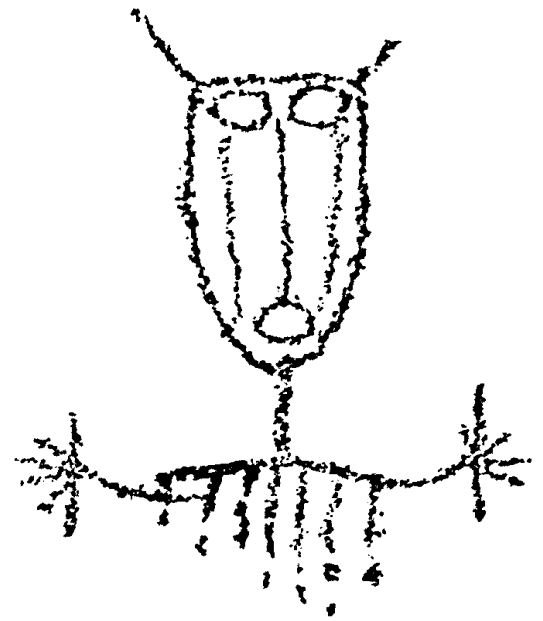


*The Owl:  
A Shamanistic Motif in the  
Archaic Rock Art Iconography  
of the Palavayu  
Anthropomorphic Style,  
Northeastern Arizona*



*Ekkehart Malotki*

**T**he excitement triggered by Grotte Chauvet, the newly discovered paleolithic cave in southern France, is in part attributable to its portrayal of several rarely depicted animal species, among them the exquisite rendering of an owl (Chauvet et al. 1996:49). Equally exciting to me is the recent discovery of over eighty owl petroglyphs at several adjacent sites in the Palavayu of northeastern Arizona (Figure 1). The ancient Hopi term "Palavayu," literally translating as "Red River," is a fitting appellation for this region in that most of the washes and creeks along which this art is found drain into the Little Colorado River. Constituting perhaps the highest concentration of rock art owls in North America, these images seem to be part of a late Archaic/early Basket-maker II rock art complex emerging in the vicinity of Petrified Forest National Park which I have termed the Palavayu Anthropomorphic Style (PASTYLE).

Justification for this name rests in the many patterned-body anthropomorphs that dominate the PASTYLE motif index (McCreery and Malotki 1994:17). Probably created by hunter-gatherers who also may have marginally practiced maize agriculture, the owls are believed to be of shamanistic origin and may be between 4,500 and 2,000 years old. It is the goal of this paper to demonstrate that the owl is graphic proof for my a priori assumption that the majority of the PASTYLE imagery is grounded in shamanistic ideology and thus amenable to meaningful interpretation.

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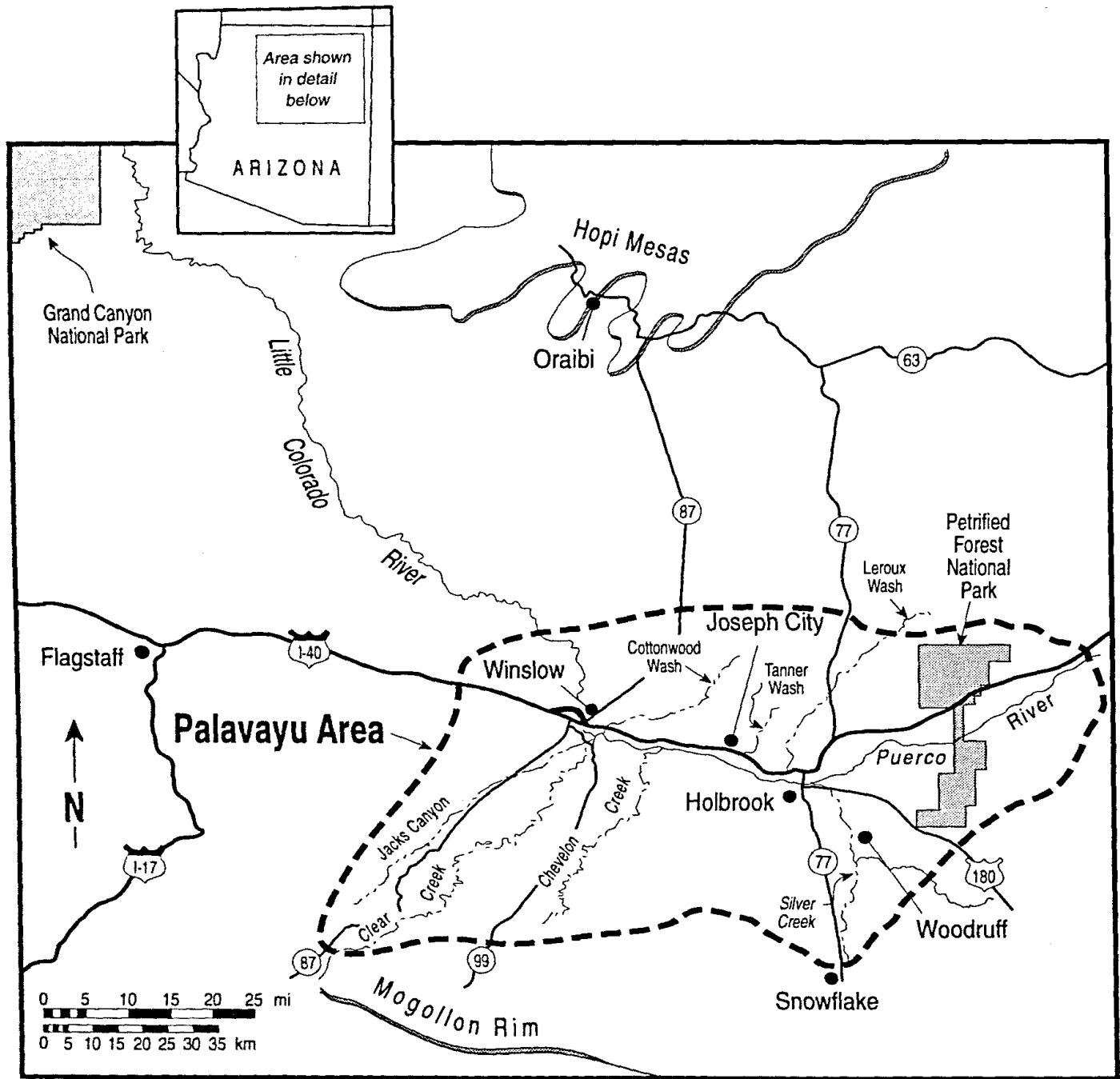


Figure 1. The Palavayu rock art area in northeastern Arizona.

### The Owl in Worldwide Folklore

Few birds have generated such powerful emotional reactions and caused more ambivalent impressions on the human mind than the owl. The typical owls (Family Strigidae of the Order Strigiformes) especially, with their large eyes, disc-like faces, and ear tufts resembling horns, have captured the imagination of human beings for centuries.

Although in the mind of many the owl symbolizes positive characteristics, even occasionally being regarded as an omen of good fortune (Sparks and Soper 1970:166), on balance the negative connotations surrounding the owl throughout history far outweigh the positive.

Positive images of the owl tend to cluster around cleverness and wisdom, possibly traceable to Pallas Athene, goddess of war and wisdom in Greek mythology, and epitomized in modern

times as a cartoon-like, bespectacled scholar in academic regalia, holding a book. This image may have resulted in part from the bird's somber appearance and large, forward-focused eyes, like those of a human being.

Negative connotations in much of the Western World often begin with the eerie, low, mournful hooting of many owls, believed to be a harbinger of bad tidings, especially of untimely death and imminent doom and destruction. That this mournful hooting has impressed human beings is evident from the onomatopoeic nature of a sample of words for "owl" in various languages, all of which appear to be attempts to mimic the hoots of these nocturnal hunters. This belief in the bird's ominous nature is further reinforced by two other habits: its extreme visual acuity at night and its nearly inaudible flight, enabling it to strike its prey in the dark, without warning.

