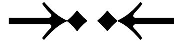
INTRODUCTION



Plains Indian rock art is some of the most recognizable on the North American continent because it represents the tribes that dominated popular culture during the period of westward expansion. From the earliest explorers through the Indian Wars and then into the twentieth century, artists such as George Catlin, Karl Bodmer, Frederic Remington, and Charlie Russell competed with Buffalo Bill's Wild West Show; ethnographers such as Grinnell and Wissler and films like *Cheyenne Autumn*, *Little Big Man*, and *Dances with Wolves* captured the attention of North Americans in portraying Plains Indian culture and the lives of famous warrior chiefs. The result is that these tribes—from the village-dwelling Mandan to the nomadic Blackfoot, Lakota (Sioux), and Cheyenne—are known around the world, and their warrior art is one of the most famous North American native art forms.

The fame of this warrior art is also due in large part to its use in so many media, which were highly valued as collectables from the first contacts with Plains Indians. From southern Alberta to northern Mexico, artists, missionaries, businessmen, and soldiers all returned to Europe and the eastern United States and Canada with painted buffalo robes,[1] decorated items of clothing, winter counts, and elaborate war shields. Ledger books filled with warrior art were captured when villages were overrun, but hundreds more such drawings were purchased directly from the warrior artists themselves—the most famous are those interned at Fort Marion, Florida, but numerous others used the drawings as "currency" at frontier trading posts during the last of the "Buffalo Days" (Berlo 2000b:12, 166). Today thousands of these artifacts stock museums throughout North America and Western Europe, and nearly every large institution displays one or more such items.

Less well understood, however, is that this same warrior art occurs as paintings (pictographs) and carvings (petroglyphs)—popularly known as rock art—scattered across the landscape of western North America from Canada to northern Mexico (Figure 0.1a and b). Extending from the Rocky Mountains and upper Snake and Colorado River drainages eastward to the Black Hills of South Dakota and the Smoky Hills of Kansas, such rock art sites occur in Alberta, a dozen American states, and the Mexican state of Coahuila. These thousands of rock art images represent a first-person account of Plains Indian life that

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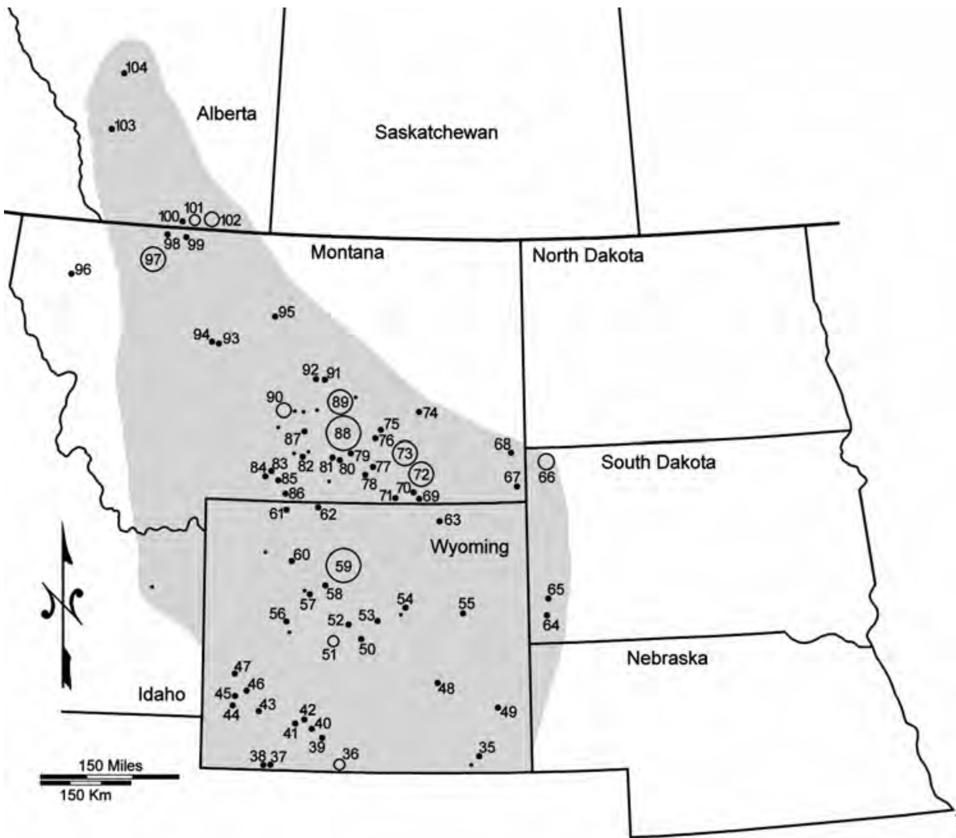

Figure 0.1a. Map, north half of Plains with extent of Biographic Tradition rock art shown in grey. Dots represent major sites; circles indicate site clusters. Numbered sites, referred to in text, identified in Appendix I. Drawing by James D. Keyser.

could be read[2] and understood by members of all Plains groups, friend and enemy alike. Through detailed study of this art and researching the numerous Plains ethnographies and ethnohistoric accounts that describe and document these Historic period cultures, scholars have recently learned to read these rock art images as well.

The stories these paintings and carvings tell, written by the hands of their own tribal heroes, are riveting documents of these peoples' struggles to retain their ancestral homelands in the face of encroaching tribes and the most determined foe of all—the westward-expanding Euro-American populace, who came as gold seekers, traders, military men, and settlers. In this book we provide an overview of Plains Indian Biographic rock art, describe how it functioned as a system of picture writing for the people who drew it, and compile the first attempt at a complete, detailed lexicon to serve as an aid in understanding and interpreting it.

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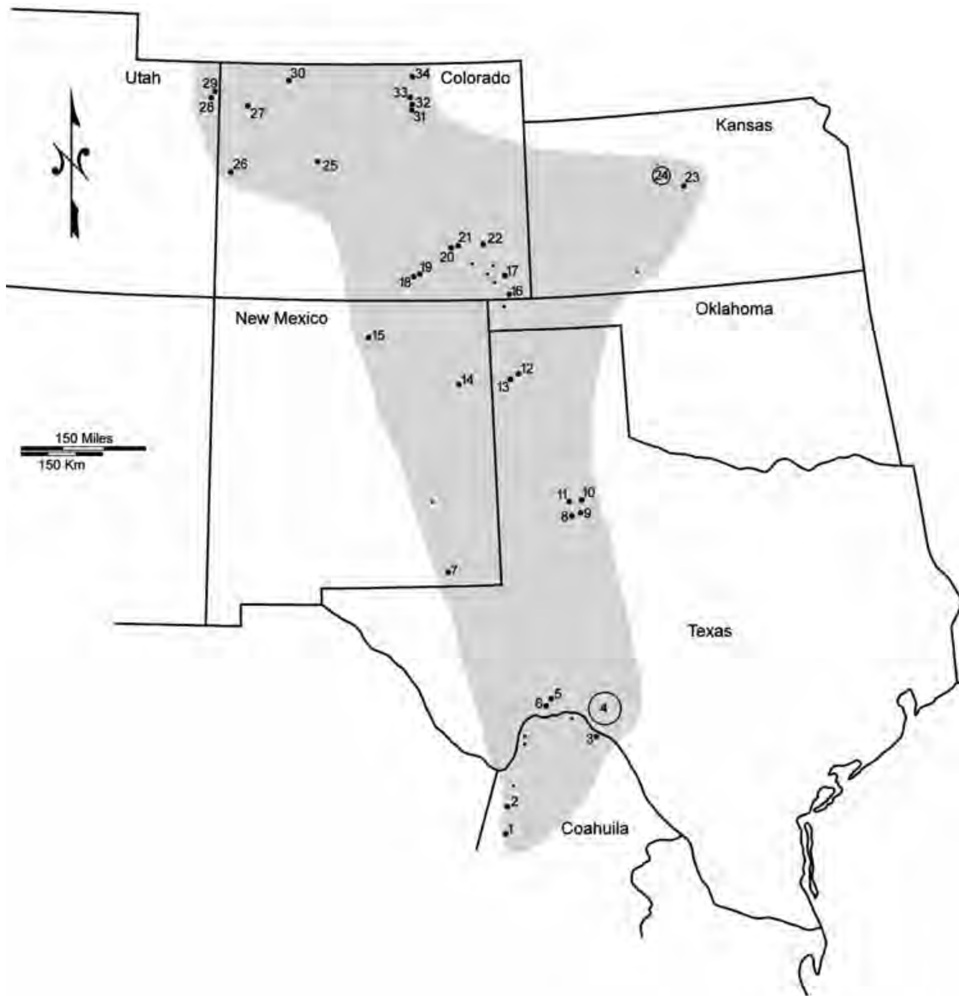

Figure 0.1b. Map, south half of Plains with extent of Biographic Tradition rock art shown in grey. Dots represent major sites; circles indicate site clusters. Numbered sites, referred to in text, identified in Appendix I. Drawing by James D. Keyser.

Plains Indian Warrior Art

Plains Indian representational art from the last millennium includes half a dozen art traditions carved and painted by both men and women (Keyser 2004a; Keyser and Klassen 2001; Sundstrom 2004b). Despite their fascinating subject matter and intriguing imagery, we will not address here the Dinwoody, Hoofprint, or Columbia Plateau traditions because they communicate not about the daily lives and struggles of the artists but rather focus on the relationship of men and women with the supernatural. As such, these arts

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are infused with mysticism and religion to the point that interpreting specific imagery is often impossible and experts must rely on general concepts of religion and cosmology to have a basic understanding of these pictures (e.g., Keyser 1992; Loendorf 2004; Sundstrom 2002).

Likewise, we do not discuss the most common Plains women's art—geometric designs painted, quilled, and beaded on clothing, parfleches, some bison robes, and other items. Though highly structured and often understandable based on detailed symbolism reported by many artists, this art tradition has almost no rock art counterpart. Additionally, as with the rock art traditions mentioned above, this art communicates primarily about people's interaction with spiritual matters rather than actual events. Interested students can refer to the works of several distinguished scholars who discuss these designs and artifacts in detail (e.g., Maurer 1992:288; Taylor 1994:121–22; Torrence 1994; Wissler 1907).

Instead, there are two art traditions that tell the everyday stories of Plains Indian cultures through the eyes of their warrior artists. Spanning the period from just before European contact (ca. AD 1300) to the period just after World War I, these pictographs and petroglyphs are firsthand accounts of tribal conflicts, personal glory, and cultural upheaval. Such images communicate even today—sometimes across several centuries—a narrative that was meant to be read and understood by anyone versed in the warrior art lexicon (Afton, Halaas, and Masich 1997:xxviii; Keyser 1987; Keyser, Kaiser, and Dobrez 2015; Keyser, Dobrez, Hann, and Kaiser 2013; Petersen 1971:269–308, 1988:xvii). These art traditions are the Ceremonial Tradition, known predominantly as rock art, and the Biographic Tradition, known from three primary media: rock art, robe art, and ledger drawings.

