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James D. Keyser & Linea Sundstrom

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## ARTICLE

# Ambrose Bierce's Indian inscriptions: Pictographic records of Indian-White conflict along the Bozeman Trail

JAMES D. KEYSER

*Oregon Archaeological Society*

LINEA SUNDSTROM

*DayStar Research*

Western History is often understood primarily from the perspective of the United States westward expansion as reflected in the concept of manifest destiny. Rarely do we have the opportunity to view this period through the eyes of native artists who were fighting to maintain ownership of their ancestral lands. These two historical currents came together in 1866 with the Hazen Expedition, when the expedition's cartographer, Ambrose Bierce, recorded two "Indian inscriptions" that were first-hand accounts of indigenous groups' efforts to combat westward expansion of different non-native peoples. Although the native groups ultimately failed in this effort, these narrative vignettes provide first-hand testimony to their effort to maintain control of the Powder River Basin and surrounding regions in the face of a variety of intrusive elements. As a part of the Biographic art tradition, both sites appear to have been left as "calling cards," a recently recognized site type whose purpose was to taunt defeated enemies with an unmistakable message detailing the artist's bravery and audacity in invading their territory.

**KEYWORDS** Northern Plains Indian Biographic art, Powder River basin, Hazen Expedition, Plains Indian warfare, Ambrose Bierce

In mid-year 1866 Ambrose Bierce, better known from his later years as a journalist and an author of short stories, resumed his military career that had begun at the start of the Civil War, by joining General W. B. Hazen on an expedition to inspect military

outposts across the Great Plains. Serving as the expedition's engineering attaché, Bierce traveled by horseback and wagon from Omaha, Nebraska to San Francisco, California. Having been trained in civil engineering, surveying, and topographic work at Kentucky Military Institute six years before, Bierce's primary duty was to survey and map the expedition's route across the largely uncharted territory it traversed. By all accounts (Fatout 1954) Bierce did his job exceptionally well, given the spartan working conditions and the fact that a significant part of the trip through Wyoming and Montana territories required a cavalry escort because the expedition was trespassing in Indian lands. In general, Bierce is credited with producing meticulous maps and drawings of notable accuracy and correct proportion. In this regard, Fatout (1954:396) notes that "Bierce had a keen eye, and he was a deft draftsman."

As Bierce traveled across Wyoming and Montana territories in August and September of 1866 he observed and recorded two "Indian inscriptions," both of which he copied in painstaking detail (Bierce 1866). In fact, even though neither site still exists, both Bierce drawings contain information of sufficient detail to reveal the Indian drawings were narratives typical of the Biographic art tradition in widespread use across the Plains in the Historic period. Additionally, the drawings provide insights relevant to understanding other rock art still extant today (e.g., Keyser 2018). The expedition's trek between Ft. Laramie, Wyoming Territory and the Yellowstone River in Montana Territory near the present-day city of Billings followed the Bozeman Trail (Figure 1), since it was along that route that forts Reno, Phil Kearny, and C.F. Smith – posts under inspection – were situated.

To place the sites Bierce recorded in context, we need to know the expedition's schedule. Sometime between 19 and 23 August 1866, while at Ft. Reno, Wyoming Territory, Bierce observed an "Indian Inscription on a rock," which he locates on the Powder River (Figure 2). This must have been somewhere about 35 km (20 miles) east of the present-day town of Kaycee, Wyoming, for even though Bierce himself does not specify the exact site location, we know the expedition spent this period at Ft. Reno on the Powder River (Murray 1968:26–27). After inspecting the post, the expedition continued northward, arriving at Ft. Phil Kearny north of Buffalo, Wyoming, on August 27. While it is possible that the "inscription" was found some short distance either upstream or downstream from Ft. Reno, the expedition's only contact with the Powder River was during their stay at Ft. Reno, and according to Bierce's own map of their route they did not follow the river in this area for any distance, nor did they cross it again (Murray 1968:24).

The second Biographic art tradition inscription recorded by Bierce was a drawing on a tree stump in the Yellowstone Valley (Figure 3). Probably drawn with charcoal (although it may, instead, have been done with red ocher) the arborylyph was located somewhere near the present-day town of Worden, Montana. Bierce's own route map, drawn as part of his official duties (Murray 1968:31), shows the expedition leaving Ft. C. F. Smith and heading north to the Pine Ridge Hills (which Bierce labeled "Wall Hills") where the expedition skirted around their south side and then traveled north down Arrow Creek.<sup>1</sup> Traveling light, the expedition would have reached the Yellowstone Valley on September 6 or 7

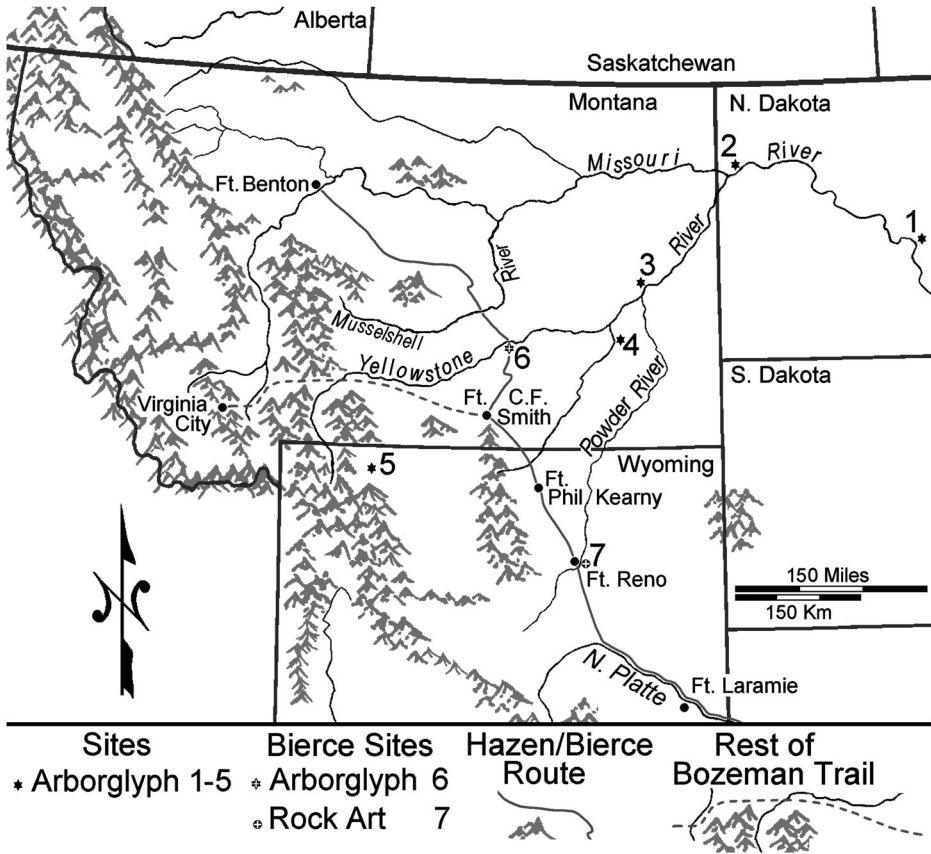


FIGURE 1 The Northern Plains, showing the route of the Hazen Expedition, route of the Bozeman Trail with military forts of the period, locations of Bierce's Indian inscriptions, and locations of other arborglyphs. Cartography done by Keyser.

