (Lewis-Williams 1981). Being 'spoilt by the dance' can be equated with the 'death' of *!kia*: the entry into and passage through the spirit realm achieved through the dance; when shamans are 'spoilt' they undergo pain and 'death' and often suffer nasal haemorrhaging (Lewis-Williams 1981). The sub-aquatic reference is also linked directly to the trance experience; as discussed further in Chapter 5, informants worldwide who have experienced altered states of consciousness describe a feeling of weightlessness (Halifax 1980; 1982).

Qing's use of the word 'tame' – recorded among the southern /Xam and the Kalahari Ju/'hoan – most probably refers to the concept of control or possession of animals by shamans (Lewis-Williams 1980). 'Taming' eland, as in Qing's statement, indicates the possession of potency (*n/om*) and the ability to control the game herds in both the spirit world and this. The same can be said for the possession of animal potency in the case of 'taming' snakes, but here Qing gives us another clue. When pointing to a depiction of a bovid rain-animal (see below) Qing insisted that the "animal which the men are catching is a snake" (Orpen 1874). Although the rain-animal looks – to a Western eye – like an eland or cow, we know that snakes are

creatures of the rain (Bleek 1933). The words snake and rain-animal can be considered interchangeable; they are the same in the minds of the initiated, the men with rhebuck heads. These therianthropes probably depict shamans of the rain who have harnessed rhebuck potency.

“The men with rhebuck heads ... tame elands and snakes” can therefore be read as “the initiated rhebuck shamans ... control the game and the rain”. If rhebuck shamans – shamans who harnessed rhebuck potency – were able to mediate among men, the game animals and the rain, rhebuck themselves must have been of particular importance to the San (Challis 2005). It is these kind of beliefs that need to be explored if this feature of the art is to be understood.

Category 1B: Widely distributed unintelligible motifs

Also present in Bongani and Kruger are lines of human figures (Fig. 4.5), similar to those found in the Drakensberg, for instance (Lewis-Williams & Dowson 1989). Some of the figures in these files possess intelligible features, such as lines emanating from the top of their heads, lines which can be explained by reference to both neuropsychological evidence (as discussed in Chapter 1, and developed further in Chapter 5) and San beliefs. Laboratory experiments have shown that people in altered states of consciousness experience a tingling sensation in the top of the head, and ethnography informs us that when a San trancer’s spirit leaves his body it does so through a ‘hole’ in the top of the head (Lewis-Williams & Dowson 1989). As in many panels in other regions such as the Drakensberg, despite the presence of such intelligible features and the close association with other shamanistic characteristics (such as therianthropic figures), the rows of figures themselves are not intelligible (cf. Smuts 1999). Thus, lines of human figures are placed in category 1B.



Fig. 4.5. File of human figures from Procession site, with lines emanating from top of heads.
Courtesy of C. de Rosner.

Category 2A: Regional intelligible/interpreted motifs

Many human figures in the region hold arrows (Fig. 4.6), as they do in other regions of southern Africa such as the central Limpopo basin (Eastwood 1999) and the Drakensberg (Lewis-Williams & Dowson 1989). The widespread nature of this particular motif makes it a strong candidate for category 1, especially if humans holding arrows are found in further regions. In Figure 4.6, the two male figures on the right each hold three arrows in one hand and a bow in the other. Particularly in the case of the central figure, it is difficult to distinguish where the hand ends and where the arrows begin. The figure on the left, carrying a stick, does not have clear sexual characteristics; red protrusions under the arm may represent breasts so the figure may in fact be female. At another site, we again find three figures, all male, carrying equipment (Fig. 4.7). The figures on the left hold stylized arrows, again in groups of three; the figure on the right is too faded to tell exactly what it is carrying. The figure to the left holds a bow in its other hand and the central figure appears to have some form of loincloth or apron (cf. Blundell & Eastwood 2001); a similar item is attached to the waist of the figure on the right.



Fig. 4.6. Male human figures holding bows and arrows – in bunches of three – at San Kop site. Note white dots surrounding head of central figure, and what may be a flywhisk over the bow of the rightmost figure.



Fig. 4.7. Male human figures with stylized arrows at Cluster site. Courtesy of C. de Rosner.

Whilst arrows were everyday pieces of San equipment, Deacon (1992) has shown they were as much “artefacts of the mind” as “artefacts of technology”. It is therefore important to explore San beliefs about arrows. Although it is hard to be sure if bunches of arrows are supposed to be real or supernatural, it appears as if the holding of arrows by human figures is connected with the harnessing and controlling of potency. I suggest that these depictions of arrows should be understood in terms of San beliefs about *n/om*, the supernatural potency that is, as we have seen, suggested by the emphasis on ‘red meat’ antelope in the Bongani and Kruger rock art. We know that arrows have *n/om*; they are dangerous in both physical and supernatural senses (Marshall 1976), not only because a slight scratch from a poisoned point will cause death but also because the spirits of the dead shoot mystical arrows of sickness into people they wish to harm. These mystical arrows are depicted in several southern African rock art panels (Lewis-Williams 1988b; Lewis-Williams & Dowson 1999). Grasping more than one arrow, a motif that the Bongani and Kruger images repeatedly depict, may represent the grasping and manipulation of *n/om*. In this way, holding multiple arrows may be akin to holding two or more flywhisks (see below), objects associated with the healing dance and with keeping sickness at bay (Lewis-Williams 1981; 1995b: 14; Lewis-Williams & Dowson 1989: 43; Eastwood 1999; Pearce 2009; Hampson in prep.).

Panels such as the one shown in Figures 4.6 and 4.7 may therefore refer to the exchange and control of potency during trance, as Eastwood (1999) argued for the central Limpopo basin in the north of South Africa. In altered states of consciousness, shaman-dancers talk of contacting god, drawing arrows of sickness out of the bodies of those whom they cure, and then expelling the arrows through the backs of their necks – that is, from the *n//ao* spot. In a different context, shamans are able to channel and control activated supernatural potency by shooting invisible arrows of potency into novices to increase their powers, “sometimes by snapping their fingers, always trying to regulate the number of arrows and the intensity of the *n/um* they carry” (Katz 1982; *n/um* is the old spelling for *n/om*). Drawing on this notion, Eastwood (1999) suggests that “processions of men with arrows represent shamans bearing the metaphysical arrows of potency”.

A further supernatural motif that may be associated with *n/om* is a semi-circle of white dots surrounding the head of the middle figure in Figure 4.6. This panel can be

usefully compared with one in KwaZulu-Natal (Fig. 4.8). Dowson (1989) has argued that the microdots in southern African rock art “depict a form of potency that is intimately associated with the human body through synesthesia” (see below). The dots and their significance certainly tally with the concept of shamans bearing metaphysical arrows of potency.

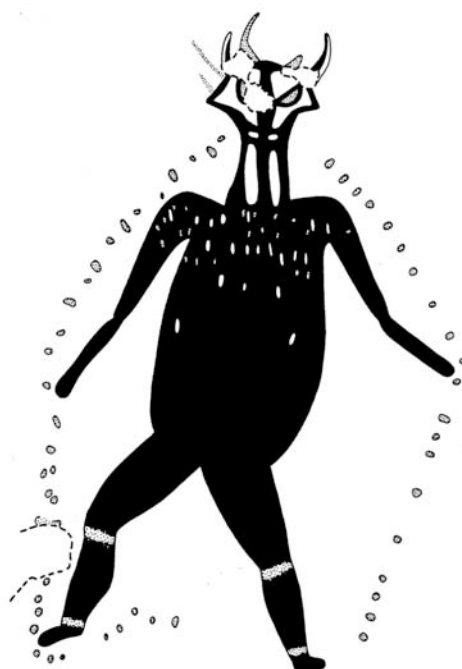


Fig. 4.8. Horned red figure from Harrismith District, KwaZulu-Natal Province. Note light red dots surrounding figure, and white bands on knees and ankles. Courtesy of RARI.

Alongside items of equipment there are examples in Bongani of a motif that is characteristic of the rock art of Zimbabwe, generally known as formlings, a German appellation given to them by Frobenius (1931). Formlings occur in diverse shapes and sizes; usually they comprise regular oval or rectangular ‘cores’, each with its own white semicircular cap at one or both ends (Garlake 1990; 1995; Mguni 2002; 2004). The cores – usually dark in colour – are often depicted vertically and side-by-side, or stacked horizontally; sometimes they are outlined or enclosed by a circular

line. Their surfaces are usually covered by grids, or lines of white dots (Mguni 2002; 2004). The example illustrated in Figure 4.9 depicts six vertical cores in dark red ochre; there is no white pigment on this panel.



Fig. 4.9. 'Formlings' from Rain-animal site.

Early researchers interpreted these images as depicting beehives or honeycombs (Pager 1973; 1976; Woodhouse 1994), or landscape (Frobenius 1931; Goodall 1959). Recent work has argued that formlings depict not daily or narrative phenomena, but what Garlake (1995) calls the 'seat of potency' in humans, corresponding to the abdominal region, which includes the stomach, spleen and liver (Mguni 2002; 2004). At present researchers are not aware of the full significance of formlings (although see Mguni 2002; 2004).

In both Bongani and Kruger there is a human posture that has not been widely reported or discussed. Indeed, it is its occurrence in Bongani and Kruger that has crystallized its importance. In 2002, we dubbed it the 'Linton posture' because there are two examples in the well-known Linton panel from the Eastern Cape Province, now in the South African Museum, Cape Town (Lewis-Williams 1988b); other examples are two equally well-known figures at Diana's Vow in Zimbabwe (Garlake 1995). The Linton posture is a supine human figure with one knee raised so that its foot is touching, or near, the knee of the other leg; the leg that is not raised is also bent at the knee. The arms may be parallel to the sides or extended; both the Diana's

Vow figures have one arm bent so that its hand is beneath or next to the head. The posture is akin to another, better known, human posture, featuring a raised knee and an extended arm, often with a pointing finger that shoots potency into the stomachs of dancers (Lewis-Williams & Dowson 1989).

We considered the Linton posture figures to be intelligible for reasons evident both at Diana's Vow and in the Linton panel itself. One of the Diana's Vow figures has "a long muzzle ... [and] the white stripes and eye surrounds of a sable" (Garlake 1987: 77). There is also a dog-like creature and a number of human figures with "the characteristic body markings of sable antelope" (Garlake 1987). Garlake comments (1987: 77):

Two [of the associated human figures] hold their arms rigidly in front, a position suggestive of incipient trance. ... The key elements of the panel suggest that a sable dance is taking place, including trance and activating potency, *n/um*. The dance reaches its fulfillment in the two largest [supine] figures, their potency or *n/um* made visible as ovals attached to their bodies, as they lie in trance.

In the Linton panel, the supine figure is associated with an antelope-headed snake that lies on its back and bleeds from the nose, numerous fish, eels, eland, a rhebuck (which also bleeds from the nose), and the sinuous red line fringed with white dots that represents the 'threads of light' that shamans say they climb on their way to the spirit world (Lewis-Williams 1988b; Smith *et al.* 2000). These elements, together with details of the Linton supine figures themselves, such as nasal bleeding and the raised knee (which may be connected with the tightening of the stomach muscles experienced by shamans in trance) support Garlake's suggestion that the Diana's Vow figures are related to shamanic experience (Lewis-Williams 1981; Lewis-Williams & Dowson 1989).

The Bongani figure (Fig. 4.10) is very similar in posture to the Linton figure. It is supine and has both knees raised; its legs appear to cross one another. Its arms are also crossed over its torso. Above is a similar, smaller, figure, with uncrossed legs and with only one arm crossed over its torso. Both figures are male. At another site (Waterbuck Bull) is a more upright figure of similar size, also painted in red, and also male (Fig. 4.11). Its legs are crossed but its arms are parallel to its sides. The

Bongani and Kruger images, therefore, although not identical to the ones in Zimbabwe or in the Linton panel, are consonant with the shamanistic context to which many other features of the art in the area also point.



Fig. 4.10. The Linton posture. One of several supine figures in Bongani. Note crossed arms over torso.



Fig. 4.11. Linton posture figure at Waterbuck Bull site.

Orpen's informant, Qing, enlarged our understanding of San shamanistic contexts when he associated the men with rhebuck heads with Drakensberg rain-animals. These fantasy creatures, embodiments of rain, are common in the Drakensberg and adjacent areas but are unknown in, for instance, the Cederberg; they are therefore a regional motif. But there are elephantine creatures in the Western Cape Province (Maggs & Sealy 1983) that show similar characteristics to those in the Drakensberg and, recently, de Rosner discovered a rain-animal in the Waterberg; the rain-animal motif is therefore a good candidate for promotion into the widely distributed category (1A). My colleagues and I have found one persuasive example in Bongani (Fig. 4.12). About 30 cm long, it is painted in red, with a white line running along the underside of its neck; its torso is bovine but it possesses an unusual porcine snout and splayed ears. It does not resemble any known species but rather appears to be a deliberate blending of species. It is important to remember that we have no examples of domestic animals in the art – no cattle or pigs. To identify it I turn to comparable images in other parts of South Africa. When shown similar images in George William Stow's nineteenth-century copies, Bleek and Lloyd's /Xam informants said that they depicted rain-animals, or rain bulls (Lewis-Williams & Challis 2011). The /Xam of the Northern Cape Province, who thought of the rain as an animal, distinguished between the rain bull associated with thunderstorms and lightning, and the female rain-animal which was linked with soft, soaking rains (Bleek 1933). The /Xam informants went on to describe how shamans entered trance in order to capture a rain-animal and to lead it across the parched land. Bleek (1933) learned that the "shamans of the rain" killed or cut the creatures so that their blood and milk would become rain. An additional non-real feature of the Bongani image is a white line emanating from the animal's back that connects with a running man holding a bow and several arrows. A crack in the rock surface curves around the animal's head and runs parallel to the creature's back. Below the animal are two figures holding bows, superimposed upon an eland with delicately painted horns. As in numerous depictions of rain-animals elsewhere, it seems as if the Bongani example is being led from behind the rock face (Lewis-Williams & Dowson 1989). These varied features identify the figure as a rain-animal; the Bongani example greatly extends the geographical area in which depictions of rain-animals occur.



Fig. 4.12. Rain-animal at Rain-animal site. A white line runs along the underside of the animal's neck, and also emanates from its back, connecting with a human figure holding a bow and several arrows (not illustrated). Note eland (below rain-animal) and patch of red paint (to right of rain-animal).

Most motifs so far discussed point, cumulatively, to San religious beliefs. This focus of the evidence encourages us to consider the implications of another motif in Bongani and Kruger for San beliefs about a tiered cosmos and the location of rock shelters in that cosmos. As in the Western Cape Province (Yates *et al.* 1990) and the central Limpopo basin (Eastwood pers. comm.), we find round and oval patches of pigment juxtaposed with – and sometimes superimposed upon – painted figures and images, usually of the same colour or colours used throughout the rest of the panel (Fig. 4.13).



Fig. 4.13 'Palette' – a patch of red paint – from Rain-animal site.

Though termed 'palettes', these patches of paint are sometimes found on the ceilings of rock shelters, a location that suggests they were not used for mixing paint (Yates *et al.* 1990). Indeed, many of the Bongani and Kruger patches of paint have been rubbed, as have those in the Western Cape Province (Yates *et al.* 1990), and, as we saw in Chapter 3, as have many patches of pigment in west Texas. In some cases, in both countries, the rubbing has resulted in a polished surface. As we saw in Chapter 3, the rubbing is isolated and specific to the area of the palette, so there can be little doubt that the action was deliberate. The Bongani palettes, present in at least eighteen sites, are some of the first to be found outside the Western Cape Province (but see also de Rosner 2009; Hampson in prep.).

Ethnography has shown that substances, such as blood and fat, used in the preparation of paint were considered potent in their own right; the paint was sometimes believed to facilitate entrance into and exit from the spirit world (Lewis-Williams & Blundell 1997). This notion seems to be implied by lines and objects that often appear to protrude from the patches of pigment (Fig. 4.14); researchers do not yet know exactly what these objects represent, but they are surely connected with Lewis-Williams's (1990) observation that parts of, or entire, antelope – particularly

eland – often appear to emerge from steps, cracks and patches of paint on rock surfaces throughout the Drakensberg. This connection is supported by the context of the ‘palettes’. Often the patches of paint are found in association with dancing or clapping shamanic figures; the touching and rubbing of paint on the rock face, the veil between this and the spirit world, would have been an important part of shamanistic ritual after the paintings had been executed. Despite Western preconceptions, it seems as if certain rock art images were made to be touched, and were themselves the product of ritual touching (Lewis-Williams 1995a; Lewis-Williams & Blundell 1997). As we shall see, essentially the same is true in west Texas.



Fig. 4.14. Patch of paint with protruding objects, including possible flywhisk (top right), from Bush Clearing site.

Category 2B: Regional unintelligible motifs

Another interesting motif, found in Bongani, Kruger, and in many regions in southern Africa, is infibulation of the penis, with examples in the Drakensberg (Lee & Woodhouse 1970; Vinnicombe 1976; Willcox 1978; Lewis-Williams 1981; Lewis-Williams & Dowson 1989), a few in Zimbabwe (Walker 1996), in the Cederberg (Hollmann 1993), and in the Brandberg in Namibia (Pager 1989). Since it is not found in regions such as the Limpopo-Shashe Confluence Area (although there are

infrequent examples in the Makgabeng plateau; Eastwood pers. comm.) or the Waterberg (Laue pers. comm.) and since it is not intelligible, it is placed in category 2B.

As early as 1929 Raymond Dart (1929) suggested that infibulation represented a bored stone and was part of a male initiation cult. Townley Johnson later believed infibulation to be purely ornamental (Willcox 1978), as did Woodhouse (Lee & Woodhouse 1970), although the latter also thought that it might have denoted acceptance into a special group or society. Vinnicombe (1976) argued that infibulation symbolized prohibition (of sexual intercourse or urination) as part of the hunting ritual, while Breuil (1948) had earlier suggested that the infibulation bar represented some form of “moral prohibition”. Willcox (1978) himself believed the infibulation bar to be decorative or protective. At present researchers still do not fully understand the significance of infibulation, hence the placing of this feature in category 2B.

Figure 4.6 includes two figures with infibulated penises; not uniquely, the penis does not extend beyond the infibulation bar. In the other panel depicting arrow holding (Fig. 4.7) all three of the figures again have infibulated penises; in this instance only one does not extend beyond the infibulation bar.

Another motif found in several regions of southern Africa is illustrated in Figure 4.15; the Bongani example is 400 mm by 250 mm, in red. Very little is known about these images, which are rare in Bongani and Kruger, far more common in the central Limpopo basin (Eastwood pers. comm.). Pager (1975), having suggested that Y-shaped variations may be “Hottentot aprons or bags”, then argued instead that they were fish traps. Eastwood & Cnoops (1994) took up one of these possibilities, suggesting that they might be depictions of loincloths or aprons. More recently, Blundell & Eastwood (2001) demonstrated that certain animal-skin shapes in Limpopo-Shashe Confluence Area rock art represent women’s aprons; they are often associated with antelope, groups of male and female human figures, and large herbivores. These depictions of aprons, characteristic of the rock paintings of the central Limpopo basin and Tsodilo Hills, are also found in significant numbers in the rock engravings of the central interior of South Africa (Eastwood pers. comm.).



Fig. 4.15. Animal skin apron at VT site. This example is approx. 40 x 25 cm.

Depictions of skins *worn* by human figures, especially in the form of *karosses*,³ are found in many regions of southern Africa such as the Drakensberg, where we also find many depictions of bags (Lewis-Williams & Dowson 1989); researchers are not yet positive of the relationship between animals, animal skins, karosses, aprons and loincloths (skins worn by humans), and bags. We do know, however, that in the Kalahari the smaller game, including ‘red meat’ animals and notably steenbok and duiker, are favoured for the making of these items (Eastwood pers. comm.). In the Drakensberg – where paintings of skins worn by humans and of bags are common – the most commonly depicted small antelope is the rhebuck (Challis 2005). In the Bongani region we also find examples of rhebuck/reedbuck and of skins (some worn by humans), but whether there is a definite connection between rhebuck/reedbuck and the skins remains to be clarified.

I note here, however, that bags – also present in Bongani and Kruger art – are imbued with potency. They are often made from ‘red meat’ animals that possess *n/om*, and the San do not necessarily distinguish between the word for an artefact and that for the substance of which it is made. Drawing from the myth ‘A visit to the

³ A kaross is a cloak worn by shamans.

Lion's House' (in which the lion hides in a bag), Lewis-Williams has argued that placing oneself in a bag is equivalent to placing oneself inside an animal, that is, taking the animal's potency (Lewis-Williams & Dowson 1989). Further research is needed to shed light on the relationship between skins, animals and bags.

Another motif characteristic of Bongani and Kruger rock art also appears to be a distinctive item of material culture. An unusual T-shaped accoutrement – that may or may not be connected with the arrows discussed earlier – is illustrated in Figure 4.16. Two of the figures in the panel hold enigmatic T-shaped objects. Comparable equipment – in all its variations – is found at several other sites in and around Bongani, and also in Kruger. Often, the objects are associated with a 'curved-trail' figure (see below). At another Bongani site (Lion Boma) the figure holds items in both hands, in one a stick-like object with a forked head, in the other a long stem from which extend four branches, all painted in red (Fig. 4.17). Although the accoutrement is sometimes more Y-shaped than T-shaped, *both* shapes are often associated with the curved-trail figures. At present we do not know if there is necessarily any connection between the two shapes other than this association with curved-trail figures. At another site a forked object is held by a figure with two protrusions emanating from the top of its head (Fig. 4.18); here, the forked object is similar to one held by a kaross-clad figure in a site in the Drakensberg (Lewis-Williams & Dowson 1989: 153, fig. 75).



Fig. 4.16. Curved-trail figures at VT site. Note T-shaped objects held by two of the figures, and white bands around the stomach. Scale in 5 mm units. Tracing courtesy of G. Blundell.

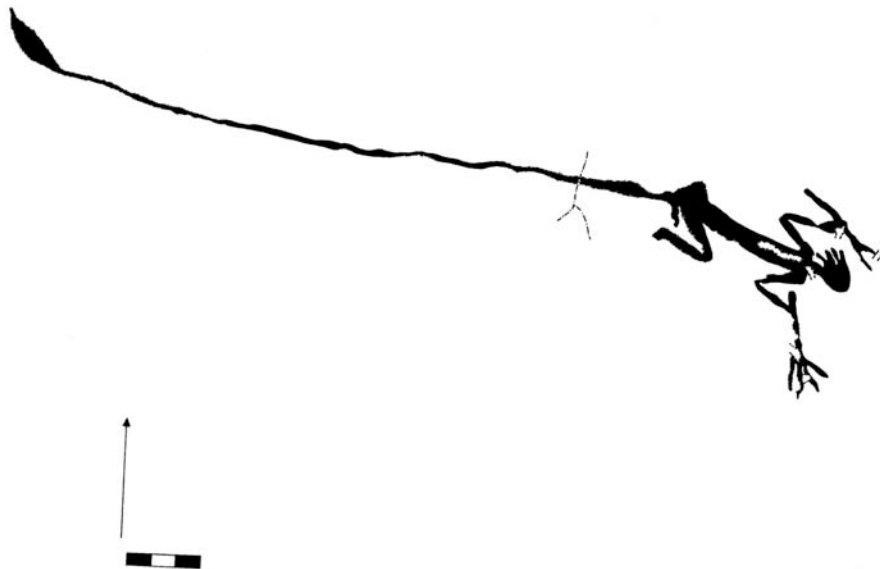


Fig. 4.17. This human figure at Lion Boma site has a long emanation from its rear and an unusual forked object in each hand.



Fig. 4.18. Figure from Gideon's site with forked object and protrusions from top of head.

Garlake (1990; 1995) identified similar forked objects in Zimbabwe, and Hollmann (pers. comm.) has recently discovered others in the Western Cape Province. Laue (2000), drawing on Garlake's work, has proposed that similar T-shapes found in the Waterberg and Zimbabwe may be crescent-shaped arrow points not designed specifically for hunting purposes. Since the T-shape seems to be too unwieldy to represent an actual projectile, it is possible that it represents the potency that arrows contain (Laue 2000); this possibility is given support by Deacon's (1992) theory on arrows being "artefacts of the mind". Although we know that arrows may represent the harnessing and controlling of potency – in a way that is not yet entirely clear – more research needs to be undertaken on the holding of forked objects, both T- and Y-shaped, before definitive conclusions regarding them can be drawn. I believe that there are probably yet more curved-trail figures in the area; discovery and study of the figures will shed some light on the forked objects they hold.

Category 3B: Extremely rare unintelligible motifs

I now consider extremely rare (idiosyncratic) and unique motifs that cannot be said to be characteristic of any region. All in Bongani and Kruger are at present unintelligible.

Instances of hares and rabbits in the paintings of southern Africa are decidedly uncommon; researchers are still not sure of their significance. Vinnicombe (1976) mentions two paintings of hares in her work in the Underberg area of the Drakensberg, and Revil Mason (1962) published a photograph of what he believed to be a hare. There are also several examples of paintings of hares in the Matopos in Zimbabwe (Walker 1996).

It is difficult to see which species of hare or rabbit is depicted in any of these regions, including Bongani and Kruger (Figs 4.19–4.21). Scrub hares (*Lepus saxatilis*) are slimmer and have smaller heads than the Cape hare (*Lepus capensis*); both species are found throughout the Kruger region. The Natal red rock rabbit (*Pronolagus crassicaudatus*), with smaller ears and a more rounded body, is similar. Both scrub hares and red rock rabbits are approximately 60 cm long, but the latter is more rufous in colour and has a greyish band stretching from the chin to the lower jaw (Smithers 1983). Because of these similarities and despite the San myths involving hares (Biesele pers. comm.), I exercise caution.



Fig. 4.19. Hare/rabbit-like motif from San Kop site.

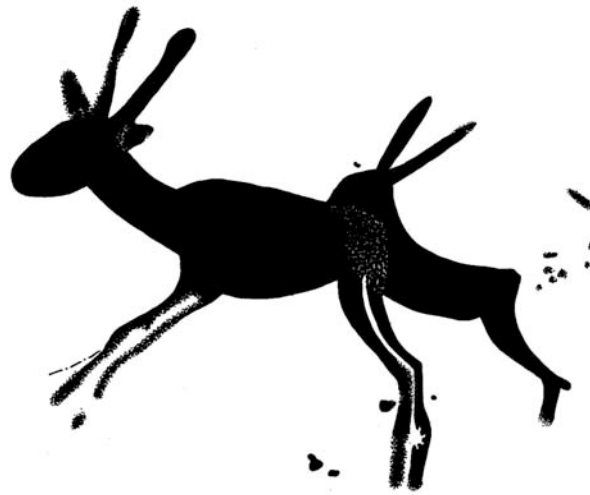


Fig. 4.20. Superimposed hares / rabbits at Lion Boma site. The larger hare is c. 5 cm from head to tail.

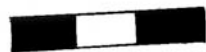


Fig. 4.21. Hare / rabbit at Cluster site.

A slightly more intelligible motif is illustrated in Figure 4.16 (above). Painted in a dark red colour are three human figures with long streamer-like protrusions from their rears. A faded fourth figure can be seen below, and at a different angle. I think the protrusions are unlikely to be extended legs, since what appear to be two feet are tucked under the abdomen of each figure. I do, however, concede that the lower of

the two feet, may, in fact, be a penis.

The protrusions resemble extended versions of those emanating from five figures at a site in Lesotho (Lewis-Williams pers. comm.). They also bear a resemblance to versions of those extending from figures in the eastern Free State Province. Loubser & Laurens (1994) state that the Free State protrusions – less curved than those in Bongani – appear to be “reptile-like” tails. Qing identified depictions of men with reptile-like tails in a shelter in the Drakensberg as living “mostly underwater” (Orpen 1874: 10). As established earlier, the fact that such figures “tame elands and snakes” indicate a shamanistic context and the likelihood that the Free State figures themselves are shamans.

A further shamanistic context is established by the Bongani figures having white stomach bands, which may refer to the sensation of constriction around the stomach area experienced by shamans in trance, caused by boiling potency (Lee 1967: 31; Dowson 1989). Shamans in the Kalahari describe the stomach tightening “into a balled fist” (Katz 1982: 46), or one’s sides being “fastened by pieces of metal” (Biesele 1975: 155).

In 2002, my colleagues and I showed that the Bongani images may also be usefully compared with some in KwaZulu-Natal and the Western Cape Province. The images from the Estcourt, Clanwilliam, Mooi River and Nsikazi (Bongani) Districts (Fig. 4.22) were painted by different artists and result from those individuals’ own experiences. Yet a common theme runs through the four depictions – the coupling of human figures with what are arguably nested catenary curves – which could shed some light on their inception. Nested curves or U-shapes are commonly experienced in altered states of consciousness and more explicitly painted elsewhere (Lewis-Williams & Dowson 1989; Lewis-Williams 1995b). The Bongani panel combines human figures with a construal of nested catenary curves, usually seen in the second stage of altered consciousness, when the subject attempts to understand more fully the geometric forms seen in the first, or lightest, stage of trance (Lewis-Williams 1995b). As Horowitz (1964: 514; 1975: 177, 181) states: “During this stage, subjects try to make sense of entoptic phenomena by elaborating them into iconic forms of people, animals and important or emotionally charged objects.”

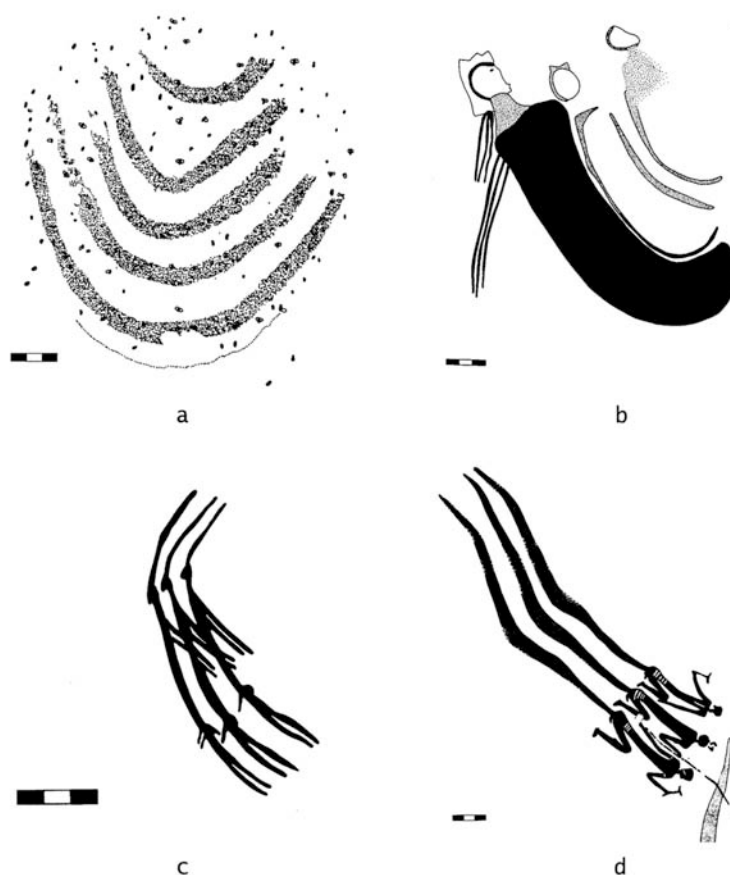


Fig. 4.22. Nested U-shape motifs from: a) Estcourt District, KwaZulu-Natal Province (colours: red and white), b) Clanwilliam District, Western Cape Province (colours: red with yellow neck), c) Mooi River District, KwaZulu-Natal Province, d) Nsikazi District (Bongani), Mpumalanga Province. Courtesy of RARI.

There are numerous examples of this combination of non-real nested curves with real human, animal or object images (Lewis-Williams 1988a; 1988b; 1995b; 1997; Lewis-Williams & Dowson 1998), yet their meaning remains difficult to ascertain. Where the images contain representations of aspects in the San cosmos that we have access to through the ethnography, we can begin to point towards possible meaning (Lewis-Williams 1995b). For now, though, the Bongani figures remain enigmatic.

These four figures are not isolated. Within the reserve and its immediate surroundings are four other sites with a single curved-trail figure (Figs 4.23–4.24; see also Fig. 4.17 above); some of the trails are less curved than others. Near by in Kruger is a site of striking similarity (Fig. 4.25), with four trails nested one above the other; because of fading and the presence of a wash, only the hindquarters and

crouched legs of the four associated figures are visible. The discovery of more curved-trail figures may shed more light on their significance.



Fig. 4.23. Curved-trail figure from Makandlela VT2. Note bending forward posture of human figure.



Fig. 4.24. Curved-trail figure from Matsulu Gate site. Courtesy of C. de Rosner.



Fig. 4.25. Curved-trail figures in Kruger. The front sections of the human figures have faded.

Two outlined (or 'hollow-bodied') human figures (Hampson in prep.) in Bongani possess another significant feature: emanations from the shoulder that give the impression of emerging or penetrating 'spines' (Fig. 4.26). Close to an outlined elephant is a figure in red with a solid head and an outlined body. Briefly, before considering these 'spines', I look at outlined figures that abound in Bongani and its environs, including Kruger. Some depictions of humans and especially animals here, as in the Tsodilo Hills in Botswana (Campbell *et al.* 1994) and the central Limpopo basin (Eastwood pers. comm.), have a dark red outline and a slightly lighter infill. Some appear to have deliberate patterns within the painted bodies that do not appear to be the result of differential weathering. Others appear to contain no paint within the outline, or no paint in certain areas of the figure (Fig. 4.27), although this may result from differential survival rather than being an original feature (see Hampson in prep. and also Chapter 7).



Fig. 4.26. 'Outlined' figure with emanations from the shoulder at Makomani Waterfall site.
Figure's head is c. 2 cm in diameter.



Fig. 4.27. Outlined roan antelope at VT site.

The making of rock art images seems to follow certain rules (Smith 1998). Moreover, these rules were related to a series of ritual stages that began with a decision to make an image, continued through the collection of pigment and the preparation of paint and extended to the varied use of images after their making was complete (Lewis-Williams 1995a; 2002: 156; in press; Dobres 2000; discussed further in Chapter 7). If the technological chain in which image-making was situated was ritually and

socially constituted, it is likely that outlined images were not incomplete: the painted outlines on the rock face were probably subsequently used in some way. Indeed, it is likely that outlined figures have certain significances that are still obscure to us (Hampson in prep.).

At another site is a similar figure with an elongated neck and arms and solid emanations ('spines') from the shoulder, this time at a more acute (vertical) angle (Fig. 4.28). Both figures with emanations from the shoulders are male.



Fig. 4.28. Male human figure with shoulder 'spines' at Spine site.

Emanations of lines and dots from the shoulder area have been suggested to represent the expulsion of sickness from the *n//ao* spot (as seen at Scot shelter in the Soutpansberg), or to represent stylized arrows (as outlined above). Eastwood (1999) cites the example of Dancers' Cave in the Drakensberg to give credence to this second suggestion. At that site clapping women surround men in diagnostic trance postures. Each man in the panel holds one arrow; some have projections emanating from the shoulders or upper back. More research needs to be undertaken before any definitive conclusions about these unusual emanations can be drawn, especially

since Pearce (2009: 339) has recently suggested that the Bongani 'spines' may in fact be flywhisks, similar to those depicted in the rock art of the Malilangwe region of southeast Zimbabwe (almost 500 km / 300 miles north of Kruger), and in other regions in southern Africa.

Because flywhisks are items of ritual accoutrement, their inclusion in rock art is meaningful and their placement – often at the shoulders and especially the lower back – likely to be significant, but, as with many items of material culture depicted in the art, not necessarily literal (Pearce 2009: 339). Indeed, during the healing dance, San shamans use flywhisks to deflect supernatural arrows of sickness that malevolent shamans (and spirits of the dead) shoot at people (Lewis-Williams & Dowson 1989: 43; Lewis-Williams 1995b: 14). Flywhisks are also used during the dance to expel sickness from patients' bodies (Low 2004: 215); ethnographically, we know that flywhisks were not used in any contexts other than the healing dance (Lee 1967: 31; Marshall 1969: 358; Lewis-Williams & Pearce 2004: 88).

At a Bongani site (WP) featuring several files of human figures, at least two figures are associated with what may be flywhisks; the figure with items attached to both his lower back and to his shoulder also has a line emanating from the back of his head (Hampson in prep.). Although the positioning in both the Malilangwe and Bongani paintings may simply illustrate flywhisks attached to waistbands or shoulder straps, or flywhisks placed in (unseen) bags, given the ritual context of the rock art it is more likely that their positioning relates to concepts of supernatural potency (Pearce 2009: 339; see also Eastwood 1999). For the San, the lower back and the belly – both of which are 'penetrated' by flywhisks in the paintings – are important parts of the body during the healing dance: supernatural potency enters the dancers' bodies through their backs (Lee 1967: 31), and, as the dancers approach an altered state and metaphorical 'death', they lean forward and potency boils in their stomachs (Lee 1967: 31). Another example of a Bongani flywhisk associated with the lower back is illustrated in Figure 4.30; see also Figures 4.6 and 4.14 above.



Fig. 4.29. File of unusual human figures at WP site. Flywhisks labelled 1 and 3 are associated with lower backs; flywhisk 2 with shoulders. Also note faint red line (4) emanating from the 'palette' (top right); the line is painted on top of a vein of quartz that runs parallel to a ledge (dashed line) on the rock surface. Courtesy of C. de Rosner.



Fig. 4.30. Male human figure with bow and several arrows at PD site. Note flywhisk at the figure's lower back. Courtesy of C. de Rosner.

4.4 Conclusion: intelligible motifs and rock art regionalism

Intelligible hunter-gatherer motifs throughout the southern African subcontinent point, in various ways, to San beliefs about a tiered cosmos and the shamans who traverse this cosmos. Certainly, Bongani and its environs conform to the overall pan-southern African pattern in this respect. More cautiously, perhaps, we should refer to the *near pan*-southern African pattern, although Lewis-Williams (in press) has recently clarified the meaning of the term 'pan-San': it does *not* suggest that all San groups are "identical in all respects, merely that certain key beliefs and rituals are widespread". I discuss the origins and significance of shamanistic cosmologies and their relationship to rock art further in Chapters 5 and 6.

Few regions in southern Africa seem *not* to have images intelligible in these ritualistic and shamanistic terms. Equally importantly, however, some regions such as the Tsodilo Hills and the central Limpopo basin appear to possess other intelligible motifs that are not explicitly shamanic as well (Campbell *et al.* 1994; Eastwood pers. comm.). What, then, can the perceived stylistic regions and the regions established by the presence or absence of ethnographically informed motifs

be said to signify? They are clearly not identical. Image-makers in some regions emphasized certain motifs while remaining within the broad San religious and cosmological framework. Exactly what those regional emphases may signify is, at present, impossible to say. Still, researchers are more likely to arrive at answers to this question if they construct rock art regions within San art on the basis of intelligible and interpreted motifs than if they remain with aesthetic criteria, the significance of which is still not understood. Further, constructing rock art regions based on the presence of intelligible motifs will help avoid perpetuating misconceptions held by the public about prehistoric artists (see Appendix A); researchers should stress that rock art is more than simply pretty pictures.

My and colleagues' preliminary work shows that the rock art of Mpumalanga Province is more prolific, diverse and complex than hitherto suspected. There are a number of under-researched areas in southern Africa, and the Bongani and Kruger region is certainly one of them. I have argued that it is important to guard against interpreting the art of unexplored regions purely in terms of what is already known about well-researched ones; there is a danger that new themes and nuances will be reduced to what has already been argued or suggested. Researchers need to seek (and explain) differences as well as similarities; the framework outlined above can be used to help researchers to seek and explain both. As work in southern Africa progresses, new motifs and combinations of motifs will come to light, and our understanding of the diversity and complexity of the regional distribution of rock art will be deepened. With this diversity in mind, I turn now to heuristic frameworks that allow us to explain the significance of certain motifs found in the rock art of the Texas Trans-Pecos.

