CHAPTER 9

The Black Warrior Pictograph

Dating and Interpretation

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Within the dark zone of Picture Cave, three pictographs were dated in 1997 through plasma-chemical extraction and accelerator mass spectrometry (AMS). The resulting four dates were reported in *American Antiquity* (Diaz-Granados et al. 2001:66, 481–493) and produced a weighted average of cal AD 1025. Charcoal pigment removed a few years later from a fourth pictograph panel, a drawing of a warrior, yielded a comparable AMS radiocarbon date. The agreement of the newer date with the four previous AMS radiocarbon measurements on the other dated images in the cave gives additional strength to the original four dates. There is no statistical difference in any of the ages.

From these results, we conclude that there may have been a flurry of activity at this time in Picture Cave. The Black Warrior figure portrays clothing elements, including a belt and a ceremonial "military" headdress (figure 9.1). The headdress bears a striking resemblance to one on display at the Osage Tribal Museum in Pawhuska, Oklahoma. The pictograph date, the Black Warrior figure, and the early historic headdress and other clothing accouterments are discussed in this chapter.

On a vertical rock wall, in the dark zone of Picture Cave, is a clear depiction of a warrior, executed in black pigment (figure 9.1). The 31-centimeter-tall figure, holding a bow and a crowned-style mace or war club, was drawn in profile in a dancing or running posture. The figure is portrayed as moving to the viewer's left. To the right is a bloated beaver-tailed water spirit depicted with three arrows in its back (see chapter 10 here). A lighter, "ghostlike" outline of a face is drawn to the left in front of the darker outline of the Black Warrior's face. This second face either represents his opposite, or twin "brother," a change in position of the figure, or a spirit emerging from the Black Warrior's mouth. The entire figure is depicted in profile with one leg raised in a dance position and one arm brandishing the mace.

The Black Warrior figure has a great many unique elements, one being that it is rendered completely in black. Although several patches of brilliant red

pigment accentuate adjoining drawings, the Black Warrior is rendered monochromatically. The face has areas of no pigment, probably the artist's convention to allow important details such as the falconid eye to be revealed. The abdomen has a horizontal hourglass (butterfly) shape that is devoid of pigment. There is a horizontally striped sash at the waist. These areas, the handle of the war club, and the trailing elements of the headdress are also in outline.

The black pigment used for the Black Warrior is probably a recipe using a charred botanical composition. A 10X magnifier reveals a thin coating of silicon dioxide (SiO_2) deposited by water passing through the porous sandstone, dissolving the SiO_2 and evaporating, leaving the Si_{02} as a coating. This silica coating provided a modicum of protection for this pictograph panel.

The headdress is a wraparound turban, or bandbox, made of opossum skin, with a seven-part trailer at the back. This is not a commonly depicted headdress in Mississippian art. In reviewing the figures depicted in the shell and copper from Spiro, only the Stovall shell cup figure has a similar animal fur hat. This unique hat (also see plate 6 in P. Phillips and Brown 1978) has a counterpart in the form of a military hat in the Osage Tribal Museum Library and Archives (figure 9.2). While the museum example has only one trailer, it is made up of a linear arrangement of panels, feathers, ribbon, appliqué, beaded elements, and bone tattoo needles and ends in a prominent horsehair tassel. The museum headdress is well provenanced as an early nineteenth-century hat worn by a member of the Men of Mystery clan who had attained all thirteen war honors. The headdress is embellished with white glass seed beads, opossum hide with fur side out, and ivory-billed woodpecker scalps with the beaks attached. The beaks are lined with thin copper sheets. According to museum records, the trailer recounts O-don, the Osage word for "war honors" (La Flesche 1975:120).