Ceremonial Tradition Art

Plains Indian Ceremonial Tradition art (Figure 0.2) began in the Late Prehistoric period and continued into the last years of the Historic period. The earliest known examples are pictographs and petroglyphs—our main interest here—but drawings in many different media were photographed and collected even as late as the early reservation years (Keyser 2004a). Ceremonial Tradition rock art of the Late Prehistoric and Historic periods shows primarily shield-bearing warriors and V-neck, rectangular-body, and stick-figure style humans. These figures are often juxtaposed with one another and with simple boat-form or rectangular-body style animals to form simple, typically static compositions (Figure 0.3). Such poses are termed "iconic" and were apparently structured as if for a cosmic audience. As such, illustrated human and animal figures regularly show detailed anatomical features, including both external genitalia and internal organs such as ribs, heartline, and kidneys—the places where spirit power was thought to reside. Facial features—especially eyes—are shown on

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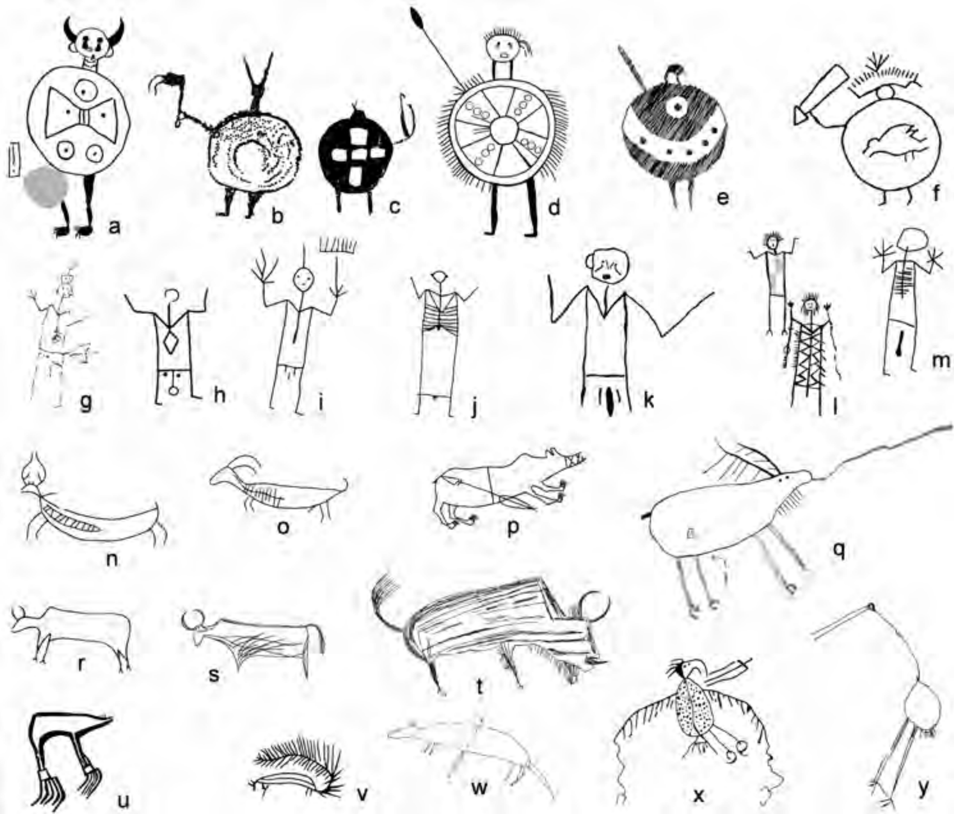

Figure 0.2. Ceremonial Tradition rock art imagery showing humans and animals. Drawing by the authors.

both humans and animals, while horns, antlers, claws, teeth, and hooves are routinely illustrated to specifically identify various beasts, both real and mythical. Furthermore, humans often brandish elaborately decorated weapons or eagle-feather fans, and others have their arms upraised in supplicatory posture. Relatively simple costume details, including headdresses, leggings, shirts, and sometimes even body painting are portrayed. Occasionally geometric designs such as zigzag "lightning bolts" or spirals are incorporated into these figures or serve to connect one to the other (Figure 0.4).

The overall impression one gets when viewing these iconic images is that they were drawn primarily to communicate with the spirit world. Often carved or painted at sites whose cliffside settings and hoodoo-dominated topography lend an otherworldly air to the location, these images frequently command imposing views of distant landscapes including sacred mountains and mesas or broad valley bottoms. In a summary discussion of such iconic expression, Michael Klassen has written: "Iconic images are static, symmetrical, [and highly] detailed motifs found alone or in small, juxtaposed groups. They rep-

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Figure 0.3. This typical Ceremonial Tradition composition shows V-neck humans, one with feather fans and feather-fan headdress, juxtaposed with a boat-form elk. Drawing from original tracing modified by photo-tracing. Photograph copyright, Michael A. Klassen. Drawing by James D. Keyser.

resent sacred themes . . . [supernatural] beings, and medicine visions" (Keyser and Klassen 2001:34). These Ceremonial Tradition sites seem intrinsically connected to the "otherworldly" aspects of the locations where they occur. Combined with the frequent illustrations of sacred themes and supernatural beings, this has led Klassen (1998:68–69, 2003:177–82; Keyser and Klassen 2001:55–56) to characterize many of these Ceremonial Tradition site locations as sacred places and "Medicine Rocks." This idea is borne out by such modern Indian place names as Deer Medicine Rocks, Medicine Creek Cave, Home of the Little People, and Place of the Ghost Writings (McCleary 2016).

From both ethnographic clues and direct ethnographic and ethnohistoric reports we know these sites were places "where the spirits dwelt." For instance, Writing-on-Stone, in southern Alberta,[3] was considered so powerful a

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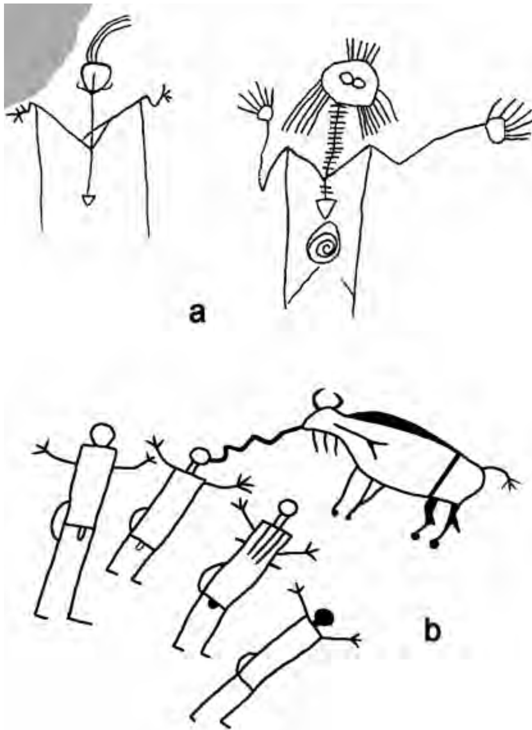

Figure 0.4. Zigzag lines, spirals, and internal organs are sometimes used to show supernatural attributes of Ceremonial Tradition figures. Drawing by the authors.

place that many people feared to camp there, and those who did heard strange spirit "voices" and left offerings to placate the supernatural occupants (Klassen, Keyser, and Loendorf 2000: 198). South Dakota's North Cave Hills (and especially the most impressive site complex at Ludlow Cave) were known as "the home of the Buffalo" or "Buffalo Home Butte" where the great herds had originally emerged from underground to populate the Lakota world (Sundstrom 2004b:79–82). Indian scouts reported both Writing-on-Stone and Ludlow Cave to early military expeditions as places where "White Men" had drawn pictures on the rocks (H. Dempsey 1973:24; Sundstrom 2006:54–57). However, by not understanding that this cultural reference equated "White" men with supernatural beings, in both cases, these early visitors remarked that they found no European images but only "rude drawings of men and animals" in typical Indian style.

In addition to their designation as supernatural places, the imagery drawn at these sites is the sort used throughout Plains Indian art to document encounters with spirit beings and spirit power. A pictograph of Thunderbird at Writing-on-Stone (Figure 0.2x), incorporating lightning bolts streaking from its wings, hailstones covering its breast, and a symbol for the sound of thunder clutched in its beak, is nearly identical to others drawn and explained exactly as such by Historic period Blackfoot artists (Taylor 1997). Rock art animals connected to humans by zigzag lines mimic those documented by later artists as images of their supernatural visions. And bugling bull elk, with heads thrown back and bodies marked or surrounded by obvious vulva-forms, show exactly the same details and composition as Historic period drawings by Sioux informants illustrating the acquisition and use of "elk 'love' medicine" (Figure 0.2q).

The artists who drew these Ceremonial Tradition pictographs and petroglyphs were obviously illustrating their own spiritual experiences and/or the denizens of their supernatural cosmos. Some artists would have been vision supplicants, seeking a spirit helper for assistance in the trials of life and after-

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ward recording their contacts with supernatural beings from whom they were soliciting various powers. Such vision quest compositions often show the supplicant juxtaposed with a bird or other animal. These images are like those used in several rock art traditions to illustrate the visionary's acquisition of a spirit helper. Other artists were religious specialists—shamans—who enlisted supernatural aid to control game animals or the weather, foretell the future, and cast various spells. Some images drawn by these "medicine men" likely illustrate their own religious rituals or practices, conducted individually or in groups, while others might show Thunderbird, underwater animals, or different supernatural beings to which their prayers were directed. Some images are shamans' self-portraits showing their own transformation into spirit animals, including birds, elk, and grizzly bears. These typically show dominating therianthropomorphic figures that combine some animal element(s) with a basic human form (Figure 0.4). Quite common are "bear-men" illustrated with bear claws or entire paws for one or more hands or feet; but examples of men with bird wings, or a bird's claws and beak, or a man with elk antlers and cloven hooves are known (Keyser, Kaiser, Poetschat, and Taylor 2012:74; Keyser and Sundstrom 2015:132–33).

But not all Ceremonial Tradition images were drawn by shamans or vision supplicants. Some few show an important man or—very rarely—a woman (but neither an obvious shaman nor warrior) dressed in ceremonial regalia (Figure 0.5). Such finery includes detailed headdresses, items of clothing, fringed and decorated leggings, and decorated staffs or feather fans. While such humans might well be portraits of shamans or warriors (or both), no attribute identifies them as such, and they could just as well simply represent an important tribal leader or band chief.

Figure 0.5. This image of a Buffalo Shaman is identified by the bustle, headdress, and fly whisk he carries. Drawing by the authors.

Warriors also drew Ceremonial Tradition images. These men stand stiffly, facing the viewer, and many carry a large, circular, full-body shield. Most of these men are almost completely hidden behind their shield, though in about 10 percent of these drawings, the warrior's body is visible as if the shield were transparent. Certainly this transparency does not represent reality—such buffalo-hide shields could not actually have been "see-through"—instead, it represents a type of perspective typical of Plains In-

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dian art where all parts of a figure are shown precisely because they really do exist, though hidden from view (Keyser and Poetschat 2014:12).

Just more than half of the shield-bearing warriors hold weapons; either projecting up and out from behind their shield or positioned just outside the shield's perimeter—often held in an outstretched hand. In the region-wide sample, such Ceremonial Tradition warriors are armed with nearly every type of weapon known on the Plains (except certain firearms and the spontoon tomahawk). A somewhat smaller percentage of V-neck, rectangular-body, and stick-figure style warriors are armed, but those that do have weapons have the same types as shield bearers. While the most common armaments for all Ceremonial Tradition warriors are lances and clubs, only a single atlatl is shown. Interestingly, bow-spears, which are well documented in ethnographic accounts, are much more common in Ceremonial Tradition art—more than two dozen are illustrated at ten sites—than they are in Protohistoric and Historic period Biographic Tradition art.