CHAPTER 5

Regions, rituals, and altered states: an ethnographic approach to Trans-Pecos rock art

5.1 *Cultural commonalities: ideology and shamanism in ethnographic texts*

5.2 *Neuropsychology and origins of the 'tiered cosmos'*

5.3 *Peyote and peyotism in west Texas and the Chihuahuan Desert*

5.4 *The application of the neuropsychological model to Trans-Pecos rock art*

5.5 *Rationalizations of altered states and the manifestation of visions on rock surfaces*

In Chapters 2 and 3, I demonstrated that, with a few exceptions, we cannot be certain which specific groups produced the rock art of the Trans-Pecos, or exactly when. Fortunately, reference to the ethnographic literature on shamanistic and animistic hunter-gatherer cultures within the Greater Southwest and further afield – the Plains, Mesoamerica, even worldwide – reveals several potentially analogous groups, both prehistoric and historic. In turn, an analysis of the ethnographies of these groups alongside a neuropsychological model also suggests *why* Trans-Pecos peoples may have produced rock art, and, further, why certain Trans-Pecos rock art motifs – the motifs I call intelligible, interpreted, or diagnostic – can be interpreted with confidence (Chapter 6). In this way, the Trans-Pecos rock art region can be defined according to the presence or absence of intelligible motifs rather than by aesthetic style. In this and following chapters, I employ ethnographic analogies to elucidate further the *motivations* for the production and consumption of – and the *meanings* of – rock art in the Trans-Pecos. Only when these motivations and meanings are known, at least in part, can heritage managers present rock art to visiting publics in a meaningful way (Appendix A).

By taking this generalized and comparative approach, I am following a long-established tradition in North American anthropological research – I see differences between sub-regions in the Greater Southwest as mostly adaptive and related to subsistence, rather than to ideology and belief, especially before the advent of agriculture and the later ingress of Plains Indians and Europeans. This in turn explains why almost all of the Trans-Pecos rock art motifs described in Chapter 3 are also found elsewhere in North America, and why they are therefore categorized as

‘widespread’. As in southern Africa, the widespread occurrence of shamanism – in one form or another¹ – throughout the Americas provides an effective framework for explaining the significance of many Trans-Pecos motifs. The framework I developed in Chapter 4 for South Africa can be used with confidence.

Classes of shamanistic (and therefore intelligible and interpreted) Trans-Pecos motifs to be examined in the next chapter include:

Category 1A: Widespread intelligible/interpreted motifs:

- Horns and headdresses.
- Emphasis on deer and death.
- ‘Contact’ art.
- Entoptic motifs.

Category 2A: Regional intelligible/interpreted motifs:

- Liminal species: turtles and Thunderbirds.
- Mesoamerican- and Mogollon-influenced motifs: Quetzalcoatl, Tlaloc, and ‘masks’.

Category 3A: Unique or extremely rare, intelligible/interpreted motifs:

- Point/human conflation.

5.1 Cultural commonalities: ideology and shamanism in ethnographic texts

Researchers need to *demonstrate* differences as well as similarities. Indeed, among widespread but specific North American culture groups, cultural commonalities are both striking and long-lived. I do not suggest that different groups’ ideologies can be reduced to a ‘lowest common denominator’ at all times (or, indeed, at any time); rather, I stress that, within broad timeframes and regions, the similarities are not and were not superficial, especially because belief systems tend to be conservative. As Whitley (2005: 86) states:

While there is no reason to assume that every prehistoric example will necessarily conform to the origin and meaning of the ethnographic cases

¹ I address shamanistic nuances below.

[from elsewhere], a starting place for analysis is the assumption that a prehistoric case should be reasonably close to the known range of variation in the ethnography. Alternatively, if the origin and meaning of a prehistoric case is thought to be significantly divergent from known ethnographic examples, then it is equally important to show how it diverges, why these variances might matter, and what unusual evidence supports this potentially exceptional variation and interpretation.

Huffman (1986) has also noted that culture change is an empirical phenomenon that can be observed in the archaeological record; genetic analogies based on linguistic and cultural connections can therefore be extended back in time and across space until *demonstrable* change in content is evident – for example, in rock art, the replacement of one iconographic system by another.

Linguistic studies (Kroeber 1934; Sauer 1934; Griffen 1979; 1983; Hale & Harris 1979; Miller 1983; Johnson & Hook 2007) demonstrate that in the Greater Southwest the Uto-Aztecan languages probably began to diverge as recently as about 3,000–5,000 years ago; before this, almost all groups in the Greater Southwest would have spoken a mutually intelligible language, proto-Uto-Aztecan. More specifically, Kroeber (1934: 13–14) published evidence that the Conchos and Chisos in the Trans-Pecos probably spoke a Uto-Aztecan language (see also Griffen 1979: 133–134; 1983: 330), as did the Suma and Jumano (Kroeber 1934: 15; Sauer 1934: 65; cf. Hickerson 1994; see also Chapter 2).

Although functionalism, structuralism and functional-structuralism as overarching theories have been rightly criticized, Eva Hunt's (1977: 259) concepts of 'structural armatures', which are "quite fixed over long periods of time, across geographic, social, and culture boundaries", are useful. Structural armatures remind us that although there are local variants, profound and widely shared templates of understanding can and do exist (Gossen 1986: ix; see also Schaafsma 1997: 9). For example, witness the deeply entrenched Western notions of linear time, the establishment of the binary oppositions between sacred and secular space, or between culture and nature (see Appendix A). As discussed earlier, it is evident that the putative rigid dichotomy between the natural and supernatural is a Western imposition on hunter-gatherer ideologies. A Kickapoo religious leader explained to

anthropologists in Coahuila, Mexico, for example, that “it would be impossible to study any phase of Kickapoo life without becoming involved in religion” (Ritzenhalter & Peterson 1956: 45). Hultkrantz (1982: 179) believes that the opposition of natural:supernatural is not a distinction in a “philosophical sense, between two absolutely separate worlds, but a more practical distinction between everyday reality and a reality of another order to which spirits and miracles belong”. In this sense, the distinction is a universal (or near-universal) foundation for human religious experience (see also Schaafsma 1997: 13; Lewis-Williams 2010).

The term *shaman* – originally a Tungus word from central Asia (Shirokogoroff 1935) – was first used in North America as long ago as 1888 by Dr Walter J. Hoffman to characterize tribal religious officials and ritual specialists; Dr Hoffman based this decision partly on strong similarities with earlier described Siberian cultures (Hoffman 1888; Whitley 2006: 1). Here is an early example of ethnographic analogy – and the cultural commonality (shamanism) itself – effectively spanning large units of space and time. In various forms throughout North America, as in southern Africa (Chapter 4), shamanism is a widely shared template of understanding.

Contrary to critics such as Alice Kehoe (2000; 2002), therefore, Mircea Eliade (1964) was not the first to elucidate hunter-gatherer shamanism. There are plenty of primary ethnographic sources from the nineteenth and twentieth centuries relating to shamanistic and animistic groups throughout North America (e.g., Harrington n.d.; Hoffman 1888; Mallery 1893; Lumholtz 1900; 1902; Kroeber 1925; Beals 1932; Spier 1933; Bennett & Zingg 1935; Driver 1937; Spicer 1940; Opler 1941; 1969; Gayton 1948; Underhill 1948). Remarkably, overarching shamanistic belief systems have been reported from as far afield as California (e.g., Blackburn 1975; Hedges 1983; Whitley 1992; 2000; Fagan 1995; Robinson 2006), Mesoamerica (Schaafsma 1980; Griffen 1983; Sutherland 1998; 2006), Texas and the Greater Southwest (Newcomb 1961; Schaafsma 1980; Bostwick 2001), the Midwest (Vecsey 1983; Lankford 2004), the northern Plains (Sundstrom 1990; 2004; Keyser & Klassen 2001; Francis & Loendorf 2002), and Canada (Keyser & Klassen 2001; Vastokas & Vastokas 1973). That ritual specialists and the supernatural should play a prominent role in ethnographic narratives throughout the Greater Southwest and the American continent should, therefore, come as no surprise; shamans played a prominent role in almost all hunter-gatherer groups in the Americas. To argue *without demonstrable*

evidence that the Trans-Pecos is a regional pocket where some form of shamanism did *not* hold sway is untenable.

I now outline some of the fundamental tenets of shamanistic ideologies, concentrating on the relationships between shamanism, neuropsychology, altered states of consciousness, and rock art – a relational framework that I employ to explain the significance of many of the motifs in the Trans-Pecos rock art corpus. I also note here that shamans operate within animistic ontologies; shamanism and animism are not mutually exclusive. Most – if not all – hunter-gatherer groups in the Americas were (and sometimes still are) shamanistic *and* animistic, at least in certain ways.²

Although the terms shaman and shamanism are disputed, and considered by some to be too general (and too widespread) to be of use, I, like many others, retain them because they point to the human universal (or, perhaps, near-universal) trait that Lewis-Williams (2002: 132) calls “the need to make sense of shifting consciousness”.³ Alternative words and phrases (that are often used euphemistically, and sometimes interchangeably with shaman, both in past research and today) include ‘medicine man’, ‘ritual specialist’, ‘man who writes’, and – less frequently – ‘witchdoctor’. Although some of these terms can be found in this dissertation, I argue that using or inventing new labels will not necessarily lead to more conceptual precision. I do note, however, that the suffix *-ism* often misleadingly suggests a coherent and explicitly articulated doctrinal system, for both shamanism and animism; Ingold (2000: 112) suggests instead that shamanism and animism are not religions but rather “orientations that are deeply embedded in everyday practice”, and not so much systems “to which people relate as immanent in their ways of relating”. Most importantly, I reject the suggestion (*pace* Kehoe) that overviews of shamanism and

² For recent work on animism, see Descola (1992; 2005); Viveiros de Castro (1992; 1998; 2004); Gell (1998); Bird-David (1999); Strathern (1999); Stringer (1999); Fowler (2004); Renfrew *et al.* (2004); Harvey (2006); Dowson (2007; 2009); Henare *et al.* (2007); Harman (2009); Alberti & Bray (2009: 337). Ironically, attempts by ‘new animists’ to synthesize animist thought have been criticized as ‘meta-narratives’ and therefore pernicious residues of Enlightenment thought (see Latour 2009).

³ For the purposes of this dissertation I employ Paul Taçon’s (1983) distinctions between shamanic and shamanistic: shamanic, the narrower meaning, is directly related to rituals performed by shamans, especially those in altered states of consciousness; whereas shamanistic, the broader, denotes diverse rituals and belief in a tiered cosmos.

animism are attempts to promote a return to ideas of 'cultural primitivism'. Following Dowson (2007: 378) and others (Janik pers. comm.), I am careful to avoid impositions of essentialized Western 'ideals' on definitions of shamanism.

Despite these caveats, there are many published lists of empirically verified characteristics of hunter-gatherer shamanism (e.g., Hultkrantz 1962; 1968; Eliade 1964; Winkelman 1992; Lewis-Williams 2002: 133). All are applicable to American contexts. I summarize the most important of these shamanic features – some of which also apply to pastoralist and agriculturalist⁴ shamanism(s) – below.

- 1) Shamanism worldwide is posited on a range of institutionalized altered states of consciousness.
- 2) "The visual, aural and somatic experiences of those states give rise to perceptions of an alternative reality that is frequently tiered (hunter-gatherers believe in spiritual realms above and below the world of daily life)." (Lewis-Williams 2002: 133.)
- 3) Shamans, with special knowledge and powers, are believed to have access to this alternative reality when they experience altered states of consciousness; shamans are considered intermediaries between the seen (everyday) and unseen (spiritual) worlds.

Why do shamans choose to enter these alternative realities? What do they do (or claim to do) in the cosmic tiers (considered to be) both above and below the mundane world of daily life? I gave several examples in Chapter 4. Lewis-Williams (2002: 133) – once again summarizing the commonalities of dozens of shamanistic societies worldwide – states that the goals of most shamans in altered states of consciousness are to:

- 1) Contact spirits and supernatural entities.
- 2) Heal the sick.
- 3) Control animals and the movements of game.

⁴ For exemplary compendia of shamanism in agricultural groups, see Bostwick (2001). Sedentary societies with some form of priesthood do not necessarily exclude the existence of shamans (see also Winkelman 1992; Friedel *et al.* 1995).

4) Control the weather.

Importantly, all four of these goals are said to be facilitated by supernatural entities that include animal-helpers, spirits, and supernatural potency (Lewis-Williams & Dowson 1989: 32; Lewis-Williams 2002: 133) – concepts apparent in widespread North American ethnography. Indeed, personal isolation in order to embark on a vision-quest, contact a spirit helper, and harness supernatural potency is fundamental to Native American shamanistic religions. O’odham-speakers (formerly called Papago) in northern Sonora (Mexico), for example, talk of harnessing supernatural energy that is similar conceptually to Western notions of electricity (Underhill 1938; 1957) – like electricity, which is essentially neutral, supernatural energy can be dangerous if not controlled. In California, Chumash groups refer to this potency as *’atiswin*, a concept which also refers to the supernatural beings themselves; and Yokuts groups call potency *tipni* (Applegate 1978: 25–27; Robinson 2006: 234).

Shoshoni shamans in California describe different stages of their vision-quests and typical experiences of out-of-body travel: first, they enter the spirit world through a hole in the rock (or through a cave itself) and then travel through a ‘tunnel’. Kent Reilly (2004: 128), who works in the Mississippi Valley and studies Midwest groups, found that the underworld was “entered from the Middle World through caves, lakes, rivers, and streams”. Similarly, Boyd (2003: 50) has shown that Aztecs (and their Chichimec ancestors) in Mesoamerica considered caves as magical places that provided access to other realms, and Dibble & Anderson (1970: 276) found that Aztecs believed that caves had “mouths which pass through to the other side”.

In the second stage, vision-questers avoid malevolent monsters; contact the benevolent and potent ‘Master of the Animals’ and his spirit creatures; and finally re-emerge through a spring or waterhole (Hultkrantz 1987; see also Lewis-Williams 2002: 167; Reilly 2004: 128).⁵ I explain the significance of these repeated sensations and perceptions later.

⁵ For further examples of Shoshoni and other groups’ vision-quests, see Beals (1943: 64); Halifax (1982); Hultkrantz (1987); Zimmerman (1996); Keyser & Klassen (2001); Boyd (2003: 54).

William Griffen (1983: 336; see also Beals 1932: 212–213; Newcomb 1961: 51–53), referring to shamanism in northern Coahuila (Mexico) and west Texas, states that “curing by shamans is noted for several specific peoples and was, no doubt, universal. ... Visions were a part of shamanistic activity and power”.

Other writers stress the importance – or necessity – of other facets when defining shamanism; I acknowledge them here, but do not consider them crucial to the development of my argument. Stricter definitions, for example, state that entry into altered states must be voluntary, and also that knowledge or power acquired on supernatural journeys should be used “for the good of the community” (Walsh 1990: 9–10). Schaafsma (1994b: 65) points out that many shamans also deal with “issues of fertility” and influence warfare. Whitley (2009: 228–229) links shamanism to forms of depression and other pathologies. Several researchers stipulate the number of religious practitioners that a shamanistic society may or must have; some focus more on the conceived subdivisions of the tiered cosmos, still others on the differences between hunter-gatherer, pastoralist, and agriculturalist shamanisms.

This relationship between rock art and shamanism has been debated fiercely for decades. Space does not allow further reference to these often acerbic exchanges, especially because their nuances attest to deep epistemological divisions within the social sciences and the academe, such as how much one may ultimately know about the past; below, however, I summarize the more persistent arguments, especially those relevant to the study of Trans-Pecos rock art. As in Chapter 4, I then demonstrate links between shamanism and specific rock art motifs.

Whitley (2006: 5) believes the “journalistic malaise” that has crept into rock art studies is a reflection of post-modern critique and deconstruction, “where arguing about what is possibly *wrong* with something is valued more highly than determining what might be *right* about it, or even figuring something out in the first place”. I am similarly optimistic: in order to explain *something* about the past, we do not have to explain *everything*.

The major premiss of rock art researcher David Whitley, who works in California and the Great Basin, is that there is – and was – essential unanimity amongst Native Americans that their rock art sites were (and, in some cases, still are) religious. For

instance, missionaries in South America destroyed certain rock art sites specifically because they were spiritual and therefore a threat; sometimes, missionaries erected or engraved crosses in high places to demonstrate religious 'superiority' (Pearson 2002: 53). A Spanish account in 1763 discusses the removal of rock art and other "detestable idolatory" (Slifer 1998: 86).

Whitley's minor premiss is that there is essential unanimity amongst ethnographers that Native American religions were (and, in some cases, still are) fundamentally shamanistic. The logical conclusion follows (Whitley 2006: 1):

To argue that the rock art then was not shamanistic implied either that there was some non-shamanistic religion in the region that no ethnographer had discovered, or that the art pre-dated the ethnographic past. Indigenous commentary denied this last inference, and, even if it were correct, it would still require a problematic change from a prehistoric non-shamanistic to an ethnographic shamanistic religion. Inasmuch as shamanism has long been acknowledged as the foundational Native American religion, brought into the Americas with the first immigrants during the Late Pleistocene ... this last possibility has always been implausible.

As a result of this logic, archaeologists in North America have widely – albeit, as shown in Chapter 1, sometimes tacitly and begrudgingly – accepted the shamanistic origins of the art even when they were not aware of the available ethnographic data (e.g., Heizer & Baumhoff 1962; Grant 1965; 1968; Garvin 1978). Employing the deductive syllogism outlined above, researchers acknowledged that 1) the art in a broad sense is religious; 2) shamanism was the core religious system; and 3) the art therefore must, somehow, be shamanistic.

From around 1970, several researchers in the USA began to incorporate ethnographic information in their interpretations and to explicitly investigate the shamanistic nature of the art (e.g., Blackburn 1975; 1977; Hedges 1976; 1983; Hudson & Underhay 1978; Wellmann 1979; Whitley 1992; 1994; 2000; 2001; 2006; Loendorf 1994; Turpin 1994; 1995; 2001; 2002; 2010; Malotki 1997; Boyd 1998; 2003; Francis &

Loendorf 2002; Loubser 2002).⁶ Kroeber (1925) had considered ethnographic analogy and shamanism as early as the 1920s; these were and are not new academic phenomena (see also Harrington n.d.; Gayton 1930; 1948; Willoughby 1932; Driver 1937; Whitley & Clottes 2005). Certainly, there has been disagreement over the nature and nuances of shamanism – should researchers place more emphasis on shamanistic vision-questing, puberty initiations, ‘hunting magic’, solstitial rituals, or malevolent shamans?⁷ – but there has been essential agreement that the prehistoric rock art of North America is “*nonetheless shamanistic in origin and in symbolism*” (Whitley 2006: 2; my emphasis). I concur, as do the majority of rock art researchers. Turpin (2001: 364), for example, discussing the widespread distribution of two specific pictographic and petroglyphic themes – elaborated anthropomorphic figures and abstract geometric signs, both of which are found in the Trans-Pecos – states that “the influence of shamanism on North American archaic rock art is pervasive and persistent”. In the Lower Pecos, where Turpin works, the consistency and what archaeologists call the ‘redundancy’ of certain motifs implies the existence of a “unified belief system” (Turpin 2004: 90). Again, this statement echoes Hunt’s (1977: 259) and others’ notions of wide-ranging ‘armatures’ and ‘near-universals’.

Importantly, the fact there have been disagreements over specific facets of shamanism, and also the strength and type of link with rock art, demonstrates that, *pace* Bury (1999), Kehoe (2000; 2002), Quinlan (2000; 2001), Francfort & Hamayon (2001) and others, the shamanistic interpretation of rock art is *not* monolithic or static, a convenient blanket theory that smothers further research. Turpin (1994: v) again points out that the very existence of an American school determined to show that shamanism is “not the root of ALL rock art” is an acknowledgement that it *is* the root of *some* rock art. The philosopher and anthropologist Alison Wylie (1982; 1985;

⁶ David Whitley’s influence should not be under-estimated; following Lewis-Williams’s work in South Africa, he was the first researcher in the USA to persuasively intertwine the evidential strands of the imagery itself, ethnography, and neuropsychology (below).

⁷ The malevolent facet of North American shamanism (*pace* Walsh 1990: 9–10, and above) is often discussed (e.g., Whitley 2000: 20, 82; Robinson 2006: 240–241). Gayton (1948: 210–211) wrote of malevolent shamans firing dangerous “airshot”. Schaafsma (1997: 9), considering the perspective of a Taos informant named Pina, states: “For a while I thought that these rock images and their function was a site specific situation. ... But I soon became aware that among the Taos whom I talked with, witchcraft [a malevolent form of shamanism] was thought to be the motivation behind *all* rock art.” This statement once again shows the need to demonstrate (and not merely assume) differences.

1988; 1989) agrees; she stresses the heuristic potential and strengths of shamanism, neuropsychology, and ethnographic analogy as complementary frameworks to explain specific rock art motifs.⁸

The widespread existence of (various forms of) shamanism in North America – and the strong links between shamanism and rock art – is central to my argument; I therefore offer several reinforcing analogous examples. While investigating the ethnographies of four specific and distinct ethnic groups – the Aztecs, the Huichol, the Yaqui, and the Hopi – separated by thousands of miles and hundreds of years, but all within the Gran Chichimeca, and all Uto-Aztecan speakers, Carolyn Boyd (1996; 1998; 2003: 50–54) confirmed that there were several ideological concepts common to all, including not only the overarching shared beliefs in a tiered cosmos, animal-helpers, and the shamanistic vision-quest, but also in serpents that live at both natural and man-made ‘gateways’ to the spirit worlds. The Aztecs and their ancestors (the Chichimec), for example, believed in 13 layers of heavens and nine layers of *Mictlan*, the land of the dead; entrance into *Mictlan* was through a cave conceived as the gaping jaws of a reptilian earth monster (Brundage 1979; Boyd 1996: 156). Boyd (2003: 108–110, figs 4.1–4.6) demonstrated that several wide-ranging and shared ideological themes are also present in the rock art of the Lower Pecos (Fig. 5.1).

⁸ Strong scientific theories accord with earlier work, they are internally consistent and internally diverse, they relate to verifiable facts, and have heuristic potential.

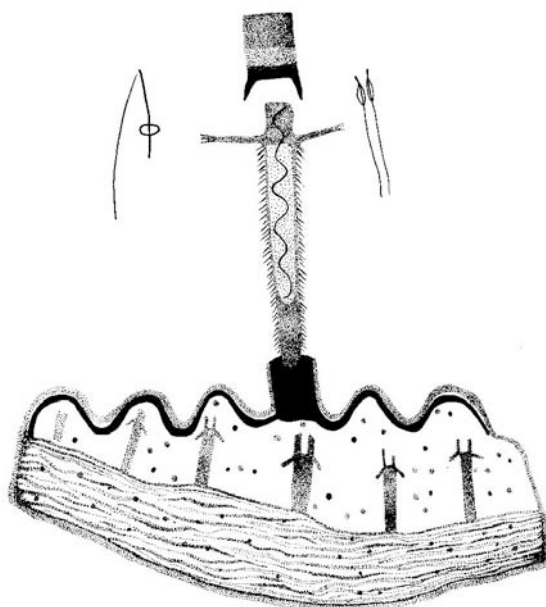


Fig. 5.1. 'Centrally-styled' anthropomorphic figure passing through an opening in a crenellated arch, from Boyd (2003: fig. 4.5). Note erect hair on torso, and atlatls.

I note here that ethnography rarely 'explains' rock art in any direct sense, and a naïve use of ethnography is only marginally more effective than 'gaze-and-guess'. Ethnographic texts as well as the images themselves often require explanation because both texts and rock art – including images that appear most 'realistic' – are "permeated and structured by a set of metaphors" (Lewis-Williams 2002: 144) and also, inevitably, by hunter-gatherer notions of the world – such as the notion of cosmological tiers. Beliefs themselves cannot be observed, and hunter-gatherers explained – and in some places, still explain – rock art imagery in their own terms, not in the language of anthropologists. *Pace* Steward (Chapter 1), therefore, apparent contradictions in informants' accounts may in fact be superficial. Just like the archaeologist digging in the ground, the ethnographer looks at patterns of behaviour and infers meanings from those patterns (Whitley 2005: 87; see also Geertz 1973). We need to understand the complexity of metaphors as well as the potential pitfalls of ethnographic analogy; failure to grasp these theoretical and methodological nuances has led many critics to throw out the baby with the bathwater. Similarly, because images are part of a meaningful *chaîne opératoire*, from production to consumption, we should avoid the temptation to isolate images from the 'chain' and treat them as "no more than cyphers of a code waiting to be cracked" (Lewis-Williams 2002: 161;

see also Schaafsma 1980). The ‘chain’, which I discuss further in Chapter 7, includes at least four stages: acquisition of imagery, manufacture of paint (or choice of hammerstone), the making of images, and the viewing, use, or consumption of images (Lewis-Williams 1995a; 2002: 156).

5.2 Neuropsychology and origins of the ‘tiered cosmos’

Having established that shamanism is widespread, and also that there are many facets of shamanism that are held in common by numerous and widespread North American groups, I consider now why this might be so. The answer lies primarily in neuropsychology and the study of human consciousness, the archaeology of thought. Indeed, as long ago as the 1950s, Joseph Campbell (1959: 350) explained the reasons for the near-universality of shamanism in hunter-gatherer communities and small-scale societies – and the near-universality of certain kinds of shamanistic imagery – as “not historical or ethnological, but psychological, even biological”.

There has been much debate on the biological origins and components of human consciousness,⁹ but few would disagree with the statement that what “constitutes consciousness for us at our particular position in history informs our investigation and knowledge of the past” (Lewis-Williams 2002: 112). Consciousness – a notion created by electro-chemical activity in the ‘wiring’ of the brain – is clearly a concept of paramount importance. Lewis-Williams and other researchers believe that recently there has been too much emphasis placed on humans’ rational (or ‘alert’) states, and not enough on autistic states at the other end of the ‘spectrum’ of consciousness (Fig. 5.2; Lewis-Williams 2002: 123).

⁹ Despite continued criticism from those who contend that the investigation of altered states of consciousness is not ‘scientific’, researchers such as Newberg & d’Aquili (2001) have chosen to investigate the neurobiology of meditation and altered states precisely because it is easily duplicated in the laboratory (Pearson 2002: 110).

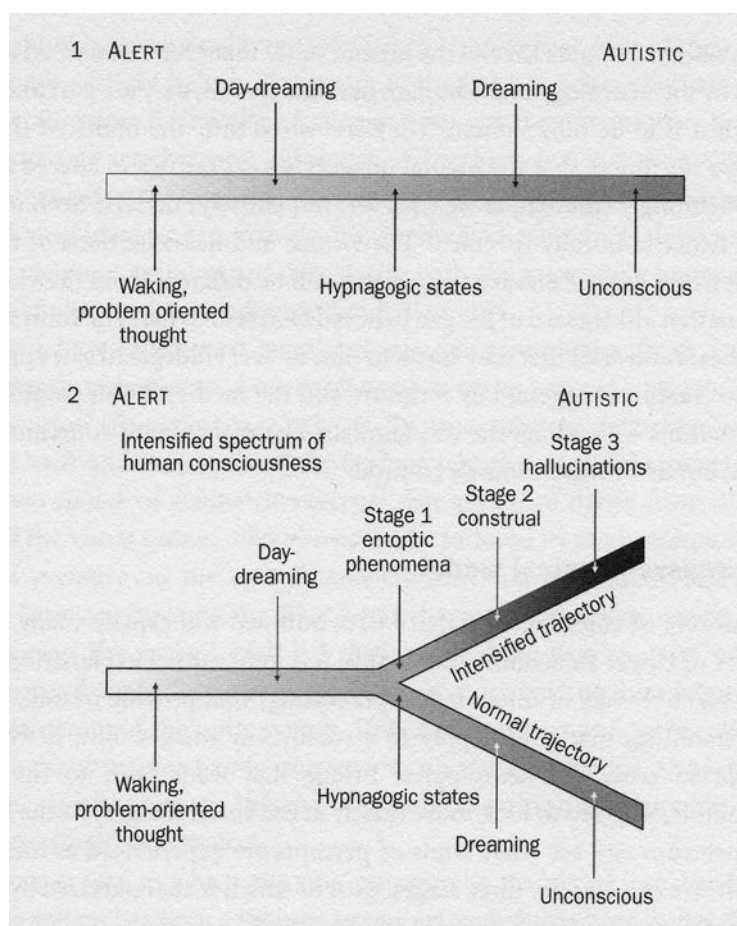


Fig. 5.2. Spectra of human consciousness, from Lewis-Williams (2002: fig. 25).

Autistic states occur along two forks at one end of the spectrum: one of these forks, dubbed the 'normal trajectory', includes hypnagogia, dreaming, and unconscious sleep; the other fork, the 'intensified trajectory', and perhaps more importantly for studies of rock art, includes altered states of consciousness (ASC). ASC and accompanying hallucinations (of all five senses; see Chapter 7) are induced – sometimes deliberately, sometimes not – by a variety of means including sensory deprivation, audio-driving (e.g., prolonged drumming), visual stimulations (e.g., flashing lights), sustained rhythmic dancing, fatigue, pain, fasting, and the ingestion of psychotropic substances (including peyote, extant in west Texas and discussed in detail below). All these methods, to varying degrees, shift consciousness along the intensified trajectory towards the autistic end (Laughlin *et al.* 1992). Also worth noting are pathologies that also produce ASC, such as various forms of depression, schizophrenia, and temporal lobe epilepsy (Lewis-Williams 2002: 124; Whitley 2010).

Importantly, although all of the mental states listed above are generated by the neurology of the human nervous system (they are ‘wired into’ the brain), the mental imagery people experience in ASC is predominantly – but not entirely – derived from memory and is therefore specific to one’s cultural environment (Lewis-Williams 2002: 126). First developed by Lewis-Williams & Dowson (1988), this neuropsychological model is not therefore, *pace* vociferous critics (e.g., Bahn 2010), deterministic. Moreover, this model is different from ‘blanket’ theories (such as the circular art-for-art’s-sake, and some of the more naïve landscape theories (Chapter 1)) that are applied unconvincingly to all images; the neuropsychological model, in contrast, can be used to explain many *specific* (but not all) features of Trans-Pecos rock art. Before turning to these specific geometric rock art motifs, found at all but three of the Trans-Pecos sites, I look briefly at the visual imagery of all three stages¹⁰ of the intensified spectrum generated and experienced under laboratory conditions; this ASC imagery is essential to the development of my argument.

In the first and ‘lightest’ stage of ASC, six of the commonest types of geometric visual percepts – also known as entoptic forms and illustrated in Chapter 3 (Fig. 3.16) – include:

- 1) A basic grid and its development in a lattice and hexagonal pattern.
- 2) Sets of parallel lines.
- 3) Dots, circles and short flecks.
- 4) Zigzag lines (both rectilinear and curvilinear) and V-shaped chevrons.
- 5) Nested catenary curves (U-shapes).
- 6) Filigrees or thin meandering lines.

Importantly, Lewis-Williams & Dowson (1988: 203) point out that because these

phenomena are mercurial, we do not suppose our six categories to be as rigid as this list seems to imply. Nevertheless, we take the six entoptic types to be fundamental because they were established by abstracting redundant elements from a large number of reports.

¹⁰ These three stages are cumulative and not ineluctably sequential (Siegel 1985; see also Lewis-Williams 2002: 130).

A seventh category that is sometimes included in this list – often overlapping with category 6 – contains the vortex, spiral, and set of concentric circles.

In Stage 2 of the intensified trajectory, entoptic phenomena are combined with culturally specific iconic forms (familiar objects) in an attempt to make sense of the ASC experience. A famous example is the construal of an ambiguous round shape as, say, an orange if the subject is hungry, a breast (if sexually aroused), a cup of water (if thirsty), or a bomb (if fearful) (Horowitz 1975: 177; see also Lewis-Williams 2002: 128). Subjects in ASC look for meaning in the geometric entoptic images.

Between Stages 2 and 3, many people experience a spiralling vortex, rotating tunnel, or concentric circles (category 7), often reported as a ‘near-death’ experience. Subjects begin to exclude more and more information from the outside: entoptic phenomena begin to give way to spontaneously produced iconic hallucinations (Siegel 1977: 136). Whereas Westerners use culture-specific words such as “tunnel”, “cone”, and “corridor” to describe the vortex, shamans from other cultures – including the Shoshoni vision-quester mentioned above – instead speak of a “hole”, “road”, “gateway”, or “tree roots” leading down into the bowels of the earth – the shamanistic *axis mundi* used to travel between supernatural levels in a tiered cosmos (Lewis-Williams 2002: 129; Diaz-Granados 2004: 140; Reilly 2004: 127). As we saw earlier, natural geographic features such as caves, mountains, and bodies of water are frequently associated with the *axis mundi* (Eliade 1964; see also Boyd 2003: 49–50; Reilly 2004: 127–128).

Stage 3 images are often increasingly vivid and change one into another (Siegel & Jarvik 1975). At this stage, subjects stop using similes to describe their experiences: now, the images *are* what they appear to be (Chapter 7; see also Lewis-Williams 2002: 129). Some subjects now feel themselves to be turning into animals, or transforming in other ways (Siegel & Jarvik 1975: 105; Lewis-Williams 2002: 130); indeed, many descriptions document somatic experiences of ASC and are what social scientists might call ‘phenomenological’.¹¹ Entoptic forms (as experienced in

¹¹ Phenomenology is a philosophical approach that concentrates on the study of consciousness as well as the objects of direct experience. See Chapter 7.

Stages 1 and 2) are still seen; by a process of integration and fragmentation,¹² compound images – such as a man with zigzag arms – are formed.

Critics are correct in asserting that rock art corpuses without direct ethnographic comment (such as the Trans-Pecos, or the European Upper Palaeolithic caves) have no *identical* counterpart in any present-day small-scale communities. But this once again is the argument from ethnographic despair: if only ethnography can provide reliable knowledge, we cannot study the remote past at all.

This brief overview demonstrates that the neuropsychological model affords at least *some* access to the Upper Palaeolithic (Lewis-Williams & Dowson 1988: 202) and, indeed, to prehistoric and historic Trans-Pecos. The neuropsychological model is an extension of a middle-range theory of the mind (Cowgill 1992; see also Earle 1994: viii; Whitley 1994: 9): it allows researchers to understand – at least in part – the cognitive processes of human experience. It is unhelpful to state nihilistically that we shall never know what prehistoric artists were thinking, or what motivated them to create pictographs and petroglyphs. Prehistoric art is not beyond scientific explanation.

Because all societies, including our own, are obliged to divide the spectrum of consciousness for the reception of information, it is clear that human communities are “not viable without some (possibly contested) consensus on which states will be valued and which will be ignored or denigrated” (Lewis-Williams 2002: 130). This statement is validated by Erika Bourguignon’s (1968) survey of 488 societies: at least 90% of these had “culturally patterned forms of altered states of consciousness”. As an example, some Californian groups (Shoshoni, Yokuts) use the same word for dreaming and waking, thus according these states the same status (Lewis-Williams 2002: 166). As we shall see below, it is often shamans who decide how to divide the spectrum of consciousness, and which divisions to value over others.

First, however, I consider the use of peyote in the Trans-Pecos and the Greater Southwest.

¹² The seven principles of perception are fragmentation, integration, replication superpositioning, juxtapositioning, reduplication, and rotation (Lewis-Williams & Dowson 1988: 203).

5.3 Peyote and peyotism in west Texas and the Chihuahuan Desert

Lophophora williamsii – commonly known as peyote – is a small (usually less than 5 cm high), blue-green, spineless cactus that contains a high concentration of mescaline, an alkaloid that produces ASC when ingested (Terry 2005: 23). Peyote grows in both Tamaulipecan thornscrub and Chihuahuan Desert environments, including parts of the Trans-Pecos (Terry 2005: 22; Figs 5.3–5.4).

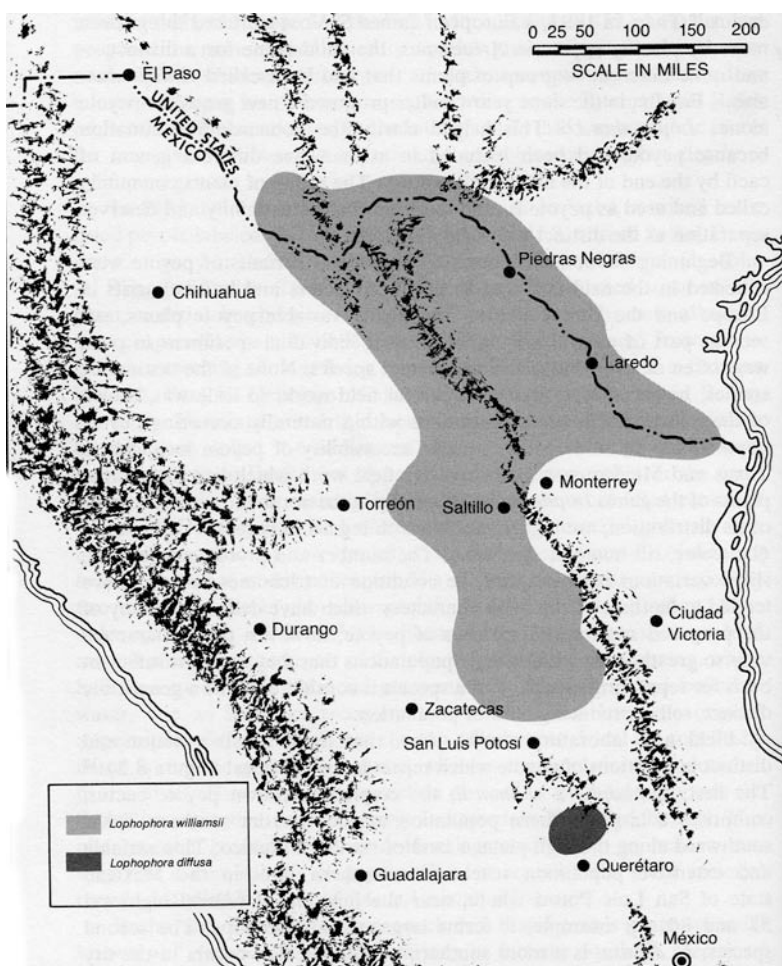


Fig. 5.3. Map showing natural distribution of two species of peyote cactus, *Lophophora williamsii* and *L. diffusa*, from Anderson (1980: fig. 8.2).

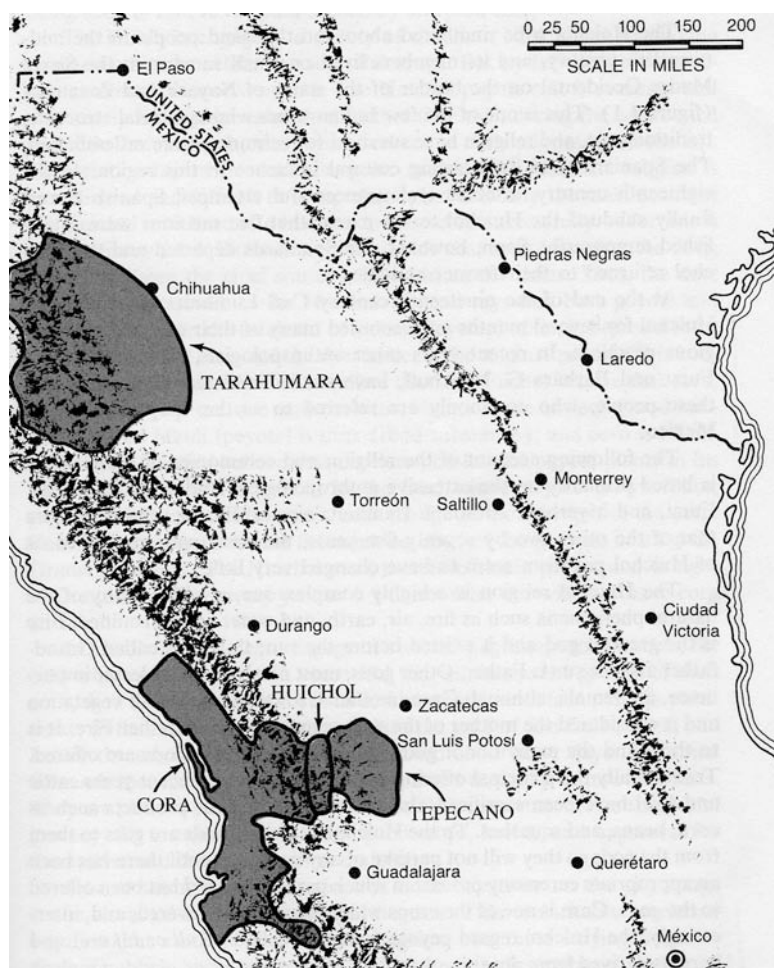


Fig. 5.4. General location of four of the peyote-using Native American groups in Mexico, from Anderson (1980: fig. 1.1). Compare with tribal map (Fig. 2.1).