The Black Warrior brandishes a large crowned war club or mace. While maces are a favorite subject in the Mississippian Ideological Interaction Sphere (MIIS) (Reilly and Garber [eds.] 2007) art on shell, copper, and pottery, they are not only depicted in the hand here, but can also appear alone, possibly as a signifier for identity. The Castalian Springs gorget and the Rogan plate both have maces, but they also have the bi-lobed arrow adornment and the bellows-shaped scalp at the waist (Brain and P. Phillips 1996:53; Brown 1989a:192, 1996:2:474–476; Brown and Kelly 2000:499–501; P. Phillips and Brown 1978:188). In the petroglyphs of East-Central Missouri, maces are found depicted, symbolically, alone or in conjunction with other motifs, such as a foot, a bird, or a bird track.

Figure 9.1.
Black Warrior pictograph, Picture Cave 1.

Around the waist of the warrior is an elaborate belt or sash of three tiers. The belt or sash bears no decoration or knot and tassel. Undecorated belts are a feature of Classic Braden (Phillips and Brown 1978:97). The woven sash or belt is a powerful

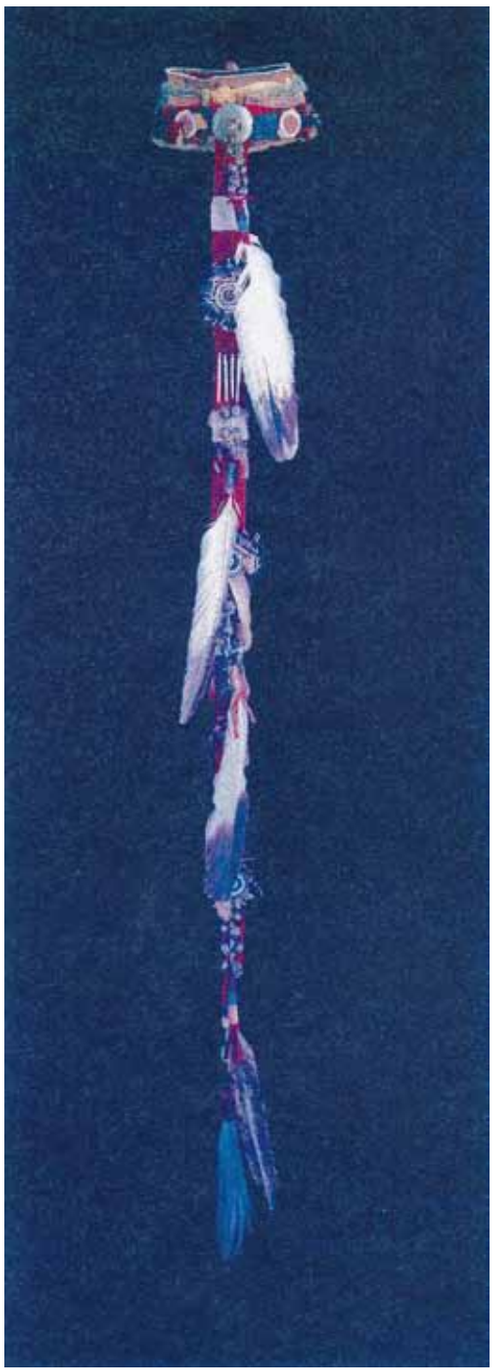

Figure 9.2. Osage headdress, Osage Tribal Museum, Pawhuska, Oklahoma.

metaphor in Osage symbolism. The woven buffalo hair binding surrounds the most sacred war symbol, the hawk shrine, or bundle (Bailey [ed.] 1995:48–51; Drooker 1992:76).

The black signifies war, and Mathews and Burns both agree that a figure of a totally black painted warrior means unmitigated or all-consuming war, the destructive power of a prairie fire (Burns 2005:60; Mathews 1961:50). The naturalistic eye has a prominent falconid, or forked, pattern. On the abdomen is a horizontal hourglass shape, as mentioned earlier, that probably represents the Great Butterfly, an important clan and war symbol among the Osage (Bailey [ed.] 1995:210; Burns 1984:32). Dark moccasins are worn. They are rather diminutive, the right moccasin ending in a smudge.