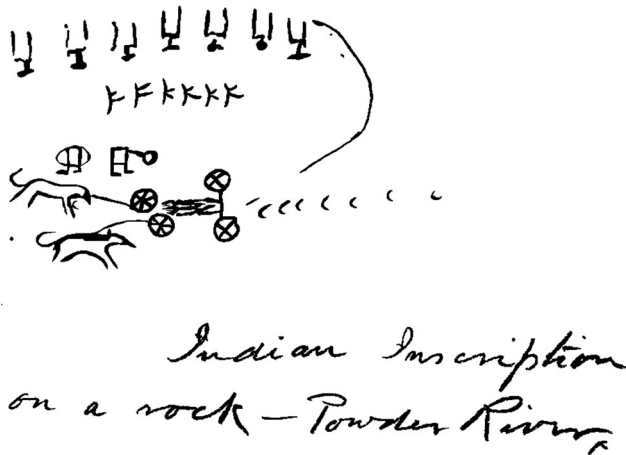
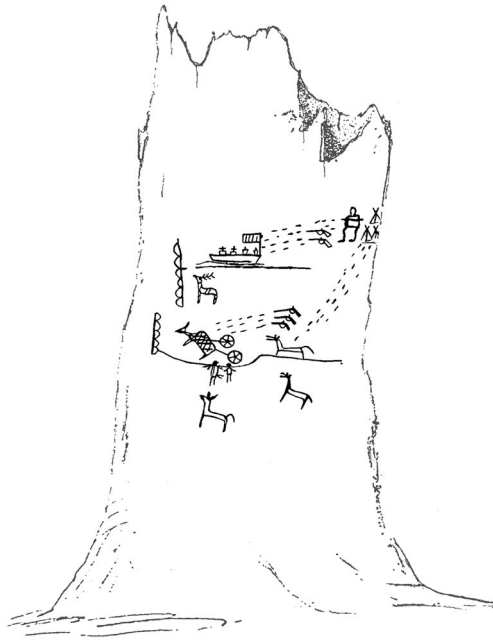


FIGURE 2 Petroglyph illustrated by Ambrose Bierce in 1866 from site on Powder River near Ft. Reno, Wyoming Territory. Illustration by Keyser from Bierce original.



*Indian Inscription on  
the Stump of a Tree - Yel-  
lowstone Valley\**

FIGURE 3 Charcoal pictographs on a tree stump illustrated by Ambrose Bierce in 1866 from a site in the Yellowstone River valley. Illustration by Keyser from Bierce original.

where they crossed the Yellowstone River and proceeded north to the Musselshell River and then on to Ft. Benton. Bierce's map shows a direct crossing of the river, with no travel upstream or downstream, so we can confidently place the arboglyph in this relatively restricted area of the middle Yellowstone Valley.

### The sites

The two sites Bierce recorded are relatively typical examples of Plains Biographic art. They use archetypal human and animal forms composed in standardized scenes and related to one another by characteristic conventions including trails marked by human footprints and horse tracks, a villagescape, flying bullets, floating weapons, stacked weapons, ethnic markers, and even name glyphs. We address each of these compositions separately.

#### *Powder River petroglyph*

This scene (Figure 2) is the more enigmatic of Bierce's two. It shows a row of seven inverted humans (portrayed as armless busts) positioned just above a row of six

crudely K-shaped elements. Both rows are placed above a pair of headless humans interacting with a wagon, which has two animals tethered to its wheels. A line of horse tracks leads up to the rear of the four-wheeled wagon, and a solid curving line arcs down from the human bust at the right end of the upper row to the wagon's rear. What appears to be a single horse hoofprint is situated just under the neck of one tethered animal.

This composition has elements of both a combat scene and a tally of war honors. The two humans who stand next to the wagon both carry shields and could be understood as attacking it, although their lack of weapons is unexplained. Likewise, why they are headless is unclear if they are attackers, but makes sense if they are scalped, since showing enemies without heads is often a convention for scalped foes. Clearly, these shield-carrying men are Indians, and if they are scalped they could represent Indian scouts employed by the military, or attackers killed and scalped by such scouts. Both Delaware and Pawnee scouts were employed by the military as early as 1857 (van de Logt 2010:43, 45) when they were involved in major battles. Between 1864 and 1866, Pawnee, Winnebago, and Omaha scouts for the US Military participated in numerous fights with Lakota, Yanktonai, Cheyenne, and Arapaho forces (van de Logt 2010:57–79). During various of these engagements, from 1857 onward, Indian scouts were killed, while in others the scouts themselves scalped Cheyenne and Lakota foes who had been killed by them or other soldiers (van de Logt 2010:45–47, 66–79). Thus, if these two shield-carrying Indian men are dead and scalped, they could represent members of any of seven different tribes.

The animals tethered to the wagon do not have the classic “horse” form typical of Plains Biographic art mature-style animals, nor are their tails typical of those drawn for horses, and we know of no other example of a rock art horse drawn with a tail like this. Also, both animals are tethered to the wagon's wheels, and the “rein” for the lower one runs from the wagon wheel to the animal's upper mid-back. Such a tether makes no sense if viewed realistically. Why the animals are tethered facing the wagon is unexplained, but clearly, they are not in position to be pulling it, an observation supported by the fact they are tethered to the wheels. Possibly they represent animals tied to the wagon while workers cut and loaded wood or hay. Another possibility is that when attacked the soldiers or teamsters had turned the wagon on its side to shield both themselves and the horse or mule team from enemy fire, as was done during the Wagon Box Fight in 1867. This would explain the position of the livestock behind and tied to the wagon.

The single path of horse tracks leading to the wagon most plausibly represents an attacker's ride up to the wagon to count coup on it or its occupants. If so, the attacker and his horse are “off-stage,” a not uncommon convention in such scenes.

The wagon itself is not an immigrant's covered wagon designed for long distance travel and transport, or a military ambulance used for transport of wounded. Rather, it is a freight wagon, hay wagon, or lumber wagon such as might have been used for hauling wood or hay in the immediate vicinity of a fort or one used by teamsters to transport goods and supplies from fort to fort. The fact it lacks an obvious wagon box suggests it represents a lumber wagon, which was typically stripped down to the running gear with no wagon box attached. Attacks on

wagon-equipped parties of all sorts – and the use of wagons as revetments – were common during the Indian wars period, as memorialized in such battles as the Sawyers, Wagon Box, Fetterman, and Hayfield fights and numerous drawings from Cheyenne and Lakota ledgers (Bates et al. 2003:262; Berlo 1996:17; Calloway 2012:111, 113, 129; McLaughlin 2013:86, 275; Petersen 1988:41, 117, 122, 129).

The two rows of images above the wagon scene have the structure of a tally, especially since the humans are portrayed upside-down as armless torsos. Likewise, the T-shaped heads might represent combatants wearing hats, either US soldiers, teamsters, or Indian scouts. The curving line was clearly drawn to connect the row of dead humans to the wagon, thereby indicating that they were associated with it. Almost certainly they were soldiers or teamsters killed by the artist and his party in their attack on the wagon.