In this section, I demonstrate that

- peyote was used by prehistoric and historic Native Americans not only for medicinal purposes but also as a relatively stress-free aid to entering altered states of consciousness.
- peyote has been available for at least 5,000 years to groups both north and south of the Rio Grande.

5.3a *Peyote as medicine*

According to historical accounts, peyote in North America was applied as an analgesic, and taken orally for numerous medicinal purposes (Anderson 1980; Stewart 1987; Schultes 1998). European settlers also recognized its medicinal value; Dr Landry, for example, in 1889 called it the “best concentrated cardiac tonic we possess” (Anderson 1980: 95).

In many Native American cultures there is no distinction between medicine and religion. For the Kiowa-Apache, for example, body and mind are not separate, and the strictly biological or medical approach to the treatment of disease is simply without meaning (McAllister 1955; Anderson 1980); again we must avoid rigid Western categories when dealing with hunter-gatherer cosmologies. When a disease strikes a Kiowa-Apache, the *person* – and not simply the body or part of it – is affected: disease and death are the result of direct action by supernatural agents who operate through witches, malevolent shamans, and other conduits (Bittle 1960: 142; see also Anderson 1980; Stewart 1987; Schultes 1998).

Similarly, ‘folk healers’ in Peru conflate medicine and religion when giving patients the mescaline rich San Pedro cactus (*Trichocereus pachanoi*) to induce vomiting and purge supernatural ‘impurities’ (Dobkin de Rios 1968: 191–194). Notably, healers themselves ingest the cactus to gain insight into the nature of illnesses – that is, the supernatural elements that are causing the disease.

Fascinatingly, several groups north of the Rio Grande have the same word for peyote and medicine: examples include Comanche *puakit*, Kickapoo *naw-tai-no-nee*, and Taos *walena* (Anderson 1980: 91).

5.3b Laboratory reports of altered states induced by peyote and mescaline

As long ago as the nineteenth century AD, Western researchers understood that the ingestion of peyote and mescaline led to altered states of consciousness and a blurring of the distinction between cause and effect (Klüver 1966: 51; Anderson 1980: 68). Researchers also realized that an advantage of peyote as a means to induce visions – unlike, say, fasting or self-injury – is that it can be ingested with little accompanying stress. Many experiments in the 1960s and 1970s confirmed these discoveries. William Braden (1967: 232), a reporter for the *Chicago Sun-Times* newspaper, for example, wrote of his feeling of a dual existence or sense of depersonalization and dissociation (discussed further in Chapter 7) after taking mescaline:

I looked down at ... my crossed legs. ... the legs weren't mine. ... I knew they were attached to my body, and I knew I could move them, but they weren't my legs. They weren't *me*. Or better yet, I wasn't *them*.

Psychiatrists Aaronson & Osmond (1971: 26–27) give an example of the distortion of time and space in altered states: “[A]t one moment I would be a giant in a tiny cupboard, and the next, a dwarf in a huge hall.” It is possible that perceptions of size and time are altered by the almost continuous movement of visions in ASC.

Reporting the experience of a German physician who took mescaline, Louis Lewin (1964: 104) stressed this sense of continuous movement, and also the principle of reduplication:

I saw endless passages with beautiful pointed arches, delightfully coloured arabesques, grotesque decorations, divine, sublime, and enchanting in their fantastic splendour. These visions changed in waves and billows, were built, destroyed, and appeared again in endless variations first on one plane and then in three dimensions, at last disappearing in infinity.

Other sensations included a ‘heightening’ of the five senses, and synesthesia. Synesthesia, which affects the limbic system of the brain in about 10 people in a million (Cytowic 2000: 10; Simner 2005), is defined as the production of a sense impression relating to one sense or part of the body (e.g., vision or eyes) by stimulation of another sense or part of the body (e.g., audio or ears) (*Oxford English Dictionary*; see also Blundell 2004: 168 and Chapter 7). For example, one post-ASC subject stated that “whenever I touch something, I have light sensations”, and, “the barking of a dog moved the whole picture and vibrated through my right foot” (Klüver 1966: 50). As well as visual-auditory synesthesia such as these, there are reports of visual-gustatory, visual-tactile, visual-olfactory, visual-kinesthetic, visual-thermal, and visual-algesic confluences. A subject of Simpson & McKeller (1955: 146), for example, remarked when pricked on the hand: “I’ve got concentric circles like round the top of a radio mast. As you touch me, jagged things shoot up, like sort of jagged things shooting out from a center.”

William Braden (1967: 236), after ingesting mescaline and listening to music, wrote about several sensations (dissociation, transformation, synesthesia, etc.) commonly experienced in ASC:

A majestic Beethoven chord exploded inside my brain, and I instantly disappeared. ... The world and I had been utterly annihilated. I could feel the pressure of the earphones; but in the space between the phones, where my head should have been, there was absolutely nothing. ... I was Mind alone, lost in an icy blue grotto of sound. There was only the music, and then bright colors that turned out to be musical notes. The notes danced along a silver staff of music that stretched from one eternity to another, beyond the planets and stars and space itself. Red notes. Blue notes. But they had no substance or dimension, and nothing was real in that empty cavern between the two earphones. That unbounded abyss. The music rolled on in orgiastic waves of sound and color, and then I myself was one of the notes. I was being swept away along the silver staff, at twice the speed of light, rushing farther and farther away from my home back there in the Milky Way. In desperation, at the last possible moment, I reached up with hands I did not own, and I tore off the earphones.

Using ethnographic examples, Ingold (2000: 279) expands on the synesthetic metamorphosis of sound into light and vice versa, 'hearing' with the eyes and 'seeing' with the ears. Among the Shipibo-Conibo Indians of eastern Peru (Gebhart-Sayer 1985: 162–164), a shaman in ASC became conscious of an aura of radiant light that seemed to float and cover the surfaces on which it fell with elaborate geometric designs, some of which were entoptic. Where they touched his lips, these luminescent designs were 'converted into song'. According to the shaman, these songs turned back into geometric designs after penetrating and healing the sick.

Westerners also 'see' spoken words, but in a different manner from the way shamans 'see' songs. According to Zuckerkandl (1956: 368), Westerners look for and see the world 'out there' whereas non-Westerners experience a world coming "from-out-there-toward-me-and-through-me". Westerners 'see' words by apprehending them as things (exterior objects), whereas shamans experience them as light streaming towards and into them (Ingold 2000: 281).

5.3c *Distribution of peyote and further ethnographic accounts of its use in North America*

Distribution maps (Figs 5.3–5.4 above) and ethnography show that peyote has not only been available both south and north of the Rio Grande for many centuries, but also that it was used during a similarly lengthy period to enter ASC.

North of the Rio Grande were two forms of semi-institutionalized peyotism. The older “Peyote complex” or “religion-like rite” was first documented in the sixteenth century AD (Slotkin 1955: 210; 1956: 34). Prior to c. 1850, this was the only form of peyotism in the Greater Southwest, before the second, more formal and better known “Peyote Cult” or “Peyote Religion” (Mooney 1900: xvi; Kroeber 1907: 398; Beals 1932: 216; Aberle 1967) developed in Texas and the southern Plains among the Comanche, the Kiowa, and various Apache groups, probably by diffusion from older forms of informal peyotism from northern Mexico (see Table 1 in Appendix C; Stewart 1987; Hultkrantz 1997).¹³ Comanche and Kiowa groups collected peyote along the Rio Grande and Pecos River (Slotkin 1955; Stewart 1987).

Since peyote is and was indigenous over a wide area both north and south of the Rio Grande, and since there is and was demonstrable cultural continuity across the river, there is no reason why peyote use in the north should not be as long-lived as it is in Mesoamerica. From the time of the first ethnographic records (AD 1560), if not earlier, shamanistic peyotism – both institutionalized and otherwise – in both northern and southern groups seems to have been part of what Slotkin (1955: 210) refers to as “one trait complex”; here is another example of a widespread cultural ‘armature’ (Hunt 1977: 259). In the Texas Big Bend, and in other areas north of the Rio Grande, then, some form of informal peyotism almost certainly stretches back into the prehistoric era (Griffen 1983: 335) – the time when much of the Trans-Pecos rock art was made. Before returning to the rock art corpus itself, I briefly outline some of the ethnographic evidence for the use of peyote both north and south of the Rio Grande.

¹³ Slotkin’s work stems from essentialist race and nationalist theories. Less controversially, Slotkin (1956) makes clear that unlike the Native American Ghost Dance, which faded, the different forms of peyotism, which stretch north into Canada, are examples of successful “accommodation rather than militancy”.

In the broader region, peyote was clearly of sufficient social value to make it the object of travel or trade for hundreds if not thousands of years. Like the production and consumption of rock art images, peyote was situated in a *chaîne opératoire*. The Spanish chronicler de Aguirre (1764: 581), for example, tells us that the eighteenth-century Opata (in what is now Mexico) obtained their ritual peyote “from the mountains of Taramara [sic]”, more than 160 km (100 miles) distant (see map Fig. 2.1). Also south of the Rio Grande, in the highlands of the Sierra Madre Occidental, ritualistic Huichol use of peyote is well documented (e.g., Lumholtz 1900; 1902; La Barre 1957; 1964; Furst 1972; Myerhoff 1974; Anderson 1980: 10; Schaefer & Furst 1996: 23; Hultkrantz 1997; Boyd 2003: 73). The basic patterns of Huichol peyotism seem to have changed little since Lumholtz’s work. Notably, the Huichol – whose ancestors migrated from a northern ancestral homeland in the Chihuahuan Desert (Myerhoff 1974) – believe that shamans and peyote (*híkuri*) both contain great *kupuri*, the animistic life force present in all things (Myerhoff 1974: 153; Halifax 1980; 1982: 81). The Huichol also believe that the ingestion of peyote results in visits to the spirit world (Myerhoff 1974; Halifax 1980; 1982). Indeed, to many shamanistic hunter-gatherer groups in the Americas, peyote and other plants have their own spirits; shamans solicit and harness these spirits (in a manner similar to their soliciting and harnessing of animal spirits) to enter supernatural realms and perform shamanistic tasks (Anderson 1980: 2). There is ethnographic evidence that peyote has been used for centuries by many groups for curing, finding lost articles, foretelling the future, and, above all, to contact supernatural beings in the spirit world (Lumholtz 1900; 1902; de Cárdenas 1945; La Barre 1957; 1964; Furst 1972; Schultes & Hofmann 1979; Anderson 1980: 2; Stewart 1987; Schultes 1998; Terry 2005: 24). Importantly, Slotkin (1955: 210; my emphasis) notes that peyote was used primarily “to obtain “visions” for purposes of supernatural revelation. Collectively, it was an element in tribal dancing rites, the peyote evidently being *used to induce a trance state during the dance.*”

Each year, the Huichol embark on a c. 500 km (300 miles) pilgrimage to their sacred homeland of Wirikúta (in San Luis Potosi, Mexico) to find *híkuri*. Schaefer & Furst (1996: 23) maintain that the contemporary Huichol peyote ritual is the “last intact survivor of a very old Chichimec/Desert Culture peyote complex”. In order to facilitate safe entrance into the sacred homeland, the shaman (*mara’akame*) leading the way in the guise of the mythological Grandfather Fire helps the pilgrims transform into spirit beings (Myerhoff 1974: 87). After the shaman slays

metaphorical 'deer' by shooting a peyote cactus with his bow and arrow, the deer's *kupuri* life force bursts out in the form of coloured rays and the pilgrims find and dig further peyote plants (Myerhoff 1974; see also Boyd 2003: 76).

Tobacco-filled gourds are placed near by, and other offerings including *nierika* paintings are piled on the ground and burned (Anderson 1980: 13). *Nierikas*, which are created in wool and wax on boards, are inspired by the visions the Huichol shaman experiences after ingesting peyote. Tellingly, *nierika* is also a word for gate or passageway, for threshold to other realms; for *axis mundi*; and also for mirror and 'face' of the deity (Halifax 1982: 70–71).¹⁴ Five of the finest peyote specimens are then hung from deer antlers, which represent Sacred Deer Person (*Kauyumári*), and the pilgrims return home (Myerhoff 1974; see also Boyd 2003: 76).

Tarahumara shamans also undertake peyote pilgrimages, travelling to northeastern Chihuahua (Mexico), close to La Junta. Tellingly, the Tarahumara word for peyote (*hikuli*) is very similar to the Huichol's name (*hikuri*). Anderson (1980: 16) describes the sacred journey:

At the collection area they [the Tarahumara pilgrims] erect a cross around which they place the first peyote collected so that these plants can tell the pilgrims where others are. They eat the next plants which are collected and then quietly lie down and go to sleep. The following day they return to the field to collect more peyote, singing joyfully while doing so. That evening a fire is built near the cross and the pilgrims dance. The harvest lasts for several days.... The Tarahumara claim that the peyote sings beautiful songs while they are in the field to help the pilgrims find where they are.

When the pilgrims return home there is a festival with many shamanistic ceremonies; participants sing and dance while a shaman 'rasps' notched sticks over a peyote plant and resonant gourd (Anderson 1980: 17; Wheeler 1993: 72).¹⁵

¹⁴ Much to the distress of fellow tribesmen, some modern Huichol sell their *nierikas* to tourists rather than offer them to deities (Locke 1972: 29; Anderson 1980: 13).

¹⁵ For more on Tarahumara peyote use, see Lumholtz (1902: 356–72) and Slotkin (1956: 105); for the Yaqui, see Beals (1932); for the Navajo, see Aberle (1966); for peyote use in general, see Anderson (1980: 3–5).

Griffen (1983) outlines the use of peyote by shamans in various regions of northern Coahuila (Mexico) and west Texas. In the region of Parras, puberty and other ceremonial dances were held for several days, and accompanied by feasting and the ingestion of peyote (Griffen 1983: 335). Julimeños used peyote and had “wild dances” or *mitotes* (Griffen 1979: 39; see also Hackett 1937: 410). In official censuses in the early nineteenth century, many indigenous groups at La Junta were considered to be ‘mixed’ – that is, they were considered to have adopted Hispanic culture traits, “*de mucha razon y espanolados*” – despite the fact that they “still carried out their own dances and indulged in peyote intoxication” (Griffen 1979: 107).

After the Catholic Inquisition, which in Mexico started in AD 1571, priests were increasingly concerned with indigenous peyote consumption; Christians were prohibited from using peyote, considered to be the work of the Devil. Priests asked men accused of sin: “Has thou drunk *peyotl* ... in order to find out secrets, or to discover where stolen or lost articles are?” (Anderson 1980: 7.) It seems that supernatural visions were allowed only if sanctioned by the Church.

North of the Rio Grande, biologist Martin Terry (2005: 41–50) questions Rouhier’s (1926; 1927) extension of the indigenous Trans-Pecos peyote range north through the Davis Mountains and beyond. There are, however, three ethnographic references to peyote in the Big Bend. First, there is still a town called Pyote in Ward County today; according to local legend, peyote grew here until AD 1900, when an unspecified group of Indians came from the west and dug up the plants (Stewart 1987; Terry 2005). Second, Rouhier (1926) claims that when Mooney was in the region in 1897, he noted that it was “rich in peyotes” (Terry 2005). Third, there is a nineteenth-century reference, admittedly dubious, to the travels of Quanah Parker, last chief of the Comanche, who reportedly visited Mitre Peak, a few miles northwest of Alpine, to replenish his peyote supplies (Schaefer 2000; Terry 2005). Today, the regulated and legal peyote harvest throughout southern Texas yields hundreds of thousands of individual plants (Terry 2005: 11; Boyd pers. comm.).

Table 2 in Appendix C lists US tribes with documented evidence of peyotism in the second half of the nineteenth century AD (Slotkin 1956: 28; Griffen 1983: 335). I look briefly at peyote use within some of these tribes.

James Mooney (1896: 7–8; my emphasis), who worked with the Kiowa in Oklahoma in the nineteenth century AD, stated that “the Indians regard the mescal [peyote] as a panacea in medicine, a source of inspiration, and *the key which opens to them all the glories of another world*”. Once again, the link between peyote, neuropsychology, and shamanism – with emphasis on the interpenetration of worlds in the tiered cosmos – is clear.

Briggs (1887: 276; see also Slotkin 1955: 218–219) confirms the importance of peyote to shamans in the Greater Southwest:

It [peyote] is regarded by the Indians as a *sacred* plant, and is eaten only by the “medicine men,” the chiefs, and other notable worthies. ... An Indian will eat six to ten (?) of these “buttons” ... In a short time – two to four hours – he becomes totally unconscious, in which condition he remains for two or three days. After returning to consciousness he will relate to the natives many remarkable adventures in the “spirit world,” The “charm” over, the tribe cluster around to drink in the superstitious recitals of these savage leaders. Such hallucinations are to these superstitious Indians undoubted realities, and form part of their religious creed.

Certain Kiowa groups still regard peyote as the “plant incarnation of the Sun God” (Slotkin 1956: 23). Similarly, Mooney (1898: 327) learned that “The greatest of the Kiowa gods is the sun ... while the peyote [button], with its circular disk and its bright center, surrounded by white spots or rays, is its vegetal representative.” Additionally, for many Kiowa (Meeker 1896: 3–4), “Mescal [peyote] is a person. ... Mescal [peyote] lives in the sun.”

The fact that some groups considered peyote buttons to be anthropomorphic, and even avatars of gods, is particularly interesting given recent findings in west Texas. Terry (2005: 34; see also Terry *et al.* 2006) argues that archaeological peyote specimens removed from the Shumla Caves (in Val Verde county) in 1933 are not only twice as old (c. 4,000 BC) as previously thought,¹⁶ but also that the specimens are

¹⁶ Terry *et al.* (2006) have also dated nine peyote buttons found in 1941 on a single piece of cordage near Cuatro Ciénegas, Coahuila (Mexico) to c. AD 1070 – 1280.

effigies created by adding non-cactus plant material to the buttons. According to Terry (2005: 34), these effigies may have been “contrived to resemble peyote in a stylized way”. Here, then, is another form of ritualistic portable art in west Texas. Peyote is not simply just another means of achieving shamanistic ASC; it was revered sufficiently to be incorporated into ritualistic effigies. Also present on the effigies are yellow specks; because these specks lack a cellular structure, they are likely anthropogenic paint, added as part of a ritual.

In addition to peyote, anthropologists and ethnobotanists have identified over 100 other species with psychotropic properties used by the early inhabitants of the Western Hemisphere (Furst 1972); these include *Agaricaceae* (mushrooms), *Solanaceae* (including jimsonweed or *datura*; see Harner 1973; Dobkin de Rios 1984; Boyd & Dering 1996; Boyd 2003: 93–95), and tobacco (Furst 1972: viii; Wilbert 1987). Weston La Barre (1972: 261) claims that some of these can be traced to at least c. 7,000 BC; Chichimecs were almost certainly acquainted with hallucinogens as far back as 400 BC (Dobkin de Rios 1996: 141; see also Schultes & Hofmann 1979; Whitley 2009: 288).

In the Big Bend there are two plants with psychotropic properties in addition to peyote: firstly, Living Rock Cactus (*Ariocarpus fissuratus*), or False Peyote, which contains small quantities of hallucinogenic mescaline (Coffin 1932: 59; Campbell 1958: 157; Bousman & Rohrt 1974: 56, 70; Powell & Weedin 2004: 317–321). Coffin (1932: 59) states that Living Rock Cactus was “used by Mexicans in the same manner as the peyote button”, and Fletcher (1930: 40) that “*Mammallaria* [sic] *fissurata* ... called peyote ... is one of the plants used by Indians and Mexicans to cause inebriation. The dry plant is chewed, and has been called whiskey.” Farther south, The Tarahumara also used *Ariocarpus* in ceremonies (Powell & Weedin 2004: 321; see also Cheatham & Johnston 1995).

The third plant with psychotropic properties in the Big Bend is Mountain Laurel (*Sophora secundiflora*), which yields mescal beans – not to be confused with mescaline, the active ingredient of peyote. Mescalism is another semi-institutionalized and loosely defined religious-like rite that may have influenced peyotism; it centres on the use of the mescal bean, which contains an alkaloid (cytosine) that produces hallucinations, convulsions, numbing of limbs, unconsciousness, and sometimes even death (Campbell 1958: 60, 159; Troike 1962; Kirkland & Newcomb 1967: 65–75;

Stewart 1987; Boyd & Dering 1996; Boyd 2003: 89). Catholic priests in the eighteenth century AD referred to mescal beans as well as peyote in confessions, asking confessors if they had eaten *frixollilo* (Troike 1962: 954). De Vaca wrote of bean trading; the beans were clearly valued (La Barre 1964). In Coahuilan groups (Mexico), the mescal bean was used primarily by shamans in communal dances as an intoxicant but also as a producer of visions. In the Plains north of the Rio Grande, however, the bean came to be associated primarily with the vision-quest initiation ceremony and the obtaining of supernatural power from plants and animals (Troike 1962: 956).

The Comanche still use mescal beans in peyote ceremonies today; mescal beans are found on necklaces, on the fringes of leggings, and on peyote gourds and feathers (Carlson & Jones 1939; Anderson 1980: 27; Dobkin de Rios 1996: 53). Kirkland & Newcomb (1967: 71) highlighted the potential efficacy of ethnographic analogy when they stated that the use of

mescal beans (and possibly peyote) by the people responsible for the Pecos River style paintings would be of little help in interpreting the anthropomorphic beings were it not that a number of historic Indian tribes used mescal beans ritually. Incredible as it may seem, many characteristic features of the pictographs are duplicated or paralleled in the mescal bean cult of these tribes!

Indeed, mescal beans were used by the Caddo “in dances, apparently by shamans, to induce visionary experiences” (Kirkland & Newcomb 1967: 75). After returning to a sober state, shamans “related the dream experiences they had had – the journeys their souls had taken” (Newcomb 1961: 311–312). For the Comanche, mescal beans are often associated with deer (Howard 1957).

A fourth important plant species found in the Big Bend, and possibly psychotropic, is Mexican buckeye (*Ungnadia speciosa*) (Adovasio & Fry 1976). Mexican buckeye seeds, which are toxic (Tull 1987: 168), have been found in association with mescal beans at many sites in the Lower Pecos (e.g., Kirkland & Newcomb 1967: 70).

Intriguingly, at Tres Metates site in western Presidio County, a single seed was found in a storage pit designed for food products (Seebach 2007: 41).

I now return to the connections between altered states and rock art.

5.4 The application of the neuropsychological model to Trans-Pecos rock art

Even if specific evidence were to emerge suggesting that Trans-Pecos rock art was *not* produced by shamanistic ritual specialists, the neuropsychological model is still analytically useful (Whitley 1994: 9). The model is strong not only because it avoids a catastrophist view of time – it does not assume that there was a massive cultural disjunction between prehistoric and recent pasts – but also because it has high explanatory power and heuristic potential. Whitley (1994: 9) also points out that the model provides a logic for the juxtaposition of iconic images and geometric motifs; again, there is no need to resort to inductively defined aesthetic styles.¹⁷ As we saw in Chapter 3, this association of geometric motifs with iconic images is common in the Trans-Pecos (Fig. 5.5).

¹⁷ Whitley (1994: 9) states that in any case, in the far west of North America “there is no archaeological or chronometric evidence in favor of differentiating these motif classes [geometric and iconic] into putative “styles””. In addition, it is clear that the neuropsychological model successfully explains therianthropes and internal designs (‘patterned body anthropomorphs’) in Californian rock art. See Patterson (1992: 153) for examples of the relationships between patterned body motifs, Huichol yarn paintings, and entoptics. In the Trans-Pecos, bodies with geometric motifs are found in the two Alamo Canyon sites.



Fig. 5.5. Several human figures at Manzanillo are juxtaposed with geometric motifs. The legs of the human figure on the right seem to disappear or emerge from the crack below. Note hand on hip posture and cephalic emanations on both human figures. The larger figure is c. 30 cm tall.

The neuropsychological model also helps explain polyopsia, superpositioning, fragmentation, and rotation of many painted and engraved motifs (Chapter 7). These features are all found in Trans-Pecos rock art. Similarly, as we saw in Chapter 3, only three of the 44 sites do *not* have entoptic motifs: Leyva Canyon, White Deer, and Tablecloth. In the Trans-Pecos, as in the Chihuahuan Polychrome Abstract Style (Schaafsma 1980; Turpin 2001), there are numerous grids (e.g., Fig. 3.52), sets of parallel lines (Fig. 3.14), dots and circles (Fig. 3.26), zigzags (Fig. 5.5 above), nested curves (Fig. 3.29), filigrees and meanders (Fig. 7.9), spirals (Fig. 3.44), and concentric circles (Fig. 3.84).

Because the seven classes of entoptic motifs are intelligible – not ethnographically, but in terms of the neuropsychological model – and also widespread throughout North America, I place them in category 1A. These motifs, and their redundancy, indicate that the Trans-Pecos artists almost certainly experienced ASC. Exactly what the entoptic motifs *meant* to the artists of west Texas is unknown – they are not intelligible in the same terms as the other shamanistic motifs discussed in Chapter 6 – but once we accept that ASC played a role in Trans-Pecos rituals, it is

likely that geometric rock art motifs stemmed from entoptic phenomena, and further research will tell us more about the meaning of entoptic motifs (see also Lewis-Williams & Pearce 2005: 45–55, 121–122). Because of the way the brain is ‘hard-wired’, prehistoric groups living in the Trans-Pecos must have had the potential to ‘see’ these very forms; certainly, they are comparable to the geometric visual percepts generated by the human nervous system in Stage 1 of the neuropsychological model. If those living in the Trans-Pecos selected and valued certain geometric mental percepts like so many other peoples, then we may conclude that those forms – grids, sets of parallel lines, circles, zigzags, nested curves, meanders, and spirals – are consistent with a neurologically generated worldview that included a tiered cosmos and visions of other realms.

Ethnography sheds some light on the seventh category of entoptic motifs, suggesting that concentric circles and spirals are pictographic and petroglyphic manifestations of the vortex or opening at the *axis mundi* (Fig. 3.30; Fig. 3.60; see also Vastokas 1977: 105; Young 1988: 136; Turpin 1994; Boyd 2003; Reilly 2004: 129). According to Floyd Buckskin, a Pit River Indian, concentric circles “mark the place where spirit beings or very powerful shamans can pass through the rock from one world to the next” (Benson & Sehgal 1987: 6–7). Similarly, concentric circles are said to be associated with Chumash shamans travelling between worlds (Halifax 1982: 70; Edberg 1985: 91; Whitley 2000), and Reilly (2004: 129) states that some motifs in Mississippian art “function as connecting agents, portals, or gateways between the natural and supernatural oppositions inherent in the multitiered Native American cosmos”. An important component of Puebloan beliefs too is the *sipapu*, a ‘place of emergence’ from under the ground (see, e.g., Waters 1963: 77–78; Schaafsma 1980). In the Lower Pecos rock art corpus, as in the Trans-Pecos, there are numerous examples of concentric circles and spiral motifs.

Having addressed the neurological origins of the tiered shamanistic cosmos and entoptic forms, and concluded that the neuropsychological model can be used with confidence in west Texas, I now consider rationalizations of other ASC sensations, and the manifestations of specific visions.

5.5 Rationalizations of altered states of consciousness and the manifestation of visions on rock surfaces

Belief in a tiered cosmos – with spirit worlds above and below the everyday world – stems from ASC. This explains why so many shamanistic societies (as well as subjects in laboratory conditions) report accounts of travelling underground or underwater (Eliade 1964; Halifax 1980; 1982; Biesele 1993; Vitebsky 1995), and also tales of flight (Eliade 1964; Naranjo 1973: 180; Halifax 1980; 1982; Hedges 1985; Biesele 1993; Vitebsky 1995). The sensation of underground and watery travel in the spirit world, as evidenced in the Shoshoni vision-quest example, derives from inhibited breathing, distorted vision and sound, difficulty in moving, and weightlessness (Lewis-Williams 2002: 147). Aquatic spirit helpers that are said to aid shamans in North America include beavers, frogs, and turtles (Chapter 6); in southern Africa, the commonest aquatic spirit helpers are fish and eels (Lewis-Williams 2002: 148–150, 175).

Tales of flight in the spirit world above, on the other hand, derive from a sense of dissociation, weightlessness, and attenuation – bodies seem stretched when seen from a great height (Lewis-Williams 2002: 147) – and from the tactile sensation of growing wings (Naranjo 1973: 180).¹⁸ In California, shamanistic metaphors for flight and whirlwind power are numerous: ritualistic cephalic topknots are made from quail feathers; the bowl used to prepare hallucinogenic jimsonweed for shamanic ceremonies is called ‘quail’; in the spirit world, the Master of the Animals is clothed in a quail feather cape; representations of shamans in the rock art have bird feet; also in the rock art, birds sometimes perch on shamans’ heads (Whitley 2000; 2005). Depictions of concentric circles might also allude to flight as well as *axis mundi* (Whitley 2000; 2005). In Mexico, Yaqui sorcerers rubbed crushed *datura* leaves on their genitals, legs, and feet to experience the sensation of flight (Davis 1998: 161–162; Pearson 2002: 105). These examples show that humans often *rationalize* neurological sensations experienced in ASC by talking of flying, or of underwater and subterranean travel – experiences that can be understood by every member of a society.

I stress again that the precise ways in which the neurological experiences are rationalized are culturally situated and therefore differ from society to society; the

¹⁸ As we saw in Chapter 3, there are several attenuated and distorted rock art motifs in the Trans-Pecos; I discuss these further in Chapter 7.

neuropsychological model is not deterministic (see also Lewis-Williams 2002: 145). In addition to flight and underwater travel, other shamanistic metaphors – all found in North American ethnography *and* rock art – include:

- 1) Death/killing: Numic rain shamans in California made rain and killed bighorn sheep (metaphors for the shamans themselves)¹⁹ in supernatural realms; unlike in nature, most of the engraved sheep in the Mojave Desert have large, raised tails, an ethological as well as symbolic indication of death. Examples of metaphorical death in the rock art of the Trans-Pecos include images at White Deer and Alamo Canyon (Chapter 3).
- 2) Aggression: several Great Basin groups possess interchangeable words for shaman, bear, and murderer (Whitley 2000: 111); dangerous animals are often painted in rock art sites; and, also in the rock art, shamans bristle with weapons. The presence of weapons in the rock art of the Trans-Pecos (at Gomez Peak, for example) is also a shamanistic metaphor.
- 3) Sex and sexual arousal: rock art sites, cupules, and caves were symbolic vaginas (see Chapter 7); shamans were considered to be more virile than other men; erections, as depicted in several rock art sites in the Trans-Pecos, are associated with ASC (Whitley 2000; Furst 2006).
- 4) Bodily transformation (Chapter 7) and animal–human therianthropy.

How did shamans actualize their notions of a tiered cosmos and their journeys through it? The short answer is *on rock walls*, after visiting the spirit world: “shamans were manifesting, or re-creating – perhaps reliving – their experiences of the supernatural realm while in an alert state” (Lewis-Williams 2002: 149). Importantly, springs, tinajas, rock walls – *and caves themselves* – were seen as ‘veils’ suspended between this world and the spirit realm, as suggested by the vision-quest examples above. More specifically, it seems that caves, holes, cracks and other inequalities in the rock surface – as at, for instance, Bee Cave or Meyers Springs in the Trans-Pecos (Fig. 5.6) – were considered portals through which shamans (and shamanic rock art images) could travel. Dowson (1998: 341), referring to the distinctions between people and paintings of people in rockshelters, states that “images of spirits ... are in a sense like people in prehistory. They are as much people as the shamans who

¹⁹ Schaafsma (1980: 153): “Further, ethnographic data show that the horned sheep has supernatural significance and that horns in themselves indicate shamanic and godly power.”

experienced them and the artists who painted them.” Caves were important locations where shamans entered ASC and met their spirit helpers (Eliade 1964; Whitley 2000; Lewis-Williams 2002: 169). In California, Yokuts people state that openings to the spirit world in caves are visible only to shamans (Conway 1993: 109–110). In Hopi and other Puebloan cosmologies, caves are venerated as portals to the worlds below, and re-created as *sipapus* in the centre of the ceremonial kiva floor (Ortiz 1972; Lamphere 1983).



Fig. 5.6. Ethnographic accounts suggest that the large (c. 1 m diameter) hole at Meyers Springs is a portal to the spirit world behind the rock face, as is the spring itself. Note the smeared red pigment around the edge of the hole. Above the hole is a painted circle and a therianthrope Thunderbird figure (not shown).

As we saw in Chapter 3, the edges of a large natural hole at Meyers Springs have been deliberately smeared with pigment. Above the hole is a shamanistic and therianthrope Thunderbird with zigzag arms/wings. At Point of Rocks, deer seem to emerge from a crack in the rock face, as do the legs of a human figure at Manzanillo. At San Esteban, too, we saw that a small hole in the rock surface re-creates the head of an unusual, fringed anthropomorph; perhaps the figure’s head is ‘behind’ the rock. Intriguingly, there is a stick pushed into a crack at Gomez Peak, possibly placed there to penetrate the veil.

In several Trans-Pecos sites, nodules and other inequalities in the rock surface have been accentuated with pigment and incorporated into paintings and engravings. In Jaguar Cave, for example, a canid's (possibly a coyote) eye was formed by painting around the edges of a small depression on the rock face (Fig. 5.7). As we shall see in Chapter 7, hunter-gatherer groups considered eyes to be particularly significant parts of the body.



Fig. 5.7. Canid on ceiling of Jaguar Cave. Note the use of a natural depression for the eye (c. 4 cm diameter). In many ethnographies (e.g., Schaafsma 1980: 240), coyote is a trickster who can transmogrify; he is associated with dance, music, and sex.

At Auras Canyon, several motifs are painted close to a vein of quartz-like calcite crystals, a geological mineral that numerous indigenous groups consider important (Pearson 2002; Reynolds 2009). When quartz breaks, because of its piezoelectric crystal structure, bright light in a form known as triboluminescence is released – this light is interpreted as ‘spiritual power’ and craved by vision-questers (Whitley *et al.* 1999: 235; see also Blackburn 1975: 92–93; Ingold 2000: 97, 99; Lewis-Williams 2002; Pearson 2002; Lewis-Williams & Pearce 2005; Whitley 2005: 144; Reynolds 2009: 164). The Huichol refer to crystals as *te’valir* “produced by the shamans” and thought to be “dead or even living people” (Lumholtz 1900: 63). *Te’valir* were often produced at

the sacred *hikuri* feast when shamans ingested peyote and accessed the spirit world (Lumholtz 1900: 63; see also Furst 2006). Similarly, Pima groups refer to crystals as ‘doctor-stones’ (Dutton & Olin 1998). As we saw in Figure 4.29, San artists deliberately painted on top of a quartz vein in a site in Bongani Reserve, South Africa. In three sites in Big Bend Ranch State Park, quartz-like calcite specimens have also been recovered; these specimens were all manuports (brought to the site by man), probably for ritualistic rather than merely technological reasons (Ing *et al.* 1996: 149–150).

I do not suggest that *only* shamans created rock art. The rock wall, however, was certainly seen as a shamanistic veil (Lewis-Williams 2002: 149), and

it seems likely that it was the shamans themselves who painted images coming through into the world of the living and visions of the transformations they experienced in the spirit world. ... The painted images of another world made sense because of their location on the ‘veil’, the interface between materiality and spirituality. The rock wall on which paintings were placed was not a *tabula rasa* but part of the images; in some ways, it was the support that made sense of the images.

Given that the rock face was not seen as a *tabula rasa*, but as a tangible interface between two realms, it can then be argued that *any* image placed upon rock walls was (and is) shamanistic, regardless of whether the painter or engraver was a ritual specialist or not. The same is true of images in a stained glass window in a Christian church, especially when the artisan left no individual ‘signature’ – sometimes, the context of images is more important than the image itself.

Despite the importance of the ‘support’ that makes sense of images, however, we should not overlook the polysemic nature of (all) symbols (Turner 1967; Whitley 2005: 82). Indeed, the shamanistic framework I employ in this dissertation is not monolithic, or insensitive to nuances of meaning – many shamanistic symbols had (and have) other resonances and connotations, albeit resonances and connotations which are finite and rarely depicted explicitly. In South Africa, Lewis-Williams (2002: 162) makes clear that

San rock art ... had many meanings and referred allusively to varied ritual contexts and human beings' place in the cosmos. Nevertheless, the polysemy of the art was not diffuse and completely untrammelled: the images were part of, and built into, the tiered cosmos.

Ethnography from the Americas – and evidence from the Trans-Pecos rock art corpus itself – demonstrates striking similarities.

I do not dwell here on exactly why shamans created rock art, but stress that, like most (if not all) art, images on rock surfaces constituted, reproduced, and sometimes challenged social relations and beliefs (Lewis-Williams 1995a). Kent Reilly (2004: 136), who works with the Mississippian Art and Ceremonial Complex, states:

The ... dance and medicine societies, with their attendant ceremonies, provided the initiates and, in some instances, the public with a meaningful mythical display through which their special status was ceremonially presented, mutually acknowledged, and publicly validated. The art and symbolism of the [Mississippian Art and Ceremonial Complex] ... conveyed to their people the supernatural power and prestige inherent in the cosmos itself, which they purported to control.

I turn now to six repeated and intelligible Trans-Pecos motifs as rationalizations and manifestations of the tiered shamanistic cosmos on rock surfaces.

CHAPTER 6

The Trans-Pecos rock art corpus: six diagnostic motifs

6.1 *Cephalic emanation: horns and headdresses*

6.2 *Anthropomorphic projectile points*

6.3 *Emphasis on deer and death*

6.4 *Liminal species: turtles and Thunderbirds*

6.5 *Mesoamerican- and Mogollon-influenced motifs: Quetzalcoatl, Tlaloc, and 'masks'*

6.6 *'Contact' art*

6.7 *Conclusion: The presence and absence of shamanistic motifs*

I turn now to six repeated and intelligible Trans-Pecos motifs as rationalizations and manifestations of the tiered shamanistic cosmos on rock surfaces. Importantly, although there are perhaps two or three times as many classes of repeated motifs, the number of classes is certainly finite; the selection and production of a limited range of images is clearly both deliberate and significant. I select the following classes of motifs specifically because they are intelligible and diagnostic as well as repeated.

Category 1A: Widespread intelligible/interpreted motifs:

- Horns and headdresses.
- Emphasis on deer and death.
- 'Contact' art.

Category 2A: Regional intelligible/interpreted motifs:

- Liminal species: turtles and Thunderbirds.
- Mesoamerican- and Mogollon-influenced motifs: Quetzalcoatl, Tlaloc, and 'masks'.

Category 3A: Unique or extremely rare, intelligible/interpreted motifs:

- Point/human conflation.

Unlike in Mpumalanga (Chapter 4), I place more emphasis on chronology and outside influence; thus, I leave Mesoamerican- influenced motifs and ‘contact’ images until last.

Horns and headdresses and the point/human confluents are *embodied* somatic images as well as shamanistic. While retaining an overarching shamanistic framework, I discuss embodiment, somatic features, and transformations in Chapter 7.