Many shields are decorated with heraldic designs using both naturalistic and geometric motifs. Geometric motifs can range from simple to extraordinarily complex, but any meaning we can ascribe to them is at best an educated guess. Conversely, naturalistic heraldry shows a variety of human and animal forms—some of which have direct counterparts in actual Historic period shields collected from various tribes (Keyser and Kaiser 2014). Extrapolating from Historic period shield heraldry, we can assume with some certainty that most illustrated shield designs were meant to represent spirit helpers or medicine visions serving both to protect the shield owner and intimidate his opponent. Two of the most expressive such designs are Bear-Coming-Out and the Hand of God. The first depicts a grizzly bear as if it were emerging from its den—and metaphorically, the shield itself—to attack the owner's opponent (Figure 0.6c, d), while the Hand of God shows a vertically divided shield with a human arm and hand reaching out from the darker half of the shield's face

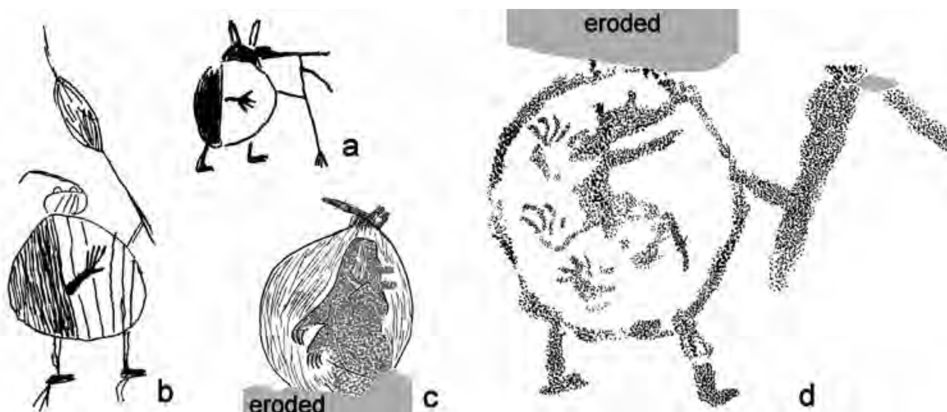

Figure 0.6. The Hand of God (a, b) and Bear-Coming-Out (c, d) shield designs. Dark grey stippling (c) is red paint. Drawing by the authors.

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into the opposite "lighter" half (Figure 0.6a, b). This "hand of god" is probably akin to the being known as "Long Arm" who lives in the sky but reaches down to earth to punish some people and protect others.

Ceremonial Tradition warriors (and some other anthropomorphs of the tradition) wear or carry numerous different items of ceremonial and secular finery. Aside from weaponry, warriors and important men wear many types of headdresses and hairstyles, face paint or tattoos, various items of clothing (including shirts, belts, breechclouts, fringed or decorated leggings, and moccasins), and feather bustles, bracelets and armbands, garters, knee pendants, and moccasin tails. In addition, some few carry rattles, branches, a fly whisk, or feather fans. The weapons of others are decorated with flags and pennants of several sorts and eagle-down fluffs. Shields are elaborated with feather bustles, feather fringe, and medicine bundles (Keyser, Kaiser, Poetschat, and Taylor 2012; Keyser and Poetschat 2014).

In summary, like those compositions showing vision quests and shamanic rites, warriors' drawings fitting clearly within the Ceremonial Tradition are static and illustrate the man and his shield and/or other weaponry and finery as if posing for a divine audience. Because no explicit action is illustrated, we know the artist's attention was not to show what the warrior is *doing* but rather to show how he presents himself in a supernatural sense (e.g., his shield design and some items of regalia and weaponry indicating the type or potency of his spirit helper) and/or secular sense (e.g., some elaborations of armament and dress indicating his "persona" or his accomplishment of various deeds). In essence, the Ceremonial Tradition artist is portraying the *who* and a very restricted part of the *what* of a narrative, but most of the *what*, *how*, and *why* are missing. These missing narrative elements greatly reduce the information available about these compositions, but fortunately the specific details of costume and accoutrements, the stylization of body morphology, and the structure of the compositions themselves still allow us a fuller understanding of these rock art images than any other in the North American Plains except those of the Biographic Tradition.

Ceremonial Tradition art began sometime during the Late Prehistoric period, certainly before Euro-American contact with Plains Indians, and most likely even before the European discovery of North America. Currently, the best estimate places the beginning of Ceremonial Tradition art sometime between about AD 1000 and 1300 (Keyser and Poetschat 2014:72–82). The tradition continued through the Protohistoric period (AD 1600–1700) and into the Historic period, with the latest relatively dated images reliably assigned well into the 1800s (Keyser and Sundstrom 2015:136; Sundstrom 2004b). This continuation into the Historic period conforms to the use of similar Ceremonial Tradition imagery drawn in a few ledgers and painted on various robe art items, including ritual clothing and tipi covers (Berlo 2000b; Ewers 1971; Keyser 2004a:11).

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Biographic Tradition Art

Sometime within the last century or so of the Late Prehistoric period (ca. AD 1450–1600), before Euro-Americans first contacted Plains Indians, some Ceremonial Tradition rock art began to undergo a gradual transformation into explicitly narrative Biographic Tradition art (Figure 0.7). The exact timing of this change within this century-and-a-half cannot yet be determined with certainty, except to say that it occurred before Plains Indians knew of Europeans and before they had adopted from these newcomers any of the metal tools or horses that were to change their lives so radically. Whether this evolution began prior to the actual European discovery and colonization of the New World is unknown, but we believe it highly likely that its earliest beginnings predate AD 1500 since by AD 1700 Biographic Tradition rock art was widespread across the Plains, and artists were using several quite complex conventions to tell narrative stories.

This gradual transformation from a relatively static, iconic art form to one whose intent was to recount explicit narratives of warriors' glory is well documented by the work of Michael Klassen (1995, 1998; Keyser and Klassen 2001; Magne and Klassen 1991) at Writing-on-Stone. As expected with such a transition, the basic forms remain the same for both humans and animals, but what changes is the introduction of explicitly depicted action scenes into these rock art compositions. And with these earliest Biographic action scenes, one can

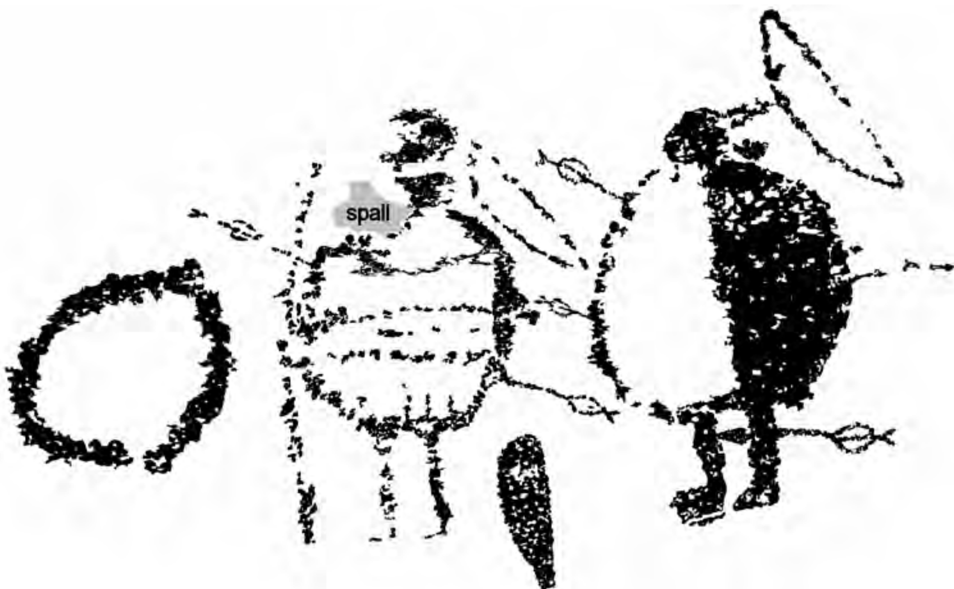

Figure 0.7. This red pictograph shows a tally of defeated warriors and a captured shield war trophy. Note floating, coup-strike bows and club (at bottom) and arrows piercing shields and wounding warrior in leg (at right). Drawing by the authors.

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clearly see that the artists' intent was to tell a story that could be generally understood by any other human observer conversant in Plains Indian lifeways of that time. Although many of these images are painted and carved at sacred sites—often identified as such by the earlier Ceremonial Tradition rock art located there—the focus of these drawings is on the everyday, and many sites are in quite pedestrian locations. The overall impression is of a secular art with a far different structure than Ceremonial Tradition art, which was intended for a completely different audience.

In what is currently the most detailed discussion of this type of rock art, Keyser and Klassen have said: "[Biographic Tradition] images are active, asymmetrical, schematic compositions found in . . . complex integrated scenes, which depict specific historical . . . events . . . . [T]hese scenes recorded a warrior's most significant lifetime accomplishments, such as war honors and brave deeds" (2001:34). By recording actual historic events, this rock art creates a pictorial history of Plains Indian people and their cultures drawn by the participants themselves. But such art is also tied to the supernatural realm, since a warrior's shield is often emblazoned with an image of his supernatural helper, and the coups he is shown counting demonstrate not only his bravery but also the power of his supernatural helper. Nonetheless, it is the stories embedded in these drawings—which can reach out and speak to us even today—that make this art the most fascinating firsthand record of Plains Indian history still preserved.

Unfortunately, even though it is almost certain that articles like painted buffalo hides, tipi covers, and decorated clothing were made during this early transitional period when Biographic art was developing from the Ceremonial Tradition, we have no examples of such perishable art recording these earliest images. Such things would long ago have decomposed in the harsh Plains environment. But, conversely, we are extremely lucky to have thousands of petroglyphs and pictographs across the region to provide a detailed record of how and where this evolution occurred. And recent studies utilizing the known dates for the introduction of Euro-American items into Plains cultures and the changes in native art that accompanied these introductions (Keyser 2010; Keyser and Kaiser 2010; Greer, Greer, and Keyser 2019) have enabled us to construct at least a basic chronology that helps date many of these transitional sites.

The earliest Biographic scenes utilize shield-bearing warriors and V-neck, rectangular-body, and stick-figure style humans, but only at a single known site—Wyoming's Red Canyon (48FR2508)[4]—do these scenes include animals (Figure 0.8). As would be expected, the few animals in these Red Canyon scenes are basic boat-form and rectangular-body style creatures. What sets these earliest Biographic compositions apart from their Ceremonial Tradition counterparts, however, is the inclusion of action. Warriors face off against one another (or sometimes a bear) in mortal combat, weapons either raised in

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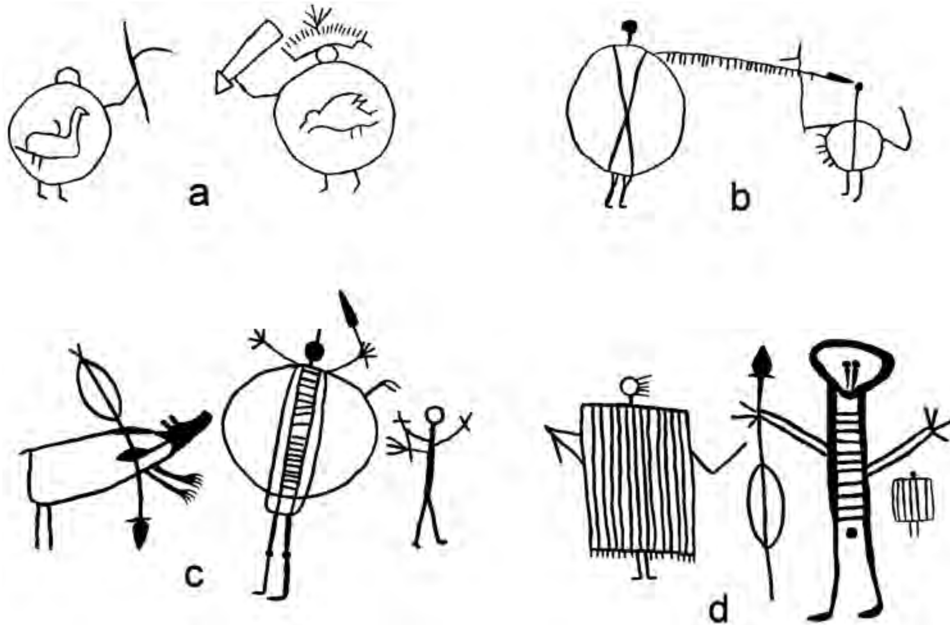

Figure 0.8. Early Biographic narrative scenes identified by the full-body shields and occasional metal projectile points (c, d) date to the Late Prehistoric and Protohistoric periods. Drawing by the authors.

aggressive pose or actually striking the enemy. Many, but certainly not all, of these are shield bearers. Some winners lean forward in an aggressor's posture, and often they have significantly more costume detail and more elaborate shield design. Some are significantly larger than the loser. Defeated warriors occasionally tilt backward, as if in the act of falling, with arms flung wide. Some defeated enemies have not yet engaged the winner with a weapon. Some winners are shown grappling in hand-to-hand combat and taking the weapon of a losing warrior. Usually this is shown in shorthand fashion by the weapon being oriented in a vertical, nonthreatening position and seeming to "float" from the vanquished foe to the victor.