The K-shaped symbols drawn between the row of humans and the wagon scene are not readily identifiable. At first glance, they resemble Y-shaped picket pins with a short length of cut rope attached (Figure 4), which were used in Blackfoot biographic art to represent stolen horses (Wissler 1912:41). However, in the well-documented history of Blackfoot biographic robe painting, the only places this symbol is used are in a tally on Wissler's drawing of Bear Chief's painted tipi (Brownstone 2005:5; Wissler 1912:38) and a robe by Victor Pepion commemorating the war deeds of Mountain Chief (Dempsey 2007:134–135). Pepion painted this robe about 1940 for display in the Plains Indian Museum in Browning, Montana during John Ewers's tenure as curator there. This connection between Ewers and Pepion is important because it seems likely that Ewers introduced Pepion to Wissler's work during the course of their collaboration at the museum. Given the rarity of this particular variant of the picket pin symbol, it seems likely it was simply an individual artist's idiosyncratic design, rather than a recognized variant commonly employed across the full corpus of Blackfoot biographic art. In any case, there is certainly no evidence that it was drawn as early as 1866. Coupled with the fact that this site location far south in the Powder River basin is considerably outside traditional Blackfoot territory – even for their long-distance raids – leads us to suspect that the symbol, despite its similarity to Wissler's illustration, is not a Blackfoot-style picket pin indicating a Blackfoot drawing.

A seemingly more plausible suggestion is that these symbols represent guns drawn in a very sketchy, shorthand form. If one views the two shorter lines extending out to the right of the longer line as the firing mechanism of a long gun, then most of these images have a slight bend in the longer line that could represent the barrel's junction with the buttstock. A very few drawings of other obvious rock art firearms are nearly



FIGURE 4 Picket pins indicating stolen horses copied from Bear Chief's war tipi by Wissler in 1912. Illustration by Keyser from Wissler's published illustration.

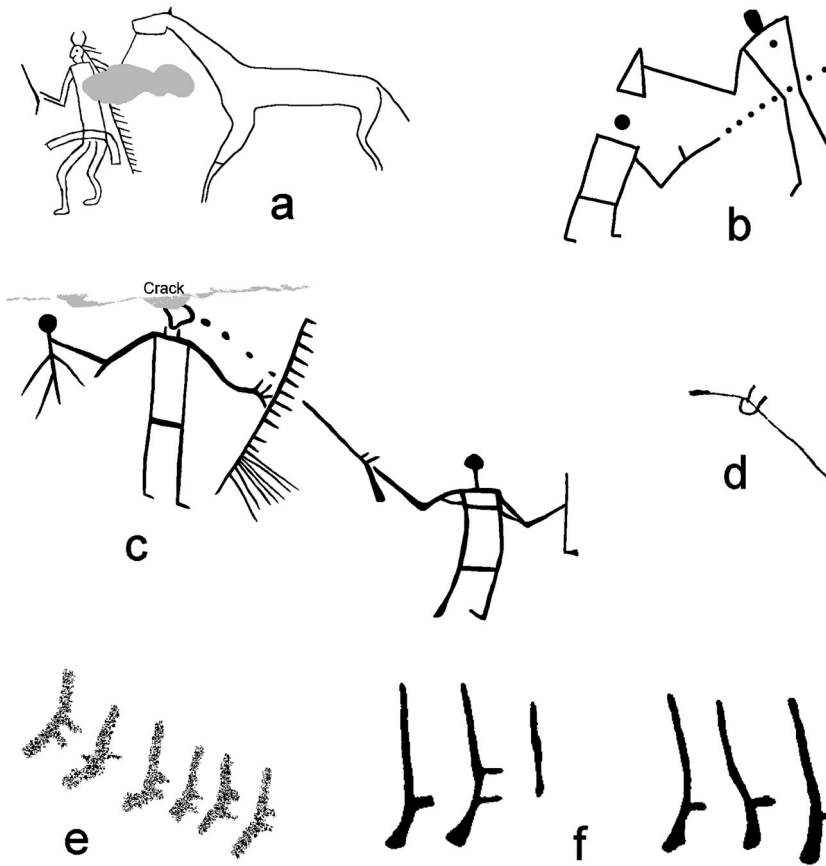


FIGURE 5 Guns are often portrayed quite simply in Northern Plains Biographic narratives. All of these are similar to those illustrated at the Ft. Reno site. a-d, f are original tracings by Keyser, e is a photo-tracing by the Keyser.

this simple (Figure 5), so it is possible that these represent a simple tally of guns. The fact that they point downward could either indicate they were taken from the dead teamsters/soldiers (who are also shown inverted) or that they are the attackers' weapons used against the wagon's defenders.

### Chronology and ethnic origin

The obvious questions concerning Bierce's Powder River petroglyph are its likely date and ethnic origin. Site chronology is relatively straightforward. Horse tracks and a wagon date the image firmly within the Historic period. Reverend Marcus Whitman made the first wagon trip across Wyoming in 1836 and by 1840 wagon trains were regularly leaving Fort Laramie and traveling across the Oregon Trail, which ran just 120 km (75 miles) south of the site. But the Bozeman Trail was established in 1863 and forts Reno (Conner), Phil Kearny, and C. F. Smith were built in 1865 and 1866. Dozens of armed conflicts, ranging from individual skirmishes to full-scale battles, happened along the Bozeman Trail between 1863 and August



1866 as Lakota, Yanktonai, Cheyenne, and Arapaho forces defended their lands from non-Indian intrusions.

Some of the most famous of these early encounters include the battles of Platte Bridge and Red Buttes, Battle of the Tongue River, the Sawyers Fight, and the Powder River Massacre but smaller-scale hostilities such as the one portrayed in Bierce's Powder River petroglyph were nearly constant throughout 1865 and 1866. For example, at Ft. Phil Kearny alone, between its 16 July 1866 construction start date and Bierce's August 10 arrival at Ft. Reno, Colonel Henry Carrington documented six raids that resulted in from one to nine casualties (Miller 2011:20). These conflicts, and the establishment of the Bozeman Trail forts, would have been the likely time frame for introduction of the lumber or freight wagon drawn in the rock art scene. We know that the petroglyph had to have been carved before 23 August 1866, since Bierce left Ft. Reno that day traveling to Ft. Phil Kearny. Thus, we can be nearly certain that the site dates between AD 1840 and 1866, and it is extremely likely that it was drawn in either 1865 or early 1866.

The ethnic origin of the site is much more difficult to determine. As noted above, local Indian warriors from the Arapaho, Cheyenne, Lakota, and Yanktonai tribes were constantly raiding and fighting in the immediate site area during the 1860s, and during that same period we have records of men from at least four tribes – Pawnee, Delaware, Omaha, and Winnebago – serving as scouts with the US military in this area; even including duty at Ft. Reno. The local tribes (Lakota, Yanktonai, Cheyenne, Arapaho) are known to have had a strong tradition of making Biographic art (Berlo 1996; Sundstrom 2004; Keyser 1984) and the other four tribes were certainly conversant in the tradition, even though we have few or no surviving examples directly attributable to them.<sup>2</sup> While it is possible that an artist from a tribe even further afield, such as the Shoshone, Crow, or Blackfoot, authored this image, there is no demonstrated record of warriors from these tribes being intimately involved in Bozeman Trail warfare during this period.