6.1 Cephalic emanation: horns and headdresses

Category 1A, widespread, intelligible/interpreted; present at 14 Trans-Pecos sites

Depictions of anthropomorphic figures with horns, antlers, and headdresses are found throughout the continent – hence the placement of this motif into category 1. There are countless ethnographic examples of horns and antlers on human figures as insignia of, or manifesting, supernatural potency in both prehistoric and historic eras (Bell 1974: 135; Grant 1978: 205–206; Halifax 1980; 1982; Schaafsma 1980; Patterson 1992: 109, 117; Whitley 2008). Schaafsma (1980: 187, 306–307, 317), describing the historic era Gobernador Representational Style in New Mexico, for example, cites ethnographic data that demonstrate unequivocally that horns often indicate “shamanic and godly power”. Jornada Mogollon rock art also features “one-horned headdresses” (Schaafsma 1980: 199). Whether the emanations from human figures’ heads in the Trans-Pecos rock art depict actual horns (that in turn represent or manifest supernatural power) or whether they are rather symbolic manifestations of cephalic potency is unimportant; these attributes are considered to be one and the same, and both are diagnostic of shamanistic influence.

South of the Big Bend, the Huichol believe in a shamanic ‘life force’ or potency in the top of the head (Halifax 1982: 83). In California, Whitley (2008: 15) has suggested that the somatic hallucination of energy ‘bursting’ and progressing up a Numic shaman’s spine and out of the top of his head might explain the ethnographically documented sense of ‘sprouting’ horns or antlers. Halifax (1982: 86) illustrates Nebraskan rock art

motifs with “antlers or rays – a sign of great power” and a panel from Utah featuring an antlered, masked, and large-eyed shamanic figure (Halifax 1982: 65).¹

In Chapter 3, I noted the horn-like emanations from the heads of several human figures at Meyers Springs. In the set of eleven anthropomorphs, the third and fourth figures from the left have cephalic emanations, as do all six figures in the third set (Fig. 3.3 and Fig. 3.5). I also referred the possible Plains or Puebloan influence: without more detailed chronological resolution, it is difficult to determine which representations or manifestations of horns in the rock art of the Trans-Pecos are indigenous and which indicative of an intrusive group. Some emanations may be feather headdresses (for example, the single, curved emanations in the second set of human figures), or horned headdresses. The longer headdresses, which denote an intrusive influence from the Plains to the north, are unambiguous (Fig. 3.3). Ethnography suggests that headdresses – whether horned or otherwise – are not only a status symbol but, like horns, are also associated with shamans; for this reason, I consider horns and headdresses together.

Several other rock art sites in the Trans-Pecos have human figures with cephalic emanations. At San Esteban, for example (Fig. 3.14), we saw that the unusual and hand-less human figure has two horn-like emanations from the top of its smeared head (Kirkland & Newcomb 1967: 129; Boren 2008). At Owl Mesa, one of the human figures with bent elbows and raised arms has a long sinuous line (as well as the short vertical line depicted by Kirkland) emanating from its head – the longer line is clearly not a horn or headdress, but rather some form of cephalic potency (Fig. 3.31).

At the Lobo Valley site some of the anthropomorphs with cephalic emanations (Fig. 6.1) display possible Jornada Mogollon and Mesoamerican influence, discussed below; others have zigzag bodies (Fig. 6.2; see also Chapter 7).

¹ I address the significance of masks and eyes below.

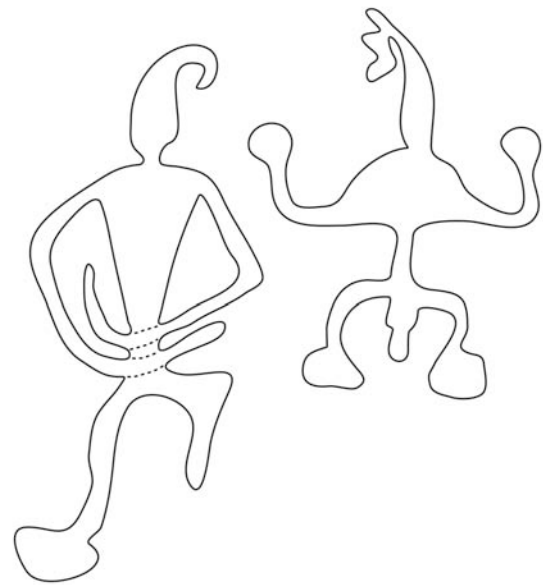


Fig. 6.1. Both abraded human figures on this boulder at Lobo Valley have curved cephalic emanations and conical heads – a possible Mogollon or Mesoamerican influence. Also note the exaggerated arms.

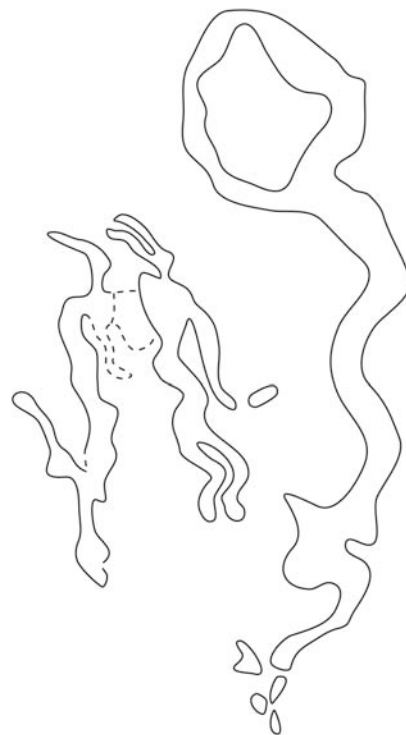
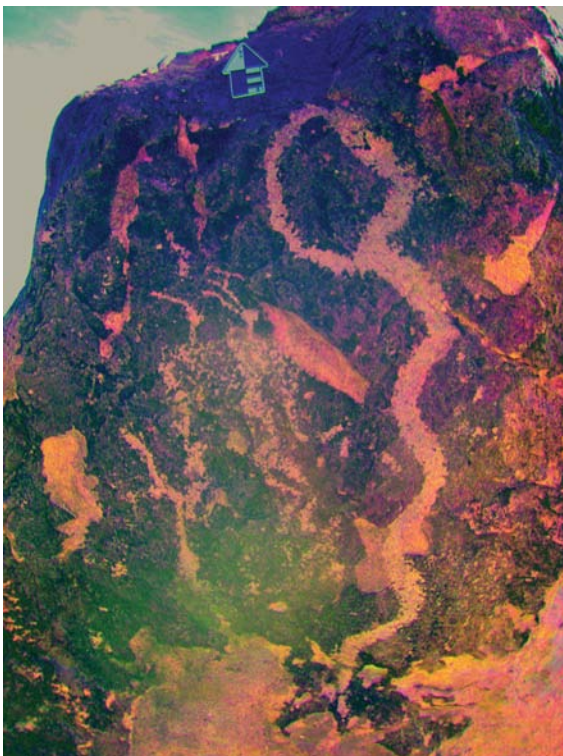


Fig. 6.2. On another Lobo boulder are two abraded human figures to the left of a sinuous 'tadpole' motif. Both anthropomorphs have cephalic emanations and zigzag bodies.

At Manzanillo (Fig. 5.5), two red human figures stand in identical pose, with one hand on hip, and the other raised; both figures have horizontal emanations from the top of the head.

Notably, with the exception of the Plains anthropomorphs at Meyers Springs, none of the human figures with horns, antlers, or headdresses in the Trans-Pecos rock art wields a weapon, or is depicted next to an animal. Although the theory of hunting magic has already been discredited, this observation alone impugns its explanatory power because it is clear that the depictions of horned and antlered human figures are *not* hunters in disguise.

6.2 Anthropomorphic projectile points

Category 3A, rare, intelligible/interpreted; present at two Trans-Pecos sites

Another specific motif connected with somatic transformations is the projectile point–human conflation found in the two Alamo Canyon sites in the western Trans-Pecos. This motif is also found in the Candelaria Style in Chihuahua, Mexico (Davis 1977; 1980), in the Greater Southwest (e.g., Schaafsma 1980), and occasionally as far north as the Dinwoody tradition of the Plains (see Keyser & Klassen 2001: fig. 8.10). Due to its rarity, I place the point–human motif in category 3, but with further discoveries it may warrant promotion to category 2; I include it here because of its conceptual association with shamanism, cephalic emanations, and embodiment.

As we saw in Chapter 3, on several rock art panels in Alamo Canyon projectile points seem to emerge from human figures (Figs 6.3–6.4). Sometimes, a line both literally and metaphorically connects projectile points with human and animal figures (Fig. 6.5). In other examples, anthropomorphic figures *become* points, or vice versa, and “shamanic power is implicit” (Schaafsma 1980: 56). The approximately triangular or trapezoidal points are anthropomorphic – the two outside tangs can be seen as raised arms, and the central tang as the anthropomorph’s head (Fig. 6.6). At several sites in Hudspeth County and in northern Mexico, the outside tangs/raised arms extend into wing-like protrusions (Fig. 6.7); as indicated above, flight is an important shamanistic metaphor. Elsewhere in Hudspeth County, barbed points are appended to human figures’ legs and elongated arms (Turpin 2005: fig. 13).

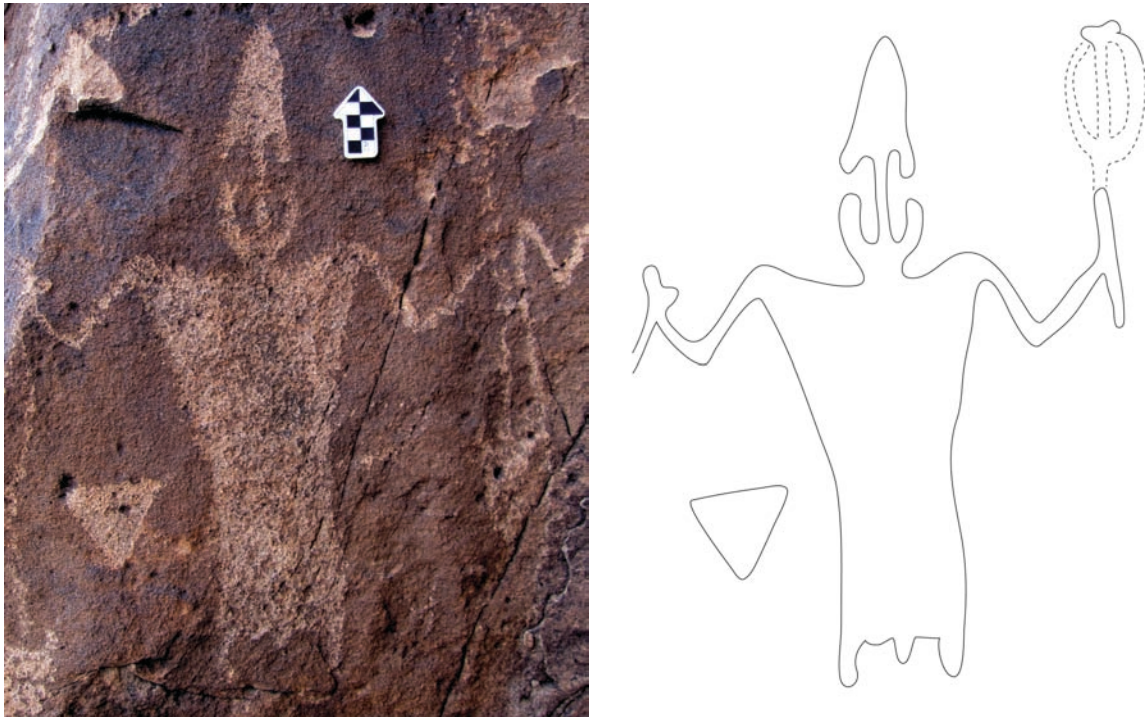


Fig. 6.3. Point/human conflation near Jaguar Cave with zigzag arms and headdress/horns.
The figure holds a similar point in its right hand (not shown).



Fig. 6.4. The head (c. 16 cm tall) of this figure from Storyteller resembles a projectile point.
Note juxtaposition of geometric motifs.



Fig. 6.5. Human figure (c. 25 cm tall, top left), deer, mountain sheep, and possible anthropomorphic points with raised 'arms' near Jaguar Cave, from Schaafsma (1980: fig. 34).



Fig. 6.6. The outside tangs of many point motifs resemble raised anthropomorphic arms.

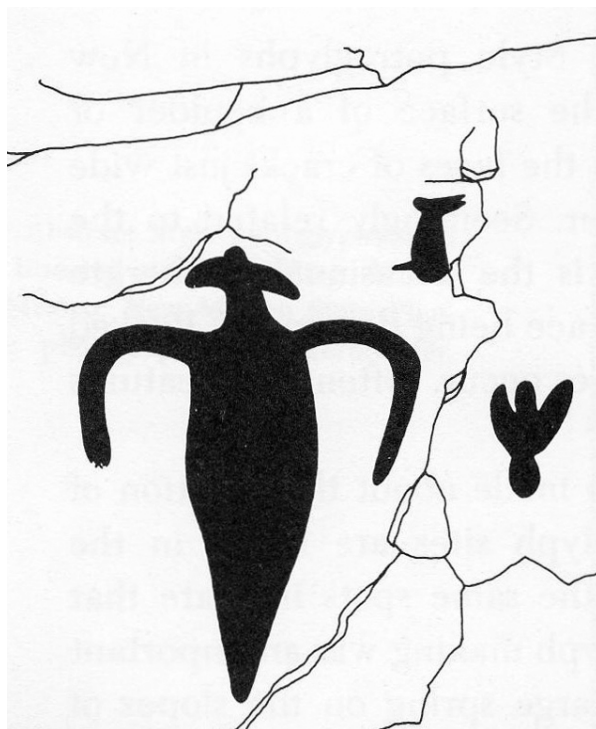


Fig. 6.7. Point-like anthropomorph with extended 'arms' from Chihuahua, northern Mexico, from Schaafsma (1980: fig. 25). Figures with similar appendages are found at sites in Hudspeth County and the Greater Southwest.

6.3 Emphasis on deer and death

Category 1A, widespread, intelligible/interpreted; present at 12 Trans-Pecos sites

In Chapter 3, I mentioned that certain animals are depicted more often than others. Although numbers by themselves are unimportant, there is clear evidence of significant cultural selection regarding the painted and engraved bestiary of the Trans-Pecos, and depictions of deer and deer-like quadrupeds comfortably outnumber depictions of other animals.

Certainly, deer and antelope were valued as game animals throughout the Americas, and eaten, but they account for a very small percentage of calorific intake in prehistoric eras. At Tranquil rockshelter in the Trans-Pecos, for instance, deer bones constitute perhaps 1% of all faunal remains (124 of 7,345 pieces) (Cason pers. comm.), and in the Archaic Lower Pecos, deer were captured only once every two or three months (Boyd pers. comm.) – the fact that calorific but scarce deer (and possible bison) fat and marrow was used as a pigment binder once again reflects the emic importance of the art (Boyd 1993; 2003: 24; Ilger *et al.* 1995; Reese *et al.* 1996a;

1996b; Rowe 2001). Significantly, the remaining 99% of faunal remains at Tranquil rockshelter are almost certainly rabbit, an animal that does not feature at any of the 44 rock art sites I visited.

Depictions of deer adjacent to anthropomorphic figures with weapons, in the Trans-Pecos and elsewhere, have often been referenced in attempts to bolster the ill-fated hunting magic hypothesis. As explained above, however, this hypothesis failed because, among other reasons, it overlooked the complexity of the symbolic value of deer and game animals in general (e.g., Schaafsma 1994b: 65); as Lévi-Strauss (1963: 89) famously stated, “natural species are chosen [as totems] not because they are ‘good to eat’ but because they are ‘good to think’”. In addition, weapons can also be symbolic and good for thinking. In west Texas and northern Mexico there are painted and engraved ritualistic atlatls with exaggerated bannerstones (weights) that, in the ‘real’ world, would have rendered the weapons ineffective for hunting (Turpin 2010; pers. comm.; Murray, pers. comm.). Similarly, an oversized ceremonial Perdiz-type arrow point was found in a Trans-Pecos cairn burial alongside smaller points that had been deliberately broken in some form of ritual (Cloud pers. comm.).

Returning to animals as symbols, deer are valued throughout the Americas not only because of their calorific benefits, but also as spirit helpers in the shamanic vision-quest (e.g., Griffen 1983: 336) – among their zoological and metaphorical traits are fleetness of foot and acute perception (Turpin 1994; de Rosner pers. comm.). In Pueblo worldviews, the killing of deer is often believed to bring rain (Tyler 1975; Boyd 2003), and, drawing from Huichol ethnography (e.g., Myerhoff 1974: 85), researchers have shown not only that the Sacred Deer Person *Kauyumári* is the anthropomorphized tutelary animal of the Huichol shaman, but also that there is a strong and sacred link between deer, rain, and peyote (e.g., Boyd 2003: 52, 74–76). Importantly, *Kauyumári*, who acts as an intermediary between the natural and supernatural, is conceived of both in the form of a deer and as a person wearing antlers (Furst 1972; Boyd 2003: 52). Huichol believe that when *Kauyumári* descended from heaven he brought peyote on his antlers to the sacred homeland, leaving the divine cactus behind in his tracks. The deer-god also has the power to open portals to other worlds (Myerhoff 1974; see also Boyd 2003: 74). Similarly, in northern Coahuila (Mexico) and west Texas, Griffen (1983: 336) found that deer were highly valued spirit helpers.

When we consider the depiction of weapons, it is important to remember that death and aggression are metaphors for ASC; shamanistic 'death' often involves being 'killed' by arrows (Eliade 1964; Hultkrantz 1968; Myerhoff 1974: 153). Feathered arrows, too, symbolize shamanic flight to the Huichol (Furst 1977: 23); the arrow is aimed to elect a neophyte to undertake the shamanic journey, and the arrow becomes a "symbol of submission to a higher order of knowledge" (Halifax 1982: 5; see also Schaafsma 1994b: 62).

Halifax (1982: 56) also makes clear that the bow,

weapon of the earthly hunt, is the caller of spirits among the Huichols, !Kung, Campa, and other shamanic peoples. It also functions as an instrument of conduction, first attracting the spirit, then moving it into the body of the shaman who is in trance. The bow thus bridges and unites earth and heaven, as it brings together spirit and matter.

In many societies worldwide, the hunting of meat-producing animals is clearly and inextricably bound up with the acquisition of the animals' supernatural power (Lewis-Williams & Pearce 2005: 115).

Invoking animistic theory (see footnote 2 above), Sutherland (2006: 10) writes that the spiritual counterpart of hunters killing animals so that people in west Texas could survive – a "metamorphosis from death to life" – was the "transference of the animal's spirit" to shamans. Both hunter and shaman faced the possibility of 'dying' for the good of the community: "The hunter faced the possibility of death in order to kill, and the shaman's body "died" (went into trance) so that the animal spirit could be brought to the group." (Sutherland 2006: 10.)

In the Trans-Pecos, the large deer at White Deer and other sites have open mouths and lowered heads (Fig. 3.72). Animal behaviourists have shown that deer adopt this posture when they are dying, but the depiction at White Deer shelter is not a simple reflection of natural events. Metaphorically, the dying deer represents a shaman's entry into ASC. Other examples of metaphorical death in the Trans-Pecos rock art

corpus include the depiction of the upside-down deer at Point of Rocks, and the open-mouthed deer at Tablecloth (Fig. 3.65).

Returning to depictions of human figures with bows and arrows close to deer and quadrupeds, I note that none of the animals in the eastern Trans-Pecos is impaled. This lack of unambiguous portrayals of a successful kill (in a 'realistic' or mundane sense) is apparent in many rock art corpuses worldwide; it is a key piece of evidence that once again weakens the simplistic notion of hunting magic as an impetus for creating rock art, and also the hypothesis that rock art is simply a reflection of everyday events. Even where there *are* depictions of pierced deer (e.g., Fig. 3.81), we saw earlier that deer are manifestations of peyote and rain, and that human figures bristling with an unnecessarily large arsenal of weapons are shamans.

At one of the western Trans-Pecos sites (Storyteller) there are also depictions of disembodied deer antlers or mountain sheep horns, symbols of shamanic regeneration (Fig. 6.8). Numerous examples of this motif are found in the Lower Pecos, often associated with (or substituting for) depictions of birds, shamans, and other spirit companions (e.g., Turpin 1994: fig. 5). Importantly, antlers are also found in west Texas burials, considered one of the methods for penetrating the veil between this world and the one below (Turpin 1982; 1992; Bement 1994; Boyd 2003: 63; Pearce 2003; 2008). I discuss disembodiment further in Chapter 7.



Fig. 6.8. Disembodied antlers or horns (centre) at Storyteller. Note also deer with antlers (right) and coyote with spiralling tail (top left).

There are also painted deer bones in several Trans-Pecos sites, including Tall Rockshelter in the Davis Mountains and others (Jackson 1938: 336; Mallouf 1985: fig. 45; Turpin 1996b; Gray pers. comm.). Most of the imagery on these bones is geometric, and often entoptic (e.g., sinuous parallel lines, grid-like motifs), but there are also examples of zoomorphs, including what may be deer (Jackson 1938: 336; Mallouf 1985: fig. 45). I argue that it was not simply convenience that led artists to choose deer bones on which to paint, rather than the bones of other animal species. Artists probably considered deer bones to be imbued with power; the artists were not adding potent pigment to a 'blank canvas', but rather to a powerful and meaningful object. In this way, as with the *chaîne opératoire* adaptation of peyote buttons into effigies, reservoirs of potency were augmented. In a site in northern Coahuila (Mexico), there is evidence that painted deer scapulae were hung from cords and used as ceremonial and possibly ASC-inducing rattles (Turpin & Eling 1999).

6.4 Liminal species: turtles and Thunderbirds

Category 2A, regional, intelligible/interpreted

In the Trans-Pecos there are at least three turtle petroforms and at least six Thunderbird pictographs.

Earlier, we saw that turtles were common spirit helpers in North America and considered to be doors or vehicles to the spirit world by hunter-gatherer and Puebloan peoples (Schaafsma 1980; Whitley 2000: 114; Keyser & Klassen 2001; Lewis-Williams 2002: 175). Many groups considered the mundane Middle World as either floating on the surface of a primordial sea, or resting on the back of a turtle that drifted in such an ocean (Reilly 2004). In California, shamans made ritual rattles from turtle carapaces (Whitley 2000: 114). Additionally, to the Sioux and other Plains groups, turtles were and are not only symbolic of protection, longevity, and fertility, but also of chastity and the 'feminine ideal' (Ehrlich 1937: 363; see also Greer & Keyser 2008). On the Plains, for instance, turtle amulets were made to carry and protect a child's umbilical cord (Maurer 1992: 136), and some groups attached similarly protective turtle effigies to infants' cradleboards (Davidson 1948: 116). Farther south, the Zuni believe that turtles are 'lost' ancestors (Murray pers. comm.). Moreover, turtles are liminal, inhabiting both land and water; like other zoomorphs also present in the mundane world, in spirit worlds, and in the Trans-Pecos rock art corpus – including birds, insects, lizards, and snakes – turtles inhabit more than one realm.²

Because turtle motifs – including the Trans-Pecos petroforms (Fig. 6.9), and a possible turtle petroglyph at Lobo Valley (see Jackson 1938: fig. 35) – are intelligible within a shamanistic framework, and present in many regions of North America (see, e.g., Schaafsma 1980: fig. 156; Keyser & Klassen 2001), I place them in category 2A. Some researchers might even argue that they are widespread enough for a 'promotion' into category 1A.

² Fossils of Mexican land turtles (e.g., *Gopherus mexicanus*) are found in Trans-Pecos Pleistocene deposits (Boren pers. comm.). Present in the Trans-Pecos today are Desert Box turtles (*Terrapene ornate luteola*) and several aquatic species (Wauer & Fleming 2002: 102–104).

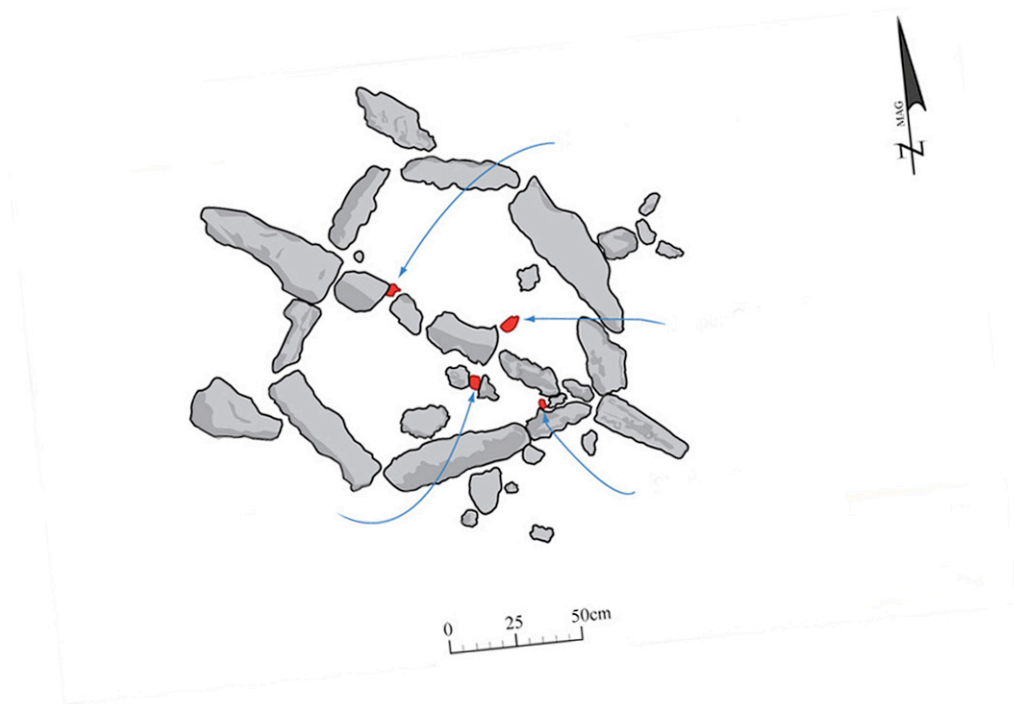


Fig. 6.9. Turtle petroform at Turtle Ridge. The significance of the cobbles (illustrated in red) is unknown. Courtesy of D. Keller, R. Walter, M. Willis, and CBBS.

Before considering other liminal species in the Trans-Pecos rock art corpus, I address a popular misconception about the turtle effigy petroform, and, indeed, about petroforms worldwide. Unlike many researchers, Keller (2008) does not claim that petroforms were *merely* signposts for springs and tinajas – indeed, he suggests that perhaps the Big Bend turtle effigies were “a way of paying tribute or homage to

these life-giving water sources” – but the underlying theoretical framework still implies an ambiguous need to ‘mark’ and map the landscape.

Similarly, referring to the Dancing Rocks petroform and petroglyph site, Mallouf (in press: 8) states that the rider on horseback and the two pairs of ‘dancing’ figures are the only figures visible from the arroyo floor – and that they are located where access to the bench surface is easiest. Mallouf (in press: 8) believes that in addition to being associated with rituals, these figures may have “marked the original trailhead into and out of the boulder cluster from the arroyo below”.

Why the need to ‘mark’ the trailhead? Mallouf (in press: 11) implies that to answer this we should consider the position of the site in the landscape. Dancing Rocks is approximately half way between the Rio Grande and the Sierra Vieja rim, which can be accessed by horseback in only a few places. The site is close to the ‘Bandido Trail’, one of the few routes that lead up to the sierra’s rim and the Marfa Plain beyond (Mallouf in press: 11; Fort pers. comm.); it is also close to perennial springs. Mallouf (in press: 11) believes that the site was chosen specifically because of its location: it is remote (at least, to our minds, and the minds of the early Spanish settlers), but close to both a horse trail and reliable water source.

But this argument still does not address the original issue of the alleged need to ‘mark’ the trailhead. Surely the horse nomads would have known this ‘remote’ landscape intimately, on both the large and small scales – just as the groups in what is now Big Bend National Park would have known about the tinajas close to the turtle petroform. I argue therefore that the Dancing Rocks site was created *primarily* for ritualistic reasons, and, moreover, that the site’s role as a ‘marker’, if it existed at all, was secondary, and perhaps a by-product of the original ritualism. In addition, proximity to water was not merely a practical concern for nomadic groups in west Texas; as we saw earlier, springs had ritualistic significance, but there is no discernible correlation between rock art and physical distance to water sources in the Big Bend (see also Hultkrantz 1987; Naranjo & Swentzell 1989: 262; Lewis-Williams 2002: 167; Schaafsma 2003; Reilly 2004: 128; Robinson *et al.* 2010; and below). Nor is there a pattern regarding orientation of rock art panels to the cardinal directions.

Jornada Mogollon rock art and Mimbres ceramics west of the study area frequently feature not only turtles, but also other liminal species: birds, insects, lizards, snakes, and tadpoles (Schaafsma 1980: 199, 233). Before discussing Thunderbirds, I consider these other important species where they are present in Trans-Pecos rock art.

There are winged insects – perhaps dragonflies – in the rock art at Graef, Lobo, and Tall Rockshelter sites, and there are non-winged insects at Cosmic. We know from ethnography that in parts of Mexico the ‘soul’ is considered to take the form of an insect, and that moths in particular are important spirit helpers (Castañeda 1974: 96–97; Halifax 1982: 20). For the Chumash, the centipede is the archetypal shaman’s apprentice or spirit helper (Blackburn 1975: 202–204). Also in California, rock art sites were said to be protected by supernatural powers, mysterious lights, and swarms of insects (Whitley 2000: 82). Closer to west Texas, several researchers (e.g., Mallery 1893; Parsons 1939: 191–92; Schaafsma 1980: 233; Wright 1988; Malotki 1997) have demonstrated the link between Puebloan ideologies and representations of dragonflies and other insects in the rock art of the Southwest. Mallery (1893: 704–705) made clear that dragonflies “have always been held in great veneration by the Moki (Hopi) and their ancestors, as they have often been sent ... to reopen springs”. Wright (1988: 151–152) states that dragonflies are “most often portrayed on altars, pottery, and petroglyphs, possibly because they are shamanistic creatures ... and have supernatural powers”.

Other liminal species in Trans-Pecos rock art include anthropomorphic, and arguably therianthropic, lizards at Las Burras (Fig. 6.10), and snakes at many sites. Individuals experiencing ASC frequently describe undulating lines as snakes (Horowitz 1964; Schaefer & Furst 1996: 156; see also Boyd 2003: 59).



Fig. 6.10. Large lizard-like anthropomorph at Las Burras.

Whereas it is difficult to know if the significance of the turtle and other liminal species for groups in west Texas developed indigenously, or derived from groups farther north – and indeed *when* these species became significant – the origins of Thunderbird symbolism are clearer. Thunderbird, a liminal, powerful, and cave-dwelling spirit being, is an important component of shamanistic earth-sky dualism in Plains Indian cosmologies (Ingold 2000: 279; Keyser & Klassen 2001: 34, 170, 187, 214); intriguingly, he is often ‘opposed’ to turtles. According to several Plains groups, Thunderbird flies across the prairies amid great storm clouds every spring, bringing rain and hail. Lightning shoots from his body and eyes, and his flapping wings create thunder. In several ethnographic accounts – for example, the Ojibwa – thunder is the sonic incarnation of the Thunderbird (Hallowell 1960: 32). In this sense, which parallels experiences of the third and heaviest stage of ASC, thunder *is* the bird, and the Thunderbird is a “phenomenon of experience” that blurs the ‘material’ and the ‘spiritual’ (Ingold 2000: 279). Much of Thunderbird’s significance stems from earlier groups’ beliefs about birds, liminal creatures that often feature as spirit guides throughout the Americas (e.g., Schaafsma 1980; 1994b; Young 1988; Malotki 1998; Whitley 2000; Keyser & Klassen 2001; Turpin 2010). Today, Thunderbird is important to many Puebloan groups; the Zuni, for instance, refer to Knife-wing, a mythological bird–man associated with warfare.

On the Plains, Thunderbird has some of the strongest medicine of all spirit beings and – because of his capacity to transform – is considered one of the most powerful ‘Grandfathers’. In animistic cosmology, Grandfathers are non-human persons. Other Plains Grandfathers with the capacity to transform include the Sun, the Four Winds, and often the spirit ‘masters’ of all the different species of animals. By contrast, only the most powerful human persons such as sorcerers and shamans can “change into a non-human form and make it back again – and then only with some danger and difficulty. Sorcerers, for example, can transform themselves into bears in order to better pursue their nefarious activities” (Ingold 2000: 93; see also Bird-David 1999: 74). The bear at Meyers Springs, therefore, might represent a transformed sorcerer or shaman.

Thunderbird is often represented not only in rock art throughout the Plains but also on tipis and on the clothing of shamans who have obtained Thunderbird potency through dreams, visions, and other forms of ASC (Fig. 6.11; see also Keyser & Klassen 2001). He also features on shields, as at Meyers Springs (see Fig. 3.11). Few claim to have actually seen Thunderbird, but those that do are usually credited with exceptional powers of revelatory vision (Hallowell 1960: 32). With florid prose, Haldeen Braddy (1941: 99) wrote of the powers of a rain shaman who lived close to La Junta: during a rain dance, “as gathering clouds now stampede the earth with shadows, old San Vicente [the shaman] ... looks up expectantly and, as the incantations begin, hears already – from howsoever afar – the mighty winging of the Thunderbird”.

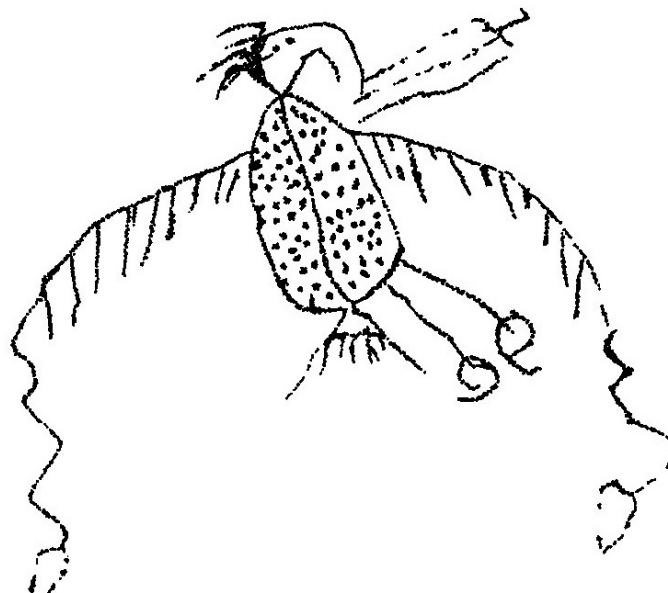


Fig. 6.11. Thunderbird from Writing-on-Stone (Alberta Province, Canada), from Keyser & Klassen (2001: fig. 3.2). Note zigzag lightning trailing from wings.

At Meyers Springs there are six unequivocal depictions of Thunderbirds (Figs 6.12–6.13; see also Figs 3.5 and 3.10). The scars in the pigment of at least three of the Thunderbirds may be the result of deliberate chipping by the original artists or by subsequent visitors to the site; I discuss ‘ritual removal’ further in Chapter 7. Alternatively, these scars may represent the hailstones associated with Thunderbirds (e.g., Boas 1935; Peel pers. comm.), or simply be the result of soldiers firing at the motifs. In Chapter 3, I also noted the zigzag arms or wings of the four smeared therianthrope figures at Meyers Springs (Fig. 3.13), one of which is above the large hole with pigment on the edges.³ The zigzags – which, of course, are entoptic in origin – represent the lightning produced by Thunderbird (Hultkrantz 1981: 33–35; see also Keyser & Klassen 2001). Another Meyers Springs’ Thunderbird that incorporates entoptic designs is that with the shield-like body, formed by three polychromatic concentric circles (Fig. 3.9). Although the circles possibly represent the sun (Ellis & Hammack 1968: 35), as present in several Puebloan iconographies, it is difficult to corroborate this alleged Puebloan influence (cf. Peel pers. comm.). There are several examples of Thunderbirds conflated with entoptic motifs in other

³ Kirkland & Newcomb (1967: 119) state that the “smudged figures, or thunderbirds, are examples where the ... artist destroyed his own design” (see Chapter 7).

adjacent regions, including northern Coahuila, Mexico (Turpin 2010; Sayther pers. comm.) and central Texas (Kirkland & Newcomb 1967: 51).



Fig. 6.12. Thunderbird (c. 1.6 m wide) at Meyers Springs with scars – possibly the result of ‘ritual removal’ – in the torso.



Fig. 6.13. Close-up of an eye (c. 1 cm diameter) on another Thunderbird at Meyers Springs.

As with turtle motifs, because Thunderbird motifs are intelligible within a shamanistic framework, and present in many regions of North America, I place them in category 2A. Arguably, they are also widespread enough to warrant promotion into category 1A.

Before turning to two categories for which we have relatively firm chronological resolution, I briefly consider another bird motif at Meyers Springs: the turkey (Fig. 3.3). Domesticated by AD 700, if not earlier, turkeys are symbolically associated by many Puebloan groups with the earth, springs, streams, and mountains (Grant 1978; Schaafsma 1980: 27–28). Turkeys act as intermediaries between the mountain water sources and the rain clouds that form on the peaks. Turkeys are considered to be teachers, and their feathers are used in rituals (Schaafsma 1980: 27–28). Again, the artists at Meyers Springs clearly saw the turkey as more than merely calorific.

6.5 Mesoamerican- and Mogollon-influenced motifs: Quetzalcoatl, Tlaloc, and ‘masks’

Category 2A, regional, intelligible/interpreted

Quetzalcoatl is present at four western Trans-Pecos sites; Tlaloc-like motifs at three sites; masks are at Hueco Tanks only.

Although Mesoamerican and Jornada Mogollon ideologies are varied, heterogeneous, and distinct from prehistoric and Plains hunter-gatherer and nomadic belief systems, they still contain concepts of a tiered cosmos, and ritual specialists who claim to move between realms.

As introduced in Chapters 2 and 3, the role of the Mogollon and their relationships with both the later Puebloans and with the earlier Mesoamerican groups is complex and contested (Martin & Plog 1973; Schaafsma 1980; 1992; 1994a; 1997; 2003; Fagan 1995; Plog 1997; Sutherland 1998; 2006; Schaafsma & Riley 1999; Walter & Fridman 2004). I argued that perhaps as long ago as the fifth century AD, polytheistic Mesoamerican influences diffused from the south throughout the western Trans-Pecos and Greater Southwest, and, in time – and probably via the Mogollon people – became a nucleus of Puebloan beliefs (Schaafsma 1975; 1980; 1997; 2006; Sutherland 1998; 2006: 8; Walter & Fridman 2004). Indeed, Schaafsma (1997: 14) makes clear that

Puebloan peoples share shamanistic beliefs with earlier Mesoamericans and Mogollon peoples, who also held that

the earth's surface is one of a series of vertical worlds, situated between the sky and the underworlds. Between these worlds there is a complex interaction and communication, realms inhabited by spiritual beings that impact life on the flat earth-surface plane. Travel from one world to another is possible through shamanic techniques of ecstasy. ... Access to the Underworld is sometimes symbolically designated by landscape features such as caves, volcanic lava tubes, etc. ... The landscape itself is inhabited by supernaturals, and topographic features and associated rock art are confirmations of events that dynamically integrate the mythic past with an on-going present.

One of the most important Mesoamerican-derived deities present in rock art sites, including Storyteller, Jaguar Cave, Hueco Tanks, and possibly Lobo in the Trans-Pecos, is Quetzalcoatl, the plumed serpent. Often feathered and horned as well as plumed, Quetzalcoatl sometimes incorporates the zoomorphic characteristics of birds and jaguars, both of which are associated with dualistic ideologies and the Mesoamerican priesthood (Figs 6.14–6.15; see also Brundage 1979; Schaafsma 1980: 238; Miller & Taube 1993; Reilly 2004: 130; Sutherland 2006: 12–13).



Fig. 6.14. Quetzalcoatl, the plumed serpent, in Jaguar Cave. Note geometrics within body, open mouth with red pigment, and curved emanations in red and white from top of head.



Fig. 6.15. Engraved Quetzalcoatl at Storyteller site.