In the figure's right hand is a small, unflexed bow with an unusual arrow. The arrow has a prominent ovoid tip and a crosspiece and is not the only arrow depicted with a crosspiece. Interestingly, both of the prominent figures have arrows with crosspieces, but the arrows impaling the beaver-tailed Underwater Spirit have no crosspieces. Arrows depicted in flight have no crosspieces either. Why then the crosspieces? We will discuss this matter later.

Who is this Black Warrior? We believe that he is "The Man of Mystery"—the "Big Soldier" or protector (Burns 1984:11). He is also called "Thunder" (Bailey [ed.] 1995:68). He is more commonly known as Spring Boy" (Hidatsa) or "Long Teeth" (Arikara). In fact, this character is most likely one of two Star Men in Osage oral tradition, one of Evening Star's sons or one of two nephews of "Hawk," or Morning Star (Duncan and Diaz-Granados 2004). We believe that at least two images of this important figure are present at Picture Cave, one showing his brother in identical regalia: large headdress, sash, bow and arrows with no crosspieces.

It is apparent that the walls of Picture Cave comprise a giant picture book depicting the Dhegihan genesis of the cosmos. Morning Star, his nephews, the Star Men, the Water Spirit who raised Thunder, or Spring Boy, and many other characters are depicted.

Whereas the Gottschall site in southeastern Wisconsin portrays a record of the Red Horn Epic, Picture Cave is infinitely more complex, and key players appear in multiple guises.

The content of the Picture Cave rock art deals with a pervasive oral tradition. The imagery implied at Picture Cave is primarily of warfare. Two of the three images of the Man of Mystery, or Thunder, depict him as a warrior armed with the war club and bow (Bailey [ed.] 1995:68; Burns 2004:19–20). The exploits of the ideal warrior are set forth in the Siouan oral tradition in which Thunder and his brother slay the monsters and make the Middle World safe for human habitation (Bowers 1950:352). The adoption of war captives helped increase household populations. This seems to have been a significant mechanism in the formation of larger, integrated households intertwined through this process and marriage. A close look at the Osage O-don, or war honors, gives one a basic key to understanding the role of early Western Mississippian warfare. The highest honors were given only for organized, regulated forays that produced scalps and live captives for adoption and military feats when engaging in defensive warfare protecting towns and inhabitants (Bailey [ed.] 1995:80–87, 106–107, 123). This is not to say that all warfare was so highly organized. However, scalp hunting seemed to target outsiders who were intruding into community territory (Tixier 1940:224). Even then, captives were given an option: be adopted or have their head or scalp taken.

The second activity depicted at Picture Cave is Man of Mystery as the sacred clown with his exaggerated penis. His powers are those of the spring storms with their lightning, thunder, and rain. These violent storms, an integral part of the rejuvenation of the prairie and plains, are another facet of this Thunderer's personality (Lankford 1987:170).

The third aspect depicted at Picture Cave is still implied: doctoring or curing (see chapter 14). The powers gained by Thunder were not only those used in war, but also the ability to doctor and to bring the dead back to life (Lankford 1987:168).

The celestial family of the Dhegihan Sioux was a microcosm of their society. The ideals embodied in the imagery and oral traditions are focused at Picture Cave in the young, aggressive sons and grandsons of First Man, or Sun. The paramount young warriors, so prominently depicted, are the Man of Mystery, Thunder, and the Black Warrior.

Experimental Methods

SAMPLE COLLECTION

Jim Duncan removed black pigment from the rock surface using a new surgical scalpel as instructed earlier by Marvin Rowe. Pigment was scraped onto a clean square of aluminum foil, wrapped, and placed in a resealable plastic bag. To minimize the visual impact of sampling, paint was taken from three locations on the image. Rubber gloves were worn throughout sampling and during later handling in the laboratory to avoid modern contamination. The sample was then sent to Texas A&M University for processing.