In any case, the simplicity of this drawing fits well with what we know of the evolution of Plains Biographic art. Despite the portrait-like drawings (e.g., Figure 6) from the last third of the 1800s, for which Cheyenne, Lakota, and Arapaho ledger artists are best known (Afton et al. 1997; Berlo 1996; Maurer 1992; McLaughlin 2013), the few extant examples of Biographic art from these tribes for the period between AD 1830 and 1870 (Figure 7) show much simpler drawings featuring rectangular-body and V-neck style humans and mature-style horses (Berlo 1996:15, 86–89; Keyser 1996:42–44; Keyser and Brady 1993; Maurer 1992:195; Taylor 1998:48, 63, 68). This comports well with the few rock art examples from this area of the Plains that appear to date from this period and that are assignable to these groups (Keyser 1984:39, 40, 47; Sundstrom 2004:111). Possibly, the stylistic simplicity of these petroglyph figures is due to their being hurriedly created on a stone “canvas” near the fight scene or Fort Reno. In sum, although it is unlikely that we will ever be able to confirm the ethnic identity of the artist who drew this petroglyph, the most likely candidates are a Cheyenne, Lakota, or Arapaho warrior-artist who was fighting to keep invading Americans out of the last hunting grounds available to these tribes in the region between the Black Hills and Bighorn Mountains.



FIGURE 6 Illustration from the Tie Creek Ledger, ca. 1878, shows typical ledger art style drawing of a Cheyenne warrior attacking soldiers within a military compound. Keyser photograph.

### ***Yellowstone River arborglyph***

Somewhere near the present-day twin towns of Worden and Ballantine, Montana, Bierce recorded a second “Indian inscription.” This was a detailed arborglyph drawn on the stump of a large tree in the valley of the Yellowstone River (Figure 3). From General Hazen’s report on the expedition’s travels, we know the stump was probably an old, dead, debarked, cottonwood tree, located quite close the river itself. Hazen described the Yellowstone River valley where they crossed thusly:

I found the right valley [south side] of the Yellowstone about two miles broad, the mile farthest from the river being rather high and covered with sage. Then came a strip of good grass and near the water a fine growth of cottonwood (Hazen 1875:44).

In contrast to the Powder River petroglyph, Bierce’s Yellowstone River arborglyph is a very detailed, readily understandable biographic narrative showing a war party’s expedition during which members participated in two actions. Conventions used to detail the narrative include a villagescape of at least three tipis, floating weapons stacked to show the attacking force, footprints showing the attackers’ path, a flag, and hats worn by people in a boat being attacked, and a Métis sash worn by one man standing by the Red River cart. The sash, flag, hats, flat-boat, and Red River cart all serve as ethnic markers indicating Métis and non-Indian Euro-American participants.

The narrative begins in the upper right with three tripodal tipis (and possibly others since one of these three seems to partly disappear around the tree’s trunk).

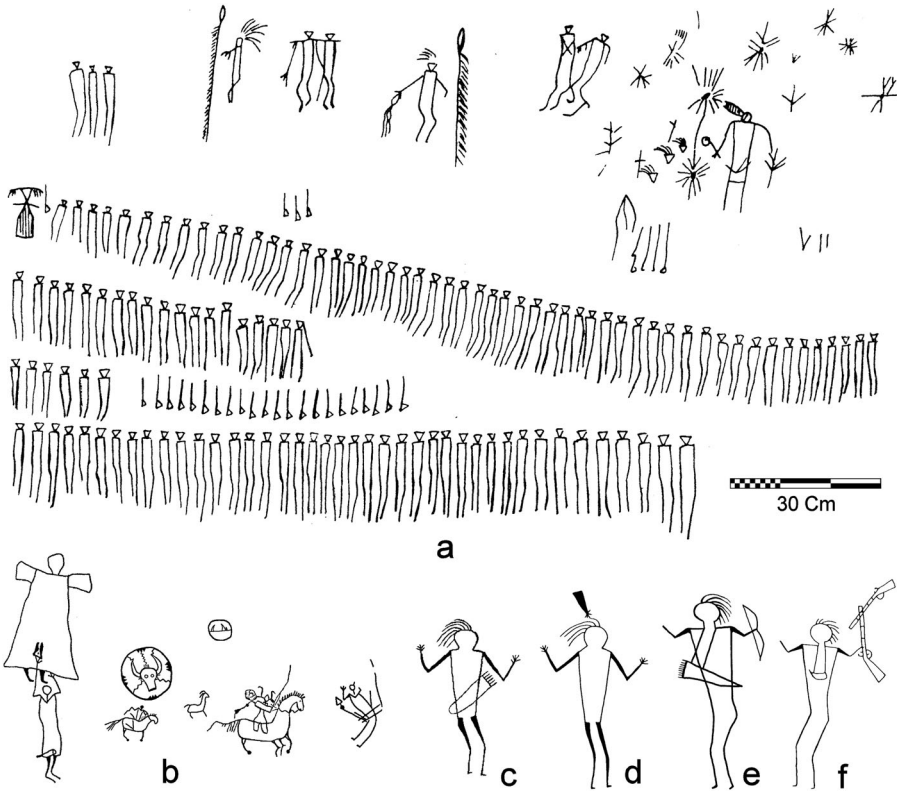


FIGURE 7 Simple rectangular-body humans are characteristic of Lakota and Cheyenne Biographic art prior to the late 1860s. a, petroglyph at 39FA79, South Dakota (original illustration by Sundstrom); b, petroglyph at 39HN217, South Dakota (original tracing by Keyser); c-f, humans from the Schoch war shirt, ca. 1830 (photo-tracing by Keyser).

Next to this village scene is a rectangular body human standing just behind and slightly above two floating guns stacked one above the other. A horizontal line across the human's upper body is a third gun since bullets stream from its end, as they do from the muzzles of the two obvious firearms. These bullets, indicated by short dashes, fly from the guns toward a boat, which floats on a pair of horizontal lines, the lower of which extends out to a range of mountains. Four humans (two with a cross-shaped head, probably indicating a hat, and thus probably a non-Indian male, the other two hatless, but without any obvious sexual or ethnic indicators) sit in the boat and a large rectangular flag flies from a mast at its right (downstream) end. We know the boat is going downstream because it is not being cordelled, nor does it have a sail. The flag is not obviously an American flag, but it may be, since it has stripes and Indian artists were not particularly concerned with specifics of flag symbolism (like orientation of the stripes). However, historic paintings and engravings show all manner of boats flying various flags, standards, or pennants; so we cannot identify with any certainty the boat, its nationality, or its purpose based on this flag.

This vessel is almost certainly a Mackinaw flat-boat. Such Mackinaw boats typically had a flat bottom like this one and lacked a centrally positioned mast with sails. Historic illustrations show, however, that some Mackinaw flat-boats were outfitted with a shorter mast to serve as a flagpole (like this one). Mackinaw boats also often had little or no cabin structure, in contrast to keelboats, which usually had a significant mast and cabin about midships (State Historical Society of North Dakota 2019). Other native drawings of keelboats in rock art, robe art, and ledger drawings emphasize the mast and cabin, and also show the cordelle and sometimes men cordelling the vessel, to clearly differentiate them from the simpler flatboats (Anonymous 2018:32; Bies 2018:23–27; Point 1967:96, 115).