Quetzalcoatl is able to transmogrify, adopting human form with pointed hat or the guise of his cosmic counterpart, Venus (Schaafsma 1980: 238), depicted in Mesoamerica as an outlined cross. Tellingly, Quetzalcoatl opens sacred portals – including circular flagstones in the centre of ball courts in Mesoamerica (Brundage 1979: 11; see also Boyd 1996: 157) – and represents “a moving energy that unified a dualistic universe, but the deity also incorporated the concept of regeneration, crucial to the Mesoamerican vision of the cosmos” (Sutherland 2006: 13). It is clear from these emphases on portals, regeneration and supernatural power that Mesoamericans, Mogollon, and Puebloan peoples borrowed much from earlier Archaic ontologies, both shamanistic and animistic; again, I stress the conservatism and resilience of cosmological beliefs through space and time in the Greater Southwest. Today, the Hopi still believe their Sky God to be a horned and plumed serpent. Several Puebloan groups believe in a similar horned and plumed Sky or Water Serpent that lives in springs or on mountains; at times, these deities are fearsome or punitive, causing floods and earthquakes (Kelley 1966: 109; see also Schaafsma 1980: 239; Lankford 2004: 214). Reilly (2004: 128–129) makes clear that, within the Mississippian Art and Ceremonial Complex, Native Americans

considered a winged and horned serpent – that also took the form of a feline – to be the primary supernatural being in the watery Underworld.

In Chapter 3, I introduced Tlaloc as a Mesoamerican rain deity who was also both beneficial and destructive. He lived within the tiered cosmos on sacred mountains, where clouds form, and also – once again – in caves and springs. In Mexico and farther south, Tlaloc was associated with Quetzalcoatl, kachinas (below), and also with turtles, lizards, snakes, and deer (Kelley 1966; Schaafsma 1980: 242; Schaafsma & Riley 1999; Sutherland 2006). As we saw earlier, these animals were all important to many shamanistic societies through the Americas.

Anthropomorphic Tlaloc-like motifs – with a trapezoidal or rectangular head above a similar-shaped and limbless body, which often incorporates geometric ‘blanket’ designs – are found in the western Trans-Pecos rock art corpus at Hueco Tanks, at Storyteller, and in Jaguar Cave (Figs 6.16–6.18). The images have disproportionately large eyes that are often ringed; these rings represent snakes, which, like Tlaloc himself, are associated with water, or “clouds heavy with rain” (Schaafsma 1980: 236). I discuss eyes as a special form of emphasized embodiment in Chapter 7. Also worth noting is the often point-like form of Tlaloc’s torso, another example of ritualistic conflation.



Fig. 6.16. One of many polychromatic Tlaloc motifs at Hueco Tanks (c. 2 m tall). Tlaloc is a Mesoamerican rain deity associated with caves and springs. Note large eyes and geometric 'blanket' patterns within limbless torso.



Figs 6.17 and 6.18. Prone and point-like Tlaloc figure at Storyteller site (left). Note facial features and geometric patterns within torso. On the right is a Tlaloc figure at Jaguar Cave site with accentuated eyes, dots within torso, and 'missing' legs.

I turn now to depictions of kachina-esque 'masks', also found in the western Trans-Pecos, particularly at Hueco Tanks (Fig. 6.19). Several ethnographic texts make clear

that Puebloan kachinas functioned (and, in some groups, still function) to *engage* the self-referenced and embodied supernatural ancestral beings (or spirits) in rain-generating rituals, especially after c. AD 1300 (Schaafsma 2003: 3, 7); further, in this sense (one we have seen before), the kachina-esque images painted on rock shelter walls *were* the ancestral dead, and not mere representations thereof. In the context of the rock art, therefore, the term ‘mask’ – albeit a handy monosyllabic tag – is certainly misleading; a better term is mask-like supernatural or ancestral ‘being’.

In some Puebloan and other Native American groups, admittedly, ‘real’ masks allowed dancers both physically *and* conceptually to become the “intermediary between the human world and the spiritual world” (Sutherland 2006: 16; see also Schaafsma 1994a; Keyser & Klassen 2001: 170) – but masks were seldom a disguise intended to hide the identity of the wearer. Rather, masks usually revealed or embodied an ‘inner truth’, or the shamanistic transformation from human to animal form. Puebloan peoples, and many other groups throughout the Americas, use masks today to become other, powerful beings. Again, the survival of core beliefs about a tiered cosmos and the roles that ritual specialists play as mediators between those different realms, is clear.



Fig. 6.19. Polychromatic ‘mask’ at Hueco Tanks Cave Kiva, c. 20 cm wide. Courtesy of J. McCulloch.

As at other sites in the Trans-Pecos, some of the motifs at Hueco Tanks – including Tlaloc motifs and supernatural beings/masks – have been largely obscured by water-laid deposits; perhaps this placement was a deliberate decision by the artists, an attempt to interact with the veil between this world and others behind the rock face. Also significant is the fact that the geometric patterns on the Tlaloc torsos resemble both Puebloan pottery designs as well as conceptually similar rain-bringing cloud symbols, a redundancy that according to Schaafsma (2003: 8) evokes and reinforces “the concept of containers with all their associated metaphors including a linkage to springs and the underworld”. Schaafsma (2003: 5) also states that in ritual contexts, “pottery jars and bowls, analogous to caves and springs, are the perceived sources of clouds and rain, an association that is repeatedly described in Pueblo oral tradition”. Thus, ceramics, agriculture, and water (both above and below ground) are all linked. We saw earlier that caves, springs, lakes, and other openings into the earth have been, and, in many hunter-gatherer and Puebloan ideologies, still are perceived as “points of energy flow between the simultaneous levels of the Pueblo universe” (Naranjo & Swentzell 1989: 262). To Puebloan peoples, these openings not only symbolize the source of clouds and rain, they are also important conduits to the underworld and the abode of the ancestor rain-makers (Schaafsma 2003: 4).

Other rain-related images throughout the Greater Southwest, especially those in Puebloan rock art corpuses (Schaafsma 1980; 2003; 2006), are often found where various supernatural beings are said to reside, including high ridges and escarpments where lightning strikes. These rain-related images include lightning/entoptic zigzag motifs, human-like ‘stepped-fret’ designs, and turtles.

Other than rainfall, another important characteristic that conceptually unites Tlaloc motifs and kachina-esque masks is the depiction of eyes (discussed further in Chapter 7). This connection may also apply to the older shamanistic ocular motifs at the Graef site and in the Black Hills.

6.6 ‘Contact’ art

Category 1A, widespread, intelligible/interpreted

As we saw in Chapter 3, native cultures incorporated geometric Christian cross imagery into their iconographic repertoires (Boren 2008: 31). The modern Arizona Hopi prayer-stick for sheep and cattle, for instance, is a Latin cross with appended feathers and herbs, an “adapted Christian emblem, associated with those animals [sheep and cattle] that first came into the country with the friars who also bore the cross” (Smith 1952: 243). We know too that Mescalero and other Apaches in the Texas Trans-Pecos traded extensively with Puebloan groups in New Mexico, many of whom had adopted the cross and Christianity (Kirkland & Newcomb 1967: 189–190; see also Mooney 1897: 332).

Caution is necessary, however, because the geometric cross symbol was not derived exclusively by or from European explorers, priests, and settlers (Boren 2008: 31). In various forms and techniques, the cross pre-dates European arrival at many archaeological sites throughout the Greater Southwest (Boren 2008: 37), including Casas Grandes in Chihuahua (Di Peso *et al.* 1974); in the Puebloan kivas at the Pottery Mound site in New Mexico (Hibben 1975); in the Hopi Mesas in Arizona (Fewkes 1892: 23); and in hundreds of hunter-gatherer rock art sites both north and south of the Rio Grande (e.g., Schaafsma 1980: 235, 238; 1992). There are also Navajo depictions of possible archaeo-astronomical phenomena that resemble crosses (Schaafsma 1980; Roberts pers. comm.). Similarly, in Mesoamerica the cross represents Venus (The Morning and Evening Star) as a guise of Quetzalcoatl (Kroeber 1907: 352; Ortiz de Zárate 1976: 61–62; Schaafsma 1980: 217, 238; Patterson 1992: 191).

Even when the geometric cross is found in clearly historic contexts, it is not necessarily a Christian emblem or the result of European influence. Captain Bourke of the US Army, writing of various Apache tribes that arrived in the Trans-Pecos during the seventeenth century AD stated that, to the Apache, the cross in one manifestation relates to the cardinal points and the four winds; warriors painted the cross symbol on their moccasins when they entered unknown territory in order to stay on the correct path (Bourke 1892: 479; see also Kroeber 1907: 41; Slotkin 1956; Mallouf 2000; Boren 2008). In addition, Apache shamans used ‘medicine cords’ in sacred rituals (Bourke 1892: 552–552), and many of these cords had either a circle or an equilateral cross attached to them; again, the cross was said to prevent people from going astray, and had nothing to do with Christianity.

To the Apache at least, it seems that the cross in certain contexts was an important shamanistic – certainly ritualistic – and pre-contact symbol. Indeed, when Bourke was given permission to examine a shaman’s medicine bundle, he found “a piece of green chalchihuitl [turquoise] and a small cross of lightning-riven twig (pine) and two very small perforated shells. The cross was called ‘intchi-dijin,’ the black wind.” (Bourke 1892: 591; see also Boren 2008: 36.) On another occasion, Bourke (1892: 479–480) witnessed a procession of Apache led by a shaman carrying two crosses; one of them was adorned with a painted snake design, willow twigs, a mirror, bells, and eagle feathers, carried “in honor of Guzanutli to induce her to send rain”. Bourke reminds us that the cross was certainly an important part of Apache symbolism before the arrival of Europeans (Boren 2008; see also Kessell 1979).

More definitive of the historic period are horses, present at nine sites in the Trans-Pecos (Figs 6.20–6.23); cattle, present at three sites; and guns, shields, and possible buildings and priests at Meyers Springs.



Fig. 6.20. Rider on horse (c. 15 cm nose to tail, centre left) at Leyva Canyon. It is harder to identify the quadrupeds above and below this figure. See Fig. 7.4 for drawing.



Fig. 6.21. Possible horse and rider at Auras Canyon with superimposed small red anthropomorph at rear end of quadruped.



Fig. 6.22. Horse and rider (c. 30 cm nose to tail) at Dancing Rocks petroform site. Courtesy of R. Mallouf.



Fig. 6.23. These horses and human figures from Alamo Mountain (New Mexico) are usually attributed to the Apache. Courtesy of J. McCulloch.

Why did hunter-gatherers paint and engrave images of European (or European-derived) anthropomorphs, zoomorphs, and objects, including guns, shields, and buildings? As argued above, they did not do so simply because they saw them, in either the real or the spirit world.

Under the umbrella of post-colonial theory, much has been written about ‘contact art’ and the incorporation of new peoples and concomitant threats to established social orders (e.g., Kirkland & Newcomb 1967; Dowson 1994; Kenmotsu 2001; Keyser & Klassen 2001; Blundell 2004; Challis 2008; Turpin 2010). Certainly, as illustrated by de Vaca’s welcome as a medicine man (Chapter 3), many of these themes apply in the Trans-Pecos, but, for brevity, I do not dwell on them here. Instead, I note that because of creolization and other social and cultural interactions, the traditionally rigid and binary division between colonizer and colonized cannot be neatly applied in west Texas, to either people or rock art motifs (cf. Challis 2008; Schaafsma pers. comm.). At Meyers Springs, for example, we do not know whether depictions of mounted Apache and Comanche horseman – Native American intruders from the north, riding horses and brandishing weapons introduced originally by the Spanish – were created by the Apache and Comanche themselves or by an earlier ‘indigenous’ hunter-gatherer group. Although we *do* know that the rock art at Meyers Springs and at other ‘contact’

sites in west Texas was created no earlier than the sixteenth century AD, the commonly applied Apache or Comanche art labels misleadingly suggest that the artists themselves were *always* Apache or Comanche; this is not necessarily true.

Because most Native American groups adopted horses and horse pastoralism in one form or another, classification of groups into farmers, nomads, or hunter-gatherers is contentious, and perhaps impossible (Hämäläinen 2003); Challis (2008) has shown recently that there are similar problematic issues regarding identity and 'contact' art in South Africa. Another important similarity between west Texas and southern Africa is the fact that horses did not necessarily 'diffuse' from one cultural group to the next, but often moved when equestrian people migrated (Challis 2008: 233).

Depictions of cattle (*Bos primigenius*) (Figs 6.24–6.25; see also Fig. 3.15) can also be used as a chronological indicator. Between AD 1493 and 1512, approximately 500 Spanish cattle were shipped to the New World from Andalusia and the Canary Islands (Chipman 1992: 54; Boren 2008: 95). The first Criollos cattle to reach what is now Mexico arrived at Tampico in AD 1521 (Jordan 1993: 67–70); wild Criollos reached the Rio Grande by AD 1539 (Rouse 1977: 43, 46, 54; see also Kelley 1986: 63; Boren 2008: 81, 95). As early as AD 1604, eight Spanish cattle ranches were noted in the mining region of Santa Bárbara (Griffen 1979: 44, 108).⁴ In short, the depictions of cattle in the three Trans-Pecos rock art sites – including San Esteban, and all close to the Rio Grande – could not have been painted before the sixteenth century AD.

⁴ As mentioned in Chapter 3, native La Juntans worked in the Santa Bárbara mines from AD 1583 and perhaps earlier.

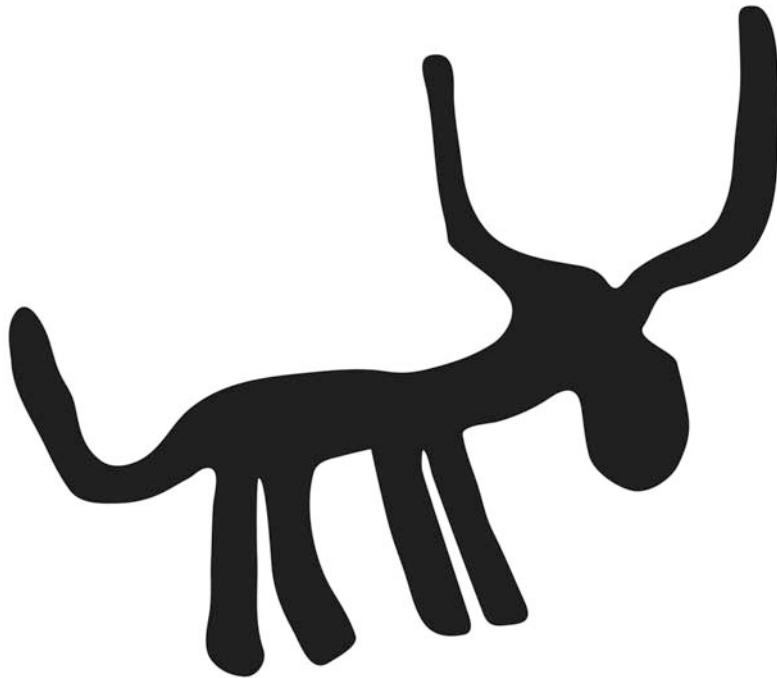


Fig. 6.24. Possible longhorn steer or cow (sub-species of *Bos primigenius*) at Auras Canyon.
Note juxtaposition with circles and other geometrics.



Fig. 6.25. Cow-like quadruped at Las Burras.

Regardless of which Native American groups created images of horses, cattle, European weapons, and possible priests (Fig. 6.26), I argue that they did so within a ritualistic – and possibly shamanistic – framework. In the minds of the artists, the universe was still tiered, and ritual specialists still journeyed to other worlds to contact supernatural beings. Mescalero and Lipan Apache spiritual life was and often still is rich with ceremonies, including *Gaan* dances, when shamans “bring the supernatural into the human arena” (Lamphere 1983: 747–749, 762; Chapter 3). The Comanche and the Apache believe in supernatural power “that pervaded the universe and could be utilized ... by ritual procedures known to priests or learned in personal revelation by shamans” (Kenmotsu & Dial 2005; see also Opler 1941; 1969).



Fig. 6.26. Geometric crosses and possible priest at Meyers Springs. Note facial features and hat, and also dark red human figure with headdress, shield, and weapon above. Compare with left of Figure 3.6.

With the arrival of new groups, whether Plains Indians from the north or Europeans from overseas, perhaps shamans and other group leaders now sought advice and power to engage the new threat from the outsiders. As we saw in Chapter 3, indigenous artists were aware that the Spanish invaders considered their churches and missions to be seats of “potent supernatural power” (Kirkland & Newcomb 1967: 123). There is also evidence that many groups in the Greater Southwest considered horses to be sacred too (Basso 1969; see also Lamphere 1983).⁵ It is no surprise that indigenous groups attempted to incorporate intrusive groups and their material and religious cultures. A greater shock, perhaps, is the speed at which the new settlers drove indigenous groups from their land, thereby denying them access to sacred pictograph and petroglyph sites. I discuss issues of present-day indigenous identity and rights to heritage sites in Appendix A.

6.7 Conclusion: The presence and absence of shamanistic motifs

⁵ For more information on the introduction of the horse to Texas and the Americas, see Bolton (1916: 321); Forbes (1959: 193); Di Peso *et al.* (1974); Griffen (1979: 14); Parsons (1987: 267); Collier (1988: 219–220); Turpin (1989; 1995: 554); Chipman (1992: 15); Hämäläinen (2003); Challis (2008).

Coupled with employment of a neuropsychological model, an analysis of the ethnographies of analogous shamanistic and animistic groups in North America explain *why* Trans-Pecos peoples produced rock art. Further, these methods enable confident interpretation of certain Trans-Pecos rock art motifs; the Trans-Pecos region can now be defined *vis à vis* neighbouring regions according to the presence or absence of intelligible shamanistic motifs, as can the internal division between the eastern and western Trans-Pecos.

The widespread occurrence of shamanism – in one form or another – throughout the Americas provides an effective framework for addressing the meanings and motivations behind Trans-Pecos pictographs and petroglyphs. This does not mean however that we should ignore the nuances within the Trans-Pecos rock art corpus. Further work will demonstrate why there are, for example, turtle petroforms in Big Bend but not in neighbouring regions. Similarly, the discovery and analysis of further Mogollon-influenced motifs will clarify the boundary between the eastern and western Trans-Pecos.

While retaining an overarching shamanistic framework, I turn now to embodiment theory to explain the significance of other Trans-Pecos rock art motifs.

CHAPTER 7

Process, transformation, and embodiment in the Trans-Pecos

7.1 Analysis of the body as a set of social and ritual practices

7.2 Rock art, ritual, and embodiment

7.3 Six examples of somatic transformation and other diagnostic features in the Trans-Pecos rock art corpus

7.4 Process and product: shamanistic interactions with the rock surface

7.5 Embodiment and consumption of rock art: acts of immersion and transference

Chapter 3 introduced several Trans-Pecos somatic motifs:

- Human figures missing heads and limbs.
- Skeletonized and zigzag human figures.
- Figures with disproportionate limbs, feet, hands, heads, and eyes.
- Polymelia.
- Pilo-erection.

These motifs are all concerned with transformations experienced in altered states of consciousness. They are all widely distributed throughout the Greater Southwest and North America, and they are all intelligible within the shamanistic and neuropsychological frameworks outlined earlier: so they are placed in category 1A. Less is known about other widespread somatic motifs – files of human figures, arms-raised postures, and vulvas – which are therefore placed in category 1B.

Also present in Trans-Pecos rock art sites are

- Handprints.
- Superpositioning of images.
- Grooves ('cut marks') and 'tally marks'.
- Pigment smearing, rubbing, scratching, and chipping.
- Incorporation of natural inequalities of the rock surface into images.

These features, not rock art motifs *per se*, result from shamanistic actions; they are evidence of kinetic physical experiences or *processes*, including the important interaction with the shamanistic ‘veil’ that separates one tier of the cosmos from others. Thus, these features, which are widespread throughout North America, are also intelligible and tell us something about the motivations behind – and meanings of – west Texas rock art.

In this chapter, after addressing both semantic and deeper philosophical differences between ‘the body’ and embodiment as analytical tools, I explore the related concepts of embodiment, somatic transformation, and process within a shamanistic framework. These notions prove useful when addressing Trans-Pecos cosmologies and the significance of the rock art corpus. By developing ideas introduced in previous chapters, I offer a unified, multi-component explanation for the meanings and motivations behind Trans-Pecos rock art. At the end of this chapter, I address the consumption of rock art in the Trans-Pecos, and consider how it was viewed and *used* by the original artists and subsequent viewers.

7.1 Analysis of the body as a set of social and ritual practices

Drawing from the work of sociologist Bryan Turner (1996), Geoff Blundell (2004: 76) summarizes two important issues that have emerged in the study of the body. First, researchers have analyzed the body as a *set of social practices*:

[T]he human body has to be constantly and systematically produced, sustained and presented in everyday life and therefore the body is best regarded as a potentiality that is realized and actualized through a variety of socially regulated activities or practices.

The production of rock art – including several classes of motifs in the Trans-Pecos – is one such socially regulated practice.

Second, the body and representations or manifestations of the body, including rock art, are studied as *systems of signs*, as the carriers of social meaning and symbolism (Turner 1996: 26). By extension, the human body is sometimes approached as a system of signs that stands for and expresses relations of power (Turner 1996: 27).

More recently and most importantly for the study of rock art in west Texas and elsewhere, researchers are developing and considering a third analytical issue: the body as *lived experience*, or *embodiment*. As Blundell (2004: 76) makes clear, embodiment theory – rather than study of ‘the body’ – emphasizes the diversity of bodies as lived experience, as opposed to Foucauldian analyses that stress the body as socially inscribed. Or, put in another way (Turner 1996: xii; my emphasis), the very word ‘body’

suggests a reified object of analysis, whereas ‘embodiment’ more adequately captures the notion of *making and doing the work of bodies* – of becoming a body in social space.

In Chapter 1, I outlined Mallery’s contribution to rock art studies in North America, stressing that he was the first researcher to consider rock art as a form of embodiment. More than a century later, researchers such as Blundell, hoping to avoid limitations of revisionist approaches to rock art, have investigated the embodied role of paintings and engravings in a “somatic past”, albeit within a well-established, theoretically-informed, shamanistic framework (Chapters 5 and 6; see also Blundell 2004: 76). Researchers within the broader social sciences have recently re-conceptualized ‘the body’ (Meskell 1999; Meskell & Joyce 2003; Blundell 2004: 76; Miracle & Boric 2008; Harris 2009; Sørensen *et al.* 2010), and, at the same time, championed data – but not in a simple empirical way. Before investigating the relevance of embodiment to rock art motifs in west Texas, I consider the history and utility of general models of the body, perception, and phenomenology and objectivism, all within the broader field of existential philosophy.¹

The study of the body has been influenced heavily by the work of post-Enlightenment Western philosophers. Edmund Husserl (1859–1938) famously proposed not only that consciousness is inextricably linked to objects, including the body, but also that all that can be known are our *perceptions* of the world – a world

¹ Phenomenology is an approach that concentrates on the study of consciousness as well as the objects of direct experience. *Pace* Whitley (2005: 149), it does not necessarily reject the application of a scientific method to mental phenomena. Objectivism in philosophy is the belief that certain things, especially moral truths, exist independently of human knowledge or perception of them (*Oxford English Dictionary*).

that exists externally to human existence. Husserl's student Martin Heidegger, and later Michel Foucault, then saw the body as something that social institutions 'work on' and inscribe: humans are defined through their actions, but, paralleling the thrust of New Archaeology hypotheses, are restrained by their environments.

More recently, Anthony Giddens (1984) investigated bodily consciousness and the duality of *structure*, and Pierre Bourdieu (1977) emphasized the role of embodiment in the older concept of *habitus*. Both men, although still committed to the sovereignty of human experience, attempted to overcome the dichotomy between earlier approaches to study of the body: on the one hand, phenomenological approaches, which champion the crucial role of the individual in society (as *per* Maurice Merleau-Ponty (1962), below) and, on the other, objectivist approaches, which, as *per* Heidegger and Foucault, emphasize the role of the social structure at the expense of individual agency. Phenomenological approaches and notions of embodiment have been key motivating factors in recent developments within rock art studies (e.g., Blundell 2004) and archaeology and anthropology as a whole (e.g., Meskell 1999; Meskell & Joyce 2003; Miracle & Boric 2008; Harris 2009; Sørensen *et al.* 2010).

Any philosophy which seeks to take us back to the *perceived* world is, of course, in its general perspective, empiricist (Chapter 1). Merleau-Ponty (1962: 373) signalled his empiricism when he endorsed George Berkeley's thesis that "we cannot conceive anything that is not perceived or perceptible". Importantly, however, Merleau-Ponty rejected the Logical Positivists and their principle of verification; he believed instead that we should not reduce contents of thought to possible contents of experience (Baldwin 2004: 7).²

Crucial to this line of reasoning is the mediation of the argument regarding *a priori* concepts between classical empiricists, who believed that all ideas derive from experience, and rationalists such as René Descartes, who held that ideas are innate within the mind and experience simply a way of bringing ideas into use. Bridging the theoretical gap, Immanuel Kant believed that some *a priori* concepts, including cultural identity and aesthetics, were integral to both experience and thought. Kant

² In the 1930s, Logical Positivists revived Berkeley and David Hume's classical empiricism, suggesting that truth and falsity can be settled only on the basis of observation. See Wylie (1982; 1985; 1989; 1993).

held that while the empiricists were largely right about empirical concepts, the rationalists were largely right about *a priori* concepts (Baldwin 2004: 8).

Like many twentieth-century philosophers, Merleau-Ponty agreed, and used Kant's work to develop a notion of embodiment, believed to be integral to the role of *a priori* concepts in *sense experience*. But Merleau-Ponty (1962: 353) claimed that Kant overlooked "the phenomenon of the body and that of the thing" when concluding that all humans are consciousnesses reproducing the world. In short, Merleau-Ponty believed that we are not so much a consciousness but a *body* that embraces, constitutes, and sometimes subverts the world. As Baldwin (2004: 9) makes clear, Merleau-Ponty argued that it is our

‘bodily’ intentionality which brings the possibility of meaning into our experience by ensuring that its content, the things presented in experience, are surrounded with references to the past and future, to other places and other things, to human possibilities and situations.

Pre-empting criticism, Merleau-Ponty stressed that this thesis – which owes much to nineteenth-century notions of animism – is both psychological and philosophical; human psychology is not merely a deterministic natural science or a branch of biology.

Merleau-Ponty's main goal was to re-discover the perceived world with the help of philosophy, aesthetics, and art. Help was necessary because, as we saw in Chapter 5 and the section on ASC, it is the role of the bodily senses not only to organize experience and constitute the physical world, but also to cover their own tracks when doing so (Baldwin 2004: 10). Merleau-Ponty's interest in art and aesthetics was one factor that indirectly spurred several archaeologists to embrace phenomenology; as several theorists (e.g., Hodder 1981; Shanks & Tilley 1987; Ingold 1996; Johnson 1999; Hodder & Hutson 2003; Bradley 2009) make clear, archaeology no longer lags behind other disciplines within the humanities and social sciences.³

Often, however, post-processual researchers have fallen into what Smith & Blundell (2004) call the "empathetic trap" when employing phenomenological and

³ For a pithy review of debates centred on art and aesthetics, see Bradley (2009: 27–29).

experiential approaches to rock art and archaeology, including landscape archaeology. Smith & Blundell (2004) remind us that a) an archaeologist's choice of study area is likely to be determined in part by his or her perception of landscape and environment; b) phenomenological and experiential approaches tend to over-emphasize macro-topographical features, which may not have been as important to hunter-gatherer societies as they are to researchers; and, c) such approaches tend to place too much stress on 'bounded' territories, also a Western concept. Moreover, phenomenological and experiential approaches by themselves cannot help us discover the *meaning* of artefacts or images, which is partly why I did not stress topographical relationships when describing the 44 Trans-Pecos rock art sites in Chapter 3. I do not suggest that the landscape *per se* was unimportant to the groups that lived in it, and modified it. Each painted and engraved rock art site was certainly part and parcel of a network of socially differentiated ritual locations that connected the various groups living in the Trans-Pecos environment. As with rain-making sites in southern Africa, for example, each site was probably "seen and evaluated *vis-à-vis* other sites in terms of the people who occupied them or used them for ritual purposes" (Lewis-Williams in press). This certainly applies in Europe (e.g., Bradley 1997; 2000; 2001; 2009; Díaz-Andreu 2002; Nash & Chippindale 2002) and in west Texas too (e.g., Turpin 1992; 2004; 2005; Boyd 2003). Below, in the section on embodiment and the consumption of rock art, I stress the importance of the micro-topography of individual sites.

Blundell (2004: 79) points out that given how readily some archaeologists have embraced phenomenology and related frameworks (e.g., Shanks & Tilley 1987; Bender 1993; Tilley 1994; David & Wilson 1999; Ingold 2000; Hodder & Hutson 2003), it is surprising how few have considered embodiment as an analytical tool. Those studies that *have* considered embodiment tend to focus on burials (e.g., Shanks & Tilley 1987) and therefore on bodies as social objects, and avenues to ancient sexualities and "the straightforward power dynamics of the Foucauldian body politic" (Meskell 1999: 42).⁴ This objectivist perspective champions how bodies are constructed, controlled, and manipulated by institutions of power rather than how the body "is experienced and rendered meaningful" (Meskell 1999: 42). In turn, this leads to the bypassing of the "embodied individual in favour of a body which is a

⁴ For an exception, see Meskell & Joyce (2003) for comparison of Egyptian and Mayan corporeal experiences.

passive reflector of large scale social processes”, or what Meskell terms the objectivist “society-in-microcosm model” (Meskell 1999: 43). Although we cannot identify the work of individual artists in the west Texas rock art sites, it is possible to avoid Foucauldian impositions and consider instead how bodies in and after ASC are ‘rendered meaningful’.

7.2 Rock art, ritual, and embodiment

Despite the blurring of animal–human–material boundaries and the exaggeration of human physiological features in rock art corpuses worldwide, there are surprisingly few examples of rock art researchers employing embodiment theory as an analytical tool; Blundell’s work in a region named ‘Nomansland’ by nineteenth-century South Africa colonists is a rare exception. Blundell (2004: 81) makes clear that the notion of embodiment allows researchers to treat rock art images as a *direct metaphorical comment on prehistoric and historic social processes*, while at the same time accepting that the artists *experienced* the images (in a somatic sense) and did not simply intellectualize them (Blundell 2004: 81). This realization can help researchers avoid the temptation to pigeon-hole rock art in a diagrammatic representation of how society operates and putatively changes over time; the notion of embodiment allows a “non-structural social” approach to rock art (Blundell 2004: 81).

Turner’s (1996) concept of ‘somatic society’ – individuals and societies using the body to express important personal and political concerns – offers opportunities to avoid the pitfalls of imposing ill-conceived theories wholesale on prehistoric communities. Turner (1996: 38) states that, among other things, every society is concerned with the reproduction and regulation of populations in time and space, and – most importantly for rock art studies – also with the representation or manifestation of the ‘exterior’ body in social space.

It is here that my use of embodiment theory diverges from Blundell’s: like previous researchers (e.g., Parkington *et al.* 1986; Mazel 1992; 1993; 1996; 2009; cf. Dowson 1994), Blundell’s primary concern is how to ‘use’ San rock art in South Africa to write a *history* of the San and their interaction with nomadic and agriculturalist settlers. Employing the concept of somatic society, Blundell (2004: 85) demonstrates that a shaman-artist’s body is “not simply a religious symbol but also a political one”, which allows researchers to “bridge the dichotomy between meaning and

motivation that has hampered southern African San rock art research since the 1970s". I refer the reader to Blundell's 2004 thesis for further analysis of the relationship between South African history and rock art.⁵

In west Texas, partly because far less is known about the precise authorship of the pictographs and petroglyphs, or about the *specific* social motivations for their production in different eras, I concentrate on ASC hallucinations and somatic transformations that are also manifest in the region's rock art. By employing the tools of embodiment theory, rock art images in west Texas can be seen as expressions of how the shamanistic world was perceived, how it *was*, and how identities were tied to physical beings and *manifestations* of physical beings. Similarly, when I analyze 'the body' and intelligible diagnostic somatic postures in west Texas rock art, I do so *not* in the objectivist Foucauldian sense, but as a microcosm of the social conditions of the groups that produced the images within a shamanistic framework (Blundell 2004: 88). Importantly, as with shamanism, embodiment theory can help us overcome the tendency in rock art research to treat the original image-makers as reactive viewers of their own handiwork (Blundell 2004: 88). As explained earlier, pictographs and petroglyphs are symbolic manifestations and powerful things in themselves; they are not mere *reflections* of either natural or supernatural phenomena.

7.3 Six examples of somatic transformation and other diagnostic features in the Trans-Pecos rock art corpus

Category 1A: Widespread intelligible/interpreted motifs:

- Headless and limbless human figures.
- Skeletonized and zigzag human figures.
- Figures with exaggerated somatic features, including eyes.
- Polymelia.
- Pilo-erection.

Category 1B: Widespread unintelligible motifs:

- Vulvas and cupules.

⁵ See also Challis (2008).

Animal–human therianthropy in the Trans-Pecos rock art corpus is rare; other than the Thunderbirds at Meyers Springs, possible candidates include the anthropomorph with frog-like legs at Cosmic shelter (Fig. 3.62) and the lizard-like anthropomorph at Las Burras (Fig. 6.10). The clay effigies recovered from Auras Canyon also demonstrate both catfish and anthropomorphic features (Madrid 1996: 8). There are numerous examples however of bodily transformation and other diagnostic somatic features in the human figures of the Trans-Pecos. Some anthropomorphic figures are headless; others are limbless. Some have zigzag or skeletonized torsos and limbs. Many human figures have disproportionately large arms, legs, hands, feet, heads, and eyes. Other anthropomorphic and zoomorphic figures in the Trans-Pecos exhibit polymelia and pilo-erection. As discussed in Chapter 6, some anthropomorphs have horns (or headdresses), while others are conflated with projectile points. Like the famous Barrier Canyon Style spectral figures in Utah, which have elongated bodies, undersized or missing limbs, disproportionately large eyes, and otherworldly headgear (Schaafsma 1980: 344), several human figures in the rock art of the Trans-Pecos exhibit combinations of these peculiar transformations. Once we have accepted that there are many widespread and intelligible somatic motifs throughout west Texas that confirm the centrality of supernatural potency and associated concepts of a tiered shamanistic cosmos, in both prehistoric and historic knowledge systems, we should be less surprised to encounter pictographs and petroglyphs that embody combinations of shamanistic elements. Again, it is clear that rock artists were not painting or carving what they saw in the mundane, everyday world.

The first five examples below are widespread in North America and intelligible in the shamanistic framework – hence their placement in category 1A. After addressing the significance of these images, I discuss vulva motifs, cupules, and the notion that *process* was as (or more) important than product to the original artists.

1) Headless human figures are found in at least six sites in the Trans-Pecos; all of the examples illustrated below (Figs 7.1–7.4) also have raised or outstretched arms; some have missing legs and/or exaggerated or emphasized fingers too. Limbless human figures with intact heads are also present in at least four sites.

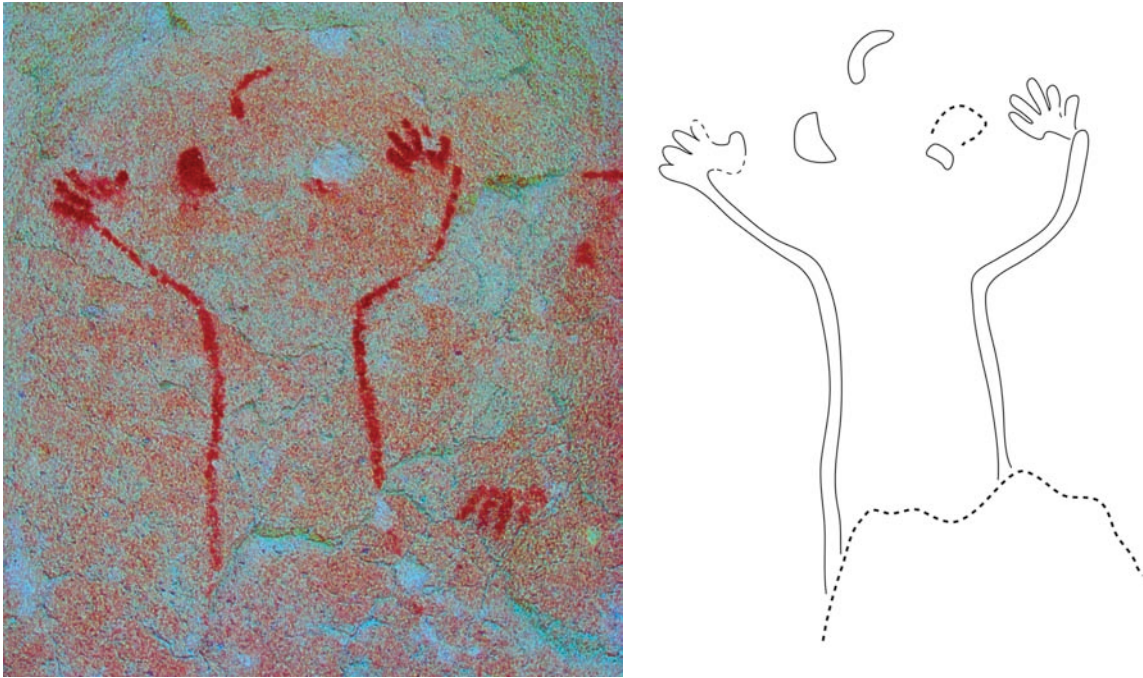


Fig. 7.1. Headless human figure at Cuevas Amarillas. Note headdress (despite the missing head), and also 'outlined' body, missing legs, and raised arms. One of the figure's ears (c. 5 x 5 cm) has flaked off.

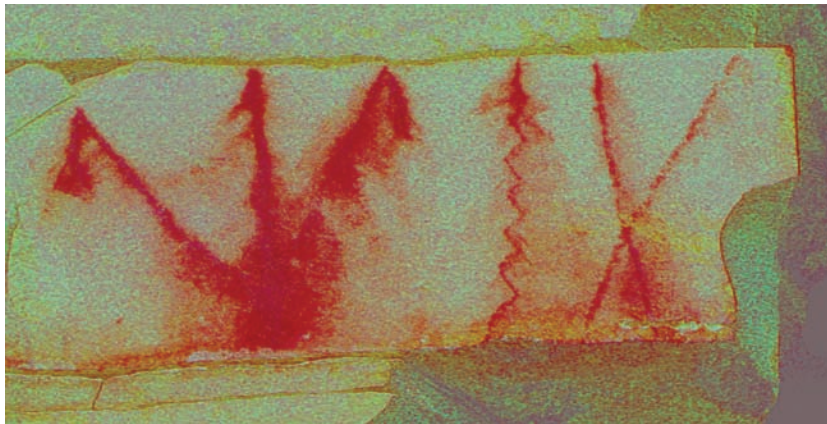


Fig. 7.2. Headless human 'stick figure' (left) and geometrics (right) at Hot Springs. Note smeared pigment, missing legs, and long raised arms with bent elbows and pendant hands. Most of the geometric motifs at Hot Springs are 20–30 cm tall.

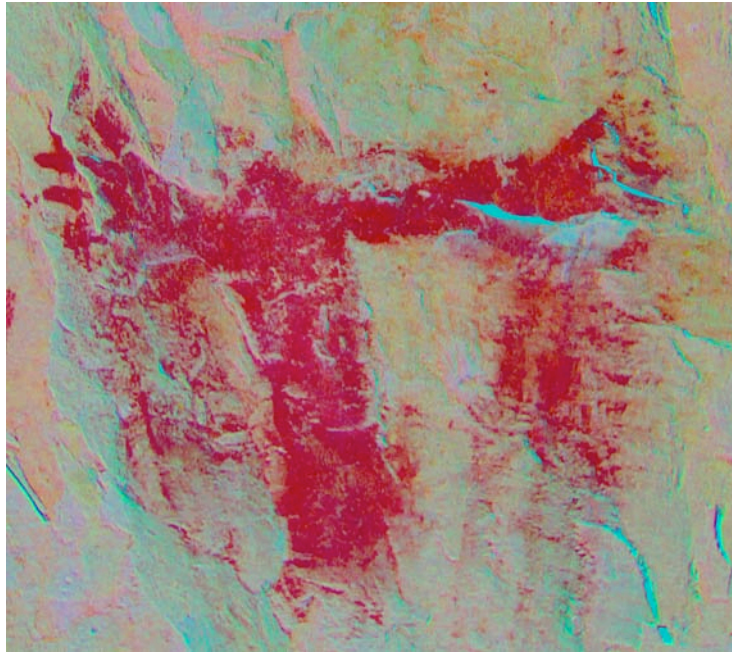


Fig. 7.3. Headless human figure at Bee Cave with missing legs, exaggerated fingers, and outstretched arms; compare with drawing Fig. 3.34. Torso is c. 12 cm tall.