Equally strong is dread of the owl as a sign of witchcraft. Latin *strix*, "screech owl," was also the Roman cover term for "witch," and Merlin, master-magician in Arthurian legend, is portrayed with an owl perching on his shoulder. Additionally, owl feathers played a major role in black magic and were a frequent ingredient of witches' charms and incantations.

Finally, even the ways that members of particular cultures tend to hear the hoot of an owl seem to be influenced by dark or sinister interpretations. English speakers may profess to hear the nonsensical "te whit, te whoo," but the Bantu-speaking Cewa of eastern Zambia are convinced they hear an ominous "Muphe! Muphe! Nimkukute! (Kill him! Kill him! That I may munch him!)" (Marwick 1970:461), and the Spanish may hear "'cruz, cruz' (cross)" after the owl, once a sweet singer, witnessed the crucifixion of Jesus and ever after shunned daylight and mournfully uttered its cry (Sparks and Soper 1970:161).

### The Owl in Puebloan Folklore of the American Southwest

The fundamental ambivalence inherent in the essence of "ownness," fluctuating between extreme positive and extreme negative conceptualization, is also observable in the Pueblo cultures of the American Southwest. Unlike the eastern Rio

Grande pueblos, in whose belief systems the owl is almost exclusively regarded as a bird of witchcraft, Tyler (1991) claims a more balanced view of the evil and good sides of the bird's nature for the western pueblos of the Zuni and Hopi. According to him, Zuni hunters invoke the mothlike silence of the owl in order to approach game animals more stealthily (Tyler 1991:172). Although permitted for the adornment of kachina masks, no owl feathers are employed in the fashioning of prayer sticks (Tyler 1991:158). Parsons reports two instances that allude to the sleepy appearance of the owl during daytime. Thus, a feather of that "sleepy bird, the owl," is placed alongside a Zuni baby if it will not sleep (Parsons 1939:92), and in one story owl feathers are used magically by one of the stick-ball racers to render his competitors drowsy (Parsons 1939:487). The Zuni belief that owls "keep away other birds, and hence keep away the rain" (Parsons 1927:107) clearly points to the association of the bird with witchcraft.

While I cannot personally verify claims concerning the Zuni, my own ethnographic field work among the Hopi essentially corroborates Tyler's observation. Based on linguistic evidence, the Hopis seem to be familiar with at least five different owl species, all of which were once indigenous to their ancestral environment. Rendered here in the standardized writing system developed for the dialect area of the Third Mesa speech community, these are *mongwu*, the "Great Horned Owl," *hootsoko*, the "Screech Owl," *koko*, the "Burrowing Owl," *koorani*, the "Pygmy Owl," and *söhömongwu*, the "Long-Eared Owl."

Of the above-mentioned species, both Hootsoko and Mongwu have been cast as supernaturals in the pantheon of Hopi kachina gods (Wright 1973:92, 111). A third kachina, Salapmongwu, literally "Spruce Owl," is apparently only attested as a supernatural personage (Wright 1973:93). Fewkes (1903:95) also mentions a female kachina, *Mongwuuti*, "Great Horned Owl Woman." Apparently, she appears during the night dances following the Powamuy ceremony or "Bean dance," accompanied by two or three owl children who sing little songs (Colton 1959:38). While Salapmongwu and Hootsoko are both equipped with bows, an obvious reference to the bird's hunting prowess, the figure of the Mongwu

kachina once more confirms the near-universal belief that owls are purveyors of ominous consequences and that, as nocturnal hunters, they are connected with killing and war. Both of these associations are actualized in the course of the Hopi clowning ritual. After warning the clown chief repeatedly of the dire consequences that will befall him and his unruly and irreverent cohorts, Mongwu finally leads the charge of the *kipokkatsinam* or "Raider kachinas" against them in order to punish and cleanse them of their amoral ways. For this very reason the Great Horned Owl was depicted on Hopi war shields. Thus, Wallis and Titiev (1944:Plate VII) describe the bird as "a scout with piercing eyes who goes about by night to reconnoiter the foe."

The Hopis do not demonstrate the nearly paranoid fear of owl feathers that pervades the New Mexico pueblos along the Rio Grande. This fear of the owl's plumage as a powerful implement of sorcery, so masterfully woven into the fictional plot of "The Delight Makers" (Bandelier 1890:47), was a definite reality among them, and anybody caught in the act of handling owl feathers became the target of persecution. Among the Hopis, arrows are typically fletched with owl feathers, guaranteeing a near-silent flight of the projectile. Owl feathers are also used in *nakwakwusi* or "prayer feathers" that are fashioned especially for peach trees. Since the bird's down feathers are believed to ensure warm weather, they are supposed to protect the trees against unseasonal killer-frosts, and they are assumed to assure bountiful peach crops. For this reason, Tyler (1991:165) sees the owl as a symbol of fertility, in my eyes an overinterpretation that is not justified. Finally, fluffy clusters of split owl feathers, known as *mongtsitoma* or *mongtsakwa*, are actually worn on the masks of various kachina deities, for example the Badger kachina, thus attesting to the positive influence and power of the bird.

Contrapuntal to these extremely positive manifestations—deification of the owl as a kachina and ceremonial usage of its plumage—runs a clear linkage of the bird to witchcraft. In order to exercise his evil craft, the Hopi *powaga* or "sorcerer" transforms himself into the animal familiar of his choice. In addition to crows and coyotes, the owl is frequently mentioned as a spirit helper on whose

supernatural powers he draws. Due to the bird's nocturnal ways and stealthy flight, the owl becomes one of the witch's preferred means of prowling in the night (Malotki 1993:163).

This witch connection is clearly borne out in Hopi oral literature. Occasionally branded *powaqmongwu*, "witch owl," in a Coyote narrative (Malotki 1985:61), the bird is contemptuously called *tu'alangwmongwu*, denoting "ghost owl." In another, supposedly true story, an owl that has been unnerving a couple with its hooting at night-time, is shot by the irate husband. As it falls to the ground, it runs away in the form of a cat. Pursuing the animal, the man eventually comes across a girl who confesses to having desired the man herself. Out of jealousy she used the guise of the owl to make the rival woman's baby sick. The witch girl eventually dies of the gunshot wound she received "as an owl" (Malotki 1979).

In passing, it is also worth mentioning that in the old days disobedient children were threatened by their Hopi parents with the prospect of being kidnapped by the owl. In a story to this effect that I recorded (Malotki 1976), the child, cast outdoors by her mother because of incessant crying, is carried off by the owl to her nest and reared there with her own offspring. In the process, the child begins to turn into an owl. On a more gruesome note, one of the Hopi lullabies tells of the owl actually consuming a child.

### **Pueblo-Type Rock Art Owls of the Palavayu**

In the light of the extensive owl lore prevalent among the Hopis and Zunis, and the fact that their villages are roughly equidistant from the core region of the Palavayu, it comes as somewhat of a surprise that rock art owl depictions stylistically conforming to PII-PIV type iconography are rather sparse. An inventory of hundreds of rock art sites with tens of thousands of individual glyphs, the overwhelming majority of which are pecked, has to date yielded only eight petroglyphic owls of this late period in the Palavayu. Six of them are briefly described below and redrawn in Figure 2.