In viewing this boat, our western artistic assumption is to see the double line underneath it merely as a landscape element representing the river in which the boat floats. However, the structural context of Plains Biographic art enables us to identify that such lines – while in fact, representing the river – actually serve as the boat’s “track” or “path” extending from the mountains at the left to this scene. The fact the “path” extends “ahead” of the boat simply serves as a common Biographic art convention to bring the “action” to where the attackers are standing. Similar uses of groundlines and even railroad tracks to represent paths of wagons, railroad trains, and even automobiles are noted in other biographic compositions of this same genre and era (Fredlund et al. 1996:15–16, Figures 9–11; Keyser and Poetschat 2005:55; Klassen et al. 2000:196, 199). Often, as here, such paths lead from an origin point to the scene being portrayed.

To the left of the boat are an elk and a vertically oriented line with shallow, sideways U-shapes arranged along its left side. This “loop line” is nearly identical to a pictographic device used by various Indian cartographers to denote mountain ranges or groups of high buttes. Both *Ac-ko-mo-ki*, a Blackfoot man and an unnamed Gros Ventres (“Fall Indian”) artist used such loop lines to indicate mountains on maps drawn about 1800 (Beattie 1985–86; Bouchet-Bert 1999:34), and John Crazy Mule used the same symbol on two biographic narrative maps he drew sometime shortly after 1878 (Fredlund et al. 1996; Sundstrom and Fredlund 1999:55). In this case, the loop lines are quite reasonably interpreted as mountains, and frame the actions of these two coup count scenes as taking place to the east side (downriver) of the mountain ranges. Furthermore, lines connect some of the actors to the mountains, thereby placing the actions in real space.

The elk is a name glyph for the river on which the boat was traveling when it was attacked. Our own research has documented that Crow, Cheyenne, Assiniboine, Lakota, Gros Ventres, Cree, and even possibly some Blackfoot groups all called what we know as the Yellowstone River the Elk River, and the Cheyenne artist, Crazy Mule, labeled the river as such on one of his maps by using a name glyph in the form of an elk’s head (Fredlund et al. 1996:6, 11). Using such name glyphs for geographic features, drawn in exactly this same sort of relationship to the named feature, is a regular occurrence on the few Historic period Plains Indian maps still extant (Bad Heart Bull and Blish 1967:289; Beattie 1985–1986:170; Fredlund et al. 1996:11; Meadows 2006:270; Steinke 2014:Figures I, II, IV; Thiessen et al. 1979:156–159).

Use of the Elk River name glyph convention has previously been suggested for Biographic rock art by McCleary (2016:111) for a fight scene juxtaposed with a painted elk in Pictograph Cave. He attributes the scene to a Blackfoot artist, and even though some Blackfoot apparently used the name Elk River for the Yellowstone (Schultz 1962:335, 377), another Blackfoot glossary reports a completely different name for the Yellowstone River, while using Elk River to refer to the North Saskatchewan River (Alberta Parks 2018). Given the tall, linear anthropomorphs drawn in fluid pose in this Pictograph Cave scene, we suggest that this drawing is more like other Crow rock art (cf. Keyser and Minick 2018:23; Keyser and Renfro 2017:13) than Blackfoot rock art.<sup>3</sup> Thus, we feel the ethnic origin of this Pictograph Cave scene remains to be demonstrated. Nonetheless, the use of the Elk River name glyph in Bierce's arboryglyph would be another instance of this convention found in roughly the same area as Pictograph Cave.

The second scene, painted just below the attack on the Mackinaw boat, begins with the tracks of the aggressors coming from the village down to three stacked guns, all of which are shooting at a two-wheeled cart pulled by a large bulky draft animal. Again, in another typical example of the synecdoche that characterizes Biographic tradition art, the attacking party "actors" are "off-stage" and represented only by their paths of footprints. The cart itself is clearly headed to the left, and we interpret that as going toward the loop-line mountains. In fact, the size of the ox and cart are such that this attack may be being illustrated just as the cart reached the mountains. The ground-line extending out behind the ox cart is its "path" showing from where it came.

Two mature-style horses are drawn to the rear of the cart; and just below it is a mule, identified by its long ears. When threatened with attack, Métis hunters typically placed their carts in a circle or line to create a fortification to protect their horses and themselves (Vestal 1934:156–157). Although the drawing does not clearly show this, the cart is interposed between the aggressors and the humans and one of their mules. Tracks of one attacker come past the guns to the uppermost horse. Such a track sequence, leaving the main body of attackers, is a Biographic art convention used to show that one particular warrior ran forward to capture this horse. The "captured" horse stands on a groundline, which arcs downward and extends to the left under the wagon's wheel and "through" the humans all the way to a second depiction of loop-line mountains. The two rectangular-body humans stand just below the cart with the groundline passing through their neck and shoulders area.

The items depicted in this drawing and the conventions used to integrate them into narrative scenes are typical of Plains Biographic art, though things such as the boat, flag, cart, draft animal, groundlines, and loop-line mountains are among the rarer items known from the biographic art lexicon. Flying bullets, human tracks, the tipi village, mature-style horses, simple rectangular-body humans, and stacked floating weapons (guns in this case) are among the most common Plains Biographic art motifs and need little elaboration here. Among these, only the stacked weapon convention, which is used to show an attacking force, requires slightly more explanation. In such "stacked arrays" each weapon is often freestanding, even while discharging bullets in the case of a gun; and thus, most actors are off-stage, as in

these scenes. But in a few cases, as exemplified by the upper scene, one or more humans stand as part of the stacked array holding a weapon that also discharges. While the number of guns does not necessarily indicate the actual number of combatants, in this case each scene has three guns and there are three tipis and three sets of foot tracks leading from the tipis to the lower scene. This implies that there were, in fact, three protagonists for these actions.

Other images and conventions used in this arboglyph require some further information to be readily understood. The two-wheeled cart is a Red River cart, the most common vehicle of conveyance on the Northern Plains during the mid-1800s. Introduced in the region in 1801 at the Pembina River post in present-day North Dakota, these carts evolved rapidly from solid-wheeled vehicles to those with spoked wheels and were quickly adopted throughout the fur trade since one cart, pulled by a single draft animal, could carry as much as four or five pack horses (Alwin and Kaye 1984:123). Red River carts were used for all sorts of fur trade transport, especially by “freemen,” who were former fur trade employees who chose not to return to Europe after their period of service. Many of these freemen were French and Scottish, and quickly formed Métis groups as they married local Indian women and had children.

By the second decade of the 1800s, the Métis had adopted a hunting rather than farming culture and begun relatively large-scale commercial meat hunting to supply the post at Pembina and other Red River valley settlements. Thus, after about 1820, the Red River cart became a cultural identifier for the Métis and their nomadic hunting way of life (Alwin and Kaye 1984:130), and by the mid-1800s such carts had become so intrinsically tied to Métis identity that they were used as an “ethnic marker” (cf. Jordan 2015:91) both by other natives and Euro-American writers (Barkwell 2007:6; Préfontaine et al. 2003). The fact they were usually pulled by oxen only served to further set them apart from other contemporaneous Plains inhabitants.

Furthermore, by moving out onto the Plains beyond the Red River Valley in both Canada and the United States, this expansion brought them deep into Lakota territory (Alwin and Kaye 1984:130). In later decades, as the range of bison became more restricted, the Métis expanded farther into the territories of the Blackfoot, Assiniboine, Cree, and Gros Ventres. With such expansion came conflict with all these tribes. James Willard Schultz (1935:184–188) described Métis groups competing for the last bison herds in Montana’s Judith Basin in the early 1880s and paints a clear picture of the prejudicial ways in which he and his adopted Piegan kinsmen viewed and treated the Métis.