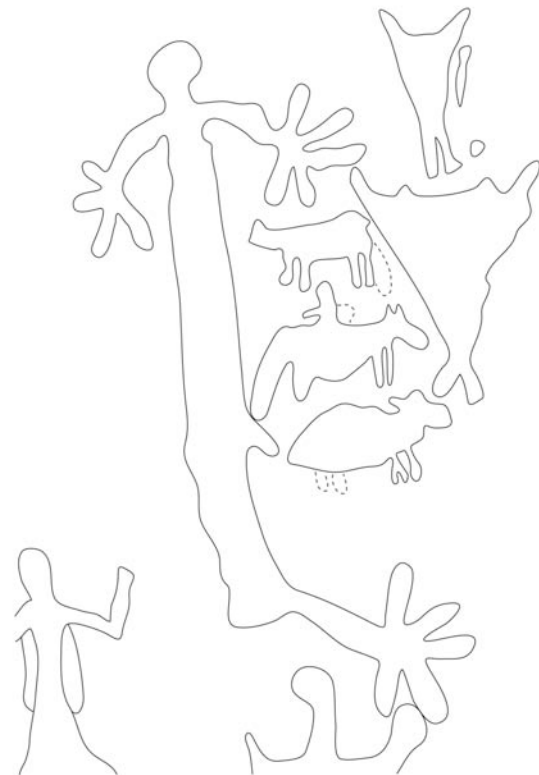


Fig. 7.4. Human figure (c. 60 cm tall) with missing leg at Leyva. The other limbs are outstretched, with exaggerated digits. To the right, beyond three quadrupeds, are two unique upside-down 'teepee-like' motifs that may be headless anthropomorphs.

As we saw in Chapter 5, a sense of dissociation is commonly experienced in ASC, and many shamanistic societies believe in the regenerative powers of a death-like trance and subsequent rebirth. Shamanic initiates worldwide receive “renewed organs and bones” from his or her helping spirit (Eliade 1964: 63). Harner (1973: 139; see also Boyd 2003: 61) cites an example of henbane (nightshade) intoxication and the resulting sense of dissociation and dismemberment:

My feet were growing lighter, expanding and breaking loose from my body. Each part of my body seemed to be going off on its own. My head was growing independently larger, and I was seized with the fear that I was falling apart.

In the Lower Pecos, Kirkland & Newcomb (1967: 49, 56) found that more than 40% of Period 2 shaman figures lacked heads, and almost 75% lacked feet or toes; in addition, they found that 37% lacked legs. Farther afield, in California and the Great Basin, there are superimposed composite motifs, including headless figures *over* Thunderbird-like images, similar to the fringed anthropomorph at Leyva Canyon (below); referring to a specific site in California, Benson & Sehgal (1987: 13) suggest that headless figures represent “death-like trance”. The close proximity of this composite motif to a concentric circle design also “suggests that the shaman has been placed at the entrance of a tunnel, poised for his journey to the land of the dead” (Benson & Sehgal 1987: 13).

Missing and disembodied heads and limbs might also not be absent at all: perhaps they are understood as being simply in the spirit world *behind* the rock face veil, and seen there by those who are able to travel between tiered realms. This may also apply to the outlined anthropomorph at Cuevas Amarillas (Fig. 7.1 above).

2) Skeletonized bodies and zigzag limbs

In many rock art corpuses, ‘contrastyled’ or X-ray styles of rock art also embody a sense of shamanic dismemberment, organ renewal, and rebirth (Halifax 1982: 76–77; Hedges 1983: 56; Patterson 1992: 214; Turpin 1994; Hampson *et al.* 2002: 27–28; Boyd

2003: 50, 55–56; Lewis-Williams & Pearce 2005: 118).⁶ This section, then, overlaps conceptually with the headless and limbless figures above. According to Eliade (1964: 63), to lose limbs and to “reduce oneself to the skeleton condition is equivalent to reentering the womb of this primordial life, that is, to a complete renewal, a mystical rebirth”. Before new shamanic organs can be obtained, shamans must gain the ability to see themselves as skeletons (Eliade 1964; Kalweit 1988). In Siberia, for instance, Buryat shamans wear tunics with depictions of ribs and sternums as a sign of their initiation (Halifax 1982: 76).

When anthropologists in the middle decades of the twentieth century asked San shamans to draw themselves, shamans did so with central zigzags (representing spinal cords) juxtaposed with additional zigzags and spirals (representing other parts of the shamans’ bodies) (Katz 1982: 235). Importantly, inner states during trance are more important to the San than external anatomical criteria. This notion echoes Aristotle’s famous maxim that “the aim of art is to represent not the outward appearance of things but their inward significance”.

Skeletonized or X-ray bodies are present in at least two sites in the Trans-Pecos: Bee Cave (Fig. 7.5) and Meyers Springs (Fig. 7.6).

⁶ X-ray or centrastyled figures usually have internal body markings, whereas outlined or ‘hollow-bodied’ figures do not (Hampson *et al.* 2002; Chippindale pers. comm.).



Fig. 7.5. Skeletonized anthropomorph with internal markings at Bee Cave. Note front-on spread-eagle human figure below. The contrast between figures like these has led to unhelpful distinctions between ‘animated’ or ‘dynamic’ figures and ‘static’ figures.

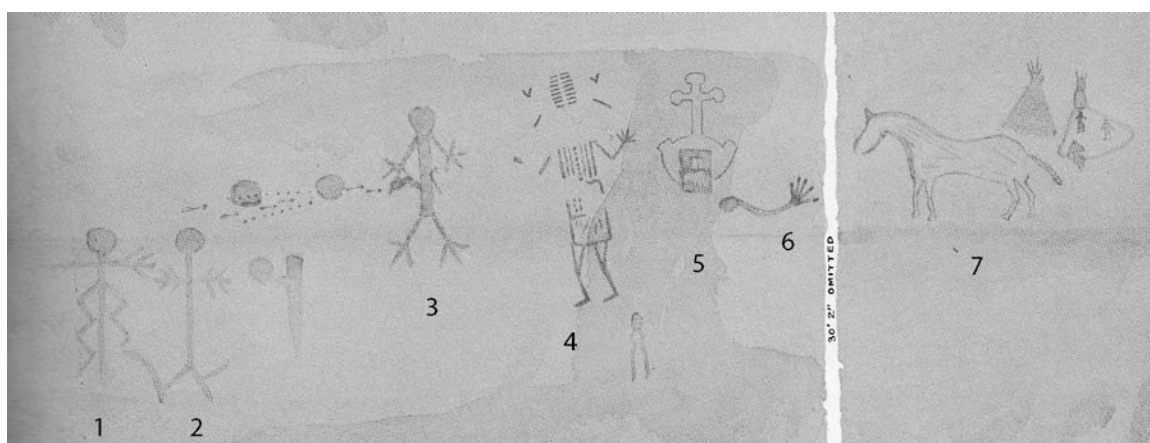


Fig. 7.6. Kirkland’s plate 79 from Meyers Springs shows internal body markings within the central figure’s (4) torso and head. Also note zigzag appendages on human figure (1); disproportionately large fingers and bird-like feet on the spread-eagle figure (3); cross motif (5); disembodied arm (6); and horse (7).

Anthropomorphs with zigzag limbs are present in at least four Trans-Pecos sites. At Meyers Springs and Lobo Valley (Fig. 6.2), for example, human legs are shown as zigzags; at Jaguar Cave, arms are (Fig. 6.3). As mentioned in Chapter 3, the zigzag arms on several smeared figures at Meyers Springs (see Fig. 3.13) might indicate that

the figures are Thunderbirds rather than anthropomorphs, or that the figures are therianthropic; again, it is hard to delineate sharp boundaries between humans and animals, especially in non-Western ontologies.

3) Exaggerated (disproportionate) anthropomorphic figures and raised arms

Many figures in the Trans-Pecos rock art corpus have emphasized, exaggerated, or disproportionately large body parts. As we saw in Chapter 5, feelings of attenuation derive from ASC and the sense of flight. Bodies and limbs appear particularly stretched or distorted when seen from above, or from a distance.

Exaggerated somatic features on anthropomorphic figures include torsos, arms (Fig. 7.7), and, most frequently, hands and fingers. The ten sites with exaggerated digits include several illustrated above (Figs 7.1, 7.3–7.4, 7.6), and also Point of Rocks, Storyteller, Indianhead (Fig. 7.9), and Cascade (Fig. 7.10).



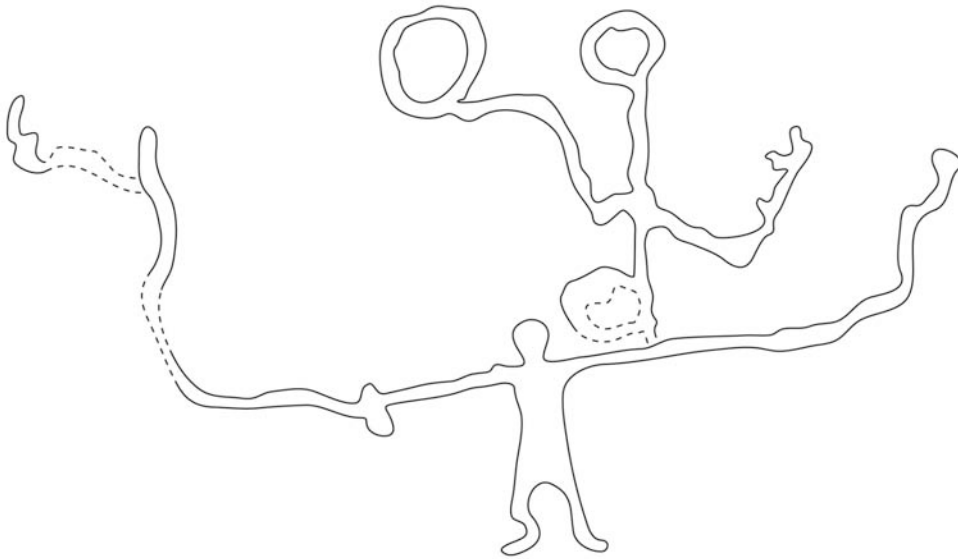


Fig. 7.7. Abraded human figure at Lobo Valley with outstretched and exaggerated arms. The circles (top) have diameters of c. 6–10 cm.



Fig. 7.8. Spread-eagle and headless anthropomorph (c. 40 cm tall) with exaggerated digits at Leyva Canyon. Note the pilo-erect, Thunderbird-like 'fringe' on the lower limbs; it is possible that this is an upside-down bird-like motif.

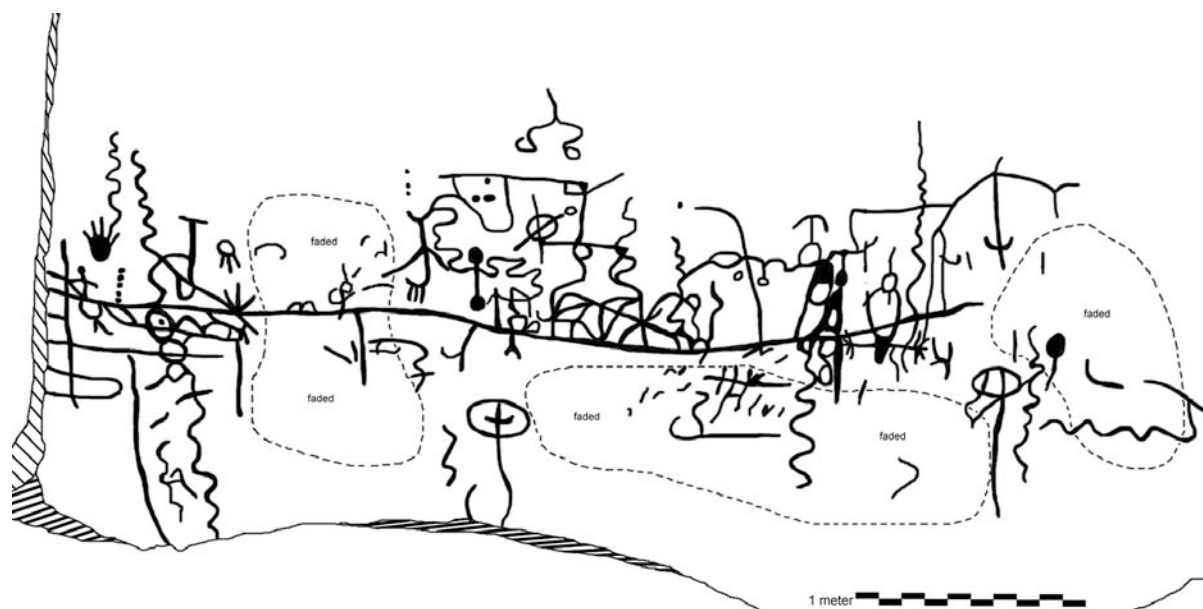


Fig. 7.9. Tegarden's (2005: plate 47) drawing from Indianhead shows exaggerated index finger on carved hand (far left); the finger extends upwards as a meandering zigzag line.

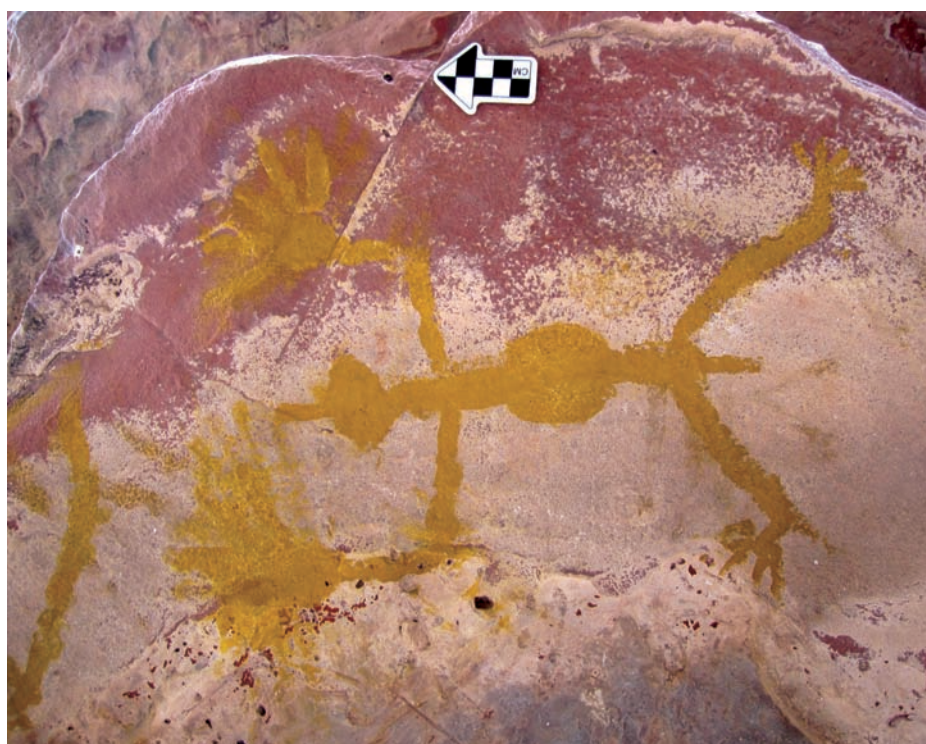


Fig. 7.10. Spread-eagle human figure at Cascade with exaggerated and smeared fingers, line from head, and penis. Colour has *not* been digitally altered.

On occasion, zoomorphs have emphasized or exaggerated somatic features too. A quadruped's tail at Woulfter is disproportionately long, and several mountain sheep at Storyteller have over-sized heads and horns (Fig. 7.11). Another sheep at Storyteller is bicephalic (Fig. 7.12).



Fig. 7.11 from Storyteller includes a sheep with exaggerated horns; the sheep is connected to a spiral motif (left centre, above the scale). Note outlined human figure with eyes, superimposed by a square-bodied deer (centre); disembodied antlers (right centre); coyote with spiral tail (top right); and horned and 'hooded' human figure below an open-mouthed quadruped (bottom centre). The 'hood' accentuates the figure's eyes.



Fig. 7.12. Bicephalic sheep from Storyteller. Bicephalism is connected to polymelia. Also note the striped/skeletonized body.

Often, the human figures with exaggerated digits are in the spread-eagle posture: they have *raised or outstretched arms and legs*. Although we do not yet know the full significance of this particular somatic feature, present in at least 13 sites (e.g., Fig. 1.2, Fig. 3.14, Fig. 3.19), it occurs throughout the Americas (e.g., Keyser & Klassen 2001: figs 8.11, 9.5, 9.9). For now, it is placed – along with files of human figures – in category 1B, but it is a strong candidate for category 1A.

In Chapter 1, I discussed Smith's (1925: 16) use of ethnography regarding shamans' arms "raised in supplication to the great spirit" and a similar posture depicted in rock art in order to "signify power". Vastokas & Vastokas (1973: 70–71) also suggest that raised arms are connected with shamanism:

[T]he rendering of the raised arm and the emphasis on gesturing hands carry a specific meaning in Algonkian pictography; the gesture is always associated with shamans. ... All denote gestures of reverence, supplication or communication with the sky and more specifically to the Great Spirit, *Kitchi-Manitou*.

The Desana of Colombia also depict their centrastyled spirit beings with raised arms (Reichel-Dolmatoff 1975). A petroglyph at Blackbird Hill, Nebraska features bird-like shaman motifs and a raised hand that "symbolizes the voice in song, strength and power" (Halifax 1982: 86; see also Wellmann 1979). In the San Juan Anthropomorphic Style in the Southwest, too, raised arms with bent elbows and drooping hands (as in Fig. 7.2 above) were formerly cited as "merely a stylistic convention" (Schaafsma 1994b: 57); Schaafsma now considers this posture to suggest the "lifelessness" of the trance state. Despite all these interesting leads, more research is needed before the motif is interpreted and assigned to a specific category with confidence.

Exaggerated and highlighted eyes in the Trans-Pecos rock art (Fig. 7.13) are also manifestations of ASC experiences; they are of especial significance because they unambiguously refer to the shamanistic sense of sight and preternatural vision. Ritual specialists who experience 'visions' believe that they can actually see the different levels of a tiered cosmos – which is why they claim to know, among other

things, which supernatural beings inhabit them. We saw in Chapter 6 that few people on the Plains claim to have actually seen Thunderbird, for example, but those that do are usually credited with exceptional powers of revelatory vision (Hallowell 1960: 32). Shamans claim that when they are in ASC, they can see lost objects, the cause of an illness, spirit helpers, evil spirit beings, and into the past or future (Eliade 1964: 42). Indeed, although ASC affect all five senses, informants worldwide speak most about sight; preternatural sight and transcosmological travel are frequently linked (Lewis-Williams & Pearce 2005: 70).

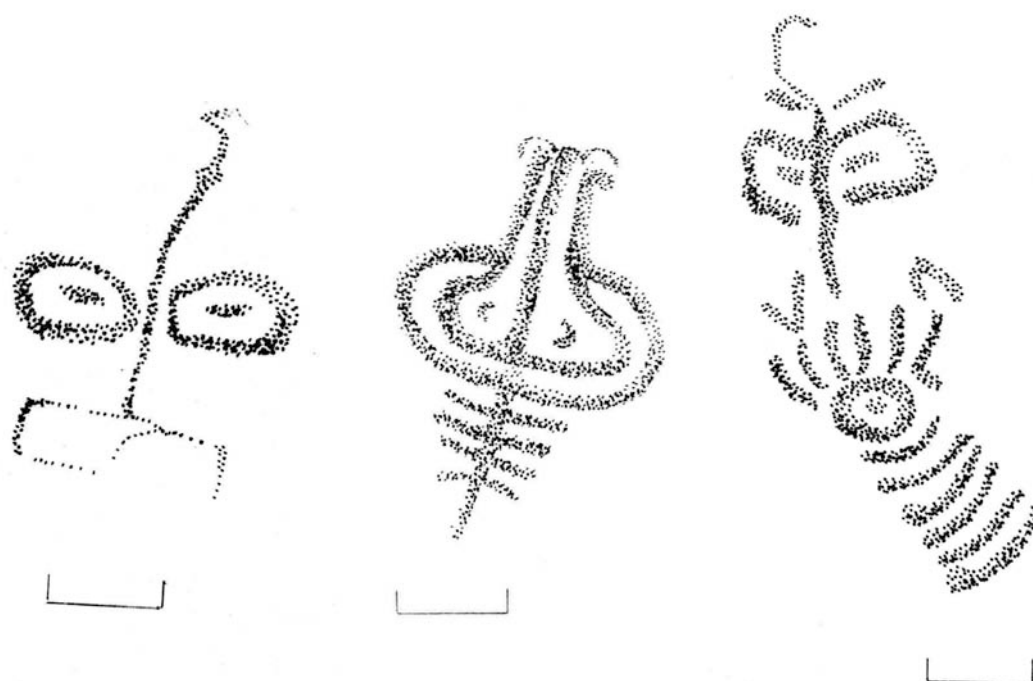


Fig. 7.13. Possible eyes at Graef petroglyph site. Note nested curves (bottom right). Scale bars are 10 cm. Courtesy of R. Peel.

Zuni rain priests rub hallucinogenic *datura* on their eyes in order to commune with the 'Feathered Kingdom' (Schultes & Hofmann 1979; see also Pearson 2002). In South America, a priest-like Desana shaman is said to have an "interior light, a brilliant flame that shines and unveils the intimate thoughts of all people who speak to him"; this light is seen in his eyes, in his "penetrating glance" (Reichel-Dolmatoff 1971: 137). Among the South American Waiwai, the interior light is related to the shaman himself: the "eye-soul [is] the small person one always sees in the other's eye" (Sullivan 1988: 244). In Colombia, a Barasana shaman spoke about his "inner seeing": "This is how the shamans travel, as they see with their thoughts and cross

between the levels of the world” (Hugh-Jones 1979: 121). Farther afield, San in South Africa told Wilhelm Bleek that a shaman known for making rain was feared because “his eyes used to shine like a beast-of-prey’s” (Bleek 1933: 390). Moreover, the shaman’s eyes were as large as an ostrich’s (Bleek 1933: 390).

In Western laboratory conditions, a man who ingested hallucinogenic mushrooms reported that he actually *became* a “disembodied eye, invisible, incorporeal, seeing but not seen” (Narby & Huxley 2001: 144). Here we see the abandonment of simile, and a more specific sense of embodiment.

Other than the petroglyphs at the Graef site, examples of highlighted and accentuated eyes in the Trans-Pecos include pictographs at Tall Rockshelter (Fig. 7.14), and more recent ‘mask’, Tlaloc, and other anthropomorphic motifs at Hueco Tanks, Jaguar Cave, and Storyteller (Fig. 7.15; see also Figs 3.88–3.89 and 6.16–6.18). There are also several sites where eyes of quadrupeds are accentuated (Fig. 7.16).



Figs 7.14 and 7.15. Tall Rockshelter in the Davis Mountains (left). Note loops and dots at top of > 5 m polychromatic vertical lines; these figures may be stylized anthropomorphs with heads and eyes. Courtesy of CBBS. On the right is an ithyphallic anthropomorph from Storyteller site. Note accentuated eyes and erect penis, both indicators of altered states.



Fig. 7.16. Unusual quadruped with accentuated eyes from near Fort Hancock. The back half of the figure is obscured by a tree. Courtesy of J. McCulloch.

Painted and etched pebbles from the Trans-Pecos also include depictions of eyes (Fig. 7.17; see also Coffin 1932: 24; Jackson 1938: 324–328; Kirkland & Newcomb 1967: 110, plates 66–68; Parsons 1986; 1987; Mock 1987; Turpin 2004; Roberts in prep.; pers. comm.), as do the anthropomorphic clay effigies from Bee Cave (Fig. 7.18; see Harrington 1928: 315; Coffin 1932: 58). Buried in rockshelters or deposited in water, these artefacts penetrated the veil between the mundane world and the underworld; their accentuated eyes may have symbolized the shamanistic sense of preternatural sight. Occasionally, the ends of the pebbles or clay artefacts have been deliberately broken, so the figures appear headless (see Fig. 7.18) – another indicator of shamanistic ASC and cosmological journeys.

Pebbles, like rock surfaces, were not *tabulae rasae*; they were important artefacts even before they were painted or etched. Formed as a result of geological aquatic processes, they were collected from and returned to sacred springs and other water sources (Mock 1987; Roberts in prep.). The modification of pebbles by humans – whether by adding pigment, etching, or re-shaping the pebbles – proliferated their inherent potency.



Fig. 7.17. Ocular motifs on painted pebbles from Bee Cave. Note possible vulva motif in the centre of the left pebble. Courtesy of NMAI.



Fig. 7.18. Clay artefacts from Bee Cave. The left figurine is c. 7 cm tall. Note accentuated eye, painted in black. The effigy on the right is c. 12 cm tall with breasts and missing head.

Courtesy of NMAI.

In California, Robinson *et al.* (2010) have demonstrated a link between portable rock art made by malevolent shamans, and springs, which were often considered inherently dangerous as well as sacred. Water spirits – like water itself – were often attributed with quixotic characteristics (Robinson *et al.* 2010; pers. comm.).

4) Polymelia, defined as the sensation of possessing extra limbs or parts of limbs (*Oxford English Dictionary*), is another somatic distortion experienced in ASC and present in at least five Trans-Pecos rock art sites. There are extra fingers on the handprints at Cosmic, and extra legs on zoomorphs at Meyers Springs, Las Burras

(Fig. 7.19), and other sites. The extra limbs and digits are carefully drawn and clearly intentional; once again, they are not artists' errors or a result of indecision.



Fig. 7.19. Six-legged canid at Las Burras (longest leg c. 30 cm). Note legless human figure (right), which is probably related conceptually to the canid.

5) **Pilo-erection** is present in at least 3 Trans-Pecos sites: Meyers Springs (Fig. 3.13), Leyva Canyon (Fig. 7.8), and Cascade (Fig. 7.20).

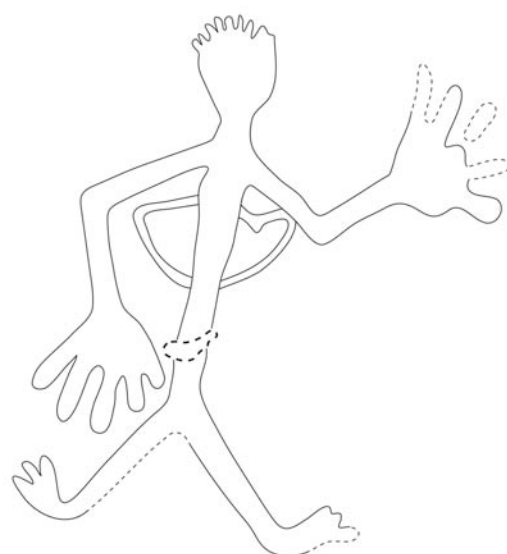


Fig. 7.20. Human figure at Cascade with erect hair (pilo-erection); each strand is < 1 cm long. Note exaggerated fingers.

Pilo-erection, when hairs stand erect due to contractions of muscle fibres, is an autonomic response controlled by the nervous system (Young 1957). Mammalian pilo-erection is used to regulate heat (the 'goose bumps' of *Homo sapiens*) and to intimidate rivals (raised bristles increase the apparent size of an animal), but pilo-erection and accompanying sweating also occur when mammals are in ASC and close to death (Young 1957; see also Hollmann 2002: 1).

In southern Africa, pilo-erection has been identified as the model of painted rock art bristles associated with images of dying antelope, therianthropes, felines, rain-animals, serpents, and other creatures (Lewis-Williams 1981; Lewis-Williams & Dowson 1989; see also Hollmann 2002). Moreover, pilo-erection is a crucial symbolic link between antelope death and the ritual 'death' of shamans as they enter ASC (Lewis-Williams 1981); the "bristling of dying antelope ... was thus a model for harnessing potency for socially beneficial ends" (Hollmann 2002: 2).

As we saw earlier, shamanistic potency could also be used maliciously; like electricity, it is dangerous if not controlled (Lewis-Williams 2002: 138; Lewis-Williams & Pearce 2005: 141). In southern Africa, lion's hairs are said to grow from the back of a shaman whose potency has become uncontrollable (Bleek 1935). Similarly, an informant reporting his experience of transformation in ASC stated: "When I turn into a lion, I can feel my lion-hair growing and my teeth forming. I'm inside that lion, no longer a person." (Katz *et al.* 1997: 24.) Tactile hallucinations often begin as itching skin on the hands, legs, and back, and progress to give the sensation of sprouting wings (above) and growing hair. Like many of the sensations of ASC, pilo-erection interacts recursively with theories of 'natural modeling' within shamanistic frameworks (Whitley 1994), and although rock art images are not simple reflections of objects in nature, many non-Western knowledge systems are nevertheless "sophisticated interweavings of acute observation of nature with subtle, multi-referent symbolism" (Hollmann 2002: 6). I suggest that the depictions of exaggerated bristles in the Trans-Pecos rock art are best explained within a shamanistic framework; they are symbolic of ASC and metaphorical death.

I finish this section on somatic transformations by considering motifs that could be categorized under the next sub-heading, that is *rock art as an embodied kinetic process* and as a shamanistic interaction with the veil between this world and other realms.

6) Vulvas and cupules

Vulva motifs, known as vulvaforms in the northern Plains, are found throughout North America (e.g., Sundstrom 1990; 1993: 295; Keyser & Klassen 2001: 181–182, 187). In the Trans-Pecos, engraved vulva motifs are present at four sites: Cerro Chino (Fig. 7.21), Beehive, Jose’s Cantina, and what may become a ‘type site’ for this motif, the recently discovered Tres Yonis (Fig. 7.22).



Fig. 7.21. One of several deeply incised horseshoe-like ‘vulva’ motifs at Cerro Chino. Most of the vulva motifs are 10–15 cm tall.



Fig. 7.22. The main boulder at Tres Yonis has six vulva motifs – three of which are clearly visible – and > 275 cupules, most of which are 2–3 cm in diameter. Courtesy of W. Cloud.

As discussed in Chapter 1, categorization of rock art motifs is necessarily subjective and, because it is related to motivation and meaning, often contested. In this section, I am prompted by the formal similarities between vulva motifs and cupules to suggest that rather than solely reflecting or incorporating notions of gender (notions that are often ill-defined), both these motifs or features – and the *process* of creating them – had more to do with connecting with spirit worlds behind or within the rock face. At present, I place these motifs in category 1B (widespread, unintelligible), but as more work is done and their significance becomes more apparent (see, e.g., Hays-Gilpin & Whitley 1998; Hays-Gilpin 2004; 2005), I am confident they will be ‘promoted’ into category 1A.

The two motifs or features are certainly not identical, nor were they created or *used* for identical reasons. Cupules – small concavities, ground or pecked into boulder or

bedrock surfaces, and sometimes known simply as 'pits' – may have been used occasionally to store seeds, or, like the wider and deeper bedrock mortars, to grind plant stuffs and possibly pigment (Parkman 1986; Peel pers. comm.). Nonetheless, vulva motifs and cupules can both be seen as the result of a shamanistic interaction with the veil that separates this world from the next. The *act* of pecking or hammering, together with the repetitive and resonant sound, was (and is) meaningful to many groups worldwide. Earlier, I showed that the rock itself was not a meaningless support, and 'connecting with' it would have had significance, "perhaps even releasing, activating or giving form to some inherent potency within the stone" (Lewis-Williams & Pearce 2005: 217). Similarly, Whitley *et al.* (1999) have shown that quartz hammerstones were carefully selected and used over a long period for ritualistic reasons. From a purely technical viewpoint, quartz is not the best stone for repeated percussion, but, as we saw in previous chapters, it is considered potent by many indigenous groups. Unlike the creation of pictographs, when material is *added* to the rock, engravings involve not only interaction with the rock face veil, but also the laborious *removal* of material.

In the far western USA, cupules were used in shamanistic and animistic ceremonies that "restored the world" (Nissen & Ritter 1986: 73) and balanced natural and supernatural forces (Minor 1975; Hedges 1976; Parkman 1986; Gillette 2002; see also Loubser 2005). Pomo groups refer to cupule-ridden boulders as 'baby rocks' (Loeb 1926; Aginsky 1939; Barrett 1952; Parkman 1994), and the Luiseño produced cupules as part of their puberty rites, for either boys or girls or perhaps for both (Chace 1964; Hedges 1976: 17). Shasta groups, on the other hand, speak of boulders with cupules being 'rain rocks' to control the weather (Heizer 1953; Hedges 1983; Parkman 1993; see also Peel in press). Tellingly, cupules are sometimes found on vertical (or near-vertical) walls in the Trans-Pecos (Fig. 7.23); in these instances, they cannot have been used for storing foodstuffs. At Auras Canyon (Fig. 7.24), six rayed red lines have been added around the diameter of the cupule.

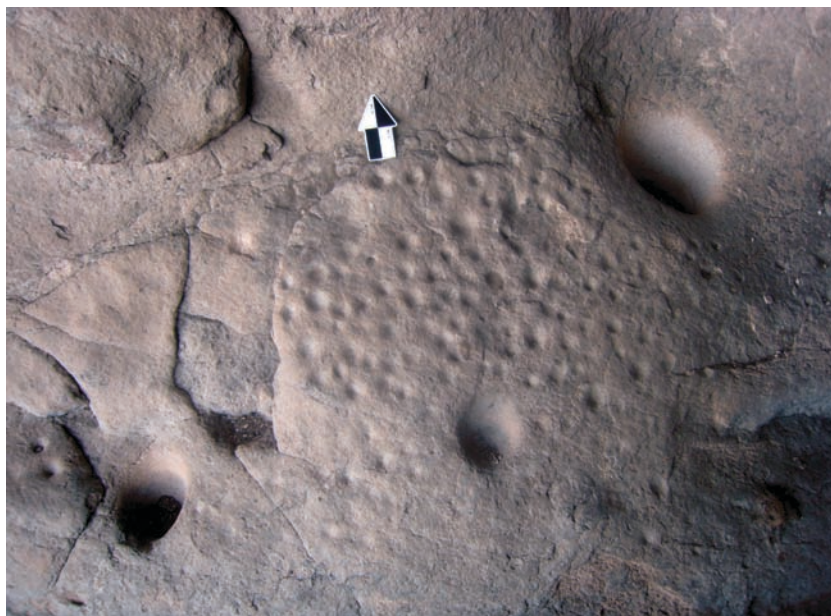


Fig. 7.23. Cupules and bedrock mortars on an almost vertical rock surface at Bison site.



Fig. 7.24. Six red pigment 'rays' at Auras Canyon also suggest that cupules were used for more than simply mundane storing or grinding.

In many shamanistic frameworks, transcossmological travel is thought of as a journey into a womb – the neurologically generated sensation of passage through a tunnel or vortex (Lewis-Williams 2002: 175; see also Vitebsky 1995: 70). Similarly, Whitley

(2005: 84, 146) has demonstrated that rock art sites (especially caves) in California were seen as symbolic vaginas; in this sense, caves, shelters, and rock art sites themselves are *gendered*. The Huichol also consider caves to be womb-like, with a female floor, and male walls (Furst 2006: 48–49). We must however remember that *shamans* were considered virile; erections – such as those at the Storyteller site (Fig. 7.15) – are associated with ASC and sleep; and, above all, abstract concepts of ‘fertility’ are often vague and inappropriate in non-Western societies. If anthropologists were able to ask clay effigy-makers in west Texas why they made so-called ‘goddess’ figurines – as found at Auras Canyon and Bee Cave (Fig. 7.18) – or to ask etchers or painters of pebbles why so many of their artefacts appear to embody female genitalia, they would have responded with a myth or some other explanation integral to their shamanistic ideologies, not with abstract and Western concepts of fertility (Lewis-Williams & Pearce 2005: 114).¹ I note that the utilization of the binary gender system might also be inappropriate for a social analysis of hunter-gatherer societies (Dowson 2000; 2001), and stress again the significance of the ritualistic burial context of pebbles and clay effigies underground (Harrington 1928: 315; Mock 1987).

Like cupules, vulva motifs are certainly ‘openings’. Intriguingly, in rock art sites in the northern Plains, as in the deep caves of western Europe, vulvaforms are sometimes smeared with red pigment and incorporated into what some researchers have (vaguely) called ‘birthing scenes’ (e.g., Greer & Keyser 2008: fig. 1). Vulvaforms, however, are openings in the sense that rock walls ‘give birth’ to spirit creatures and supernatural beings through these portals (Lewis-Williams & Pearce 2005: 114): “It was to the fecundity of ‘membranous’ mediatory walls that ... vulva motifs referred, not to ‘fertility’ as conceived by some in the modern Western world.” There are also vulvaforms that have been ‘rubbed out’ (see below), perhaps by women seeking supernatural power (e.g., Greer & Keyser 2008: fig. 6).²

¹ This desirable aim for emic perspective is also apparent in vague notions of so-called ‘sympathetic magic’ and the putative proliferation of game animal herds (Chapters 1, 5, and 6).

² See also Sundstrom (1990; 1993; 2004) and Keyser & Klassen (2001: 177–189) on vulvaforms in the Hoofprint Tradition of the northern Plains, and Whitley (2005: 98–99) on the links between malevolent shamanism, androcentrism, and vulvaforms.

Finally, I suggest that the squid motif – a formal variation of the shumla motif – may have also been a variant of vulva motifs; Tegarden's (2005: 134–135) definitions do not allow for an interrogation of the polysemous and shared meanings between these motifs, or the possible overlapping motivations for their creation. It is likely that all three varieties – and perhaps the horseshoe-like variation at Cerro Chino – were concerned with penetrating fecund, potent, and mediatory rock surfaces, and interaction with different cosmological tiers.

7.4 Process and product: shamanistic interactions with the rock surface

Category 1A: Widespread intelligible/interpreted features:

- Handprints.
- Superpositioning of potent pigment.
- Grooves ('cut marks') and 'tally marks'.
- Smearing, rubbing, scratching, and chipping.

Rock art in the Trans-Pecos is the result of an embodied kinetic process, a shamanistic interaction with the veil between this and the spirit world. I argue also that – in addition to cupules and bedrock mortars (above), and incorporation of natural inequalities of the rock surface into images (Chapter 5) – several specific features and techniques are variations on this pervasive ritualistic theme, albeit sometimes in ways that are not yet entirely clear. I consider these four variations – handprints; superpositioning of potent images; grooves and tally marks; rubbing, smearing, scratching, and chipping – in turn.

1) A hands-on experience: harnessing potency

Handprints and footprints seem to lie between the representational and non-representational categories of rock art; they highlight the fact that these categories are inevitably subjective. Handprints and footprints are also forms of somatic image. As Lewis-Williams & Pearce (2005: 119–120; my emphasis) make clear:

Although the image of a hand no doubt had significance as the residue of a specific ritual and person, we argue that the *processes* of production of those images mattered a great deal.... Moreover, the paint used for making handprints was probably itself not merely a technical material, as Westerners

may think of paint, but rather a powerful substance that effected or enhanced contact with the supernatural.

Handprints, present in at least 15 sites in the Trans-Pecos (Fig. 7.25), were products of ritual actions that comprised several stages within the *chaîne opératoire*: preparation of a potent substance (pigment and binder), followed, in the case of positive handprints, by application of that substance to a hand, and pressing of the hand against a surface from and into which forms of animals and other spirit beings sprang and disappeared (Lewis-Williams 2002: 161). Rather than simply a 'signature' or some vague form of 'marking', the production of handprints and footprints was powerfully meaningful within a shamanistic framework, and probably associated with ritual touching of the rock (discussed below). With negative handprint stencils (Fig. 7.26), a human hand was painted on to the wall by blowing – or, uniquely in the Trans-Pecos, by scraping soot. Thus, the hand was also blown or scraped *into* the wall or 'membrane' between this world and the next; like outlined figures and missing body parts, negative handprints *disappeared* behind the pigment and rock face.