At the "Paw" site, located on the Little Colorado River, two rock art owls are portrayed, one of which is depicted in Figure 2a. Solidly

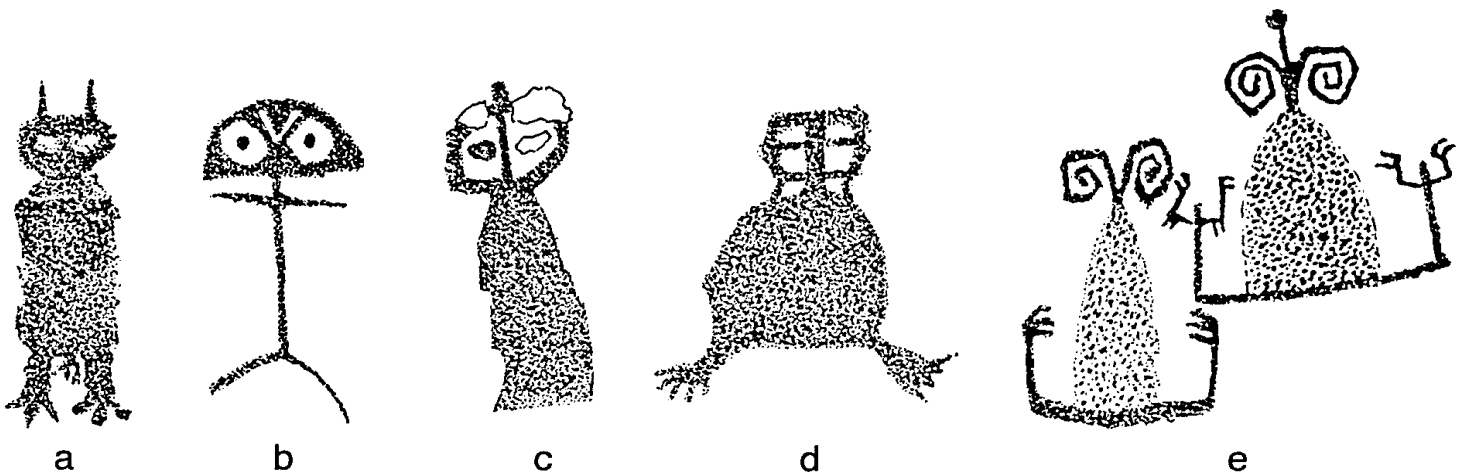


Figure 2. Pueblo-type owl images in the Palavayu.

pecked, they are associated with simple, coarsely executed anthropomorphs, three of which are grouped in a staff-bearing scene, and with several crude quadrupeds. Scattered throughout these elements are finely executed pawprints, presumably all bear. Stylistically, I would suggest a late PII affiliation for this panel.

At the "Triptych Terrace" site (Figure 2b; for a photograph see McCreery and Malotki 1994:Figure 5.6), a stick-figure torso with stick-figure arms is topped by a meticulously executed goggle-eyed head strongly suggestive of owl features. The semi-circular shape of the head is reminiscent of a Pueblo kachina helmet mask and therefore may be of PIII affiliation.

"Tick-tack-toe," located west of Petrified Forest National Park (Figures 2c and 2d), contains on one panel a PIII-type owl with a solidly-pecked body stump. The head, which has suffered from exfoliation, may actually have been adorned with now unidentifiable head projections. On a second panel, a beautifully pecked owl with quadrisected head and large, human-type feet is accompanied by equally impressive renditions of a mountain lion, an elaborate slab-paho, and a geometric design near an anthropomorph with upraised arms. The entire panel, which was clearly created by the same artist, is probably from the late Pueblo III or Pueblo IV period, since slab-pahos seem to be distinctive temporal landmarks for this time bracket (McCreery and Malotki 1994:144).

Finally, at the "Datura Crescent" site east of Winslow, three rock engravings, two of which are shown in Figure 2e, probably represent owls. Most likely of Pueblo IV affiliation, both the big eyes and the talons of the petroglyphs have strong owl-like features.

This sparsity of owl images in the context of a range of other avian depictions is in itself no certain clue to a cultural disinterest in the bird on the part of the prehistoric Pueblo people. One wonders, for example, why the trash middens of Nalakihi, a Pueblo III site on Wupatki National Monument, contained the remains of four species of owls (King 1949:148). It is therefore quite conceivable that the owl was either so sacred or laden with negative connotations that rendering its essence on a permanent rock surface was essentially taboo—or the activities and/or rituals requiring the making of rock art were not ones which involved owls. Nonetheless, there are pictorial elements associated with the owl images which seem to betray a definite degree of importance credited to the owl in Pueblo iconography. These elements would include power animals such as bear (represented by its tracks) and cougar, cervids in a game trap (as well as in other situations), ceremonial objects such as the slab-paho or dance wand, and human figures in ritualistic scenes and positions. Whether this importance may have related to the complex of hunting, perhaps in the role of a tutelary game master, must remain speculation.

## The PASTYLE Rock Art Complex

Given the relative scarcity of rock art owls in the Pueblo horizon of the Palavayu, the recent discovery of over eighty petroglyphic images of the bird within a relatively small area of the same geographic region is almost sensational. All the more so, in my opinion, since they stylistically match all the characteristics of the most ancient rock art tradition in the Palavayu, that of the late Archaic or early Basketmaker II period. Showing all the hallmarks of what I have termed the Palavayu Linear Basketmaker Style (McCreery and Malotki 1994:18), the owl images may be between 4,500 and 2,000 years old. There is increasing chronometric evidence for a new "long chronology" for Basketmaker II (Schaafsma 1994:45) in the southern reaches of the Colorado Plateau. A series of new radiocarbon dates for maize farming in the Black Mesa region shows that their calibrated ages fall in or very near the 4th millennium B.P. (Smiley 1994:173). In the total absence of any archaeological survey data for the area in which the newly-found owls are located, the early portion of the chronological sequence of culture stages given in Table 1 must remain speculative and subject to revision.

*Table 1. Tentative chronology of culture stages in the Palavayu.*

Paleo-Indian Period	9,500 B.C. to ca. 7,000 B.C.
Archaic Period	7,000 B.C. to ca. 1,500 B.C.
BM II - BM III Period	Linear ca. 1,500 B.C. to ca. A.D. 1 Majestic ca. A.D. 1 to A.D. 700
BM III - PI	A.D. 700 to A.D. 950
PII - PIII	Early A.D. 950 to A.D. 1100
	Late A.D. 1100 to A.D. 1300
PIV	A.D. 1300 to A.D. 1450

The newly-emerging PASTYLE rock art complex, a descriptive overview of which is presented in McCreery and Malotki (1994:13-29), iconographically shows striking resemblances to Turner's Glen Canyon Style 5 and Schaafsma's San Juan Anthropomorphic Style (McCreery and Malotki 1994:18, 23). I believe, however, that the regionally developed focus of the Palavayu complex goes beyond these stylistic affiliations and is part of a much larger, Western North American

rock art tradition, which may embrace, in addition to the above-mentioned Glen Canyon and San Juan manifestations, the imagery of the Barrier Canyon Style in Utah, the Dinwoody Style in northwestern Wyoming, the Pecos River rock art in south Texas, and perhaps also the painted sites in Baja California. The general stylistic uniformity which underlies these regional rock art corpora in spite of regional differences may also suggest a degree of homogeneity in the framework of social, political, and religious ideologies. Anchored in a hunter-gatherer lifeway, its cognitive roots may ultimately be traceable to Paleolithic Asia.

In spite of its conceptual indebtedness to a pan-Western Archaic matrix, the PASTYLE complex has unmistakable properties of its own. Its idiosyncratic commonalities set it off from all of the other Archaic rock art horizons. It is not only geographically concentrated, but the range of motifs is also fairly restricted. In addition to the leitmotif of the anthropomorph that runs the full gamut from solidly-pecked to patterned-body figures, the PASTYLE exhibits a large theriomorphic repertoire in its animate branch. Consisting primarily of horned ungulates (elk, bighorn sheep, pronghorn antelope, deer), the imagery also features birds, represented almost entirely by owls; serpents (Malotki 1994); dragonflies (Malotki 1997a); several centipedes; a single turtle; and one arachnid strongly resembling a spider.