Such early combat action occurs both as pairs of fighting individuals and larger battle scenes involving as many as a dozen participants. Some individual actions show a shield bearer facing off against an unshielded opponent, but many more such scenes show two shield-bearing warriors or two V-neck warriors in direct combat. However, all early battle scenes include a few participants without shields, and sometimes they even outnumber shield bearers. These early combat scenes occur throughout the northern Plains, with larger battles scattered from Williams Coulee (EcPl-25), Alberta, to the Gateway Site (48LN348) in southwestern Wyoming.

Other notably early Biographic compositions are coup counts and coup-count tallies (Figures 0.7–0.9), depicting specific acts of bravery and war hon-

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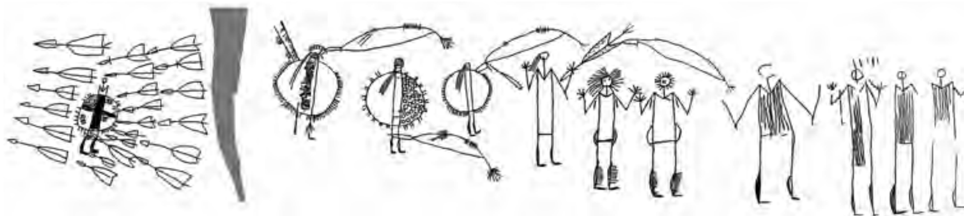

Figure 0.9. This tally of enemies on whom coup had been counted is the work of two artists. The second artist added the four people on the right. Note the richness of detail for weaponry. Drawing by the authors.

ors. Such war honors—called coups—included a variety of actions ranging from touching or killing an enemy to taking his weapon or scalp to braving an enemy's overwhelming firepower or serving as the leader of a war party. From the earliest days of coup counting, capturing an enemy woman was accorded high honor. After the introduction of the horse in the first decades of the 1700s, stealing an enemy's horse became a paramount coup and various uses of the horse in warfare (such as trampling an enemy underfoot, relinquishing the advantage of one's mount to enter combat afoot, riding by and striking an enemy with your quirt, and giving away horses to less affluent tribesmen) became specifically noted honors. Some tribes commemorated even lesser, secondary honors, including being wounded, acting as a war party scout, or fighting from behind fortifications (Keyser and Klassen 2001:267). For several tribes there was a hierarchy of coups that included being the first through fourth person to touch an enemy, taking something from him in hand-to-hand combat, leading a war party, and stealing an enemy's best horse from where it was picketed at his tipi.

But merely performing these deeds was not enough. To validate his status, a warrior had to recount his coups at various tribal gatherings and depict them on personal equipment and clothing and as rock art.[5] Sometimes these images are full-fledged action scenes detailing how various coups were performed. Other recounts were in the form of tallies, where vanquished enemies, captured women, captured weapons, and other war booty were listed by illustrating them in a group. With defeated enemies, often the particular weapon used to strike the person was illustrated in meticulous detail.

The earliest coup-count rock art shows a standing or falling warrior who is struck by a floating weapon. There are also a few tallies illustrating a victorious warrior's brave deeds in the form of a row of multiple figures showing both vanquished enemies struck with various weapons and items of war booty captured on the battlefield. About a dozen such early coup-count images are scattered from Alberta to Wyoming, and early tallies of coups are found at site DgOv-83 in Writing-on-Stone Provincial Park, three sites in Montana, and a site in northern Wyoming (Keyser 2017b; Keyser and Poetschat 2014:167, 244;

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Keyser, Kaiser, Poetschat, and Taylor 2012:269–74). The early coup-count compositions (Figures 0.7, 0.10) typically show an enemy warrior (often but not always a shield bearer) being hit with a coup-strike weapon. Rather than being held by a winning combatant, however, these weapons float free to strike the enemy's body or shield. In this more abstracted narrative, the floating weapon is usually the only thing indicating the scene's protagonist.

Coup-count tallies are more conventionalized compositions. Six such very early examples are currently known, all characterized by shield-bearing warriors and/or V-neck humans hit by coup-strike weapons or capture hands (a disembodied hand or arm and hand, signifying the protagonist's bare-hand touch to count coup or capture an enemy). These images are often aligned in a row with one or more captured war trophies (Keyser 2017b). The shield-bearing warriors all carry full-body-size shields, indicative of a Late Prehistoric or early Protohistoric period age. Three of these tally compositions have been extensively studied and recorded in detail. One at DgOv-83 (Figure 0.7) shows two defeated enemies standing side by side, both struck with multiple weapons, and a captured shield aligned with them (Keyser 2017b). Both warriors are pierced by arrows and struck on the head and shoulders (or upper-right shield margin) by a floating "coup-strike" bow. One warrior is also hit with a club positioned just to the right of his legs. A lance stands just to the left of this warrior, which may mean the tally's creator captured it from him; but the other is unarmed (as though his weapon were taken by another combatant). To the left of both warriors, but carefully aligned in the short row, is an undecorated circle representing a captured shield—a composition similar to later Historic period examples. The absence of metal projectile points in this composition, combined with the full-body-size shields, is persuasive evidence that it dates to the Late Prehistoric period (at least pre-AD 1600 and quite possibly one or two centuries earlier).

Two tallies at Montana's Bear Gulch site (24FR2) are approximately contemporaneous with the one at DgOv-83. The simplest shows two side-by-side women both grabbed in their genital or breast areas by a capture hand to

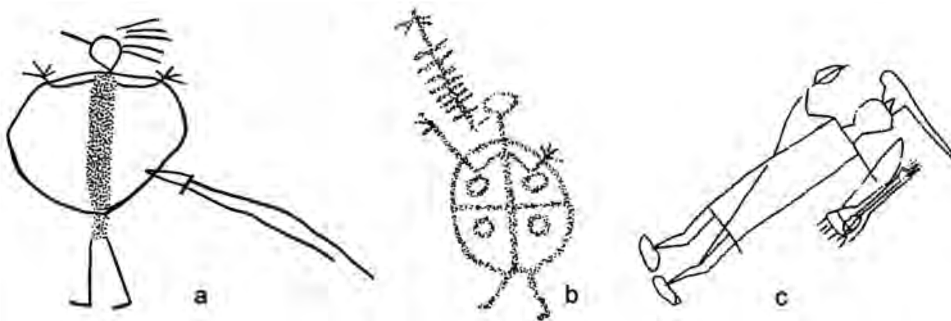

Figure 0.10. Early coup count scenes from the Late Prehistoric and Protohistoric periods typically involve floating coup-strike weapons. Drawing by the authors.

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indicate they were taken captive by the tally's creator (Figure 0.11). The second composition—clearly the product of two different artists—is much more complex. It is a row of eleven scratched humans (Figure 0.9), several of whom have obviously had coup counted on them (Keyser 2011e). Initially, the first artist drew himself bravely facing a nearly overwhelming fusillade of enemy arrow fire (represented by twenty-two flying arrows, only one or two of which slightly wound him), followed by four enemy warriors on whom he has counted coup by touching each with a bow-spear or a highly decorated arrow. Then come two women who stand under an over-arching bow-spear positioned to indicate their capture and control. A later artist, recognizing the first man's coup-count tally, added his own tally of four V-neck enemy warriors to complete the row, but he did not clearly illustrate how these enemies were overcome. The classic V-neck style humans (one of whom is also a shield-bearing warrior) combined with the full-body-size shields and metal projectile points shown on three arrows and three bow-spears date this tally to the early part of the Protohistoric period, sometime between approximately AD 1620 and 1700. Based on stylistic criteria and superimpositions of similar figures at Bear Gulch, the tally of two women taken by the capture hand might be as much as a century older than the longer lineup, but it could just as easily date sometime in the 1600s (Keyser, Kaiser, Poetschat, and Taylor 2012:233–37).

Despite these relatively simple beginnings, the development of action scenes and the focus on actual events marked a radical change in the purpose of Plains Indian rock art. Then, just as this relatively slow evolution was happening, Plains Indian cultures were exposed to an onslaught of events that

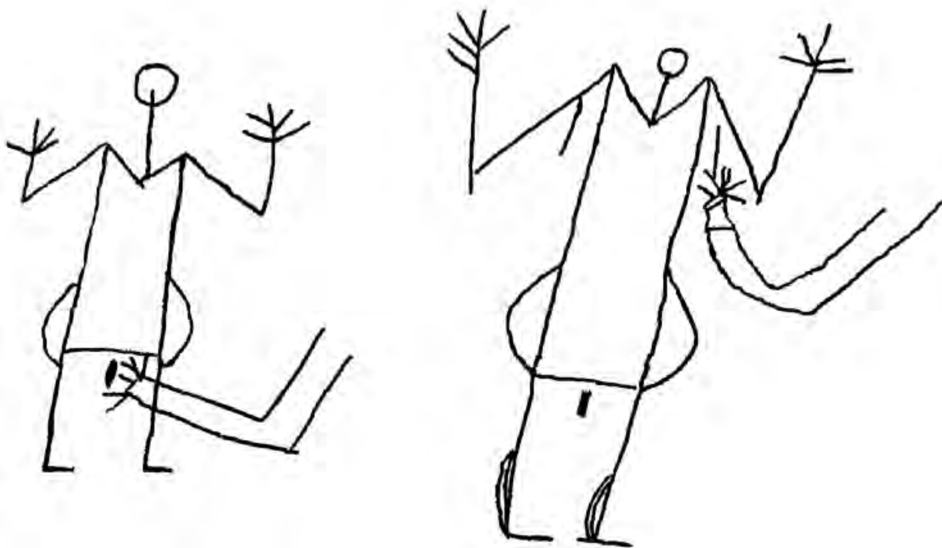

Figure 0.11. A tally of captured women. Note the breasts (at right) and emphasized hips on both. Drawing by the authors.

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transformed everything. The initial incidents were neither large-scale nor particularly disruptive. Sometime in the late 1500s or first decades of the 1600s, strange diseases—against which the natives had no immunity—first began to appear. But unlike the second wave of such epidemics a century or two later, these first exposures were not especially detrimental on a society-wide scale. Contacts with the few native traders and travelers who unwittingly carried these microbes were rare, and pedestrian groups were limited to relatively restricted ranges in which they infrequently contacted other tribes. So, the first wave of these strange diseases never reached epidemic proportions on the Plains during the Late Prehistoric period since the diseases quickly burned themselves out in these small, relatively isolated groups.

Along with these diseases, a few metal tools first appeared—primarily knives and projectile points—brought to the Plains by native middlemen traders who obtained them from groups further away who were in direct contact with Euro-Americans. We can imagine the first of these items would have passed from group to group across long distances, becoming more and more valuable the further from their source. These strange new lightweight but nearly indestructible weapons rapidly became highly sought-after among plainsmen since they provided a marked advantage over enemies who still wielded stone-age weapons. And the fact that the first of these weapons are so carefully and forcefully rendered in early rock art (Keyser and Kaiser 2010; Keyser, Kaiser, Poetschat, and Taylor 2012:118–22) is a strong indication that a warrior's prestige must have increased manifold if he was armed with an iron spear point. But these weapons were still relatively few, and for a century or more war still remained a foot soldier's domain, with relatively minor casualties and comparatively few opportunities for a man to amass a war record (Tyrrell 1916:328–44).[6] The first White men visiting or living with various native groups were fur traders, and they increased the number of these trade goods slightly, but change continued very slowly.