Figs 7.25 and 7.26. Positive hand- and wrist-print at Cueva Larga, and four negative stencils (produced by blowing white pigment) at Point of Rocks.

The U-shaped ‘decorations’ on the positive handprints at Cosmic shelter and Point of Rocks (Fig. 3.22) are telling. Not only are the U-shapes entoptic motifs, they also embody a somatic sense of ‘tingling’ in the hands reported by many people in ASC.³ Perhaps the patterns were created before pressing the hand onto the rock. If however pigment was removed from the rock face *after* the hand had been applied and withdrawn, this precise act would constitute another stage in the ritual of engaging with the veil that separated this world from the spirit world. Indeed, the precision of the ‘decorations’ suggests that these patterns are not the result of certain areas of pigment simply adhering to the rock more effectively than others. Similar ‘decorated’ handprints are found throughout the Greater Southwest (e.g., Schaafsma 1980: 119, plate 11).

Other remarkable handprints are those with missing thumbs at Meyers Springs (Kirkland & Newcomb 1967: plate 70). As in western European Palaeolithic caves, these are not representations of mutilated hands (Lewis-Williams 2002; Morley 2007). Rather, like the outlined figures and missing body parts described above, fingers (and parts of fingers) disappeared in the spirit world behind the rock face. Another somatic experience of ASC related to handprints (and footprints) is polymelia; some hands have extra fingers.

2) Potent pigment and superpositioning

Rock art images are powerful ‘things in themselves’. Many indigenous groups consider the very pigment used to create pictographic rock art to be powerfully imbued with supernatural potency (Erlandson *et al.* 1999; Lewis-Williams 2002; Whitley 2005: 143; Robinson 2006: 236–238). In some parts of California, the word for ‘paint’ was the same as the word for ‘supernatural spirit’ (Hann *et al.* 2005.; see also Whitley 2005: 9). Also in California, red pigment was sometimes obtained from sacred quarries and hot springs – special kinds of transcological portals (Whitley & Dorn 1984; Whitley *et al.* 2005). Pigment was traded over large distances (Kelly 1932; Ray 1963; Franklin & Bunte 1994; Whitley 2005). As mentioned earlier, hunter-gatherers in west Texas sometimes used valued deer fat and marrow to bind pigment to the rock face (Boyd 1993; 2003: 24; pers. comm.; Ilger *et al.* 2005; Reese *et al.* 1996a; 1996b). Animal and human blood has also been found in binders (Reese *et*

³ See also Lewis-Williams & Dowson (1988: 210) for reports by nineteenth-century San shamans.

al. 1996a; 1996b; Scott *et al.* 1996; Rowe 2001; Whitley 2005). Similarly, and reminiscent of the smeared vulva motifs in the Plains and the smeared hole at Meyers Springs, the southern African San believed that pigment ‘dissolved’ the rock face veil and allowed images of and from the other world to slip through. Pigment, like the rock art motifs themselves, is sometimes considered powerful in a dangerous way; as noted above, rock art, like electricity, is potentially harmful. In south-central California, for example, touching rock paintings and rubbing one’s eyes was said to lead to death (Zigmond 1986). Because art ‘performs’, we should always ask what it can *do* (Boyd 2003: 106).

Some rock shelters acquired more and more potency as the quantity of pigment and powerful images piled up, one layer on top of another (Lewis-Williams 2002: 161); at least 30 of the Trans-Pecos sites have some form of superpositioning (Fig. 7.27). Superpositioning is clearly *not* a consequence of the lack of suitable or unadorned rock surfaces on which to paint or engrave; often, we find sites where most of the rock wall is bare, with images concentrated in a relatively small area. At sites like Tall Rockshelter, large quantities of pigment and binder were prepared and applied to large areas and in many layers, further evidence that paintings were not idle doodles because of the time and labour required to create the art.



Fig. 7.27. Unusual form of superpositioning at Red Buffalo site: geometric engraving (c. 20 cm wide) *over* red pigment smears.

3) Grooves and tally marks

There are grooves (Fig. 7.28) and tally marks (Fig. 7.29) at many sites in the Trans-Pecos and farther afield (e.g., Keyser & Klassen 2001: 295–296). As we saw in Chapter 1, Smith (1925: 8–9) suggested that certain rock grooves were the result of sharpening tools specifically to make petroglyphs. Many sites in the Trans-Pecos however have grooves in relatively inaccessible places, and the sites themselves are often far from the nearest petroglyphs. I argue that grooves were not used simply for sharpening tools (Feyhl 1980; Sanger & Meighan 1990: 30): as with cupules, it was primarily the interaction with the shamanistic world behind the rock face that mattered. Perhaps ritual abrading or incising of the rock surface transferred potency within the rock to the tool and the person using it (Keyser & Klassen 2001: 295). The same emphasis on process also applies to the production of ritualistic tally marks, entoptic motif 2 (Keyser & Klassen 2001: 100–101, 295–296; see also Lewis-Williams & Blundell 1997). The simplicity of these and other geometric motifs – simple in a narrow Western sense – is best explained by stressing process rather than product (e.g., Heizer & Clewlow 1973: 5; Schaafsma 1980; Whitley 2005: 95).⁴



Fig. 7.28. Cupule and grooves on a vertical surface at Pourover site. In the Trans-Pecos, at least 29 sites have deeply incised grooves.

⁴ At Columbia Plateau sites to the north of Texas, painted tally marks were associated with shamanistic vision questing in both prehistoric and historic contexts. Early informants reported that the marks enumerated spirit helpers and, sometimes, days spent fasting at a particular site in order to experience ASC and enter the spirit world (Keyser & Klassen 2001: 100–101, 296).

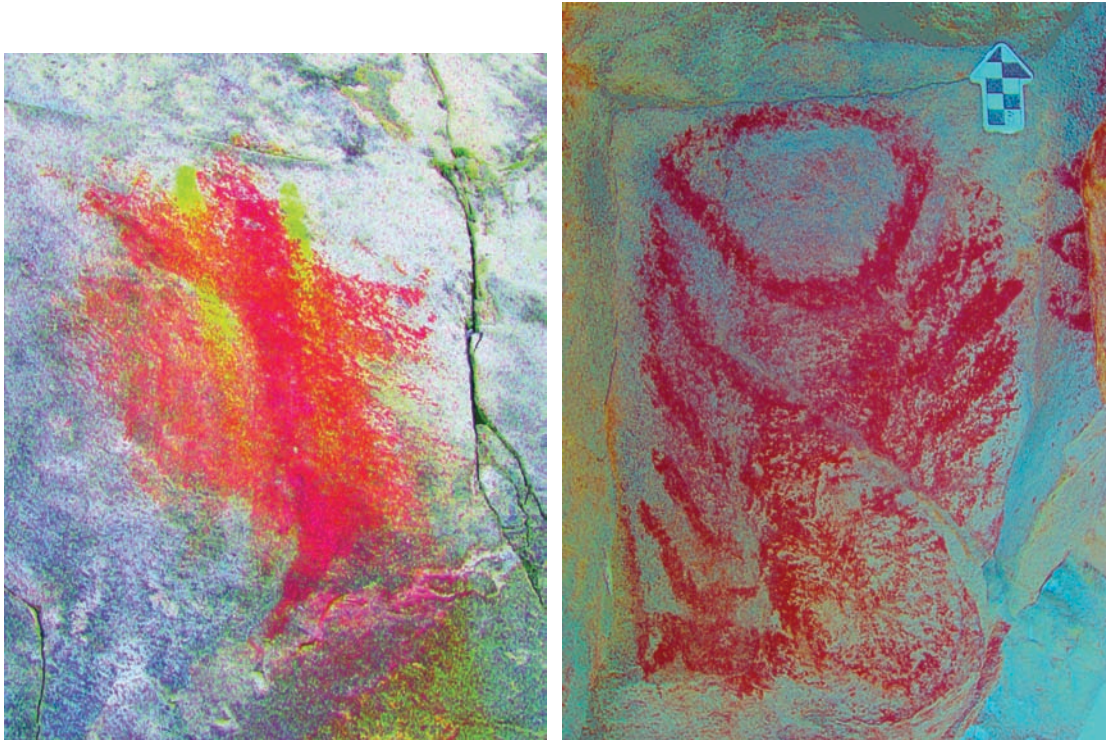


Fig. 7.29. Vertical 'tally marks' at Woulfter. Each mark is c. 1–2 cm tall. At least 34 Trans-Pecos sites have some form of tally marks or sets of painted parallel lines (entoptic motif 2).

4) Smearred, rubbed, scratched, and chipped pigment

There is little ethnographic evidence on precisely what happened to potent rock art images after they had been made, and how and by whom they were consumed or used during the final (but not necessarily finite) stage of the *chaîne opératoire*. But some images, like the 'palettes' in southern Africa (Chapter 4), were clearly meant to be touched (Lewis-Williams 2002: 160).

Present in at least 14 Trans-Pecos sites, smeared, rubbed, scratched, and chipped patches of pigment are remnants of tactile encounters between human skin, or a specially selected lithic tool, and the rock surface veil (Figs 7.30–7.33). These pervasive, active, immediate, and intimate encounters were both facilitated and accentuated by the potency in the pigment and binding agents *after* these materials had been applied to the rock. The creation of rock art was thus "an externalization of the individuals' sentience in an expression of motion and pigment" (Highwater 1982; see also Robinson 2006: 231). Later, touching the images on the rock surface "may have activated the '*atiswin* [potency] of entities both nearby, and in the extended environment" (Robinson 2006: 239). Additionally, by touching the images after they were made, certain members of shamanistic societies came into physical contact with the spirit world and its inhabitants – in this way rock art was *used*.



Figs 7.30 and 7.31. Smearing polychromatic anthropomorph (c. 30 cm tall) with outstretched limbs at Manzanillo (left). Right: The lower half of this geometric motif (nested U-shapes and circles) at Bundy has been rubbed. Both images are too high up for animals to reach.



Fig. 7.32. The white patch of pigment at Cosmic shelter has been scratched and wiped.



Fig. 7.33. Dotted line indicates unusual scored but unpainted ear (c. 10 cm long) at White Deer shelter. The painting is unusual because although the *act* of scratching was important in itself, most scratch marks in the Trans-Pecos are *over* pigment.

Chipping pigment (Figs 7.34–7.36) was not necessarily a form of vandalism or obliteration, regardless of which groups the original artist and subsequent ‘chipper’ belonged to. There is evidence in South Africa demonstrating that subsequent herder and agriculturalist groups painted over or chipped earlier San art to harness its inherent potency; subsequent groups believed that the efficacy of the hunter-gatherer art continued long after the original artists perished or migrated. For these reasons, *pace* Roberts 2005, I refer to the chipping of pigment as ‘ritual removal’ rather than ‘ritual obliteration’.



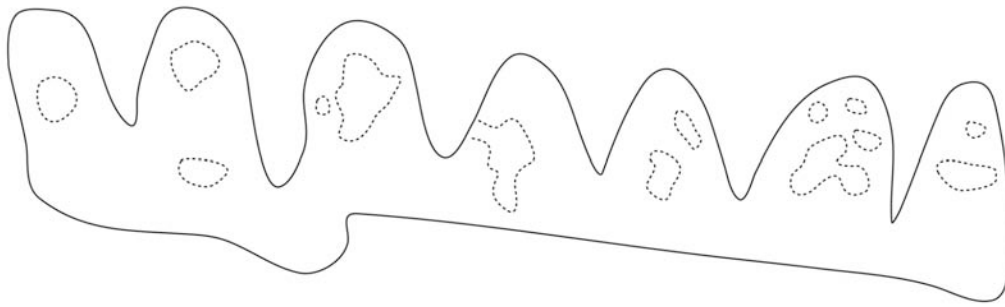


Fig. 7.34. 'Ritual removal' at Auras Canyon; the chipping of potent pigment from each red geometric triangle was deliberate and precise. Each triangle is c. 5 cm tall.



Fig. 7.35. 'Ritual removal' of pigment from shamanic anthropomorph (c. 15 cm tall) at Panther Cave in the Lower Pecos.

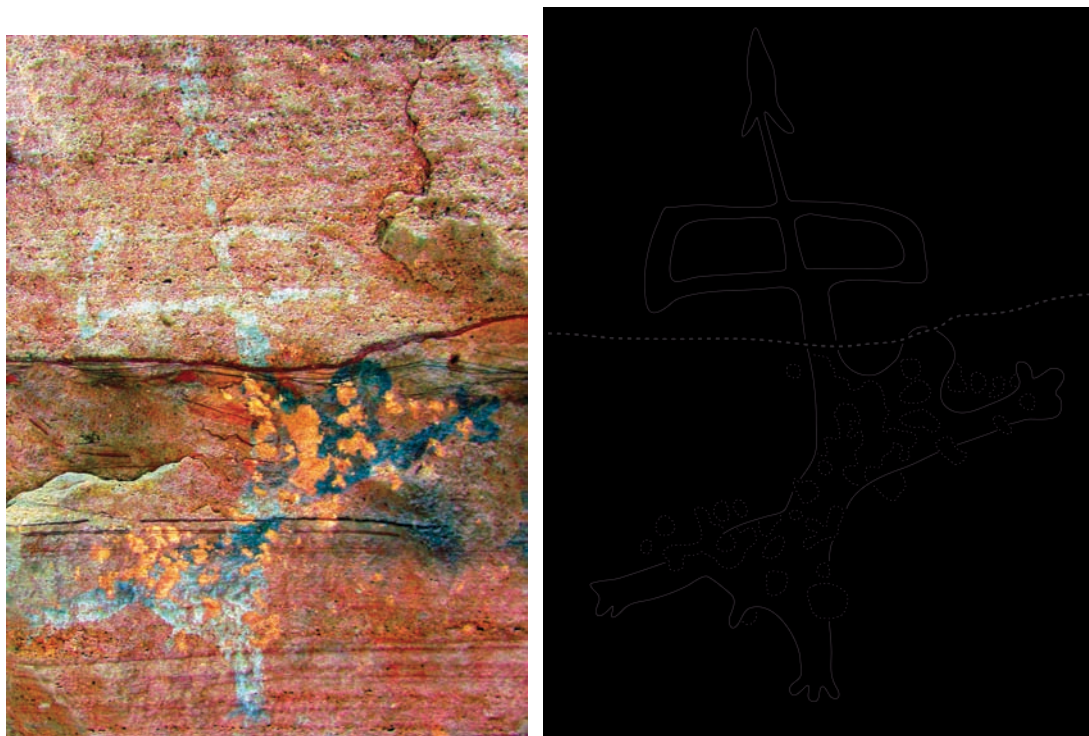


Fig. 7.36. 'Ritual removal' at Tablecloth; the pecking of the black and white spread-eagle anthropomorph is precise and deliberate. The bowman's head is c. 1 cm in diameter.

7.5 Embodiment and consumption of rock art: acts of immersion and transference

Although I have deliberately paid little attention to macro-topography, the physical properties of both rock art images and of the space in which people viewed and engaged with those images are important (Tilley 1994; Bradley 2000). Until we understand these properties, we shall not fully grasp the significance of the production and consumption of rock art. Physical properties of both image and engagement space necessarily impact the human body, through 'immersion', 'transference', and transformation (Chapter 5; see also Blundell 2004: 158).

As we saw in Chapter 3, at many Trans-Pecos sites – Woulfter, Gomez Peak, Point of Rocks, Jaguar Cave, Tablecloth – rock art motifs are often small and detailed, and in relatively inaccessible and cramped spaces. This has led many researchers in other regions to differentiate between 'public' and 'private' rock art. Although it is likely that some rock art sites were more 'private' than others – perhaps fewer rituals and vision-quests were conducted there, and by fewer ritual specialists than at other, more 'public' sites – I reject this binary distinction. The terms 'public' and 'private', often employed without due care, do not necessarily apply to hunter-gatherer societies.

I concentrate instead on the *act* of seeing and ‘using’ the images. Earlier, I discussed tactile engagements with images on the rock face. Because of the need to get close to the pictographs and petroglyphs to see them, even if people did not touch the rock face they became ‘immersed’ in the images simply by viewing them (Blundell 2004: 167). Jamake Highwater (1982: 55), a Native American philosopher, artist, and dancer, believes that the concept of immersion is an act that goes beyond mere viewing. Immersion stems from “primal” – as opposed to Western – thinking. Drawing from Merleau-Ponty’s phenomenology, Highwater (1982: 55) believes that in the Western world the

“conceptualizing” of art into something special called “Art” produced a wide separation between commonplace experience and *specialized* forms of expression. ... [Whereas for] primal peoples, on the other hand, the relationship between direct experience and expression has remained so direct and spontaneous that they usually do not possess a word for art.

As discussed in Chapter 5, Native Americans and other indigenous groups immerse themselves in ‘art’ and then ‘transform’ – that is, they “know something by temporarily turning into it” (Highwater 1982: 61). This notion is akin to ‘knowing by becoming’ – a notion more easily achieved in dreaming or in other altered states. Importantly, ‘knowing by becoming’ can take place before, during, and after the production of rock art.

I am not suggesting that Westerners are incapable of transformation, transference or immersion; nor do I condone Highwater’s (1982) implication that Western:non-Western is a strict binary opposition. Blundell (2004: 167) cites the example of Wassily Kandinsky (1866–1944), a Russian painter who suffered from synesthesia and who is sometimes called the progenitor of ‘spiritual art’. Similarly, Chipp (1968: 546–548; see also Tegarden 2005: 97) cites the US artist Jackson Pollock:

On the floor I am more at ease. I feel nearer, more a part of the painting, since in this way I can walk around it, work from the four sides and literally be *in* the painting. This is akin to the method of the Indian sand painters of the [American] West. ... When I am *in* my painting, I’m not aware of what I’m

doing. ... I have no fears about making changes, destroying the image, etc., because the painting has a life of its own.

The production and consumption of rock art images in west Texas involved not only the topography of the individual sites, and small and detailed imagery, therefore, but also the neurological evidence of ASC, in which there is a blurring of body, rock art image, and identity. As with San viewers of southern African rock art, people engaging with west Texas pictographs and petroglyphs might have seen projections of themselves moving across the painted and engraved panels. Other viewers may have felt themselves merge with the images, and, in some cases, as the distinction between image and viewer eroded, “transference would have taken place and the viewers of the images would have become the images themselves” (Blundell 2004: 169). In nineteenth-century Nomansland (South Africa), for example, shamans standing in rock shelters and viewing the art would thus have *become* their rock art ‘portraits’ (Blundell 2004: 169). In both South Africa and the Trans-Pecos, as with Klüver’s (1966: 71–72) well-known report on a physician’s mescal-induced visions, ‘The image is I’ would have been an appropriate phrase:

The subject stated that he saw fretwork before his eyes, that his arms, hands and fingers turned into fretwork. There was no difference between the fretwork and himself.... ‘The fretwork is I’.

Once we have accepted that there are many widespread and intelligible motifs throughout west Texas that confirm the centrality of somatic transformations, supernatural potency, and concepts of a tiered shamanistic cosmos – in both prehistoric and historic knowledge systems – we are in a better position to understand the significance of associated but hitherto enigmatic motifs, and how one region differs from the next.

CHAPTER 8

Re-considering rock art regionalism and cultural identity

Using anthropological and archaeological approaches, I have

- recovered some of the meaning(s) and motivation(s) behind the production and consumption of rock art in specific regions: Trans-Pecos Texas and Kruger National Park, South Africa.
- interrogated previously held notions of rock art regions, both theoretically and in practice.
- contributed to sets of rock art data.

I demonstrated in Chapter 1 that early rock art researchers introduced some of the intellectual concepts that still govern problem-oriented research today. Rock art researchers in the USA and South Africa helped shape the discipline of cognitive archaeology.

After introducing the archaeology and people of Trans-Pecos Texas, and considering how both changed through space and time (Chapter 2), I described rock art motifs at 44 Trans-Pecos sites (Chapter 3). I categorized these images so as to facilitate study of their *significance* – the meanings and motivations behind their creation.

In Chapter 4, which introduced motifs at 44 sites in and around Kruger National Park in Mpumalanga Province, South Africa, I developed a methodological framework for clarifying nuances within and between rock art regions. I argued that we learn more about regional rock art corpuses by defining regions and styles according to the presence and absence of ethnographically informed, diagnostic, and intelligible motifs – rather than by formal aesthetic analysis. In the Kruger area there are at least six recurring San motifs that are best explained within a shamanistic framework.

Returning to Texas in Chapters 5 and 6, I used the neuropsychological model, ethnographic analogy, and a shamanistic framework to address the origins and significance of six classes of Trans-Pecos motifs: horns and headdresses, projectile

point/human figure confluents, an emphasis on deer and death, liminal species (turtles and Thunderbirds), Mesoamerican- and Mogollon-influenced motifs (Quetzalcoatl, Tlaloc, and 'masks'), and post-European contact art (horses, cattle, weapons, and priests). That all but the point/human confluents are present in other American rock art corpora should not surprise us: in one form or another, there were shamanistic societies that produced rock art throughout the North American continent. Chapter 6 also confirmed that the boundary between the western and eastern Trans-Pecos can be defined according to the presence or absence of Mesoamerican- and Mogollon-influenced motifs.

In Chapter 7, I employed embodiment theory – another anthropological and sociological approach – to underscore the significance of Trans-Pecos motifs within a shamanistic framework. Like many images throughout North America, certain motifs in the Trans-Pecos feature somatic distortions or emphases; others demonstrate that the *process* of creating the art was as important as the product. I concluded Chapter 7 by showing that interaction with the shamanistic 'veil' that separates one tier of the cosmos from others was important to eastern and western Trans-Pecos groups both during and *after* the creation of rock art.

Going forward

I hope this work will lead to further research and raise the profile of rock art analysis in understudied regions. Ongoing surveys in west Texas and Mpumalanga continue to yield undiscovered archaeological sites and, particularly in places threatened by erosion or development, there is an urgent need for excavation. Absolute dates for rock art motifs may help tie them to cultural deposits and enable us to ask further meaningful questions about the relationships between the two classes of material culture: images on the rock face and artefacts in the ground.

Many specific questions remain: When exactly did people arrive in the Trans-Pecos? From where? Why are some rock art sites painted and others engraved? What are the specific relationships between petroforms and other forms of rock art in the Big Bend? In more recent years, how exactly did indigenous groups interact with colonizers? At least three more years are necessary to answer these questions. Further work will flesh out the comparative regional framework outlined in these

chapters and enable us to focus on more specific questions of ideologies, creolization, and change through time.

Rock art today

The precise effect that rock art motifs had in hunter-gatherer societies in the past, both before and after contact with agriculturalist and colonial settlers, is hard to determine. What is clear, however, is that like most (if not all) art, rock art motifs were *significant*; they constituted, reproduced and occasionally subverted beliefs and social relations. Rock art images were powerful. This was true in the past; it is still true today.

During the hundred and more years since archaeology became a professional academic discipline, indigenous groups have struggled to regain land rights and even to exist within a framework fashioned and controlled by Western cultures. I argue that the presentation of rock art to the public, however, can and does change people's attitudes towards rock art, indigenusness, and cultural identity (Hampson 2004).

On the individual, group, regional, or larger scales, cultural identity is a recurring theme in the social sciences (e.g., Bourdieu 1977; Giddens 1984; Shennan 1989; Miller 1994). Far too often, however, writers do not specify *how* identities are formed and revised. This omission often leads to the idea that identity formation is an end in itself, the ultimate goal of all cultural processes; this approach to identity has been labelled essentialist or 'primordialist' (Rowlands 1994: 132; Blundell 1996: 12). In contrast, Malkii (1992: 37) and others define identity as "always mobile ... partly self-construction, partly categorization by others, partly a condition, a status, a label, a weapon, a shield, a fund of memories". I prefer this approach to identity, which has been termed 'interactionist' (Rowlands 1994: 132; see also Blundell 1996: 12); it is useful when addressing the ownership and presentation of rock art sites.

Every year, more and more indigenous archaeological sites are opened to the public as heritage attractions, but the methods of presentation at those sites are rarely scrutinized (cf. Blundell 1996; Hampson 2004; Smith 2006). Some presentations emphasize theoretical concepts that challenge visitors' commonly held misconceptions of the indigenous people who made rock art. Thoughtful heritage

managers at public rock art sites are interested in cultural identity as well as practical conservation issues.

Although the people who visit rock art sites are part of a public that comprises manifold and ever-changing communities, there are widely shared beliefs about indigenosity, self and 'other' (Blundell 1996). As I have shown elsewhere (Hampson 2004), some of these beliefs extend across continents. In Appendix A, I focus on public rock art sites in South Africa, but many of the issues are also relevant in the Texas Trans-Pecos.

Because rock art sites are implicated in cultural identity formation today, there is an urgent need for theoretically informed presentation and for educational campaigns against negative stereotypes of rock art and the people who made it. Further research will ensure appropriate presentation of potent rock art sites in South Africa, the USA, and worldwide.

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APPENDIX A

Presenting rock art: indigenous identity, national parks, and public rock art sites in South Africa

- 1 *The nature of national parks*
- 2 *Cultural identity: its shaping and presentation*
- 3 *Kamberg Rock Art Centre: images of power*
- 4 *Wildebeestkuil Rock Art Centre: rock art and respect*
- 5 *Conclusion: Presenting rock art, challenging prejudice*

Two new rock art visitor centres opened recently in KwaZulu-Natal and the Northern Cape Provinces, South Africa (Laue *et al.* 2001; Hampson 2004; 2005; Mazel 2008; Morris *et al.* 2009; Ndlovu 2009). Both visitor centres present rock art in a challenging and exciting new way.

Theoretical literature on presentation at archaeological sites is scarce (cf. Gathercole & Lowenthal 1990; Pinsky & Wylie 1990; Bond & Gilliam 1994), and little has been published on the visitor experience at the new South African rock art sites since they opened to the public (cf. Mazel 2008; Morris *et al.* 2009). This appendix is not a descriptive account of the sites, but rather an analysis based on first-hand observation of ways of presenting rock art. Examination of public perceptions towards rock art and indigenesness, I argue, leads to greater insight into how presentation influences those perceptions. To turn theory and fieldwork into a presentable form, I divide this appendix into five sections.

1 The nature of national parks

The word 'paradise' derives from a Persian word describing a walled and cultivated garden, often enclosing an oasis in the middle of the desert. The earliest parks, therefore, were areas of 'culture' surrounded by 'nature' (Jones 1985: 305). Since the nineteenth century, however, this concept has evolved, and national parks are now thought of as pristine natural areas surrounded by culture and 'civilization'.

In the USA, certainly, the wild western frontier was declared tamed by the government – and 'national unity' finally achieved – by the 1890s, albeit at

admittedly great social and psychological cost to both colonizer and colonized. The American character – referring explicitly to the character of the victorious colonizers – was redefined in terms of individuality, resilience, and resourcefulness. In turn, preservation of the alleged ‘wilderness’ was seen as key to the preservation of national-cultural values. In the twentieth century, as the idea of national parks caught the imagination of the world, nation-states developed national parks as surely as they acquired national flags and anthems.

Yellowstone – the first official national park in North America, and, indeed, the world – was established in 1872 on ‘natural’ land perceived to be economically worthless. Tellingly, the fact that this was also a cultural landscape peopled by the Sheepeater Native Americans was overlooked, even concealed, until recently (Nabokov & Loendorf 1999). Indeed, land use within national parks was, and still is, usually managed to protect the habitat and biological diversity of the core ‘wilderness’ area, rather than to support indigenous people and indigenous activities such as hunting and fishing. This lack of support stems partly from the fact that the managers of national parks have always struggled to fully grasp the concept of a national park peopled by indigenous groups.

Yellowstone National Park was created not merely to preserve the putative wilderness. It was also intended to bolster the burgeoning tourism industry, and to promote both national prestige and unity. The creation of national parks in areas far from urban settlement was sponsored by the cult of patriotic ‘monumentalism’: Europe may have had impressive cathedrals and palaces, but the Americas had grand and allegedly untouched landscapes (O’ Riordan 1976: 4). This helped encourage the paradoxical myth that national parks are unpeopled yet sacred sanctuaries, at the same time that they were designated as areas for tourist use and recreation.

Globally, the development of national parks on the Yellowstone or ‘multiple-use’ model patently devalues the role of indigenous people and indigenous resource management. Ironically, this has often led to the inability of parks to accommodate the exponential growth of tourism that has occurred worldwide. As a result, the multiple-use model – a system that attempts a compromise between the competing interests of exploitative resource use for profit, and the conservation of nature – is a

management principle increasingly challenged by the ecosystem model. This alternative, with its echoes of animism, is based on the premise that all parts of the ecosystem, including humans, animals and natural processes (such as burning)¹ are inter-related (Lawrence 2000). Park environments are no longer seen as static, self-maintaining and enclosed.

How does a national park, then, as a place in a state of wild *nature*, change when it is acknowledged to be also a place of *human* culture with indigenous inhabitants who care for the land, fundamentally shaping its natural state and ecology? Although 'indigenoussness' is a difficult concept to define, 'original' inhabitants of some national parks are clearly not extinct, reduced to the static material traces archaeologists try to understand.² The concept of a national park will change again when it is fully realized that indigenous people are active in the world today, with their own understanding of what is and is not fitting in national parks. This applies to almost all nations in the world today.

Indeed, the retaining of the word 'national' is a reminder that this concept still embodies frameworks of national identity and nationhood, beyond the concerns of the immediate place and region. That larger constituency is now further taken to encompass the whole human world: the South African national park I consider below is recognized as World Heritage Sites. Ironically, at the same time, the nation-state has been weakened as it fails sufficiently to accommodate the special concerns and the local loyalties of indigenous groups and communities within itself.

2 Cultural identity: its shaping and presentation

Like the land itself, archaeological artefacts and rock art images are valued and presented by different people in different ways: whoever owns and controls them determines how they are 'used' (McBryde 1984). Ownership is key because neither

¹ It is now generally accepted that decades of fuel build-up in Yellowstone drove the catastrophic blazes of 1988 (Spence 1999).

² The term 'indigenous' is clearly understood at the time of settler contact, but miscegenation and other two-way discourses result in arbitrary definitions of indigenoussness over time. Definitions are further complicated when indigenous people reside in national parks created by non-indigenous government for use by tourists (see below).

academics nor heritage resource managers operate in a social or political vacuum: the study and presentation of long-term social processes and development of essential human traits can reproduce and challenge the social inequalities of today (Lewis-Williams 1995c). Rock art especially can be and is championed, used and manipulated in and without national parks as political and cultural identity symbols and as links to past eras. It is even less under the command of heritage professionals than are more technical materials like stone tools.

The management of rock art sites involves decisions made in the present-day socio-political *milieu*. Owners and managers cannot present the past without interfering with it. They can, however, be transparent about decisions regarding the presentation of rock art sites open to the public, and they can challenge existing views of indigenous people and of why they produced rock art. In South Africa, a rock art tradition has ended – and many people are beginning to regret this. By contrast, in other regions and countries, such as northern Australia (see Hampson 2004), a rock art tradition has – and always has – been revived and manipulated according to the goals of the present-day. A key question here is: How can indigenous and non-indigenous owners and managers communicate these concepts at rock art sites open to the public?

In this appendix, I take three heritage themes – rock art, national parks, and cultural identity – forward in parallel. Each is introduced in the following section (Kamberg), then further developed and explored through a second case study (Wildebeestkuil). In this way, I demonstrate that the presentation of public rock art sites can and does make a difference, challenging visitors' preconceptions of rock art and the indigenous people who made it.

3 Kamberg Rock Art Centre: images of power

Kamberg Rock Art Centre, opened in 2002, is a new tourist venture that presents Maloti Drakensberg rock art in a way not attempted before (Fig. 1). The centre is situated in the Ukhahlamba–Drakensberg National Park, which was created (as a small game reserve) in 1903 and recognized by the World Heritage Committee in 2000 for both its natural and cultural values. The South African park and its neighbouring lands in Lesotho cover 2,430 sq. km (940 sq. miles) and are famous for their cold and lonely heights and their herds of wild antelope. Indeed, the park

certainly fits the natural ideal: the 'barrier of pointed spears' (Ukhahlamba) ridge of the high mountains, still without any road, catches snow every month of the year (Fig. 2). This is land in a state of nature, land without people – other than tourists who come to this land *because* it is without people.

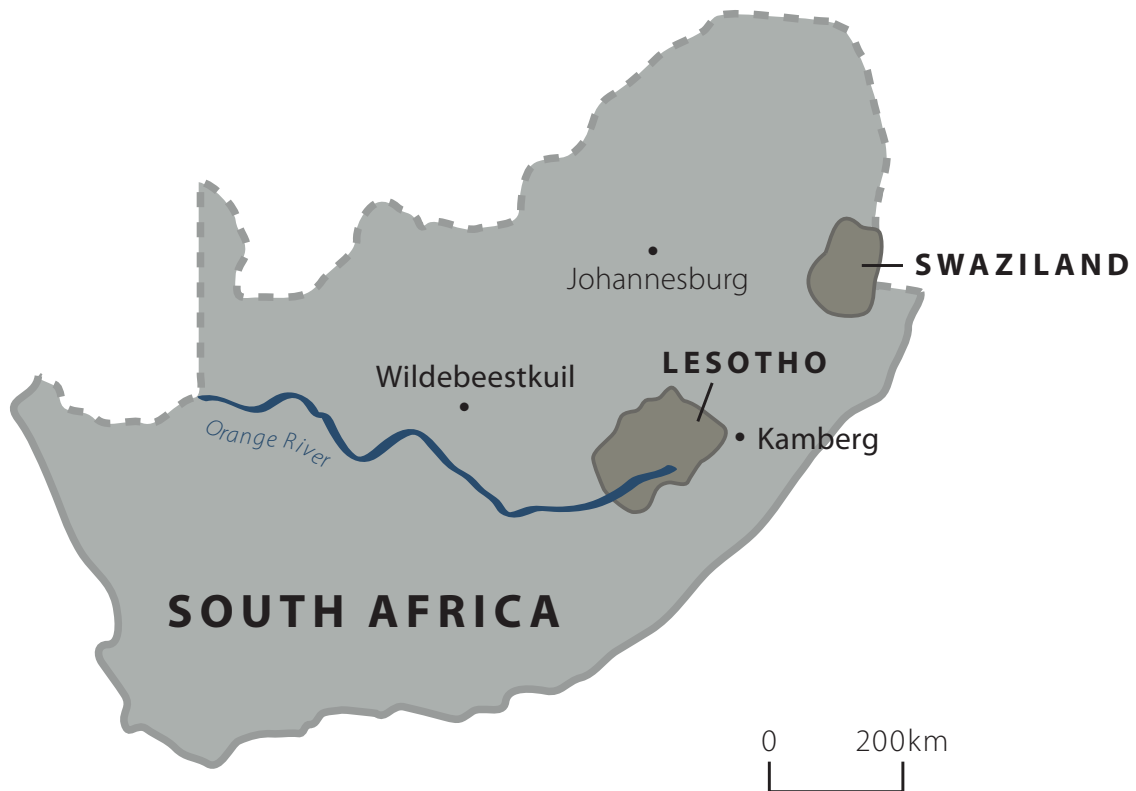


Fig. 1. Map of South Africa showing the two new visitor centres. To the west of Kamberg lies the mountainous and landlocked country of Lesotho.



Fig. 2. View of Ukhahlamba-Drakensberg National Park from Game Pass rock art shelter.

Few visitors realize, however, that it is without people because the indigenous San hunter-gatherers of its fastness were shot out in the 'Bushman wars' of the nineteenth century, when the last San (Bushman) hunter-gatherers came down from the mountains to capture the cattle of the white settlers.

People of *other* ethnicities – some of whose farming forebears intermarried with the hunter-gatherer San – now live on and around the park borders. Indeed, Nguni-speaking farmers were moved from other areas during and after the Bushman wars to make a frontier zone intended to stop the raids on the colonists below. In this cultural conflict, the San perished, while the crowded villages of the Nguni-speaking subsistence farmers still shape the cultural landscape today (Wright 1971: 93–113).

Inside the park, rock paintings (Fig. 3) are the chief sign of culture, the chief trace of its former people and poignant memorials of the San. Public rock art sites have the potential to show that these images are not the naïve doodles of innocent and child-like primitives – “monkey-men” as guides used to tell visitors to Main Caves, the principal public rock art site – but the subtle and profound religious images of a complex civilization. How to make this complexity clear and challenge negative attitudes to the San? How do tourists perceive the rock art and the original artists? How is this culture to be understood in a land of nature, a nature transformed

through the tragic story of its recent cultural history? Who are *now* the indigenous people of the Drakensberg?



Fig. 3. San rock paintings at Game Pass shelter. Note the eland antelope, the large cloaked shamans (c. 50–80 cm tall), and the superpositioning of pigment.

Once a national park is admitted to be a cultural, not just a natural place, the question follows, what kind of cultural place? The wilderness model will not be of help here, since it is driven by natural ecology. Culture should be defined in terms of the indigenous people of that particular part of the country.

The term indigenous is notoriously difficult to define. Interactionist cultural identity is self-defined and also imposed from without (Malkii 1992). The concept of an original people is fine for the first human presence in an unpopulated land, and the division between indigenous and immigrant is clear at the moment of first contact, when the immigrant ship touches the indigenous shore, but miscegenation and other two-way discourses result in arbitrary definitions of indigenusness over time. This is especially true in South Africa and other countries where a substantial proportion of people are descended from European immigrants. What is less known, however, is how substantial and varied were the movements of African peoples, of varying languages, types of subsistence and ethnicities, over the last several or many

hundred years, as the varied evidence of language, archaeology, and oral history shows. Denial of this complex process reached an extreme stage in the late *apartheid* era, when an attempt was made to divide non-European South Africans neatly into distinct and defined groups each with a 'homeland', a place where they properly belonged – whether or not they did or ever had actually lived there.

In colonial and *apartheid* South Africa, the people at or near the bottom of the racial heap were the Khoesan (Khoe pastoralist and San hunter-gatherer) communities, descendants of the 'Hottentots' (Khoe) and Bushmen (San) encountered as backward grotesques as the Cape was colonized. If long-term continuity of a presence in southern Africa was to be the deciding factor, it is these people who had and have the best claim to be indigenous. The archaeological and historical evidence is unambiguous: the Khoesan of today descend from those hunter, gathering and pastoralist peoples whose presence is attested long before the iron-using and farming peoples came to occupy the land from around 2,000 BP (Mitchell 2002).

3a South African rock art images as symbols of power and reconciliation

Thus, the Khoesan people came to have a special place in the symbolism of the 'new' South Africa, a symbolism that was before long embodied in rock art imagery. After the collapse of *apartheid*, how was the new South Africa, a rainbow nation with eleven official languages, to be given a unity? Like all nations, South Africa is an "imagined community", because most of its members will never meet even a small fraction of its fellow members (Anderson 1983; Chippindale pers. comm.). Where was a common and honourable past to be found, after a recent history of so much division and oppression?

Heritage management has become "the most important sphere in which contests over South African pasts have been taking place" (Rassool 2000: 21).

In the new South Africa, archaeology – especially rock art – plays a special role in identity formation: it promises a history for all.

Rock art already occupies an important place in South Africa today, both metaphorically and literally. Two figures from rock art are the central and human element on the new national coat-of-arms (Fig. 4) that also appears on every South African coin (Smith *et al.* 2000: 468; Lewis-Williams in press). The San figures are a

conscious historical reference intended to escape the colonial legacy and the racial divisions of the old South Africa; they represent “a heritage that unites all South Africans in common humanity” (Smith *et al.* 2000: 468). President Mbeki saw the figures as evoking South Africa’s distant past, in a country that stresses the importance of embracing the indigenous belief systems of its people (Smith *et al.* 2000: 468). People of South Africa are searching for new symbols of power, new rallying points needed for a new society. Rock art images fit the bill.



Fig. 4. South Africa’s coat-of-arms. The motto, which translates as “Unity in diversity”, is in an extinct San language.