The animal pulling the cart is clearly not a horse, as evidenced by its bulky body, odd horn configuration, and cross-hatched coat marking. It seems most likely that this is an ox, which were often drawn with odd coat patterns and horn configurations. In many winter counts, cattle are depicted as speckled as a clue to their species (Mallery 1893:286). It seems likely that the crosshatching on this animal shows that it has a brindled or spotted hide, rather than a solid one like a bison. The prominent hump and horn configuration clearly indicate that it is not a horse. In the mid-1800s oxen were the preferred draft animal for Red River carts, and these were mostly Texas Longhorn cattle, which are typically spotted.



Finally, identification of the two humans by the Red River cart as Métis people is further supported by the two short horizontal lines extending from the waist at the right side of the larger figure (Figure 8). These are clearly not weapons, and they are unlikely to represent a bleeding wound since there are neither bullets fired directly at these humans nor weapons pointed toward them (cf. Keyser et al. 2014:37, 41–42, 47–48). Instead, the most plausible interpretation is they represent the ends of a Métis sash, a brightly colored, finger-woven wool belt that was the standard dress for Métis men (Louis Riel Institute 2018). Adopted from the French voyageurs during the fur-trade era, such sashes quickly became a symbol of Métis identity as well as a utilitarian garment serving to assist with almost every facet of frontier life (Historica Canada 2018). That an Indian artist would portray such a sash worn by a human juxtaposed with a Red River cart is typical of the use of ethnic markers in Plains Biographic art (Jordan 2015:90–91), and our identification of this trio of attributes – red river cart, ox as draft animal, and waist sash – as indicating a Métis party is not merely a guess, but rather a reasonable inference informed by the larger context (historic and geographic) of the picture itself.

The line connecting one horse and the wagon to the loop-line mountain is another example of the use of a groundline to indicate a path of travel. Obviously, the Métis group was traveling a trail toward one of the many mountain ranges in this area of southern Montana/northern Wyoming when they were intercepted and attacked by the raiding party to which the artist of this arborglyph belonged. During their attack on the wagon, the raiders may well have killed the ox pulling it, and they took at least one horse from the group. Even though one human's tracks lead only to the

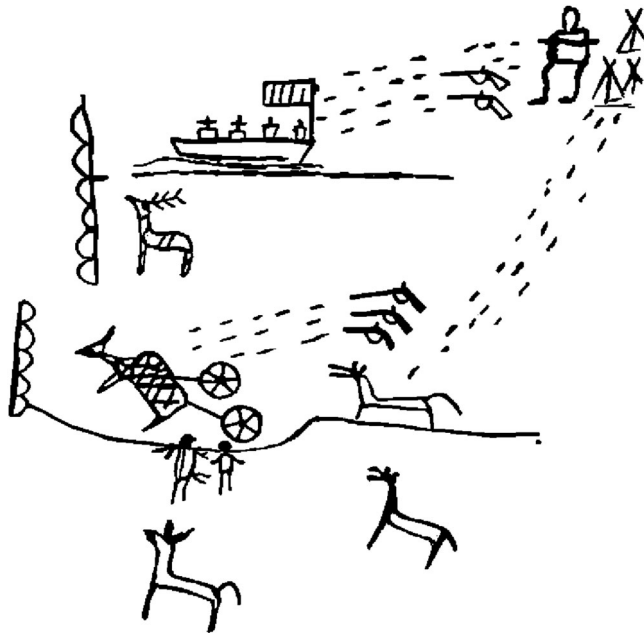


FIGURE 8 Close-up of drawing on tree stump illustrated in Figure 3 to show details of scene. Note patterned body of ox and sash shown at waist of human at lower left.

rearmost horse, we suspect the raiders actually took both horses and the mule, given the way the animals are positioned in the drawing.

This arborglyph drawing has many geographic elements like maps drawn by Plains Indian artists throughout the 1800s (Beattie 1985–86; Fredlund et al. 1996; Meadows 2006:270; Steinke 2014; Warhus 1997). Other than on such Indian maps, things like mountains, rivers, and a trail are not typical of most Biographic tradition narratives, but they are not unknown. For instance, a stream and the plan of two adjacent Arikara villages are laid out in a biographic drawing on a war shirt (Anonymous 2018:32–33), and two rock art panels in the North Cave Hills show what appear to be geographic features and routes of travel indicated by foot tracks (Sundstrom 2004:106–107). In this regard, the Bierce arborglyph is a significant addition to the Biographic art lexicon.

### Chronology and ethnic origin

We can make reasonably accurate assessments of the age and ethnic origin of the Bierce arborglyph. The age of the drawing can be established to within a decade or so. The component scenes show two distinct, but related actions, both perpetrated during a single war expedition by the raiders coming from the tipi camp at the upper right. The upper scene shows an attack on a Mackinaw flat-boat as it descends the Yellowstone River. Although such an attack could have been executed as early as 1835 when the first keelboats and Mackinaw boats began to ply the river (MacDonald 1950:45), it was only in the period between about 1840 and 1850 that Mackinaw boats were regularly used on the river (MacDonald 1950:51–56). By the early 1860s, flat-boat traffic on the Yellowstone was commonplace, because this mode of travel and transportation was beginning to appeal to more and more miners in the settlements around Virginia City and Helena. These residents of Montana Territory wanted to return to the “States” to avoid Montana winters. They traveled the river in flotillas termed “Mackinaw fleets,” whose boats numbered from a few to as many as 20 all going downstream together (MacDonald 1950:56–61).

Hezekiah L. Hosmer, Montana’s first territorial chief justice and resident of Virginia City, wrote of his trip downriver in September, 1865, in dispatches to *The Montana Post*, published in Virginia City. Entitled “Correspondence from the Mackinaw Fleet,” Hosmer, and his son, J. Allen Hosmer (who authored a book about the trip a few years later) noted that they set sail for “America” on 27 September 1865 in a group separated into four “fleets” with a total of 36 boats. Leaving from near the present-day town of Livingston, they took 11 days to travel down the Yellowstone to the Missouri River. Constantly on the lookout for Indian attack, they saw no natives, but did find their own arborglyph drawn in charcoal on a peeled cottonwood log in an old war lodge along the river near its confluence with the Powder River (Hosmer 1865; Hosmer 1962:299). Although they mostly tied up and camped ashore, they occasionally remained aboard their boats all night to thwart potential hostile actions.

Like the flat-boat, Red River carts have a very similar history in this area. Jesuit Father Pierre-Jean DeSmet is credited with being the first to bring Red River carts



into Montana in 1841, but in the following two decades numerous Métis people would have been coming into the eastern part of the territory (McGinnis 1990:101). By 1866 such carts would have been relatively common, especially once the Bozeman Trail opened in 1864. Given that Bierce recorded this arborglyph in early September 1866, we can state with near certainty that it was drawn between 1840 and summer 1866, and quite likely it dates to the early years of the 1860s.