A third branch in the animate division comprises hybrids or composites, generally of the therianthropic type, chimerical and fantastical monsters, as well as other unrealistic or unidentifiable creatures that I collectively refer to as "phantasmomorphs."

A fourth branch, finally, contains plantlike elements or phytomorphs. While none of the plants is identifiable, several depictions appear strongly reminiscent of the thorn apple seedpods of the extremely poisonous and hallucinogenic *Datura*.

The inanimate branch of the PASTYLE motif inventory is divided into both representational and nonrepresentational glyphs. The latter category, here termed "geomorphs" because of the multitude of its geometric designs, is filled with dots, grids, spirals and concentric circles, meanders,

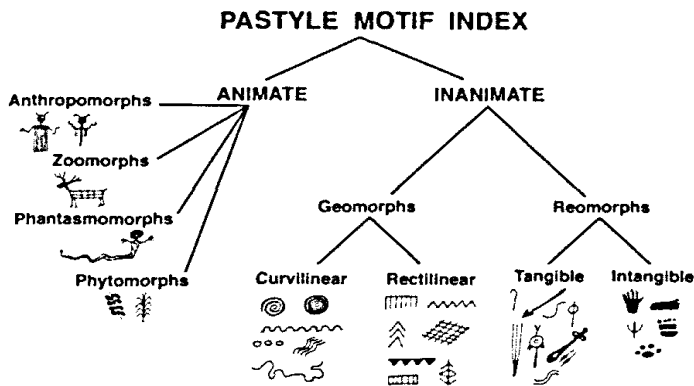


Figure 3. Tree diagram of the PASTYLE motif inventory.

chevrons, nested U-shapes, and other nonfigurative elements. This class of elements constitutes the well-established panoply of phosphenes or entoptic phenomena (Kellogg et al. 1965; Lewis-Williams and Dowson 1988). Among the inanimate representational forms, labeled "reomorphs" here because they suggest "real," identifiable objects, is encountered an array of handheld items including wands, rings, S-shaped sticks, projectile-tipped darts, etc. Also found in this category are occasional bear tracks as well as human hand- and footprints. Figure 3 provides a summary of the PASTYLE motif index in the form of a tree diagram.

### Bird Depictions in PASTYLE Imagery

Unlike the depicted quadrupeds listed above, which are all desirable food and game animals and could therefore be regarded as evidence for compulsory magic and a hunting hypothesis, snakes, dragonflies, and birds are primarily not part of the game or food category. To be sure, one long-legged bird, depicted in the typical grid-bodied fashion of the Palavayu Basketmaker II Style, might possibly have qualified as a menu item. Showing all the characteristics of a wading bird, it may represent a crane or heron (McCreery and Malotki 1994:80). The remaining birds are not identifiable. On two panels they occur as tiny, fluttering creatures. Executed probably by the same artist, they are spatially associated with shamanic-type PASTYLE imagery and may thus function as "soul-birds" on extracorporeal journeys (McCreery and Malotki 1994:VI). There is ample evidence in contemporary Pueblo ethnography that birds were primarily acquired for their plumage. The extensive usage of

feathers as votive offerings by the Southwestern Pueblo Indians is well documented. This also holds for owl feathers, especially among the Hopis and Zunis, whose secular and ceremonial interests in them were pointed out above.

To date, a total of 86 PASTYLE owl depictions has been recorded at 20 different sites in the Palavayu. Most of them are located at three major site clusters within an area of approximately 12 square kilometers. Considering that the entire Palavayu covers some 7,000 square kilometers, this highly idiosyncratic concentration of the owl motif in basically one locale is extraordinary and may be attributable to the individual pictorial preferences of one or two artists. All sites, located in the canyon depths of two of the four Palavayu tributaries draining into the Little Colorado from the south, are riverine, either directly adjacent to water from seasonal runoff or within walking distance of permanent pools. Due to periodic flooding of the gorges, which sometimes partially or totally submerges even the rock art panels, no habitation sites ever seem to have been established by the ancient hunter-gatherers along the occasional dry sections bordering the watercourses, nor have I ever come across any artifacts on their banks.

The broken cliff walls, up to 100 m high, consist of huge sandstone strata along the bottom end of the canyons, which in turn are overlaid by limestone formations at their upper end. Only the lower layer provides smooth rock faces that are suitable canvases for rock art. Their often darkly varnished exterior makes for an excellent contrast when a lighter-colored subsurface is revealed.

All of the owl motifs are pecked, some meticulously so, suggesting that they are the result of both direct and indirect percussion techniques. Many of the depictions have acquired various degrees of repatination that, in some cases, rivals the original varnish, vouching for their great age. Ranging in size between 20 cm and 88 cm, most of the images fall into a middle size range of 35–65 cm. Some, however, are so positioned along precarious ledges that they cannot be reached without sophisticated climbing equipment. They have therefore not yet been measured.

Only two of the owls are portrayed in relatively naturalistic form. All of the others show distinctly unnatural or supernatural features, such

as decorations on their ovoid bodies and insectlike antennae projecting from their heads. Figure 4, which I consider my owl "Rosetta Stone," shows naturalistic and stylized owl images side by side. Several owl depictions are anthropomorphized, others are highly abstract in that their torsos are constructed of rakes. Quite a few occur individually or in groups, constituting separate panels as in Figures 5 and 6, others are embedded in the context of anthropomorphic and/or entoptic motifs. A splendid example of the latter is the panel in Figure 7. Figure 8 graphically summarizes the range of stylistic variation.

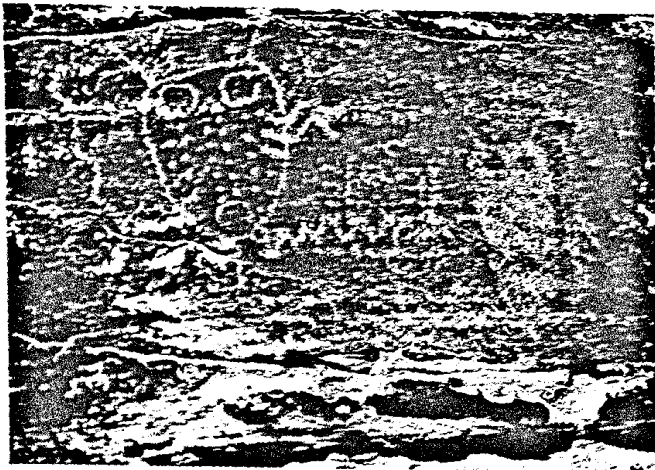


Figure 4. The PASTYLE owl "Rosetta Stone" from the "Red Ribbon" site. Leftmost of owl trio, 39 cm.

## Interpretation of PASTYLE Owl Imagery

Observing that most studies of American rock art had been much too simplistic, Hedges (1976:126) also claimed that much of the art was "directly related to shamanistic beliefs and practices." Today, nearly twenty years later, there is a general consensus among a number of rock art specialists that a great deal of the Archaic rock paintings and engravings encountered throughout western North America is shamanistic in origin. Paradigmatically developed by Lewis-Williams and Dowson (1988) in the context of South African

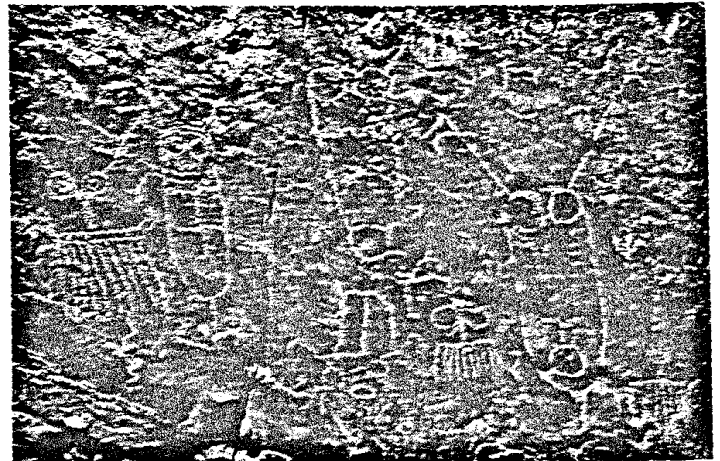


Figure 5. The "Owltown" site. Owl on extreme right, 85 cm.