All entities, all identities have their history. Khoesan identity, manifested in the national coat-of-arms, is not passive or neutral. Changes in identity and status over future generations in South Africa might possibly echo the inversion of comparative status that took place in immigrant Australia in the twentieth century. Many European immigrants arrived in Australia as condemned convicts, and governments branded them with that ‘stain’. Until, that is, national confidence grew, and having been in a family of founding Australians seemed praiseworthy: many came to like the raffish idea of a (mildly offending and unfairly punished) law-breaker in the family – the ‘stain’ became a mark to be proud of. Will South Africans in the late

twenty-first century come to celebrate and even seek a Khoesan strain in their ancestry as governmental attitudes change?

Designating the Khoesan as the bridge between the national past and future is a complex process, and this complexity is often overlooked. Indeed, negative stereotypes of the Khoesan pre-date modern conceptions of *apartheid*. In the 1920s and 1930s, Donald Bain laboured in South Africa to establish a reserve for the San in order to save them from what he perceived as their certain extinction (Blundell 1998: 154). In this way, Bain moved between 'savage' and 'civilized', and established himself as an expert on the relationship between 'them' and 'us' within the newly independent nation. Now, the post-*apartheid* South African government has attempted to form the nation's identity around something that makes it unique – the San. A perception of Khoesan as nothing more than mediators, however, opens the door for misappropriation of their art and the perpetuation of stereotypes. The use of indigenous people in identity formation often objectifies those people as homogenous entities frozen in a mythic time, and sometimes overlooks their very existence today.

Indigenous people have been discriminated against ever since first contact and the divisions between 'us' and 'them', 'self' and 'other'. Contrary to widespread belief, hunter-gatherer tradition is not timeless, static or a-historical. Tradition – often considered by Westerners as synonymous with authenticity – is correctly defined by its continuity rather than by its lack of change (Akerman 1995).

Academics should champion this definition. Withdrawal from the political arena means missing an opportunity to influence how the Khoesan are portrayed as indigenous peoples. Incorporating the Khoesan and other indigenous groups into national identities will, in any event, continue without academic intervention. In South Africa, the new coat-of-arms, with its central San figures and San motto chosen by archaeologists and linguists, has raised the profile of indigenous issues.

Attitudes towards the Khoesan and other indigenous groups can also be altered by the way rock art is presented at public sites. At the two South African rock art sites I examine below, there are innovative new visitor centres, ventures concerned with conservation, job creation, tourism promotion, and challenging attitudes towards

indigenous people. The dual function of rock art as a source for research and educational purposes and a resource for tourism income and employment will benefit not just academics but also – and more importantly – impoverished local communities.

As mentioned above, Nguni-speaking guides at Kamberg are from societies that have lived close to the rock art for centuries, but, despite some miscegenation, are not themselves very closely related to the original artists. The Kamberg guides consider themselves first and foremost to be Nguni rather than Khoesan, although some are becoming more proud of their Khoesan ancestry. Guides at the other site, Wildebeestkuil (below), have not lived in its region for long, but consider themselves Khoesan and therefore closely related to the original artists (Ndlovu 2009).

3b Logistics and presentation at Kamberg Rock Art Centre and Game Pass shelter

The Kamberg Camp resort, run by Ezemvelo KwaZulu-Natal Wildlife, was – despite its excellent accommodation options – close to bankruptcy until the re-development of Game Pass rock art shelter and the Kamberg Rock Art Centre in 2002 (Laue *et al.* 2001).

The Trust that runs the centre today has three broad aims in developing rock art tourism there:

- 1) to benefit all South Africans by informing and inspiring locals and visitors about this proud South African contribution to world heritage,
- 2) to create permanent jobs, and,
- 3) to help protect rock art (Laue *et al.* 2001: 6).

Guided tours to Game Pass shelter leave thrice daily, and last 2–3 hours; they cost 15 rand (approximately £1 in 2010). Viewing an optional introductory video costs R25. According to the Camp manager, who at present also runs the rock art centre, these fees are too expensive for South African tourists, which explains the low visitor numbers (1 or 2 a day) in winter. In summer there are 200–300 visitors to Kamberg Camp a month, but not all go to the site, a stiff walk up a steep path from the visitor centre. Tea and coffee is available at a café, and guides also sell crafts made by local communities in a shop.

Initially there were ten guides (Fig. 5), now there are seven, all selected by the local Thendela village community. Previously, KwaZulu-Natal Wildlife employed three guides (also from Thendela) to take visitors to unadvertised rock art sites, including Game Pass; they were not trained, and offered no information about the art or the San. Today's guides are trained by members of the Rock Art Research Institute in Johannesburg and receive a pooled share of the R15 for the guided tour and a percentage of the R25 video viewing. They make about R700 (£47) a month plus tips, a reasonable salary in one of the poorer areas of South Africa. The Thendela community, like other communities close to KwaZulu-Natal national parks, also receives R5 a night for every person lodging in the parks, and R1 for every day-visitor.



Fig. 5. Guides and trainers at Kamberg.

I turn now to the visitor experience at Kamberg (see Hampson 2004 for further comments).

The introductory video is controversially designed to evoke powerful visceral responses in the viewer. Critics say it resembles a feature film, and has too many detailed shots that spoil the sense of surprise when visitors first see the actual paintings. Almost all the entries in the visitor book repudiate these claims.

The video opens forcefully: "Listen, listen, just for once, so you should not be ignorant." It focuses on Sotho, Hlubi and Zulu (Nguni agriculturalist) intermarriage

with, and songs borrowed from, the hunter-gatherer San; there are also interviews with Nama (pastoralist Khoesan) descendants. Richard Duma from the local Thendela community states: “We still maintain our San culture.”

The Duma family and others at Thendela where today’s guides live are Nguni-speaking Hlubi, forcibly settled close to the Drakensberg foothills in AD 1849 to act as a buffer between the San and the white colonists. Like many other Nguni-speaking peoples living in the region, the Hlubi had a complex interaction with the San. An exchange of many beliefs is reflected in ceremonies performed in Thendela today, especially by those who claim San ancestry.

Many Hlubi still consider rock art sites sacred. In front of San paintings, children are baptized, offerings are given to ancestors, and healers pray – for, in rock art sites, “prayers will be answered”. Elliot Ndlovu, an Nguni healer with San ancestry states: “You can feel the spirit” because paintings were done “with the blood of the eland”. Rock art sites are still special places.

The literature available at the shop presents a mixed message. Some of it perpetuates stereotypes that the venture sets out to challenge. An official Ukhahlamba-Drakensberg booklet, for instance, states: “Bushmen survived in the Drakensberg for thousands of years where they lived a simple stoneage existence. These small, wiry people [had] ‘peppercorn’ hair and light brown skin.”

A greeting card for sale at the shop challenges these misconceptions, and includes quotes from the KwaZulu-Natal Wildlife pamphlet on San rock art:

The ... paintings of yesteryear tell us about the mythology, ritual and beliefs of the San people. All that remains of this sophisticated culture with its complex symbolic and metaphoric art is the paintings left behind on the rock. ... San art was a religious art rather than art as we know it.

Additionally: “The trail to Game Pass shelter is ... nothing short of a world-class experience in Khoesan rock art and *living* Zulu and San culture” (my emphasis). Visitors are promised more than a dead culture.

Another pamphlet, *A window on the invisible world*, focuses on San beliefs and San languages. Comparison of !Kung-speakers' myths and rituals collected from Namibia and Botswana in the 1970s with those learned from /Xam-speakers in South Africa in the 1870s show an astounding similarity (e.g., Lewis-Williams & Dowson 1999). Such material allows us some insight into the San's world, informing us of the 'trance' or 'medicine' dance, powerful songs, therianthropes, and supernatural potency that permeates the multi-tiered universe (Lewis-Williams & Dowson 1999; Lewis-Williams 2002).

The section entitled 'Metaphors of the other world' addresses Game Pass shelter itself and concludes:

Had the colonists made more effort to engage with the San, they might have questioned the naïve and pejorative assumptions they held about these people: these were not a simple people with crude art but a sophisticated culture with a complex symbolic and metaphoric art.

The pamphlet unashamedly tries to challenge any negative preconceptions visitors may have of the San: visitors should try to avoid the bigoted mistakes the early settlers made. There is also information regarding etiquette at public rock art sites: "Each site is a unique work of art and the artists who made them were like the great masters, such as Raphael and Van Gough [sic], of Western art. Sites such as Game Pass should be treated with the same respect we accord to those great masters." No new graffiti have appeared since the opening of the visitor centre.

Clearly, public rock art sites should possess appropriate infrastructure; this usually includes boardwalks and viewing platforms. At Game Pass, supervision by well-informed guides renders these artificial structures unnecessary. Indeed, it is best to avoid physical barriers where possible (Loubser 2001: 101), because, worldwide, barriers have often proved not only aesthetically offensive and ineffective in affording protection, but also counterproductive, stimulating what Jones (1985) refers to as "larrikinism".

At Game Pass, my guide, who introduced herself as Promise, had great respect for the San. She spoke of them with awe. Her knowledge at the site itself was

impressive: “Here in Kamberg we have ... eland and shamans”. Promise spoke authoritatively about superimposition of potent pigment, therianthropes with large cloaks and “ropes or ‘threads of light’ so shamans could climb to the heavens”, flywhisks as status symbols, and the spirit world. (For further analysis of the rock art at Game Pass see Vinnicombe 1976; Lewis-Williams 1981; Lewis-Williams & Pearce 2004).

I was impressed. But what did other visitors think of Game Pass?

3c Visitors to Kamberg and public perceptions of the San and their art

Visitors’ books give people somewhere to put their ‘graffiti’; they give the appearance that sites are cared for; they record visitor numbers and attitudes, and warn of changes in them (Pearson & Sullivan 1995: 284). Comments in the visitors’ books at Kamberg suggest that attitudes towards the San are changing: visitors feel honoured to be accompanied by local guides, some of whom are descended from indigenous San, with a strong connection to local country – many tourists feel that the visitor experience is “authentic”. Most entries demonstrate that the venture is challenging visitors’ perceptions of the San, and also that visitors appreciate the sophisticated complexity of the art. Promise confirmed this, telling me that the Duma family had only become proud of their Bushman ancestry since people stopped associating the San with “theft and medicine men capable of great evil”. Promise also spoke of regular eland feasts that started in 2003 (see also Ndlovu 2009). With the park manager’s permission, the Duma family, accompanied by a local anthropologist, sleep and pray in Game Pass shelter for one night each year; the following morning, they capture an eland and share the meat with the entire Thendela community.

Since the opening ceremony in 2002, which many Khoesan representatives attended, Thendela people and other South African communities are beginning to realize that the Bushmen “lived well”. As recently as 1999, both public and governmental attitudes towards the San were markedly different. In that year, on Human Rights Day, when 400 sq. km (155 sq. miles) of the Kalahari Desert was returned to the formerly dispossessed =Khomani San, the Main Caves rock art site a few kilometres from Kamberg was re-opened to the public after refurbishment (Prins 1999: 5).

Unlike the 2002 opening of the Kamberg centre, there were no Khoesan

representatives present. Things *do* change: the Kamberg Rock Art Centre *has* made a difference.

Having introduced the concepts of national parks as places to preserve heritage, the complex nature of cultural identity formation, the special role of rock art in South Africa today, and how presentation of public rock art sites can challenge preconceptions of indigenusness there, I turn now to another new venture in unusual circumstances.

4 Wildebeestkuil Rock Art Centre: rock art and respect

A parallel venture to Kamberg is the Wildebeestkuil Rock Art Tourism Centre, opened in 2001 in the low and windswept country of central South Africa, 15 km (9 miles) west of the diamond town of Kimberley (see Fig. 1). This is the land of the other and much less-known kind of San rock art, engravings (Dowson 1992; Rusch & Parkington 2010) cut into the open rocks of the *veldt*. Here, again, the immediate descendants of the artists of this area perished when the San hunter-gatherers were swept aside in the turbulent movements and confrontations of southern African people in recent millennia and centuries. But there are now Khoesan people living close to Wildebeestkuil again, arriving there in singular circumstances. The !Xun and the Khwe are originally from Angola and Namibia. Recruited by the South African army as trackers, during the wars between South Africa and its northern neighbours in the 1960s, 1970s and 1980s, they were brought back for their own safety and survival when South Africa evacuated its troops. After years camped at Schmidtsdrift, a former military base, they were granted the farm of Platfontein, on which the engravings lie. The diversity of languages that members of the community speak – two mutually unintelligible San languages (!Xun and Khwe), Portuguese (from the Angola years), and Afrikaans (from the army time) – reflects their recent history.

At Wildebeestkuil, a new visitor centre like that at Kamberg presents the rock engravings, again in a manner not attempted before, but in a significantly different way – one that reflects the different community the rock art is acknowledged to belong to, and its different circumstances.

4a Frontier tourism

Wildebeestkuil Rock Art Tourism Centre (Fig. 6) is not in a national park *per se*, but it faces similar issues to heritage attractions that are. The starkly beautiful and windswept land around Kimberley in the Northern Cape Province of South Africa supports only marginal farming, and white settlers were not keen to inhabit the area until the discovery of diamonds in 1869. Prior to this, many settlers once again saw the vast plains as frontier wilderness.

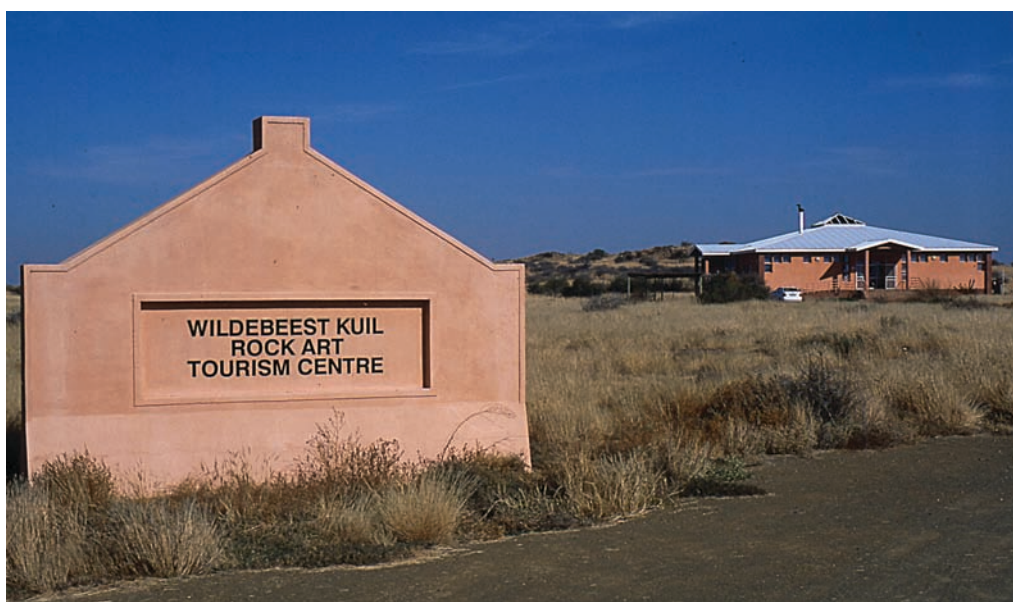


Fig. 6. Wildebeestkuil is 15 km (9 miles) west of the diamond town of Kimberley.

In the early nineteenth century, English-speaking farmers were moved into the region by the Cape Colony government in order to stop Afrikaans-speaking Boers encroaching on British interests farther north. Many farmers lived similar lives to the region's Khoe pastoralists, and farm workers were often trilingual, speaking English or Afrikaans, Tswana (Nguni) and Griqua (originally Khoesan) languages.

After the discovery of diamonds, the town of Kimberley grew up rapidly, and tourists today look down into the 'Big Hole' from which the precious stones were mined. As in national parks worldwide, indigenous groups – here Khoesan – fared poorly in the face of farming, mining and tourism interests. The Khoesan in the Northern Cape were not shown much respect; some were killed, others were absorbed into colonial society.

More than a century later, Charyl Carolus, former South African High Commissioner in London, declared at the opening of Wildebeestkuil in 2001: “This site of the past cements the future.” The centre treats the rock art “with respect. It has become one of the big sites of the reconciliation of South Africa.” As at Kamberg, rock art is seen as having a positive role in identity formation in the new South Africa.

4b Logistics and presentation at Wildebeestkuil

The rock art site of Wildebeestkuil is held in public trust, and a Northern Cape Rock Art Trust owns the visitor centre as a non-profit venture. The land surrounding the centre, part of Platfontein farm, is owned by the two Khoesan communities mentioned above – the !Xun and the Khwe.

The Trust comprises representatives of the various stake-holders: the !Xun and the Khwe, academics, the McGregor Museum in Kimberley, South African Heritage Resources Agency (SAHRA), the Northern Cape Tourist Authority, and the Department of Sport, Arts and Culture in the Provincial Government.

The site is presented using various media. As at Kamberg, there is a video and guided tours, but there are also informative signs, exhibitions, and audio commentary. A visit to Wildebeestkuil costs R15 for the film and guided tour, R25 if visitors opt for the audio wand.

The narrator of the video declares at the outset that South Africa’s rock art is “more precious than its diamonds”. As at Kamberg, introductory information imbues the site with value and appropriate visitor behaviour. Several !Xun and Khwe then inform viewers that San healing dance elements can be found in modern !Xun and Khwe dances: there is continuity between the original artists and the present-day !Xun and Khwe guides, and the engravings act as a form of ‘title deed’. The narrator also mentions neurological and anthropological studies that have helped academics learn much about the religious significance of rock art (Lewis-Williams & Dowson 1988; 1999), making clear that the engravings (Fig. 7) are not just idle doodles. The ending is forceful: “Step back into the pasts with your hosts!”



Fig. 7. Engraving of a rhinoceros on a c. 1 sq. m boulder panel at Wildebeestkuil. Note that the back half of the figure is absent.

The guided tour (Fig. 8) along a wooden boardwalk takes about an hour. It adheres to the principle of a 'metaphoric pilgrimage' (Blundell 1996: ii), whereby visitors – usually only one or two on each tour – pass through a liminal phase (the visitor centre) before viewing the art and returning to their familiar world via the café and gift shop.



Fig. 8. !Xun guide and information boards at Wildebeestkuil.

On the information boards, Ingold's (1993; 2000) animistic notion of the "temporality of the landscape" is employed alongside the concept of metaphoric pilgrimage as a theoretically apposite frame for integrating palaeoenvironmental, archaeological, historical and ethnographic aspects of site presentation. As at Kamberg, the coupling of these theoretical presentations challenges dualist and essentialist assumptions that underpinned public rock art sites in South Africa. The landscape ceases to be merely an unavoidable backdrop, either overlooked or emphasized as an engine of history, depending on whether a cultural or ecological deterministic approach is taken. Most importantly to many visitors, the guides are Khoesan.

As at Kamberg, the religious and complex nature of the rock engravings is central to the tour. Much is made of the importance of the eland antelope and the potency harnessed by shamans in the trance dance (Lewis-Williams 1981; 2002):

The engravings are not the products of idle doodling, nor of straightforward zoological documentation or narrative, but comprise a sophisticated religious art associated with ritual specialists in Bushman or San society called medicine people or shamans.

The pamphlet also makes clear that:

The [!Xun and Khwe] San communities (along with other Khoisan³ people and organizations also represented on the Trust) see in the rock art of Wildebeest Kuil a link with their pre-colonial past in the subcontinent. The struggle of the last independent Khoisan of the Kimberley area is reflected in the story around Wildebeest Kuil. So, too, is the tumultuous recent history of the !Xun and Khwe. ... For the first time in their modern history the !Xun and the Khwe now hold legal title to land ... and enjoy full citizenship and the privileges of being part of the broader South African community.

In 2001, before the Kamberg and Wildebeestkuil centres were opened, a training camp was held in KwaZulu-Natal by the Rock Art Research Institute for the guides who would staff both new ventures. At Kamberg, seven of the original ten remain in post, but four of the original six from Wildebeestkuil have gone. Only one guide is

³ Khoisan is the old spelling for Khoesan.

employed there full-time. There is also one part-time guide, one trainee (studying heritage at university), and two shop assistants, all !Xun or Khwe.

It was the full-timer who guided me. He believes that “books about the San and their art need to change over twenty years” (because “culture changes”), and he also declared: “I want to go forward, not back.” As emphasized in the video, “the San belong in modern history, not in the romantic past”. He regrets the fact that the !Xun mother tongue is threatened and believes that many problems stem from the *apartheid* government placing the San so close to a large town (Kimberley). He welcomes the opportunity to try to alter visitors’ attitude towards indigenous Khoesan people.

4c Public perceptions of archaeology and indigenouness

Khoesan who survived European-led commando raids in the nineteenth century were often incorporated into colonial society as farm labourers (Mitchell 2002; Challis 2008). In the 1980s, at the nearby farm of Springbokoog, Afrikaans-speaking farm workers – probably direct descendants of the San who originally lived in the area – referred to the San as *wildebusman* in a derogatory manner; they wished to distance themselves from negative connotations. As at Kamberg, attitudes to indigenouness began to change with the fall of the *apartheid* government in the 1990s, and continue to change at and around Wildebeestkuil today.

The introductory video at Wildebeestkuil shows the National Khoesan Consultative Conference figurehead Jatti Bredekamp, and its Northern Cape representative (and Trust treasurer) Barend van Wyk. Korana (Khoesan) leaders participate in the activities of the Friends of the Trust. Yet other Khoesan groups in the region feel that they were not consulted or involved in the Wildebeestkuil project. Those local Khoesan who consider the !Xun and the Khwe as “sell-outs, interlopers, impostors” (Morris *et al.* 2009; Morris pers. comm.) suggest that the !Xun and the Khwe have been “allowed to tell a story that is not really theirs”. The tour guide at Kamberg remembers the six !Xun and Khwe guides at the training session in KwaZulu-Natal considering themselves to be “not Bushmen but mixed”. Conversely, the Wildebeestkuil guide refers to the Duma family in Kamberg as “having knowledge but not really understanding”. He suggests that other “mixed-race” families in KwaZulu-Natal know more about the ways of the San.

Regardless of these tensions, projects such as Wildebeestkuil and Kamberg provide opportunities for rural storytelling (Ouzman pers. comm.) as well as dissemination of academic research. Both methods help to challenge misconceptions. Guides combine learned research insights and information about the rock art with personal perspectives and histories as well as reflections on the academic inputs received during their training.

This kind of knowledge, a mixture of what the experts declare and of what guides notice and know themselves, is common, even characteristic of guides who take tourists to heritage places. Stonehenge custodians over the years developed their own folk knowledge of the place (Chippindale pers. comm.) until a more professional training supplanted it. Safari tourist operators in Kakadu National Park, in the Northern Territory of Australia, now receive training to give them a better understanding of indigenous culture. What gives these issues special edge at Wildebeestkuil is the uncertainty surrounding definitions of indigenusness there.

Indigenusness in the Kimberley region is particularly difficult to define. Khoesan people in the area rejected the *apartheid* category of 'coloured' in a recent census, and suggested the alternative 'indigenous' before the World Summit on Sustainable Development, but the term has not yet been clearly defined. Because definitions of indigenusness are still unclear, we cannot be sure exactly what 'my people' means, when the guide uses that phrase. What does it mean to him? What does it convey to us? The !Xun alone? The !Xun and the Khwe? All San people? All Khoesan? The introductory film shown at Wildebeestkuil makes clear that Khoesan communities are not homogenous entities: the !Xun speak one language, the Khwe another, and the original artists a third.

Khoesan in the Kimberley area are attempting to project a positive identity, often by championing essentialist, primordialist, old-fashioned and racist books and ideas. Some Korana people explain that their ancestors made rock engravings 8,000 years ago and very little has changed since; this view is taken directly from early twentieth-century essentialist articles (Morris pers. comm.). Often, indigenous communities feel pressure to conform to expectations of authenticity, which, in reality, means commodification and marginalization. Indeed, commodification of

culture has become a requirement of the legal discourse on indigenous identities (Robins 2001; Sylvian 2002; Biesele pers. comm.).

Alongside this emphasis on the unchanging oldness of their culture, indigenous people also want to be – and need to be – contemporary citizens of the modern world. In the introductory film, an old Khwe woman talks (with customary San language clicks) about the need for computers in the community: a twenty-first century person addressing twenty-first century issues.

4d The future of Wildebeestkuil

Up to 1,000 visitors to Wildebeestkuil each month were predicted; in reality the number is closer to 130 (half South African, half from overseas) – a number so low it puts the venture close to crisis. The low visitor numbers are partly because of insufficient marketing, partly because Wildebeestkuil was provided with government funding for only 2.5 years, but mainly because of the singular circumstances in the region (Morris pers. comm.). Where Kamberg is in an established tourist destination, Kimberley is, to many, more a stopping-point on the long highway from Cape Town to Johannesburg. Airline links to Kimberley are prohibitively expensive and unreliable, buses are few, and trains dangerous. There is no public transport from Kimberley to Wildebeestkuil. 10,000 people each year visit the Big Hole and some tourists take tours of the townships on the outskirts of Kimberley, but few leave the city limits.

Ryan & Huyton (2000) have suggested that the promotion of ‘indigenous’ tourism without a better understanding of the true nature of tourist demand is “irresponsible, socially dangerous and obscene”. Indeed, recent tourist prediction for Wildebeestkuil is still vastly over-inflated; to capture 10% of Northern Cape tourists, for example, would require an increase of visitor numbers by over 9,000%.

David Morris (Morris *et al.* 2009: 23) suggests that, on the basis of his experience with Wildebeestkuil “one would question to what extent niche market heritage sites should be considered as sustainable job creation opportunities in the first instance”. More positively, “To the extent that these projects can generate wealth, it will often be of a more intangible kind, measured in a sharing of knowledge and debate about the past and its present relevance” (Morris *et al.* 2009: 23).

Provincial government support continues to be lukewarm (Morris pers. comm.). The Northern Cape Department of Sport, Arts and Culture, resentful of how support for the project arrives via academic institutions based elsewhere, deliberately missed the centre's opening and has not given financial support. Until recently, a small diamond mining company supplemented the Trust's income with several thousand rand a month for the right to survey and dig on Platfontein. This has now stopped, leaving the Trust in financial disarray. In 2008, over US \$4,000 worth of electrical cables were stolen. Without subsidies from the McGregor Museum in Kimberley, Wildebeestkuil would not be sustainable.

How interested are people in archaeology? Do low visitor numbers at Wildebeestkuil stem from more than simply logistical problems? Recently, there has been some upturn in public interest towards archaeology in the region. For instance, many people in Kimberley are angry with developers digging trenches in old cemeteries (Morris pers. comm.). Hopefully, visitor numbers at Wildebeestkuil will rise as people become more interested in South Africa's prehistory and its indigenous people and rock art. But is this a naïve wish?

5 Conclusion: Presenting rock art, challenging prejudice

The decimation of the indigenous San in South Africa resulted in the end of their long rock art tradition. In contrast, indigenous groups in the Northern Territory of Australia, for instance, despite widespread incursion by government officials, explorers and missionaries, continued to paint throughout the years of European colonization, and in Kakadu National Park until the 1960s (Hampson 2004; 2005).

Indeed, indigenous peoples globally have demonstrated cultural and historical ties to rock art sites, regardless of when those sites were last used. Federal laws such as the 1990 Native American Graves Protection and Repatriation Act (NAGPRA) in the USA reflect these cultural links. Archaeologists in the USA and other countries are now legally obliged to consult the public and indigenous groups prior to making decisions about site management. As a result, the decision-making process surrounding public presentation and resource ownership is increasingly democratized.

It is not only laws that facilitate indigenous involvement in site management; cultural resource management (CRM) as a new facet of archaeological research also promotes it. As Whitley (2001: 21) makes clear, CRM operates within a scientific framework and can also *champion* the active participation of indigenous communities in the interpretation of the archaeological record. Worldwide, archaeologists and the public denied extant indigenous people patrimony of rock art sites for many decades and for many political reasons. As we saw in Chapter 1, the New Archaeology declared that hunter-gatherers were primarily concerned with subsistence, and because ethnographic records were ignored, almost all indigenous rock art was deemed to be prehistoric in age (Whitley 2001: 32). Coupled with the fact that many archaeologists thought the meaning of the art to be unknowable, these beliefs trivialized the religious and socio-political *raison d'être* of rock art. Thankfully, rock art researchers are challenging these views. Presentation at indigenous rock art sites *does* make a difference.

In Kakadu National Park in Australia, few people contest definitions of indigenusness: everybody understands this is indigenous Aboriginal land, and despite inequalities in joint management policies Aboriginal concerns are recognized and usually prioritized. In both the USA and South Africa, indigenous people like the forgotten and supposedly extinct Khoesan are beginning to redefine themselves within the new socio-political framework. Definitions in South Africa are understandably complex because hunter-gatherers, pastoralists and farmers have shared the same land for at least 2,000 years. Earlier, I demonstrated that Nguni-speaking farmers near Kamberg are reclaiming their Khoesan ancestry, and that they were honoured at the 2002 opening ceremony of Kamberg Rock Art Centre, whilst a mere three years earlier there were no Khoesan at the re-opening of the rock art site at Main Caves. As Prins (1999: 5) makes clear, the artists' descendants in 1999 were conveniently explained away by "assumed extinction", and few were keen to celebrate their Khoesan past. Until recently, the Khoesan have had few opportunities to control their own heritage, achieving little in their struggles against mining companies, cattle ranchers and the tourism industry. The visitor centres at Kamberg and Wildebeestkuil are successfully challenging misconceptions about the indigenous inhabitants of South Africa.

5a Rock art, politics, and identity

Rock art played a political role among indigenous societies in the past; exhibits and the use of the art today also play pivotal roles in identity formation. Since 2000, rock art has featured in South Africa's coat-of-arms and on all South African coins (Smith *et al.* 2000: 468). In many countries, too, rock art can be a key proof that people do know and belong to specific sections of country.

Museum exhibitions before the democratic elections of 1994 in South Africa nearly always reinforced the stereotype that indigenous people were simple folk, close to nature and therefore entirely removed from the political arena. Similar notions existed in the USA and Australia. The fact that rock art has been considered beautiful for decades in no way saves it from bigoted or trivializing invective. Indeed, glossy photographs in popular books, often accompanied by banal captions, and inappropriate display of the art in public reproduce and perpetuate racial stereotypes.

Because there is no such thing as a neutral, value-free exhibit, white-coated professional managers and curators should not attempt to conceal their political position behind those very same white coats. Rather, they should shake viewers' prejudices in order to "enlist their help in re-making the past" (Dowson & Lewis-Williams 1994). They can do this at public rock art sites.

Accusations of immorality, however, should not be a tool for consolidating power. Managers need to induce a shift in perceptions rather than employ alienating or confrontational tactics. In this way, visitors may begin to appreciate that rock art images are not simply pretty pictures born of an innate aesthetic urge, but powerful things in themselves that could and can be implicated in the mediation of cosmological realms, and in political change (Dowson & Lewis Williams 1994). As with stained glass motifs in church windows in the western world, without meaning rock art loses its active role. Separated from social and ritual concepts art becomes static and passive. As I demonstrated earlier, despite their singular circumstances, the presentation at Kamberg and Wildebeestkuil succeeds in challenging visitors' perceptions of indigenous culture. Rock art has a special role to play.

Tour guides and educational information at Kamberg and Wildebeestkuil help inculcate appropriate visitor behaviour and attitude from the outset. Information concerning the meaning of the art and its unique, finite, and non-renewable nature imbue these places with value; more can be done at other rock art sites to alert the public that their support of and interest in archaeological remains and indigenous people not only aids the safeguarding and conservation of heritage but also helps challenge bigoted views towards the original artists (Dowson & Lewis-Williams 1994; Smith 2006).

5b Rock art tourism: culture or nature?

Vast sums are spent each year on promoting rock art worldwide, but little on site presentation or protection. The sites discussed in this appendix are rare exceptions. At most sites, poor site protection measures and lack of interpretive material gives the impression that the art is of limited value, and the sites are consequently not shown the respect they deserve. Of dozens of South African sites officially open to the public, only three have full-time guides, and very few have any kind of tourist infrastructure. In Kakadu National Park in Australia, Aboriginal traditional owners have made it clear that no more than three rock art sites should be open to the public: they want to control their own heritage and do not want tourists walking over more of their sacred land.

Tourism is a double-edged sword: sites may be threatened by both increased visitor numbers and lack of funding, but heightened public interest also provides a (potential) political body able to influence politicians and help champion rock art research, develop positive attitudes towards indigenous people, and ensure site preservation (Whitley 2001).

Tourist agencies started promoting indigenous rock art as part of a broader wilderness experience in allegedly unpeopled national parks in the 1970s (Loubser 2001: 98). Surveys reveal that, until recently, tourists rarely visited rock art areas purely to view paintings or engravings; rather, they were primarily interested in the surrounding landscape. Tourist marketing strategies, drawing from the Yellowstone model of national parks, stressed the natural setting of the art at the expense of its fundamentally religious or cultural nature, thereby reinforcing the misguided view that rock art sites were as much, if not more, natural rather than cultural. This

strengthened Eurocentric views of indigenous peoples as 'nature's children', removing them from the political realm. A danger of site promotion and interpretation, regardless of how the site is interpreted, is misappropriation: without caution rock art sites can become part of European cultural baggage (Gillespie 1983). In Australia, for instance, although Aboriginal involvement in heritage management is increasing rapidly, "Europeans still control much Aboriginal cultural history with expertise, funding, and control of information" (Pearson & Sullivan 1995: 52).

5c Research ethics: a way forward

Should academics promote rock art as a symbol of national and cultural identity? Worldwide, indigenous people and their art have been incorporated into national park emblems, logos, and commercial souvenirs. In museums, in books and at public rock art sites in the USA, Native Americans were, and often still are, depicted as part of a linear historical trajectory that originated with the Native American, achieved dynamic change with the arrival of the Europeans and culminated in the disappearance of Native Americans and the founding of the modern American Nation-state, complete with its flag, anthem, and unpeopled national parks (Blundell 1996: 91; Hampson 2004; 2005). As we saw with the Jumano in Chapter 2, the treatment of indigenous people as a vanishing people masks very real political clashes between them and national governments (Blundell 1998: 155).

As suggested earlier, promoting the San as an image for national identity in South Africa may cause similar problems. When nation states steer indigenous identity formation, indigenous people are almost always objectified as homogenous entities frozen in a mythic time. Withdrawal from the political arena, however, is fruitless. Academics cannot afford to miss timely opportunities to influence the way in which indigenous peoples are perceived, especially because the incorporation of indigenous people into national identities will, in any event, continue without academic intervention (Dowson & Lewis-Williams 1994).

Intervention in the identity formation process raises concerns about research ethics, censorship, and freedom of speech. There are many unanswered questions about the authenticity, privilege and power of owning or presenting another culture's intellectual property, especially their sacred knowledge (De Lacy 1994: 491). Local rights must not be usurped by unilateral claims about academic, national or world

heritage significance. The indigenous voice in Australia was not heeded by academics until the 1980s, when Langford (1983: 2) made her famous comment: “We say that it is our past, our culture and our heritage, and forms part of our present life. As such it is ours to control and it is ours to share on our terms. That is the Central Issue in this debate”.

The 1991 Jindabyne conference in Australia successfully established a formal Code of Ethics (Davidson *et al.* 1995: 83). Specific instances have demonstrated that this Code bears teeth: it illustrates the changing perceptions of, and burgeoning respect for, indigenous culture. Archaeologists from La Trobe University, for example, were ordered by courts to return excavated material to the Tasmanian Aboriginal Land Council in 1995. At Mootwingee rock art site in New South Wales, Aborigines barricaded the site because they were refused involvement in management (Pearson & Sullivan 1995: 164). Previously, many non-Aboriginal heritage managers were concerned with little more than conservation and visitor numbers; now they are increasingly obliged to examine all aspects of management policy.

5d Presenting rock art, challenging prejudice

Signs, tour guides and information for tour operators and park visitors should engender respect for the art and the original artists. Official signs should alternate with softer ones, and managers should explain *why* tourists should not touch the art or leave the path. Managers should anchor interpretation in the familiar (which is what people are comfortable with) before moving into the unknown (to challenge prejudices). There is no space here to suggest specific practical improvements to presentation at Kamberg and Wildebeestkuil (although see Hampson 2004), or to public rock art sites elsewhere, but I stress that visitors worldwide need constant reminders that archaeological sites are “human artefacts” and not “static monuments from the past” (Jones 1985: 300). Visitor books highlight how pleased tourists are when they are guided by a person from the immediate country surrounding the rock art site, especially if that person is descended from the original artists. Indigenous guides challenge prejudice and remind visitors of rock art’s role in highlighting indigenous connection to country. Left *unchallenged*, negative perceptions of indigenous people and their rock art may be reinforced and perpetuated.

#	County	Trinomial	SITE NAME	Topography	Elevation	Picto	Petro	Grooves	Cupules	Notes/Colour
42	Hudspeth	41HZ377 etc.	Storyteller (Alamo Canyon)	boulders and shelters	1328m	y	y	y	y	petros; plus red, black; see Ch 3
43	Hudspeth	41HZ375	Jaguar Cave (Alamo Canyon)	boulders and shelters	1292	y	y	y	y	510 petros inc. >124 points (S&S 1974:7); plus white, red, black, yellow; see Ch 3
44	El Paso	41EP2	Hueco Tanks	boulder shelters	1410	y	y	y	y	petros; plus >1200 red, orange, yellow, white, black, green pictos

#	Anthros	Zoos	Geometrics	Handprints	Superpos.	References	Visit date
42	100s	100s	points, entoptics (all categories) + others		y	Jackson 1938:35- 9; Sutherland & Steed 1974; Schaafsma 1980; Apostolides 1984; Turpin 2001	12/05/09 with FA
43	>60	>126	>200, inc. points, entoptics (all categories)		y	see above (Storyteller)	12/05/09 with FA
44	100s	100s	entoptics (all categories) + others	y	y	Jackson 1938:10- 21; K&N 1967:173-203; Davis & Toness 1974; Sutherland 2006	12/12/2008

APPENDIX C

Prehistoric peyote use in the Greater Southwest

Table 1 (below) lists peyote-using tribes. Also noted is the year of the first ethnographic mention, the tribal name for peyote, whether peyote was used in tribal rites or to induce visions, and whether the tribe location is marked in Fig. 2.1 or Fig. 5.4 (Slotkin 1955: 204–206, 209; Anderson 1980: 140).

Tribe	Date of first mention of peyote use	Name for peyote	Peyote used to induce visions	Marked on map
'Chichimeca'	1577 AD		y	
Aztec	1590		y	
Queres	1631		y	
Acaxee	1645			
Coahuilteco	1649	<i>pajé</i>	y	
Cora	1672	<i>huatari</i>	y	Fig. 5.4
Hopi	1720			2.1
Isleta	1720		y	
Taos	1720		y	
Opata	1762	<i>Pejori</i>		2.1
Pima	1767			2.1
Jumano	1769		y	2.1
Tarahumara	1791	<i>hikuli etc.</i>		2.1, 5.4
'Southwest'	1885		y	
Comanche	1886	<i>wokowi etc.</i>	y	
Kiowa	1886	<i>seni</i>	y	
Kiowa-Apache	1888	<i>ho-as, ho-se</i>	y	
Huichol	1888	<i>híkuri, hikuli</i>	y	5.4
Lipan Apache	1891			

* * * * *

Table 2 (below) lists tribes with documented peyotism in the second half of the 19th century located in the Greater Southwest ‘culture area’ and recorded by state and by official USA Agencies in AD 1890 (Slotkin 1956: 36).

State	Agency	Tribe	References
Arizona	Pima	Papago	Young 1895: 122
New Mexico	Mescalero	Mescalero	Clark 1888
New Mexico	Mescalero	Lipan	Havard 1885: 521; Clark 1888
New Mexico	Southern Ute and Jicarilla	Jicarilla	Mooney 1900: xvi
Texas	‘Vicinity of Laredo’	Unspecified	Coulter 1894: 131
Texas	Unspecified	Unspecified	Lumholtz 1902: 358
‘Southwest’	Unspecified	Unspecified	Briggs 1887: 276; Bandelier 1890: 88
‘Eastern exile’	Unspecified	Chiricahua Apache	Jones 1899: 95