CHEMICAL PRETREATMENT AND PLASMA EXTRACTION

We observed no extraneous materials (fibers, rootlets, etc.) when we examined the paint sample with an optical stereo microscope. Sodium hydroxide washes in an ultrasonic water bath were performed following experimental details outlined in Steelman et al. (2002). We omitted traditional acid washes used by other laboratories, as they are unnecessary with plasma-chemical extraction (Chaffee et al. 1994; Pace et al. 2000; Russ et al. 1992). In our procedure, decomposition of carbon-containing minerals such as carbonates and oxalates into carbon dioxide is prevented by running the plasma at low temperature (<150°C). With plasma-chemical extraction, only organic material is removed for radiocarbon measurements. The plasma-chemical extraction method has been used repeatedly to collect organic carbon from

rock painting samples for radiocarbon dating and has been described in detail in *American Antiquity* (Armitage et al. 2001; Diaz-Granados et al. 2001). AMS carbon-14 measurements were performed at Lawrence Livermore National Laboratory's Center for Accelerator Mass Spectrometry (CAMS).

Results and Discussion

Charcoal sampled from the Black Warrior pictograph yielded an AMS radiocarbon measurement of 965 ± 35 years BP. Calibration was performed using OxCal v3.5 (Bronk Ramsey 2000, based on data from Stuiver et al. 1998). The radiocarbon results and calibration of the pictograph dated here are shown in table 9.1, along with the previous age estimates of three other images in Picture Cave (Diaz-Granados et al. 2001). A weighted average (pooled mean) of five radiocarbon results (see table 9.1) was calculated using the R_ Combined function in OxCal v3.5, which assumes that the dates are from the same sample or object. While these radiocarbon dates are on four separate images in Picture Cave, they were all painted within a very short time span, and the age of the charcoal used to make each image is indistinguishable with radiocarbon. It is even plausible that charcoal from the same piece of wood was used to create all four paintings. An X^2 distribution was performed to justify averaging the five radiocarbon results from Picture Cave. T (eX^2) = 1.5 is a statistical indication that the combination of results is appropriate (it should be <7.8 for 95 percent probability that ages are coeval). Therefore, the weighted average is a best estimate for the true radiocarbon age of painting activity in Picture Cave.

The calibrated age ranges are summarized visually in figure 9.2. All determinations overlap even at 1s. Almost certainly, these four images were drawn within less than a 150-year period, possibly much more closely together than that.

A radiocarbon date on charcoal pigment from a cave painting represents a *maximum* age for the creation of the image. While charcoal is the most commonly dated archaeological material, it does not *directly* date the event of interest, the production of a rock painting, in our case, but rather the death of

TABLE 9.1. Radiocarbon analysis of charcoal paintings, Picture Cave

SAMPLE	CAMS #	CARBON-14 YEARS BP	UNCALIBRATED DATE AD	CALIBRATED DATE AD (1S)	CALIBRATED AGE RANGE AD (2S)
Black Warrior	89608	965 ± 35	985	1020–1060 1080–1160	1000–1170
Figure w/ wrap	41464	940 ± 80a	1010	1020–1190	970–1270
Underwater Spirit	41465	950 ± 100a	1000	1000–1210	890–1280
Bent arm w/ pelt average	38458	1035 ± 55a,b	950	890–920 950–1040 1140–1160	880–1160
Weighted average	—	980 ± 30b	970	1010–1050 1090–1120 1140–1160	990–1070 1080–1160

a. Diaz-Granados et al. 2001.
b. Calculated using R_Combine function in OxCal v3.5.
Note: CAMS = Center for Accelerator Mass Spectrometry.

the plant from which the charcoal was made. Old-wood and old-charcoal effects have been discussed by Diaz-Granados et al. (2001) in relation to Picture Cave. The old-wood effect arises because wood may have died long before it was burned to make charcoal (Schiffer 1986), but Diaz-Granados argues that it is not likely to have introduced much of an error in the case of Picture Cave charcoal drawings due to a relatively high decay rate for the area. Alternately, charcoal could have been burned at an earlier, unknown, time and left lying on the cave floor before being picked up and used to execute a painting (Bednarik 1994). However, since there was little charcoal on the cave floor when it was first seen by Diaz-Granados and Duncan in 1992, it is improbable that old charcoal has influenced these dates. We therefore expect that these radiocarbon dates on charcoal pigments at Picture Cave are reliable estimates of the time the drawings were made.