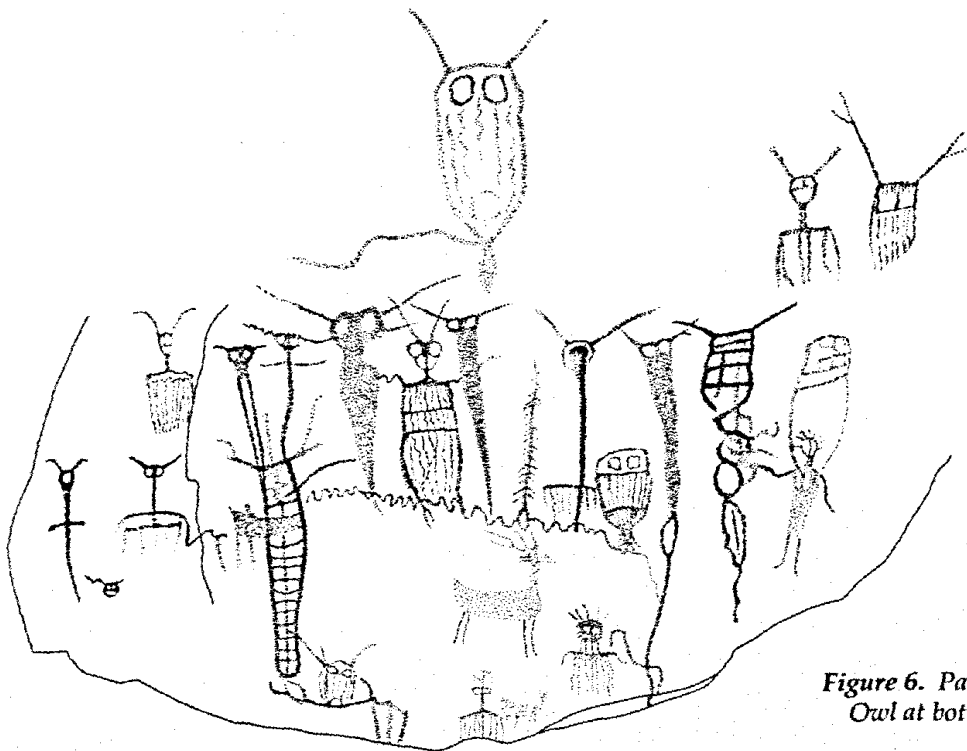


Figure 6. Panel B at the "Hootenanny-Dune" site. Owl at bottom, 16 cm.





Figure 7. Panel A at the "Hootenanny-Dune" site. Owl on left, 28 cm.

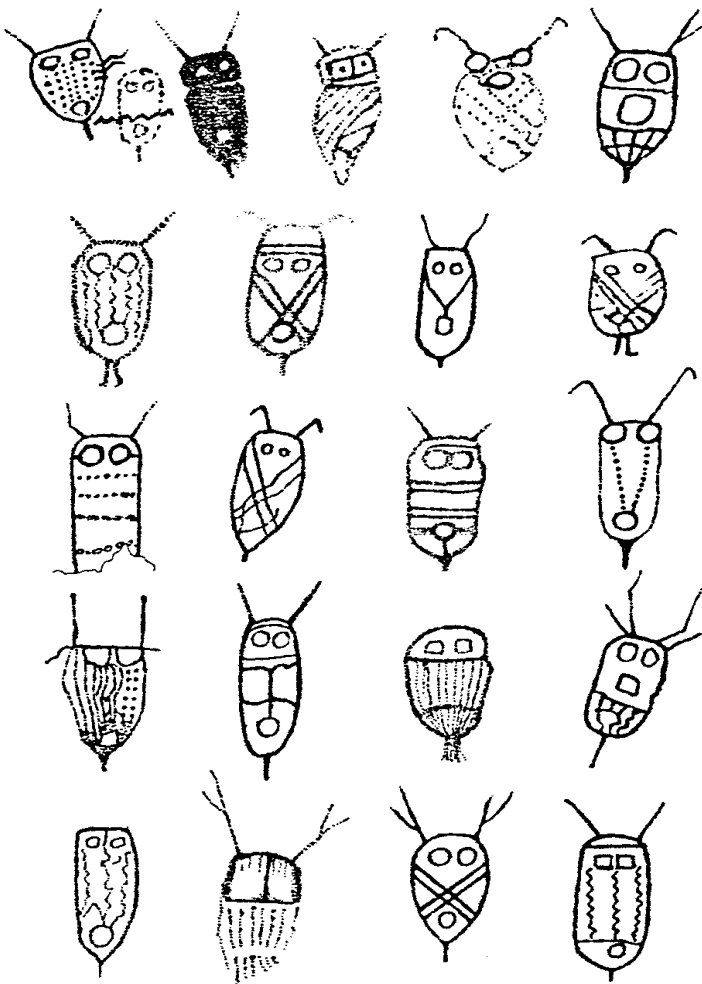


Figure 8. Stylistic range of PASTYLE owl variation. Drawings not to scale.

San rock art, with neuropsychological insights into the human brain and ethnographic information from Bushman hunter-gatherer cultures complementing each other, the shamanistic hypothesis is meeting with very positive resonance in its applicability to western North American rock art. Found to have a great deal of heuristic potential, the neuropsychological bridge that it provides allows us to cross the deep chasm, formerly marked by frustration and sometimes despair, which lay between the recording and interpretation of rock art of hunter-gatherer vintage.

Whitley, who worked with Lewis-Williams in South Africa, was among the first to transplant the seminal findings of this neuropsychological model to the United States. "This model of the mental (and ultimately graphic) imagery that may result from an ASC (altered state of consciousness) is based on the premise that the human neuropsychological system is a biopsychological universal. The neuropsychological effects of ASCs, therefore, are universal and cross-culturally experienced because all *Homo sapiens sapiens* are 'hard-wired' in the same way" (Whitley 1994a:85). In applying this model to his rock art research in the Great Basin, Whitley (1994a:92) comes to the conclusion that a shamanistic rock art origin associated with altered states of consciousness was widespread among hunter-gatherer groups, and that this

pattern may indeed "represent a fundamental aspect of New World religions."

Schaafsma (1994) has posited a generalized shamanistic framework as "the most useful model" to better understand the Barrier Canyon Style and the San Juan Anthropomorphic Style within the confines of the Colorado Plateau. In similar fashion, Turpin (1994) has convincingly argued that many of the Pecos River Style pictographs reflect mental imagery resulting from shamanistic trance or altered states of consciousness. For a cave site in Montana, Loendorf (1994) has demonstrated how rock art and shamanism are linked together through the concept of the vision quest.

I should like to submit that the neuropsychological model is also applicable to PASTYLE rock art. Much of its iconography—a plethora of entoptic phenomena, both replicated and construed, patterned-body anthropomorphs in phosphenic designs with associated animal spirit helpers and an array of power objects, therianthropic and other fantastic depictions, etc.—perfectly matches the paradigm of trance-imagery. It consistently fits the visionary hallucinations that typically originate from altered states of consciousness, as demonstrated by the neuropsychological model.