The ethnicity of the arborglyph artist is a bit more speculative, but the use of the elk name glyph to identify the river allows us to rule out the Mandan, Hidatsa, Kiowa, Shoshone, and Arapaho who called the Yellowstone River by names other than Elk River. Likewise, we can reasonably rule out Crow authorship because neither the horses nor the humans are stylistically like Crow drawings of the mid-1800s (cf. Keyser 1996:41, 2018:139–140, 144; Keyser and Minick 2018:23; Keyser and Renfro 2017:17–18).

This leaves Lakota, Yanktonai, Cheyenne, Blackfoot, Gros Ventres, and Assiniboine groups as those who were likely to have drawn this arborglyph, since raiders from all these groups would have been in the area and would have referred to the Yellowstone as Elk River. For these groups, the drawings themselves provide a few clues as to which is most likely the group responsible for the images. Rock art and robe art of these tribes from the mid-1800s generally shows small, rectangular body humans and mature-style horses like those drawn on the Bierce Arborglyph. Only the Blackfoot typically drew other styles of humans – the triangular body, hourglass-style figures and rectangular body, V-neck-style humans, which are relatively common in their art from this period (Bouma and Keyser 2004:18; Lycett and Keyser 2017:5–8). The absence of such figures suggests this is not a Blackfoot drawing but does not rule this out with certainty. The other three groups all typically drew only rectangular body humans along with guns, tipis, and mature-style horses in both robe art and rock art of the mid-1800s (Ewers 1982:42; Feder 1980; Keyser 1996:42–44; Keyser and Brady 1993; Maurer 1992:186–193; Taylor 1998:28–29, 48–49, 62–63).

The placement of the attackers' camp to the right (east) of the two mountain ranges and their travel southward (in relation to those same mountain ranges) suggests that these raiders came from the north. Supporting this inference is the arborglyph's location, right where the primary war trail for northern tribes sneaking into Crow country crossed the Yellowstone River (Keyser 2007:10; McGinnis 1990:29–30, 187). If this movement south down the war trail along the eastern flanks of the Rocky Mountains and outlying ranges accurately reflects the movement of this war party, then it is unlikely to be a Cheyenne drawing, since this tribe was primarily located to the southeast of the middle Yellowstone River region. Instead, Assiniboine, Gros Ventres, Yanktonai, and northern Lakota, all living north of the site, regularly traveled the war trail to the middle Yellowstone country to raid the Crows. These groups would seem to be likely candidates. Thus, we suspect an artist from one of these tribes drew the Bierce arborglyph.

### Interpreting the arborglyph scenes

The number of items and conventions used by the artist who drew the Bierce arborglyph, coupled with Bierce's attention to detail when he recorded this drawing,

enable us to interpret fairly completely the actions being portrayed. From a camp established north or northeast of the Yellowstone River, a small party of raiders attacked a single flat-boat traveling downriver. Typically, such Mackinaw boats traveled in fleets for protection from such attacks, but it was not uncommon for a single boat to strike out alone (MacDonald 1950:52). Two humans in the boat have cross-shaped heads, which usually indicates people wearing hats. In combination with the large flag flown at the craft's bow, the hats indicate that the boat occupants were a party of non-Indians.

Various reports attest that such attacks were an ever-present danger for river travelers and could involve horrific violence. Crow Indian agent A. J. Vaughan attempted to transport a Mackinaw boat full of provisions and annuity goods for the Crows upriver from Ft. Union to Ft. Sarpy in August of 1855 but was turned back only a short distance up the Yellowstone River due to a Lakota attack, and similar attacks were of sufficient frequency that no annuity goods made it upriver in the three-year period from 1855 to 1857 (MacDonald 1950:48–49). Ten years later, both of the Hosmers' reports still emphasized a constant wariness regarding Indian attack on their Mackinaw fleet as it headed downstream (Hosmer 1865; Hosmer 1962, MacDonald 1950:60).

Finally, we have an eyewitness account of one such attack as seen by Fanny Kelly, a white woman abducted by Lakota warriors in 1864. In October of that year, in her captors' camp on the Yellowstone River, she reported:

... a large Mackinaw, or flat-boat, was seen coming down the river. From their hiding-places in the rocks and bushes, [Lakota warriors] watched its progress with the stealthy ferocity of the tiger waiting for his prey. At sundown the unsuspecting travelers pushed their boat toward the shore, and landed for the purpose of making a fire and camping for the night. The party consisted of about twenty persons, men, women, and children. Suspecting no danger, they left their arms in the boat. With a simultaneous yell, the [warriors] dashed down upon them, dealing death and destruction in rapid strokes. The defenseless emigrants made an attempt to rush to the boat for arms, but were cut off, and their bleeding bodies dashed into the river as fast as they were slain .... (Kelly 1873:164–165)

Given these reports, it seems telling that although the drawing shows the boat coming under heavy fire from the attackers, there is no evidence that anyone was killed or wounded. Neither is there any indication of the boaters returning fire, nor the attacking party counting any sort of coup. For this artist, apparently the attack on the Mackinaw boat was of sufficient value to be used as one part of his calling card.

The second scene shows more detailed action. Here the raiders have come a long way from their camp (as evidenced by the long line of tracks) when they raided a group of Métis with their Red River cart, pulled by an ox, traveling on a trail leading to the mountains. The combination of three elements, the Red River cart, an ox used for a draft animal, and what is likely a Métis sash worn by the larger

human, makes a strong case that this scene shows an attack on a group of Métis in which one or more horses were taken.

One is tempted to identify the trail in this scene as some segment of the Bozeman Trail, which ran north along the Bighorn Mountains and then turned west to skirt the north side of the Pryor Mountains and continue just north of the Absaroka-Beartooth Range. It then enters the mountains near present-day Livingston, Montana. The easternmost east–west segment of the Bozeman Trail is just 60 km (40 miles) south of Bierce arborglyph and would have been a tempting target for such a raiding party. The scene reveals that upon encountering the Métis travelers, the raiders brought the wagon and draft animal under heavy gunfire. This action appears likely to have killed the ox, since the firepower is directed toward it, but it may also have resulted in the death of the two persons shown just below the cart. Unfortunately, there is no overt indication that these represent killed enemies, but their placement along with one horse and mule is suggestive. During or just after the attack on the cart, the tracks of at least one attacker shows he ran ahead to capture the horse standing on the trail-line just behind the cart. Although no other tracks lead to the mule or the other horse, we suspect that their placement away from the cart indicates they were also taken.

In sum, this action resulted in the disabling of an enemy Red River cart by killing its draft animal (and possibly some of its occupants) and taking at least one horse if not three animals. These are the sorts of war honors that would have received prominent display on a bison robe, war shirt, or tipi liner when these raiders returned home.

Conflicts like that depicted in this scene arose throughout the nineteenth century when Métis hunters entered bison hunting grounds controlled by the Lakota and Yanktonai and their allies. As the bison herds diminished during the height of the hide trade, Métis hide-hunters moved south and west from the Red River of the North into what is now eastern Montana in search of bison to meet the demands of Hudson Bay Company traders (McGinnis 1990:101, 142–143, 156). It is estimated that they killed half a million bison in the Lakota hunting territories in twenty years (Vestal 1934:156). Naturally, the Lakota and Yanktonai fought fiercely to protect their hunting grounds. The Métis proved a formidable enemy “ready to circle the two-wheeled carts into an effective fortification at the first sign of danger” when venturing into contested territory (McGinnis 1990:156). The Yanktonai in particular harbored enmity against the Métis, and conflicts between them occurred frequently in the bison hunting grounds of the Judith Basin, just north of the area likely depicted on this arborglyph (McGinnis 1990:159).