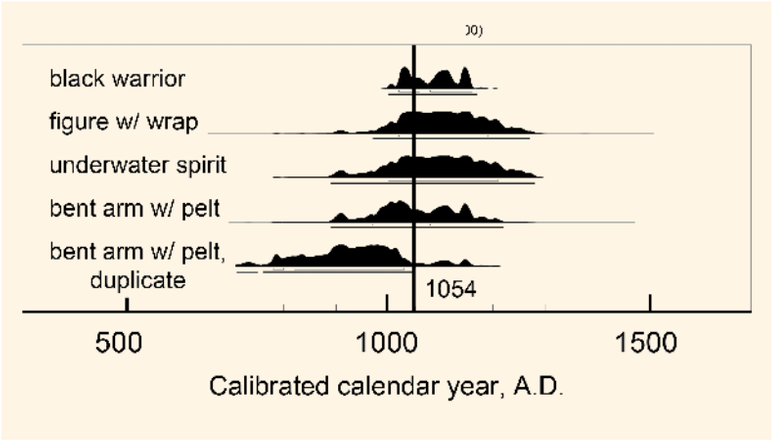

Figure 9.3. Calibrated probability distributions for four radiocarbon determinations of pictographs, Picture Cave 1.

Discussion of Iconography

The Black Warrior is a major figure in the art of Picture Cave. He is armed in all of his several images. He successfully aids his brother in subduing the forces of death and darkness, and he helps render their initial hostile nature into a peaceable, helpful, coexisting balance in the cosmos. In his role as a Dhegihan sacred clown, we can only say that he flees from the sunrise. The night belongs to the feminine powers; the dawn is the time for hunters and warriors, the chase and military exploits.

In 1911, Alice Fletcher and Francis La Flesche published their ethnography of the Omaha Tribe. This work has become the most important source of information regarding the Dhegihan people, and even more significant, it is the standard of excellence in conducting ethnographic studies (Bailey [ed.] 1995, 2010; Townsend and Sharp 2004). While there have been many naysayers who have long implied that the Dhegihans long ago lost their cultural heritage and thus soliciting information from them would yield only made-up stories and scanty recognition of ancient lore, nothing could be further from the truth. Because of their wealth, the Osage resisted the Ghost Dance, Old Man Faw Faw's teachings, and, with the death of John Wilson (Moon Head), they reinstalled their ancient religion as primary in the Osage Native American Church (Mooney 1996:264–265; Louis Burns, personal communications, 2005–2010).

Because of the complexities regarding tribal rolls and the corporate holdings of the Osage oil reserve, the Osage have preserved the ancient clan lineage. This does not mean that a great corpus of Dhegihan lore exists in toto; it does not. What we have found is a genuine effort on the part of the Osage and their Dhegihan kin to carefully preserve as much information as possible.

The White Hair Memorial along with the Osage Tribal Museum in Pawhuska, Oklahoma, have preserved much more of their heritage than the anthropological community acknowledges. Add to this the vibrant Osage Native American Church, and the ancient past is an integral part of the spiritual landscape.

Conclusion

It is both exciting and significant that all four of the charcoal paintings dated from Picture Cave yielded essentially the same age. Statistically, they are indistinguishable from one another, with a weighted average of 980 ± 30 years BP and a calibrated age range of cal AD 990–1160. Diaz-Granados et al. (2001; chapter

5) show the calibration curve in this time frame (AD 900–1250). At an uncertainty of 2s, all five samples' calibrated age ranges include the calendar year AD 1054, the year of a visible supernova (see Armitage et al. 1997, for a brief discussion of that event). Whether observation of the supernova might have triggered the paintings in Picture Cave is unknown, but the overlap of the age ranges with the time of that event is intriguing.