From all indications, the hunter-gatherer people that created the treasury of Palavayu art were committed to maize agriculture and were much more sedentary than Archaic populations. They have therefore been termed "forager farmers" or "farming foragers." This, at least, is Smiley's (1993:252) conclusion on the basis of new cultigen dates for maize, one of which corresponds to about 3,900 calendar years B.P.

While shamanism, "the most ancient of humankind's religious, medical, and psychological disciplines" (Walsh 1990), is almost universally believed to have been associated with hunter-gatherer societies, it was not discontinued with the emergence of maize cultivators in the Southwest. It must have been practiced by Basketmaker II people, for it lasted, in vestiges, into modern Pueblo times. PASTYLE artists have been extinct for several thousand years. Nothing is known about their beliefs, myths, rituals, and world view.

It is not possible to debrief the artists as to whether they executed the rock art in their role as shamans, whether they used hallucinogens to achieve trance, or whether rock art sites were vision quest sites. Nor can we investigate many other questions that perplex rock art researchers. The cardinal question, therefore, is whether present-day ethnographic information from the Southwestern Pueblos, presumably descendants of the Basketmaker people, can be used to shed light on their ancient rock art practices.

In my own field work among the Hopis, who today live only 100 km to the north of the northernmost perimeter of the Palavayu, I have been able to retrieve a sizable body of ethnographic data, a small percentage of which relates to the topic of shamanism. Above all, in addition to recording narratives featuring such shamanistic themes as death and rebirth in the initiatory act of becoming a shaman (Malotki 1974), I have been able to collect a good amount of surviving witchcraft lore. Presented in bilingual fashion to preserve the cultural authenticity of these important source materials (Malotki 1993:149–184), they contain many elements and practices for which only the term *powoqa*, "sorcerer, witch," needs to be exchanged for *tuuhikya*, "medicine man" or *poosi'ytaqa*, "shaman," to grasp their significance in this context. Among others, the cited passages allude to the sorcerer's capability of transmogrifying himself into various animals (Malotki 1993:24, 43), travelling nocturnally in the guise of birds and insects (Malotki 1993:40), and acquiring power from his "pets" or animal familiars (Malotki 1993:48, 49). Furthermore, they refer to witches who possess charming songs to allure sexually desirable females and game animals (Malotki 1993:60–63), who influence the weather (Malotki 1993:64, 65), and cause crop failure (Malotki 1993:66).

*Povosqa* (PL *povosyaqam*), the Hopi Second Mesa term for "shaman," which is known as *poosi'ytaqa* (PL *poosi'yyungqam*) in the Third Mesa dialect area, are in themselves insightful bits of information. All shamans, at one time, had to be members of a curing society known as *poswimi* (Curtis 1922:53). Its initiated members, termed *poovost* or *poswiwimkyam*, were basically "men with

X-ray vision." Etymologically connected to *poosi*, "eye," *povosqa* literally translates "one who does seeing," whereas *poosi'ytaqa* means "one who has an eye." "Seer" thus perhaps best captures the notion of the Hopi shaman, with "seeing" relating of course to the diagnosing and curing of illness and disease. As a rule, this "seeing" is enhanced by the use of a *ruupi*, or "crystal," the shaman's "third eye." In addition, the Hopi shaman is said to have consumed a specific *ngahu*, or "medicine," which may have heightened his visionary command and the diagnostic faculties of his all-seeing eye. Though nothing is known about the substance that was taken or of its possible ingredients, it may have involved *datura inoxia* or *datura meteloides*.

Bunzel (1992:533) corroborates this healing approach also for the Zunis. To aid his diagnosis, the medicine man drew on the use of a crystal or partook of a vision-inducing drug. Bunzel also suspects that the latter was "Jamestown weed," an Anglo term for *Datura*. La Barre (1975:35) adds the interesting observation that at Zuni the plant was also used as a device for divination. Thus, medicine men supposedly gave the plant to clients to discover thieves. Parsons (1939:196) relates a similar Zuni belief about two brothers who live inside the plant and reveal "in trance the whereabouts of lost persons or articles."

Containing the powerful alkaloids hyoscyamine and scopolamine (Schultes and Hoffmann 1979:110), the violently hallucinogenic and toxic plant *Datura* was and still is the most common psychotropic source in the area (Schultes 1972:46). Although *tsimona*, the Hopi term for *Datura*, is today vehemently shunned and decried as a *nukustusaqa*, that is, "evil grass" (Malotki 1983:207), Whiting (1966:89) lists it as one of the Hopi medical herbs—supposedly it was used to cure meanness—and reports that "the root may be chewed to induce visions by the medicine man while making a diagnosis." According to Curtin (1965:186), the Zunis employed *Datura* as a narcotic, anodyne, or anaesthetic. Pulverizing its blossoms and roots, they applied it externally on wounds and bruises. Zuni rain priests chewed the root of the plant to ask ancestral spirits to intercede for rain (La Barre 1975:35). Ethnographic information like this suggests strongly that the plant was

also known and used as a psychoactive stimulus in the Southwest in prehistoric times. Boyd (1996:266–269) has made a convincing case the depiction of hallucinogenic plants, including *Datura*, in the Archaic rock art paintings of the Lower Pecos River. There is no doubt in my mind that hallucinatory visions resulting from the ingestion of *Datura* have also been incised at a large number of PASTYLE sites.

While I have already published one brief Hopi folk reference to the shaman (Malotki 1993:186, endnote 6), another one is to be quoted here in full due to the inherent significance of this piece of ethnographic information.

Long ago, when a person became sick, he went to a shaman. The shaman was of course an initiated member of the Shaman society. If someone was not very sick, he went to him for treatment, and the latter treated him at any time of the day. If the patient was gravely ill, though, his relatives hired a shaman for him. He then did his shamanic diagnosing only at night. Whenever the shaman was going to practice at night, he used a special medicine. Upon eating this medicine, it got like daylight for him. Or he smeared something across his eyes, and then it got as clear as day for him. This is what people also tell, so I know about it.

After first swallowing some sort of medicine the shaman can see whatever *tuukyayni*, or "foreign object implanted by someone through black magic," is causing the ailment. He then removes this foreign object. Nowadays, no one practices this skill anymore. The medicine-men certainly don't do it. Only those who had learned this technique and were properly initiated were like that.

When I was still a child, a man by the name of Yoto used to shamanize. No sooner had he swallowed his medicine than something happened to him. This Yoto had a hawk for a father or animal familiar, and so he behaved and screamed like one. Like a hawk he had his wings spread out and flew up, even climbed on top of things. Shamans will typically have one of the game animals, bears, pronghorn, all sorts of beasts, even mountain lions, for a helper. Thus, with a bear for an animal familiar, he will act like one too. Growling like a bear he feels around his patients and removes from them the foreign objects that are causing the disease [Malotki 1984].

One of the classic metaphors for the shaman's out-of-body experience in his attempt to gain access to the spirit world is that of flight. It therefore comes as no surprise that Hopi witchcraft lore contains many allusions to the sorcerer's ability to fly. Notable among the animal familiars that he employs to this end are crows, owls, eagles, bats, and skeleton flies. The standard device of metamorphosing himself into one of them is somersaulting over a hoop, which itself may well be a symbolic act for the entering of an altered state (Malotki 1993:165-166).

There is no doubt in my mind that the ethnographic information referred to above constitutes almost irrefutable evidence that shamanism was once very much part of the Hopi cultural fabric. The big question that remains, however, is whether these ethnographic data can be extrapolated into the past to postulate the existence of shamanism in hunter-gatherer and Basketmaker II times. While I personally believe that this question can be answered in the affirmative, it must be pointed out again that there are no Hopi or Zuni ethnographic accounts that address the subject matter of rock art itself, for example, the motivation for its production, its function in the private or communal sphere, etc. Nor is there any paleo-ethnographic evidence in existence that convincingly proves that shamans were the artists that created it. I believe, however, that the thematic content of many of the iconographic motifs unequivocally points to a shamanic origin for this art. One clear example of pictorial evidence is recognizable in the PASTYLE owl images.