Then, about AD 1700–1730 (depending on where you lived on the Plains), everything changed. To the north, fur traders began entering the area in regular numbers and with them came guns and ammunition, woven cloth, and many other sorts of trade goods. From the south, Spanish horses were stolen and traded northward all the way to the Saskatchewan River in present-day Alberta. In the span of one man's lifetime, a warrior could easily have transitioned from a foot solder carrying a large buffalo hide shield to a mounted cavalryman carrying a much smaller shield and shooting a flintlock rifle. Coupled with the increasing intertribal conflicts caused in part by groups being pushed onto the Plains from surrounding areas by the domino-like expansion of Euro-American civilization to the east and south, these new weapons of war set the stage for a florescence of Biographic art into a Plains picture writing that captures a first-person look at one of the most exciting periods of frontier history.

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Influence of the Horse on Plains Indian Culture as Represented in Art

The importance of the horse to Historic period Plains Indian culture cannot be overstated. First appearing among the tribes of the southern Plains in the beginning decades of the 1600s, horses were traded north all the way into Canada in just more than a century (Figure 0.12). In tribe after tribe, a man who spent his childhood in a culture with nothing but dogs for beasts of burden grew into adulthood as a horseman tending his herd and replenishing it through raids on neighboring tribes. His own sons would never know life without horses. This newfound treasure of horses revolutionized hunting, transport of household goods, warfare, art, and the entire economy of his tribe. Additionally, they became fixtures in religious ceremonies and were soon accorded origins steeped in mythic symbolism. As Horse Capture and Her Many Horses state in their book *A Song for the Horse Nation* (2006), the horse was as central as the buffalo to the existence of Plains Indian culture during the two centuries from about 1700 to 1880. If anything, the horse was even more central to the practices of Plains Indian warfare and thus, ultimately, to how it was portrayed in Biographic art.

Although the earliest Plains Biographic images undoubtedly date to prehorse days and document coups counted, weapons captured, and prisoners taken as part of the Biographic art lexicon (Keyser 2011e, 2017b), these few drawings record pedestrian warfare between men who carried large full-body-sized shields and engaged one another as shock troopers slugging it out in close-quarter combat with clubs, elk-antler-spike maces, and spears (Figures 0.7, 0.8). Bows and arrows were occasionally brought to bear from a distance, but even the early historic addition of iron arrowheads and spear points served only to increase the mayhem inflicted by one force of foot soldiers on another unlucky enough to be numerically overwhelmed (Keyser 2018c; Keyser and Poetschat 2014:107–18).

But from their first introduction, horses changed everything. Kroeber (1939:76–84), Wissler (1914), and H. Wilson (1963) demonstrated that these animals radically altered the economy and social systems of Plains tribes, and Grinnell (1910), Secoy (1992), Ewers (1955b), Lewis (1942:46–59), and McGinnis (1990) illustrated the effects of the horse on the war complex. Certainly, horses greatly increased mobility and significantly changed buffalo hunting, but more relevant to our interest, they became, in fact, the *raison d'etre* for Plains warfare. And in so doing, they embodied almost everything—speed, strength, power, wealth, masculinity, and dominance—that Plains warfare represented and Biographic art sought to portray. Case in point, one primary war honor among many tribes was for a man's horse to run down a foe—to actually trample him to death underfoot. And this act was proclaimed in various ways, from picturing the deed to tying a bloody enemy scalp on the horse's bridle to painting the image of the unfortunate victim on the horse's chest—just as if he were still being overrun. In fact, one famous Crow war horse named Baaaatcheih-

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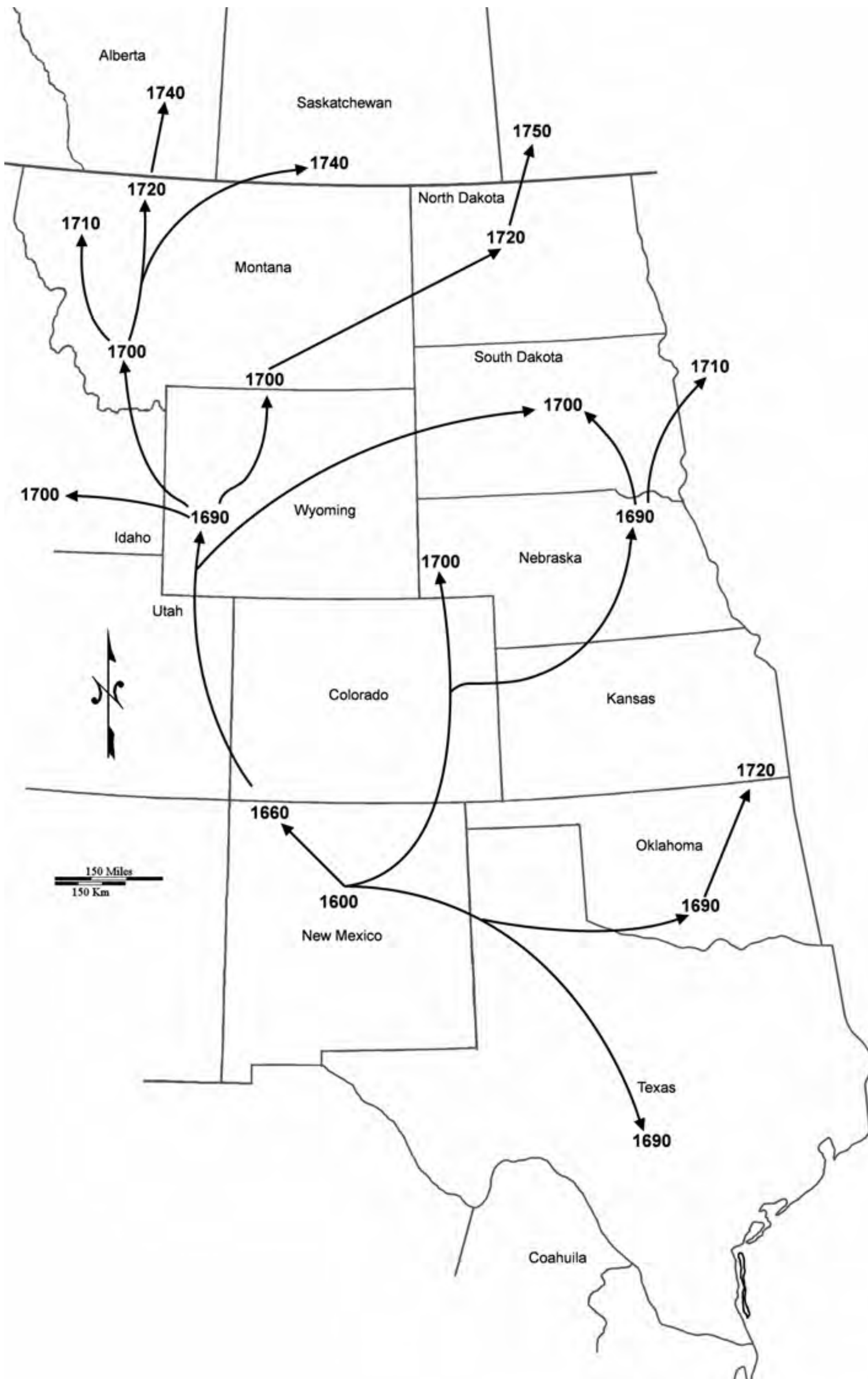

Figure 0.12. The spread of the horse across the Great Plains. Dates are approximate for the arrival of horses in various areas. Drawing by James D. Keyser.

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chipuahosh (The-One-Who-Jumps-Over-All) was remembered more than half a century later as a superior mount precisely because he could execute this deed (Keyser 2012:7; McCleary 2010).[7]

To emphasize their centrality to war, Plains warriors developed extensive rituals and practices designed to safeguard all the above-mentioned qualities in their horses and project them outward so anyone seeing the actual animals or even drawings of them would understand their power, speed, and skill. Thus, horses quickly came to take a central place in various religious rites and ceremonies (Ewers 1955b). Additionally, protective amulets, body paint designs, and various body modifications were developed and used religiously. Furthermore, Plains Indian horsemen invented or adopted a remarkable range of horse finery and accoutrements that added to both the utility and the beauty of these animals. To document their horses' various characteristics, Plains warrior-artists illustrated their horse accoutrements in painstaking detail and devised numerous symbols and conventions to commemorate the attributes of their mounts in Biographic drawings.

Initially, horses embodied power. The first horses gave their owners a distinct advantage over pedestrian enemies, and many were quickly cloaked in leather armor so they could be used as "tanks" to crash through enemy defenses. We know much of this story from the detailed accounts of an aged Cree warrior, Saukamappee, who told David Thompson in 1787 of his earliest battles (as an ally of the Blackfoot) in which he saw the first horses and guns put into use in this manner (Tyrrell 1916:328–32). No such armor still exists, but rock art fills in the details by depicting such battles and provides relatively detailed information regarding the methods of construction and decoration of this leather armor worn by both horses and humans (Greer, Greer, and Keyser 2019; Keyser 2016; Mitchell 2004). Furthermore, pictographs and petroglyphs document the prevalence of such armor and demonstrate its efficacy against various types of weapons (Greer, Greer, and Keyser 2019; Keyser 2018c; Keyser and Poetschat 2014). Not surprisingly, these earliest horses are illustrated as blocky, sturdy animals who are typically shown in close-quarter combat, often with arrows or spears stuck in—or deflected by—their armor, while helping their riders strike down less well protected foes.

The efficacy of the horse in battle rapidly changed warfare practices on the Plains. Speed became paramount, and clubs and maces—along with full-body shields—were largely ineffective against the tempo and power of the horse. Close combat was soon replaced by quick sorties in which warriors would charge into battle on horseback. As equestrian warriors became commonplace, they traded their large shields for smaller versions easier to carry on horseback. These were further reduced in size as their usefulness waned with the introduction of firearms, sometimes shrinking to become little more than amulets, but still worn to convey spiritual protection or the power of the warrior.

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Speed remained a key attribute of horse warfare from these earliest days until the reservation period. Lightning-quick raids, and the ensuing race home with a captured herd, were the highlight of the warrior experience and were the means by which a young man gained both a horse herd and his reputation for bravery. Light cavalry tactics were practiced from childhood and perfected for combat so that "ride-by" coups counted on an enemy with a spear, a coupstick, or a quirt are a common portrayal in Biographic scenes. Likewise, swooping in to rescue a wounded or unhorsed comrade, racing out to strike or capture an enemy or his horse, and even riding down a foe to trample him underfoot were all deeds of bravery frequently illustrating a man's war record. But speed was also a highly valued defensive tactic. Mounting one's best horse and pursuing fleeing raiders sometimes foiled their taking your own horses and carrying a wounded friend from the battle enabled both to fight another day. The speed and agility of these Plains Indian warriors was so legendary that more than one US cavalryman remarked that Plains Indians were the finest light cavalry they had ever encountered.

Given this focus on speed, portrayal of the horse's body shape soon changed from the early blocky, tank-like creature to a long, lean animal with extended neck, sleek head, and a long trailing tail. Legs were stretched out front and rear to show this newfound ability to hit-and-run an enemy that had previously been overcome only by massive force of shock troops. The overall depiction of the horse as a sleek and slippery creature able to get into and out of tight spots not even previously envisioned is powerful testimony to the importance of this fleet-footedness. But numerous conventions were designed by warrior-artists to reinforce this concept and communicate it through their Biographic art. These include split ears, medicine bundles, and amulets believed to magically help a man's mount avoid pitfalls and stumbles. Further, various sorts of lightning symbolism were used for body paint and to illustrate the shape of reins and quirts to magically invoke the speed and power of lightning and symbolize the fleetness of the horse versus the pedestrian foe.