Northern Lakota and Yanktonai winter counts record a decisive battle between Red River Métis and Yanktonai forces in 1824. The winter counts relate that the Yanktonai found a large group of Métis inside a fortification, routed them, and destroyed the fort (Howard 1960:365–366; Sundstrom 1998). Lakota and Yanktonai winter counts also record a battle with Red River Métis bison hunters in 1873 (Howard 1969:35; Sundstrom 1997). The winter counts place the battle on the Tongue or Power River in eastern Montana. This time several hundred Métis were holed up inside a natural fortification reinforced by a corral made of their carts. From this position, the Métis were able to drive the Lakota-Yanktonai

forces back (Howard 1968:21, 65–66; Vestal 1934:154–160). Many other, smaller skirmishes took place when Métis communities ventured into the Powder-Tongue River country. The arborglyph likely refers to one of these.

### Function of the Bierce inscriptions

Both the petroglyph and the arborglyph recorded by Bierce appear to have originally been drawn by Indian artists as “calling cards” – a newly defined site type whose purpose, as recorded in various historical sources, was to threaten and taunt locals by showing the presence of successful enemy raiders and illustrating the actions they had undertaken (Keyser 2018; Keyser and Minick 2018; Minick and Keyser 2019). Such sites make a statement to locals that their enemies have come, been successful in various warfare actions, and then gotten away. The basic activity – making this sort of “art” – is akin to “challenge tagging” characteristic of gang graffiti done in a rival gang’s territory (Phillips 1999:170). In the typology developed for such calling card sites (Minick and Keyser 2019) these are both obviously “after-action” scenes representing successful raids on non-Indian and Métis groups in the arborglyph and a military work party in the rock art. All these groups could well have been considered “locals” by the Indian artists because they were involved in establishing and supplying settlements in the region (forts, trading posts, and the first mining towns). Recounting their warfare prowess in this way to those they viewed as locals was typical of Plains war parties (Taylor 1895:130; Welch 1924).

When drawn in one’s home territory, such calling card rock art or arborglyphs could also have been done to warn off potential interlopers (Bouchet-Bert 1999:38–42). The Powder River inscription may have served as just such a message, since the site was apparently placed quite near Fort Reno.

The Bierce arborglyph, with its clear indication that the war party had traveled a great distance, implies that it was done by a group from outside this specific area and intended as a taunt to those who were viewed as locals. There is ample ethnohistoric evidence of similar arborglyphs functioning as calling cards in the late 1700s through the 1800s (Carver 1781:417–418; King 1964:78–79; Taylor 1895:130; Welch 1924). And recent archaeological research has shown the same sorts of images made at select Plains rock art sites (Keyser 2018; Keyser and Minick 2018; Keyser and Renfro 2017; Minick and Keyser 2019), which have also been interpreted as calling cards. Both types of these sites served as calling cards by encoding sufficient information to communicate intimate details of battle actions to any natives who viewed the drawing. The best of several discussions about such calling card sites and their communication potential is documented by James (1823:296–297) who wrote:

... [Omaha war parties] also peel off a portion of the bark from a tree and on the trunk ... they delineate hieroglyphics, with vermilion or charcoal, indicative of the success or misfortune of the party, in their proceedings against the enemy. These hieroglyphics are rudely drawn, but are sufficiently significant, to convey the requisite intelligence, to another ... party. On this rude chart, the combatants are generally represented by small straight lines, each surmounted by a head-like termination, and are readily distinguishable from

each other; the arms and legs are also represented, when necessary to record the performance of some particular act, or to exhibit a wound. Wounds are indicated by the representation of the dropping of blood from the part; and arrow wound[s], by adding a line for the arrow, from which the Indian is able to estimate, with some accuracy, its direction, and the depth to which it entered. The killed are represented by prostrate lines; equestrians are also particularized, and if wounded or killed, they are seen to spout blood, or to be in the act of falling from their horses. Prisoners are denoted by their being led, and the number of captured horses is made known by the number of lunules, representing their track. The number of guns taken, may be ascertained by bent lines, on the angle of which is something like the prominences of the lock. Women are portrayed with short petticoats, and prominent breasts, and unmarried females by the short queues at the ears.

Testament to the communication inherent in these drawings is provided by the use of the Biographic art lexicon (Jordan 2015; Keyser 1987; Parsons 1987; Turpin 1989) to understand these various scenes in specific detail. The fact that we can do this a century and a half after a non-specialist recorded the art, provides another level of support to James's assertion and the words of Edwin Denig (2000:18–19) who wrote:

... Most Indians can carve on a tree, or paint, who they are, where going, whence come, how many men, horses, and guns the party is composed of, whether they have killed enemies, or lost friends, and, if so, how many, etc., and all Indians passing by, either friends or foes, will have no difficulty in reading the same, though such representations would be quite unintelligible to whites unless instructed.

## Notes

- 1 Bierce's map is not completely clear on this point, because it makes it appear that the stream they descended, which he clearly labels as Arrow Creek, is immediately west of the Pine Ridge Hills. This would put the stream in the current position of Fly Creek. Arrow Creek is located further west, between Fly Creek and Pryor Creek. However, had they traveled down Fly Creek it seems likely that Bierce would have mapped Pompeys Pillar, which is immediately across the floodplain from where Fly Creek enters the Yellowstone Valley. He did not map Pompeys Pillar, probably because the pillar is not visible from the mouth of Arrow Creek, 12 km (8 miles) upstream.
- 2 For example, there is little if any published record of Osage biographic rock art, but during his tenure at the University of Tulsa Keyser was shown two pictograph sites with Biographic imagery that was readily identifiable as Osage by Garrick Bailey who even recognized some of the stories and culture heroes portrayed. Unfortunately, to the best of our knowledge, those sites have never been recorded and reported.
- 3 There are much smaller, one-legged humans drawn below the elk who appear to attack it with spears. These anthropomorphs more resemble typical Blackfoot figures and they may depict another war party drawn here in response to the original scene. Unfortunately, these scenes have deteriorated to such an extent that a detailed interpretation of their relationships is probably no longer possible.

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## Disclosure statement

No potential conflict of interest was reported by the authors.

## Notes on contributors

James D. Keyser is a Montana native who earned BA and MA degrees in anthropology at the University of Montana and a PhD in anthropology at the University of Oregon. He has conducted rock art research across western North America and in Italy. Prior to retiring from a career with the USDA Forest Service he was a professor of anthropology at both the State University of New York at Buffalo and the University of Tulsa. He is currently a faculty affiliate at the University of Montana. Keyser is the author of more than 200 archaeology publications among which are seven books.

Correspondence to: James D. Keyser, Oregon Archaeological Society, 1815 SW DeWitt, Portland, OR 97239. Email: jkeyserfs@comcast.net

Linea Sundstrom is a private contractor specializing in North American archaeology, ethnogeography, and rock art. She has over 35 years' experience in the archaeology of the northern plains and is the author of three books and numerous articles on northern plains archaeology and history. She received the Heizer award for ethnohistory in 2003 and the Luebke award for Great Plains studies in 1998 and 2009.

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