Owls are birds, and shamanism is replete with bird symbolism (Eliade 1964). The connection between birds and shamanistic power seems already established in Stone Age art. This connection is clearly evident in the celebrated "Bird Shaman" of Lascaux (Bataille 1980:113), and La Barre (1990:410) contends that the "Dancing Sorcerer" of Trois Frères wears an owl mask (Breuil 1979:166) and that "the bird shaman can be traced from Magdalenian to modern Siberian times." Wellmann (1976:101), in his observations on the bird motif in North American rock art, points out that the bird may either lead the shaman's soul, "acting as psychopomp, or the shaman's soul may itself change into a bird." Owl

depictions are therefore an obvious allusion to flight as a symbolic expression for the shaman's extracorporeal journey in quest of visions or other supernatural responses to mundane needs. Owl feathers may have been regarded as sources of spirit power, and imitating the bird's call may have contributed to the shaman's magic success.

But the owl signifies more than that. I propose that it represents a succinct metaphor for the shaman himself. This would imply that the modern Hopi belief that witches will transform themselves into owls also holds for the ethnographically non-attested past. To be sure, the temporal gulf that separates the present-day Pueblos from hunter-gatherer and Basketmaker II bands is enormous. I would posit, however, that there is an ideological continuity that can be projected back from present-day witchcraft lore to one-time Basketmaker II shamanic practices. Extreme Pueblo conservatism in matters of religion would similarly justify cautious extrapolation of present-day ceremonial attitudes and practices to those of ancestral populations in prehistoric times.

Many of the behavioral traits of the owl have immediate relevance for the shaman. The owl is nocturnal, and shamans seem to prefer the dark of the night for serious curing sessions, as transpires from the Hopi text above. Because of the bird's legendary ability to hunt efficiently in the dark and to spot and discriminate potential prey with an almost sonar positioning ability, it is easy to understand that the owl might have come to represent in the minds of foraging farmers a sort of shamanic ability to "see into" the other, hidden world of spirits or "see beyond" the ordinary, visible world. A liminal creature that is at home in the realms of both light and dark, just like the shaman who commutes between the secular and supernatural world, the owl is singularly predestined to become the metaphor par excellence for the shaman. The PASTYLE owls can thus be regarded as self-portraits or alter egos of the shaman. I believe that this identification with the bird may have been the ultimate motivation for portraying the bird with such frequency in the rock art of late Archaic and early Basketmaker II times. Compared to the paucity of owl images in the Pueblo periods, as was pointed out above, this might indicate a possible cognitive shift in the perception of the owl over

time. As legitimate shamans began, during Pueblo times, to compete with equally or more powerful practitioners of black magic, their shamanic animal familiars, when associated with witches and sorcerers, eventually became feared and perhaps even tabooed. This may have led to hesitations on the part of shaman artists to depict the bird.

In scrutinizing the petroglyphic portrayals of the PASTYLE owls it is notable, first of all, that all of them are rendered in rigid, frontal posture. None are shown in profile or with spread wings. Many have faces with large, prominent eyes and equally striking circular mouths in place of expected longitudinal marks for the beaks. Of the manifold physiological symptoms that have been observed in victims of *Datura* intoxication, pupil dilation may have been a motivating factor for the PASTYLE shaman-artist to select the owl as one of his alter egos. Extreme pupil dilation causes photophobia (Millspaugh 1974:502) to a point that a patient will gain the ability to see clearly at night, but be abnormally intolerant of daylight (Cooper 1997:35). The frequent occurrence of owl depictions in PASTYLE art can thus be seen as indirect evidence that some of its shaman-artists may have resorted to the psychotropic properties of *Datura* to achieve trance states. This effect of *Datura*-triggered pupil dilation may, ultimately, also explain why so many PASTYLE anthropomorphs are bug-eyed, i.e., rendered with eyes that are wide open and staring.

Instead of ear tufts, in the majority of cases the owls possess antennaed projections from the head, some of them quite long and terminating in hook-shaped tips. The depiction of antennaed or horned heads is one of the outstanding hallmarks of the over 1,800 PASTYLE anthropomorphs that I have recorded to date. Commonly assumed both to denote spiritual power and to represent conduits for vital force, the straight-lined antennae may also symbolize the potency activated by the shaman when entering a trance, or it may depict his spirit on the point of departing on extracorporeal travel. Whitley (1994b:26) notes that such head emanations are "common somatic hallucinations" during altered states of consciousness. This unmistakable semblance to PASTYLE anthropomorphs is immediately apparent in that the owls generally occur in the company of human figures with

cephalic projections. Additional similarities to the latter can be detected in the owls' torsos. Most of them are decorated with entoptic designs such as dots, flecks, sinuosities, and single or double lines that cross each other in bandolier-fashion. It should also be noted that many Hopi and Zuni kachinas are similarly endowed with horns and other head emanations and frequently sport bandoliers as part of their ceremonial upper body make-up.

Several of the owls have been anthropomorphized, which is clearly evident from the addition of digitated hands. One, at "Hootenanny," actually holds a crook staff in one hand, another, at "Choirboys," a staff and a rattle (Figure 9). Commonly considered to symbolize power, staffs of this kind survive among contemporary Hopi ritual paraphernalia (Wright 1979:92-94). Interesting in this connection is the observation that in some instances the ovoid shape of the entire owl, in itself conveying the impression of a mask, has become the head of an extended humanized shape. Humanized owls can be considered therianthropic in nature, more specifically "glaukanthropic." This

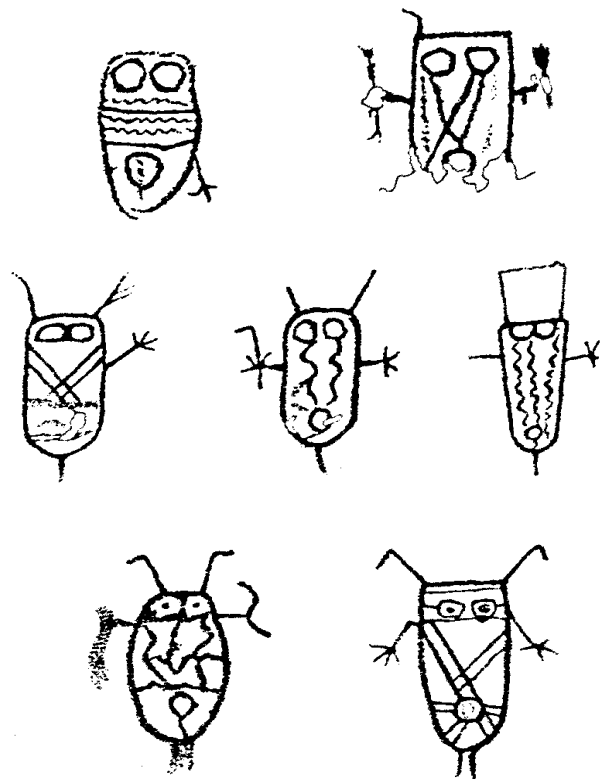
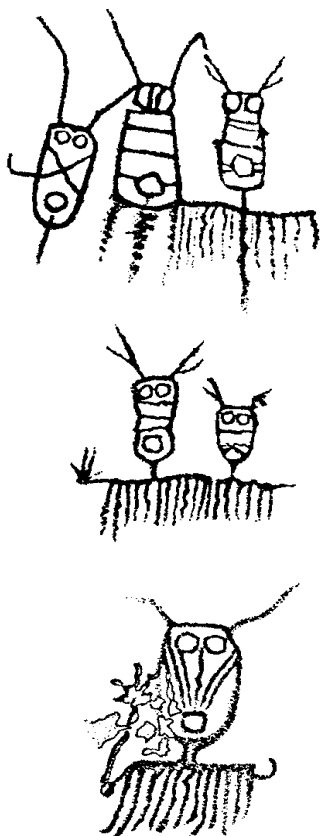


Figure 9. PASTYLE owls with anthropomorphic features.