But the horse also expressed power in the form of a masculine ideal that was emphasized to a greatly exaggerated degree in the art of some Plains tribes. For instance, early horse depictions (Figure 0.13) by warrior-artists from an unknown tribe illustrate a stallion's outsized penis in what is clearly both a fascination with the organ itself but also an expression of both masculinity and fertility (Keyser, Kaiser, Poetschat, and Taylor 2012:90).[8] One of these horses has a line extending from its penis into a vulva-form–shaped crack in the cliff in an obvious expression of sexual potency, though whether this actually was intended to refer to the horse or, metaphorically, to its owner is not known. For later warrior-artists, however, especially those from the Crow, Cheyenne, and Lakota tribes, horses came to embody the masculinity—and therefore strength and power—of their owners. Biographic art depictions, especially in

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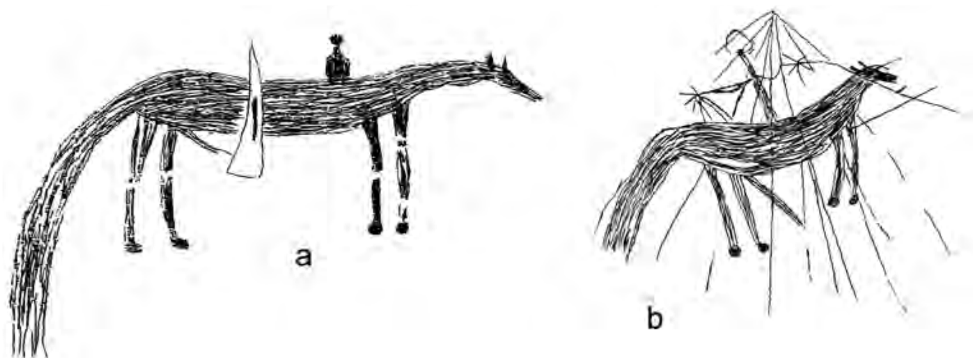

Figure 0.13. Early horses at Atherton Canyon, Montana. Drawing by the authors.

rock art, show horses with an emphasized prepuce (penis sheath) and often a very elongated tail. This exaggeratedly long tail is especially true for Crow warrior-artists' rock art horses, since Crow warriors felt their own long hair was the ultimate symbol of masculine virility and potency (Denig 1976:155).[9]

Given the importance of horses to all aspects of Plains culture, the variety of horse tack items and accoutrements comes as no surprise. Some items, such as saddles, *estribos de cruz* stirrups, snaffle bits, jingle bits, saddle blankets, and German silver-ornamented headstalls, were adopted directly by Plains horsemen from Spanish and later US cavalrymen. Others, such as quirts, reins, and horse armor, were native-made versions of items adapted from those initially seen being used by Euro-American horsemen. Still others, including a wide variety of decorative adornments, tied-up tails, medicine bundles and amulets, and body painting schemes, were native inventions designed to meet the tribesmen's spiritual views of horses as their partners in war. In fact, horse accoutrements show the greatest diversity of any category of items illustrated in Plains Biographic drawings.

In short, Plains Indian culture is often viewed through a lens that shows it as dependent on the bison, and for thousands of years the archaeological record demonstrates this to be true (Kornfeld, Frison, and Larson 2010:207–89), but, in fact, during the two-plus centuries of the Historic period, starting around the mid-1600s, Plains Indian culture rapidly became just as dependent on the horse. In contrast, however, Plains Biographic art is all about the horse. Although this art tradition is rooted firmly in the pre-horse period, had Plains Indians never acquired horses, their biographic drawings would be but a pale imitation of what Biographic art eventually became.

So with new weapons, greatly increased mobility because of the horse, and the constant presence of nearby enemies, Plains warfare rapidly changed from lumbering, precontact, close-quarters, shock-trooper engagements to light cavalry raids whose intent was the theft of horses and the acquisition of war honors (Keyser 1979, 2018c:101–17; Keyser and Poetschat 2014:92–118).

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And with this change in warfare came a distinctive change in Biographic rock art. Horses dominate this art, with humans often restricted to supporting roles. Many humans are shown as almost sketchy riders, while their mount is emphasized with hooked hooves, a long neck, and sleek body, and accoutrements that might include split ears, reins and decorated bridle, a feather war bonnet, a tied-up tail, a forelock decoration, a saddle, and even a brand or body paint. By this time the shield-bearing warrior is rarely seen, and heraldic shield decoration is all but unknown. Across the region, pedestrians are typically small, rectangular-body style figures, though limited numbers of V-neck style humans still occur, and hourglass-body style humans become the hallmark of historic Blackfoot art.

Human headdresses and hairstyles are often emphasized, and some clothing items—especially fringed war shirts and leggings—are frequently shown. Occasional images show even fancier dress, including dance bustles, Chief's Coats, moccasins, women's dresses, and blanket clothing. But such human-related items are almost always subservient to the action in which the wearer is engaged. Headdresses and Chief's Coats serve primarily to identify a particular man or his opponent so the battle actions can be readily attributed to the artist. Dance bustles and the detailed garments worn by groups of observers and participants indicate the type of ceremony being illustrated so the drawing can be understood in the historical context of the artist's tribe.

If anything rivals horses in Biographic art, in terms of number and details, it is weapons. Guns and lances dominate among the two dozen types of weapons shown, but often multiple examples of these are stacked in impressive columns to represent massed enemies against which a lone raider has triumphed. In a type of synecdoche common to this art, whereby a part stands in for the whole, a weapon routinely represents a human actor—even the hero of the scene—who is not illustrated. Multiple types of different weapons are commonly illustrated, so there are four different kinds of tomahawks, four different sorts of coupsticks, and five different kinds of firearms found in this art.

These weapons also show elaborate detail. Guns show intricate hammer-and-trigger assemblages as well as ferrules sometimes holding a ramrod; or there is a swatch of red cloth strung through each ferrule to emphasize them. Lances have all manner of decorative elements, including feathers, banners, and flags; but more important in many cases is their large metal killing point. Bows are frequently shown as recurved, sinew-backed, composite types, but others are simple long bows. Arrows show a variety of points (some metal) and often elaborate fletching. Decorative tabs hang from spears and sword and tomahawk handles; and the shafts of several types of weapons are sometimes shown wrapped with ermine skins or other decorative material.

In addition to these details of accoutrements, regalia, and weaponry, Biographic scenes are clarified and expanded by emphasizing action and movement. Riders strain forward, quirting their galloping horses into the action,

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while victorious combatants lunge forward to strike a blow against an enemy who is falling backward in defeat. A striding warrior, using his own shield as a battering ram, deflects an enemy's coup strike to land his own killing blow. Arrows fly, and bullets—shown as a series of dots, dots with "tails," or a line running from the gun barrel to the flying projectile—whiz across the battlefield while the tracks of men and horses show their paths to and fro throughout the action. Muzzle blasts indicate the discharge of firearms, while bullet wounds marked with a dot and arrows stuck in horses or humans are often accompanied by flowing blood. Warriors dismount to strike a foe or take his weapon as a war trophy, while another man rides through the field of battle to lash an enemy across the face with his quirt. Others rain bullets or arrows down on an enemy force.

And after the fight a man would take time to recount his personal glory with a tally of defeated enemies and the weapons he had taken from them. Usually aligned in a row or column—although sometimes just scattered across a metaphoric field of battle—a series of vanquished enemies would be illustrated, with detailed information as to how each was overcome. For each foe, a coup-strike weapon documents the honored blow, and tracks of a horse and human sometimes show details of how he was hunted down. A horse or horses posed in front of a tipi, sometimes with the hero interposed between, illustrates a man's theft of a prize horse from an enemy. A woman "tagged" with a capture hand indicates a war captive brought home to be incorporated into the winner's tribe.

In short, coup counting was almost the singular focus of this art, and action was fast and furious. Shorthand conventions were used to illustrate the action and document the acquisition of war honors, and these conventions—along with the various forms of actual things being portrayed—form a lexicon that organizes and informs Plains Biographic art. Thus, a single weapon might be shown twice in a scene to illustrate its sequential use more than once in the action. Likewise, a cluster of bullets above and behind the head of a rider leaning forward to touch and capture a fallen soldier's horse illustrates the fusillade of fire the warrior braved in performing this daring deed. A circle surrounding a group of humans indicates an entrenched war party facing off against superior enemy forces, and a strategically placed capture hand can indicate anything from a stolen horse or captured weapon to a counted coup or the enslavement of an overpowered woman.

Finally, quite late in the Historic period, Biographic art underwent further change, wherein ideograms were developed out of the basic pictography structuring this art. Plains Indian artists began to draw symbols that stood for things rather than drawing the objects themselves. Thus, among the Blackfoot, a horse's **C**-shaped hoofprint was squared-off into a three-sided, quasi-rectangular image and stood for the leadership of a war party, and an **X** (Figure 0.14) represented a stolen horse by depicting the pin to which it had been picketed.

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For the Mandan, Hidatsa, Arikara, and Crow, a hashtag (**#**) symbolized a man's bravery in fighting from behind hastily constructed breastworks, and among several different tribes, an **X** elaborated in a variety of ways (e.g., **-X-**, **=X**; see Figure 0.14) stood for the counting of first through fourth coup. Nearly universally across the Plains, an arc with a pendent zigzag line symbolized a man's service as a war party scout. Whether these ideograms represent a natural evolutionary development in this art that would have occurred regardless of

Figure 0.14. Honor mark vocabularies used by artists from the Blackfoot confederacy and those from the Mandan, Hidatsa, Arikara, and Crow tribes. Drawing by the authors.

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contact with Euro-Americans or were derived in response to Indian artists seeing written languages has been the subject of some debate; but in either case, they move the lexicon another step away from Ceremonial art and show a transition from picture writing toward idiographic writing.

It is this lexicon, and the "rules" that Plains Indian artists used to structure their narrative art, that enables it to be read by others—often centuries after it was drawn. One of us (Keyser) has spent forty years studying Biographic art and learning its lexicon and rules, and the other (Kaiser) has more than a decade of recording and analyzing Plains Biographic art in this way. We have both read widely, consulting a multitude of historical sources that discuss this art form in its several manifestations. Additionally, we have both published extensively on this subject. During that work we have spoken with dozens of different experts in various aspects of Plains Indian culture and coauthored papers with several of them on different topics related to this general theme. In this process, we have educated ourselves to the point where we are moderately fluent in this Biographic picture writing. Seeing others struggle to interpret these drawings or miss the nuances that enable a fuller understanding of such imagery encouraged us to write this book. We hope it is as enjoyable for you to read and use as it has been for us to write. More importantly, we hope it helps reveal the depth of these historic, first-person accounts of the lives of Plains warriors and enables modern-day viewers to better understand these messages sent across the centuries.

For All to See: Other Biographic Art Media

Plains Biographic art occurs in several different media, the primary three being rock art (discussed in detail, above), robe art (painted bison robes, tipi covers, items of hide clothing, and muslin sheets in the latest years of the Historic period), and ledger art (drawings in pencil or pen and ink on many different sorts of paper, including entire ledger books but also individual sheets and loose-leaf folios). In addition to these major media, Biographic images are also drawn on trees, engraved on various metal tools such as axe blades and a brass bucket (Scott et al. 1997), on antler quirt handles (Keyser and Cash Cash 2002; Penney 1992:264–65), and painted or engraved on various other items (Maurer 1992:235). Some warriors (Figure 0.15) even painted various war honors on their horses (Bethke 2016:220–21; L. Dempsey 2007:14–16; Densmore 1918:329–30; Penney 1992:56). Women sometimes also produced Biographic images in beadwork showing their husband's war honors. Most known beadwork examples are from the reservation period in South Dakota (Lessard 1990; 1991).