**Figure 10.** Glaukocephalic or owl-headed rake images from the PASTYLE tradition.



**Figure 11.** Owl-headed rake-bod with anthropomorphic features from the "Flint Trail" site. Size of owl, 66 cm.

coinage is based on *glauks*, the classical Greek word for "owl," whose combining form is *glauk-*. Terminologically, one could perhaps also refer to them as "were-owls" or "glaukanthropes."

Five of the owls are graphically conceived on bodies that constitute rakes (Figures 10 and 11). The single rake, a rectilinear geomorph from the second or construal stage of trance (Malotki 1997b), is seen at numerous sites of PASTYLE affinity. It also occurs as a torso of PASTYLE anthropomorphs generated in the third or iconic phase of the three-tiered shamanistic model (Lewis-Williams and Dowson 1988:204). Generally interpreted as a rain sign (Malotki 1997b), rake motifs are also held to represent outstretched wings (Hedges 1985:89). While the latter interpretation would once more point to the shaman's capability of magic flight, the former could be seen as a symbolic reference to the owl as a rain-shaman. As was pointed out above, the Hopi kachina pantheon contains three owls, and kachina gods are essentially supernaturals responsible for

the production of life-empowering moisture in the form of rain.

Additional evidence for my shamanistic interpretation of PASTYLE owl imagery may be adduced from the neuropsychological model as proposed by Lewis-Williams and Dowson (1988). Within the framework of this model, which operates with six basic phosphenes or entoptic forms, I see PASTYLE owls as mental products from the second or construal stage of the altered state of consciousness. During this trance stage the shaman-artist typically attempts to make sense of the entoptics by equating them with objects familiar to him from his normal state of consciousness. Specifically, I submit that owl images are construed from the endogenous class of simple circles or dots that rank as category III in the Lewis-Williams and Dowson scheme. Anthropomorphized owls and owl-headed rakes, in turn, would have been hallucinated in stage three, the deepest stage of the ASC, when trancing subjects, often after passing through a tunnel or vortex,

actually begin to participate in their own ecstatic visions. Figure 12 is a graphic attempt to illustrate the genesis of PASTYLE owl images in the context of the three trance stages of the neuropsychological model.

One curious detail, for which I have only a very tentative explanation at this time, is a sort of necklike appendage attached to the bottom sections of several owls. Conjecturally, these "necks" may be indicators that the owl configurations equipped with them are actually the disembodied heads of owl shamans. Whatever their function, it was this feature which, after the discovery of the "Owltown" panel, allowed interpretation of a mysterious "creature" at the "Bric-a-brac" site as an owl and not as an unidentifiable insect as intimated in Figure 5.3, one of the graphic animal inventories of the Palavayu in McCreery and Malotki (1994:79). Rayed extensions from the necks of several of the owl heads may actually indicate the birds' plumage. One of the birds shows clearly descending tail feathers (Figure 13).

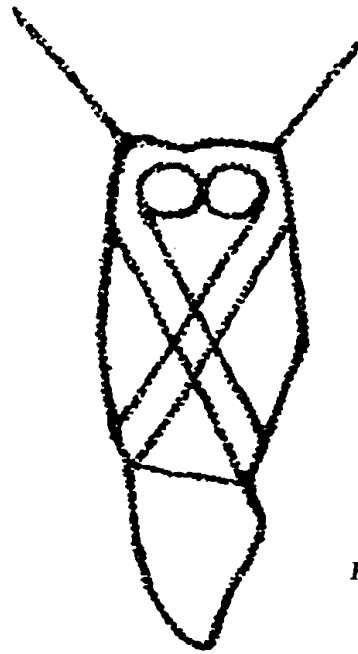


Figure 13. Tail-feathered owl from "Red Ribbon." Size, 40 cm.

### Conclusion

The unusual find of a large number of owl images in the late Archaic/early Basketmaker rock art horizon of the Palavayu is not accidental. Rather, it must be seen as integral to the shamanistic iconography that clearly differentiates this art from that of later Pueblo periods in the same region. While no claim is being made that all the elements in PASTYLE rock art are of shamanic origin, the owl, defined here as a particularly appropriate metaphor for the shaman, can be seen as one additional piece of evidence for the applicability of both the shamanistic hypothesis and the neuropsychological model in the attempt to better understand this fascinating art complex. While the actual meaning of the rock art owls to their ancient creators may elude us, they can certainly not be seen as products of idle painters or lessons in ornithology. Nor were they game birds, *bons à manger*, "good to eat," to refer to Lévi-Strauss' famous observation. Rather, they must have been selected because they were *bons à penser*, "good to think." Contemporary Hopi ethnographic information provides a strong argument for the latter, even though there is a tremendous temporal gulf between the ideological system of the artists that created the owls and that of modern-day Hopis. Using current ethnographic data and extrapolating

### HUMAN NERVOUS SYSTEM

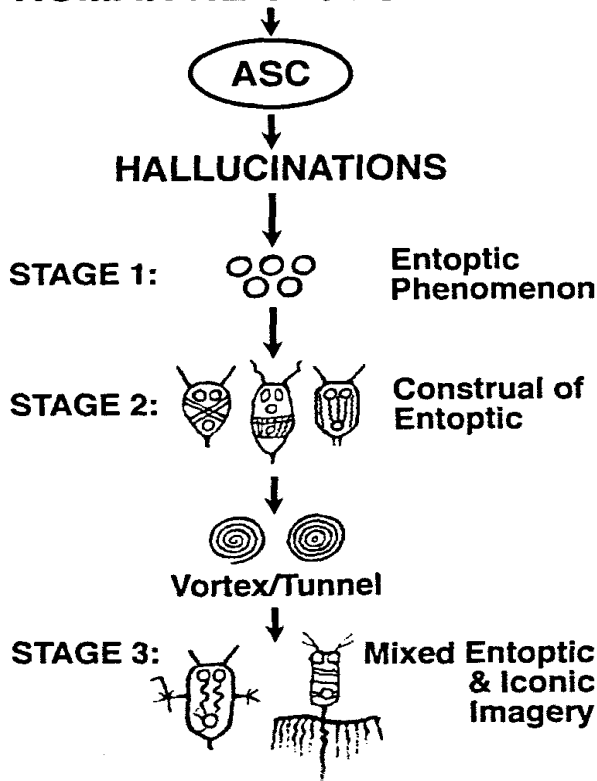


Figure 12. PASTYLE owl images in the context of the neuropsychological trance model.



them back several thousands of years into the past, is certainly a big and risky leap. However, while Hopi owl lore may not be directly applicable to the understanding of the ancient PASTYLE owl depictions, despite the fact that the Hopis are in part descendants of the Anasazi Basketmakers, it is one tool that allows us to shed some light on the owls. By gaining a better understanding of the conceptual framework that ultimately may have triggered their pictorial renditions, new and valuable insights are established that can no longer be ignored in the study of Basketmaker II or other populations in the prehistoric Southwest.

**Acknowledgments.** Several friends and colleagues helped shape this paper. Chris Downum, Kelley Hays-Gilpin, and Don Weaver kindly agreed to act as scientific sparring partners. Ken Gary and Nicholas Meyerhofer readily volunteered to be sounding boards for style and content. Pat McCreery joyfully provided the illustrations. Susan Lamb remembered the King reference on archaeological owl remains at Nalakihi, Wupatki National Monument. To each of the above I express my sincere gratitude.

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