Finally, winter counts are a special type of Biographic art, recording tribal history by depicting significant events, with each pictograph characterizing a specific year. This art has a more corporate than personal orientation and is drawn on everything from hides to muslins to paper. While using many con-

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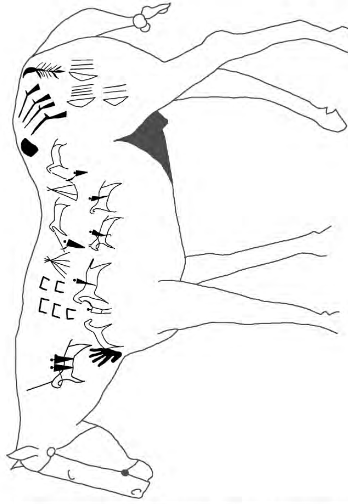

Figure 0.15. Blackfoot warrior, Morning Eagle, leads his war horse, elaborately painted with his war honors, through camp, 1908. Drawing made by the authors from this and another photograph to clarify the Biographic imagery. Note red-painted handprint on horse's shoulder and squared hoofprints indicating horse raids. Photograph from Walter McClintock Papers. Western Americana Collection, Beinecke Rare Book and Manuscript Library, Yale University, New Haven, CT.

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ventions found in other Biographic art, winter count images acted primarily as mnemonic devices to remind the reader of a significant event that occurred in a particular year. Some of these individual year glyphs have proven to be key to interpreting rock art (e.g., McCallister, Keyser, and Kaiser 2021) and others have provided interesting supplemental information. However, since this book has Biographic rock art as its primary subject, and there is no rock art equivalent to winter counts, we discuss them here only in relation to the few cases where they already have (or are likely to have) an impact on understanding rock art. Conversely, we provide somewhat more detailed summaries of the other primary types of Plains Biographic art media, specifically because they have such close correlation to rock art and have been used so frequently as comparative material.

Other than rock art, ***Robe Art*** provides the earliest evidence of Plains Biographic art. Given what we know of the development of Biographic rock art, we can assume tipi covers, war shirts, and bison robes were painted with similar scenes of personal honors in the Late Prehistoric and Protohistoric periods, even though no examples have survived. The earliest perishable items decorated with Biographic imagery that still exist likely date from the late 1700s and early 1800s (Horse Capture et al. 1993; McLaughlin 2003).[10] These show typical V-neck and rectangular-body style warriors arrayed in a variety of scenes documenting different sorts of engagements (Figure 0.16). The scarcity of firearms depicted in these scenes contrasts markedly to later robes, supporting an early date inferred for these pieces. Later robes and war shirts were painted

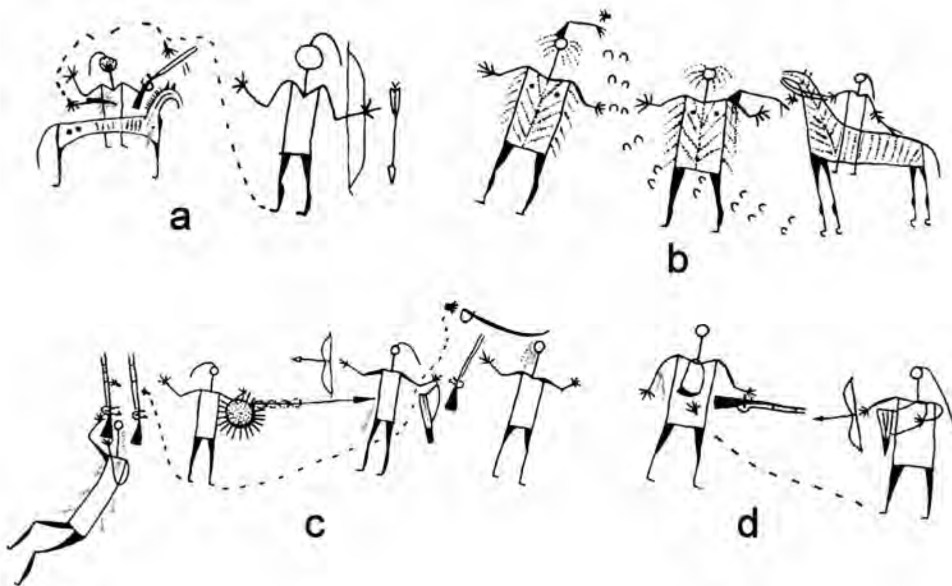

Figure 0.16. Early Biographic scenes from the Foureau bison robe, early 1800s. Drawing by the authors.

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throughout the nineteenth century and even into the early decades of the 1900s, although many of the latest examples were painted on pieces of muslin and canvas. There are currently more than one hundred specimens in museums throughout North America and Europe, but many others are known only from photographs (Bates, Kahn, and Lanford 2003:8; L. Dempsey 2007:49, 123; Hungry Wolf and Hungry Wolf 1977; Keyser 2000:87). Tribes particularly noted for their robe art include the Blackfoot, Sioux, Mandan, Hidatsa, Cheyenne, and Crow, but a few examples are also known from the Flathead, Shoshone, Gros Ventres (A'ani'nin), and Pawnee.

Robe art imagery typically illustrates characteristic war-honor scenes involving fighting warriors, captured weapons and stolen horses, and tallies of enemies bested or war trophies taken. Among some groups a painted robe or muslin might also have symbols showing scout service, war party leadership, and even stolen horses given away to increase a man's prestige. Although almost any piece of robe art can have any type of imagery, some tribes are known to favor certain compositions; thus, Blackfoot robes almost always include tallies of captured war trophies and entrenched forces, while Missouri River tribes (e.g., Mandan, Sioux, Cheyenne) more frequently emphasize coup-count tallies of defeated enemies. Only a few pieces of robe art are annotated in detail, but among these are more than thirty Blackfoot robes, muslins, and a tipi cover (Brownstone 1993, 2005a, 2007; L. Dempsey 2007:78–91; Ewers 1983); Mandan warrior-chief Mato-tope's robe (Catlin 1973:V.1:148–54); and robes and muslins drawn by the Crow warrior White Swan (Lycett and Keyser 2021b; Wildschut 1926).

One painted bison robe—the Segesser I hide painting (Figure 0.17)—deserves special mention. Created sometime in the late 1600s or early 1700s,

Figure 0.17. Biographic scene from the Segesser I hide painting, dating to the early 1700s, shows leather armor for both men and horses, shields, and weaponry very much like those depicted in northern Plains rock art. Drawing by the authors adapted from Hotz 1991 and author's photograph.

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the piece is not typical of robe art elsewhere on the Plains, and it may not even have been painted by an Indian artist (Hotz 1991). However, analysis shows that it illustrates a battle somewhere on the central or southern Plains between 1690 and 1720. Its importance to the study of Biographic art is the fact that it illustrates leather body armor for both humans and horses in forms that can be recognized in rock art images scattered from Kansas and southeastern Colorado to southern Alberta.

For many Plains groups (except notably the Blackfoot), robe art declined in importance in the last decades of the 1800s, and it was replaced by ledger art in several instances. But the value of robe art for the study of Biographic art in general is well documented, and in many cases it provides a "missing link" between the unannotated rock art of earlier periods and the hundreds of annotated ledger drawings obtained from numerous groups (Keyser 1996).

Ledger Art is the name given to a broad range of drawings on paper. Most commonly drawn in business ledgers and similar bound volumes obtained by tribal artists from a variety of sources, ledger art is also drawn in a Dakota-language Bible, in autograph books, in loose leaf folios, and on a wide variety of individual sheets of paper. Drawn with pen and ink, colored or plain graphite pencils, or even watercolors, many ledger drawings are exceedingly colorful and often utilize multiple different writing instruments, so that a single figure can be outlined in ink and infilled with colored pencils or a watercolor wash. The earliest documented ledger drawings (Figure 0.18) were collected primarily on the northern Plains from Mandan, Hidatsa, Flathead, Blackfoot, and Gros Ventres artists in the years between 1835 and 1850 by explorers, Jesuit priests, and Fort Union's fur trade factor (Denig 2000; Keyser 2000; Point 1967; Thomas and Ronnefeldt 1976). Several of these are exceedingly well annotated. Others were collected at similarly early dates from Ute and Comanche artists on the southern Plains (Ewers 1982a).

But the heyday of ledger art was the Indian Wars period and the decades immediately after. During this time dozens of Lakota, Cheyenne, Kiowa, Nez Perce, Arapaho, Arikara, Hidatsa, and Crow artists drew more than a thousand ledger drawings that survive today. The majority of these, authored between 1860 and 1880, were drawn in actual ledger books that were kept by members of various warrior societies among the Lakota, Cheyenne, Arapaho, and Kiowa. Termed "war books" (McLaughlin 2013:52–68), these ledgers filled with drawings of famous men and their battle exploits were used to maintain the cohesion of a multiethnic tribal fighting force as it faced the US military. Many such war books were captured on the battlefield or removed from warrior burials. Others were created by Arikara and Crow warriors who were enlisted as scouts with the US military.

Still other ledger drawings are the products of Cheyenne and Kiowa war prisoners interned at Fort Marion, Florida, between 1875 and 1878. Native artists from this group, such as Howling Wolf, Making Medicine, and Zo-Tom,

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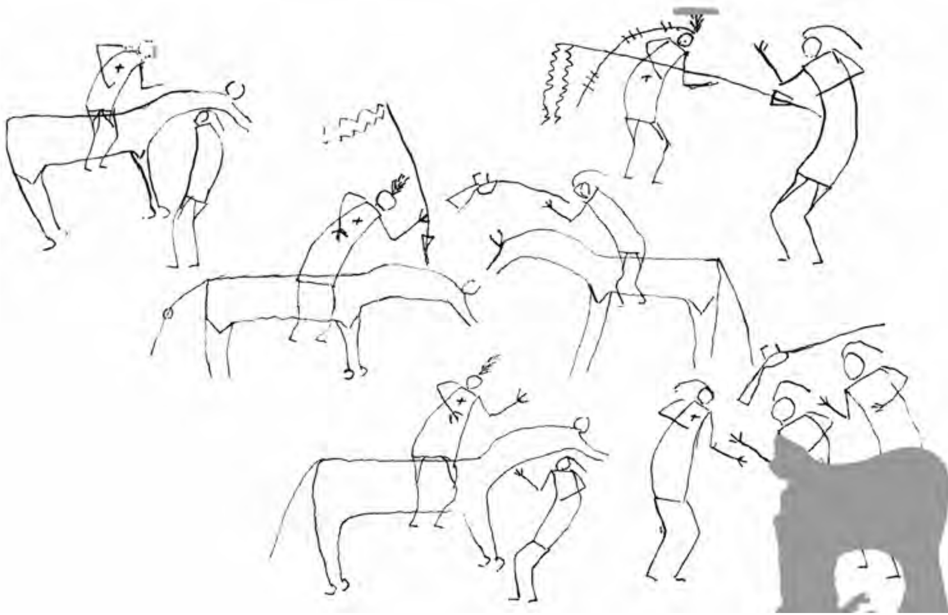

Figure 0.18. Combat scenes on one page of the Five Crows ledger folio, attributed to the Flathead chief Red Feather (Adolphe). Photograph by Keyser, original ledger drawing from the De Smetiana Collection, Missouri Province Archive, Jesuit Archives & Research Center, St. Louis, Missouri.

were well-known names among patrons of the arts living along the eastern seaboard at that time (Petersen 1968, 1971; Szabo 1994, 2007; Viola 1998). Still other ledger drawings were produced for use as currency at frontier trading posts during the early years of the reservation period. Sometimes commissioned by interested collectors but often simply done by warrior artists who used them to obtain supplies to support their families, these drawings often exist as loose-leaf folios (Berlo 1996:146; Heidenreich 1985; Miles and Lovett 1994, 1995), and many are the exploits of famous men drawn not by themselves but by others. Finally, probably the largest collection of ledger drawings is more than four hundred drawings by Amos Bad Heart Bull (Bad Heart Bull and Blish 1967) done in the first decade of the 1900s as a pictographic history of the Oglala Sioux.

Because much of this art was produced directly for consumption by artists, collectors, and ethnographers, hundreds of these drawings are annotated as to what they show and sometimes how they are structured. Certainly some annotations are nothing but fanciful inventions or wishful thinking of a collector who knew little or nothing about the art (McLaughlin 2013:5), and these provide either no information or can actually mislead an unwary researcher. One of the most blatant (and hilarious) examples is the Schild Ledger in which a collector annotating in German misidentifies the gender and ethnic iden-

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tity of numerous illustrated participants in his captions for the illustrations. Another example is the Samuel Strong/Roman Nose ledger in which the annotations mistakenly identify coup-strike weapons as those having been thrown at a retreating enemy in frustration (Figure 0.19) or identify tallies of enemies on whom coup has been counted as soldiers seeking peace with the Indian artist (Smithsonian 2019). Obviously, such misleading captions provide nothing of substance for our study; but fortunately, annotations for hundreds of other drawings (e.g., Berlo 1996:96, 150–55; Bad Heart Bull and Blish 1967; Heidenreich 1985; Keyser 1996, 2000; Miles and Lovett 1994, 1995; White Bull 1968) provide invaluable information concerning the anthropology of this art. And it is these hundreds of annotations and captions for different drawings that form the "Rosetta Stone" aspect that ultimately enabled the reconstruction of the Biographic art lexicon (Keyser 1987, 2000; Parsons 1987).

Winter Counts are pictorial calendars arranged as a linear series of images depicting significant yearly events in a group's history. The Lakota created most of these, but examples by the Kiowa, Mandan, and Blackfoot also survive. Surviving winter counts date from the mid nineteenth to early twentieth century, and some record events more than two hundred years previous. Possibly this historical knowledge was known through oral recitation, but it may be that earlier winter counts existed and were buried with their keepers (Burke 2007:2; Mooney 1898:144).

Some later winter counts, like ledger art, were collected by, or commissioned for, Euro-Americans (Corbusier 1886; Mallery 1877; Mooney 1898). These collectors' annotations enable not only interpretation of the meaning of indi-

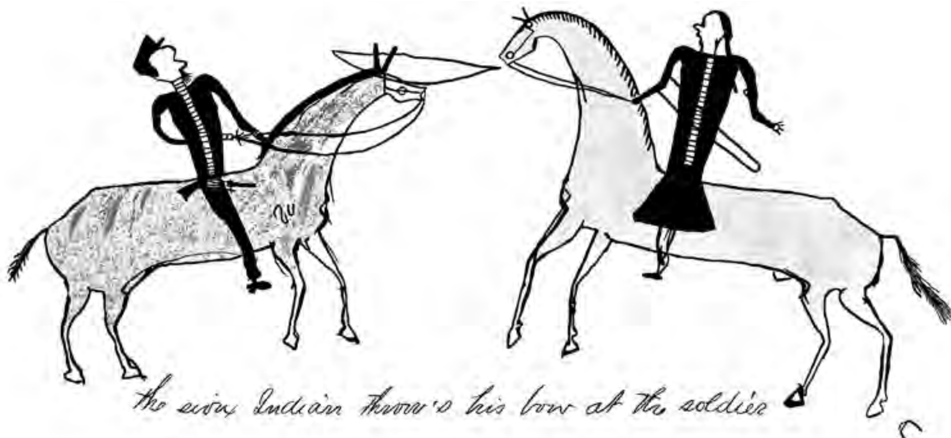

Figure 0.19. A scene from the Samuel Strong, Roman Nose ledger illustrating a fanciful (but nearly meaningless) annotation by a collector who did not understand the Biographic art lexicon. Note floating coup-strike bow. Drawing by the authors, based on original ledger drawing NMNH-1303–11008300, National Anthropological Archives, Smithsonian Institution.

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vidual images but also facilitate understanding of how artistic conventions were used. And, uniquely, they sometimes allow comparison of different illustrations of the same events, showing the variety of ways different artists could depict similar actions and ideas.

These pictorial records acted largely as a mnemonic device to remind the reader of noteworthy happenings. While some calendar entries are explicitly narrative, much winter count imagery comprises only implied or inferred narrative. As such, these images sometimes seem incomplete or cryptic to an outsider; but the events would have been known to insiders based on their own observation or others' verbal testimonies.

Although some winter count entries have exact parallels with Biographic warrior art, much winter count content differs significantly. Warriors' coups, which are the cornerstone of other Biographic art, are underrepresented, as they were less significant to the group (Sundstrom 2018). Furthermore, winter counts generally reflect communal experiences and focus on more memorable, unique, or unusual occurrences. Such events include significant battles, peace treaties, and the deaths of tribal leaders. They also record times of plenty, as well as starvation, suicides, and defeats rather than just victories. Episodes of disease, floods, fire, and impressive meteor showers are also drawn. As such, winter counts expand the Biographic lexicon to give a broader view of Plains life.

While using often-abbreviated narratives in keeping their calendars, the artists were also familiar with Biographic rock art, robe art, and ledger drawings. As such, they were well versed in the standard Biographic lexicon and compositional structures (Kaiser and Keyser 2020). Therefore, many calendar entries parallel other Biographic art illustrations depicting typical narrative events. As Risch (2000:32) notes, one of the main narrative categories found in winter counts is "contests," which includes various types of conflict, horse stealing, hunting, and violent deaths. From these and a few other images (e.g., those detailing disease), we can better understand some conventions and narrative structures and use them to assist in the interpretation of rock art (e.g., McCallister, Keyser, and Kaiser 2021; Parsons 1987).

For our purposes, however, what is most important about these various media is that Plains Biographic drawings are essentially the same no matter what material the artist chose as his "canvas" (Figure 0.20). A mounted man engaging a pedestrian foe is structured the same way, and uses exactly the same sorts of conventions, whether it is carved as a petroglyph, painted on a bison robe with native pigments, or drawn with colored pencils in a ledger book. Likewise, other than the use of guns as both primary and coup-strike weapons, a tally of coups counted on defeated enemies painted on a northern Plains war shirt collected in 1837 is essentially identical to one carved more than 150 years earlier as a petroglyph at Bear Gulch (Figure 0.9). Additionally, many of the conventions used in winter counts (such as the action hand, the

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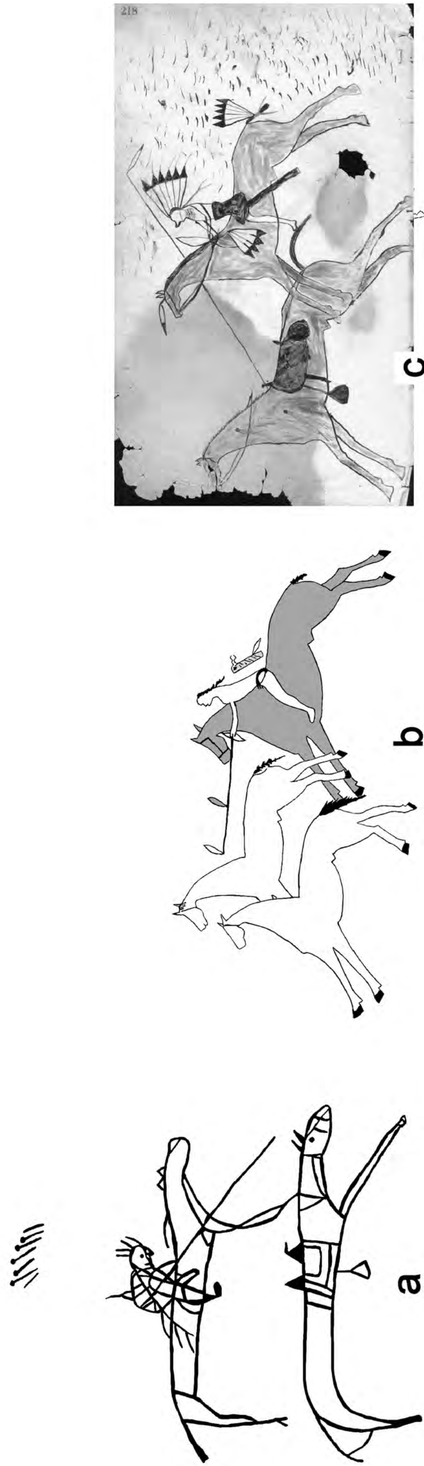

Figure 0.20. These three scenes show exactly the same battle action (the claiming of a riderless horse) in rock art (a), robe art (b), and ledger art (c). Note that a and c show the action while the protagonist is under fire, as indicated by the flying bullets above and behind him. Drawing a by the authors. Drawing b adapted by the authors from a Lakota bison robe, American Museum of Natural History, New York (cat. no. 50/6793). Photograph c, image courtesy of Michael Fosha, Black Hills State University, Spearfish, South Dakota.

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coup-strike weapon, track sequences, muzzle blasts, and flying bullets) are the same as those used in rock art, robe art, and ledger drawings (Figure 0.21).[11] What this means is that understanding the structure and meaning of the art in any one medium is usually transferable—at least to some extent—to understanding the art in another.

Each of these Biographic art media have experts who specialize in studying that particular expression—sometimes to the exclusion or near exclusion of other media. Thus, some scholars (e.g., Petersen, Szabo, Berlo) are best known for detailed studies of ledger drawings, and their publications detail entire ledger books filled with Biographic imagery, while other specialists (e.g., Brownstone, Dempsey) focus their expertise primarily in the study of painted bison robes and other items made of animal skin (e.g., war shirts, leggings). Still others (e.g., Howard) specialize in winter counts. Finally, a few scholars (e.g., Ewers, Greene, Horse Capture, Maurer, McLaughlin) have multiple publications that include analyses of Biographic drawings on various media, including hides, clothing, paper, muslin, and even smaller objects such as engraved antler quirts and beadwork-decorated bags.

What these experts all lack is sufficient familiarity with rock art to translate their knowledge of Biographic art in their preferred medium of study to the pictographs and petroglyphs so widely scattered across the Plains. Thus, despite the fact that there are several authors (e.g., Keyser, Sundstrom, Klassen, Turpin, Jordan) who have published extensively on Biographic ***Rock Art***,

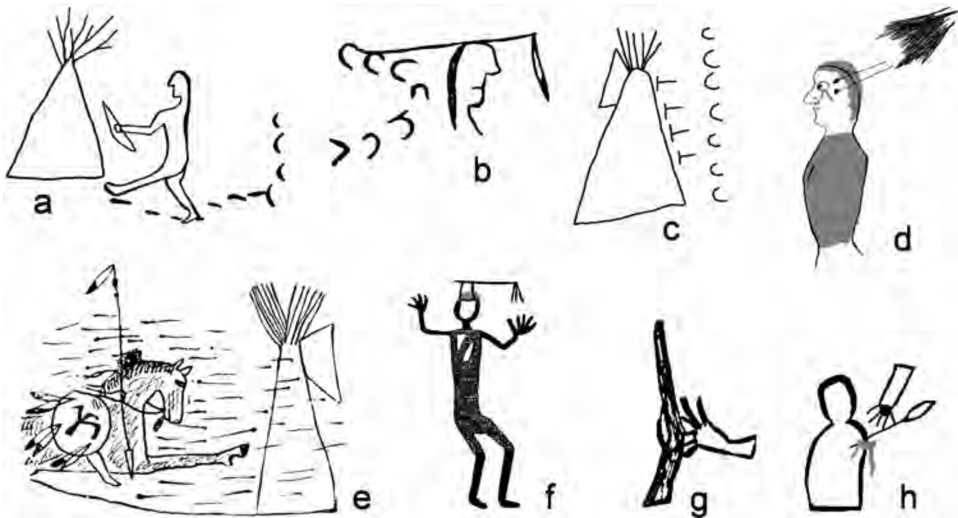

Figure 0.21. Winter count and pictographic census imagery uses many of the same lexical conventions and synecdoche as other Biographic art. These include striking a tipi (a), ride-by coup count (b), flying projectiles (c–e), muzzle blasts (d), stacked arrays of combatants (c), floating weapons (b, d, f), and the capture hand (g–h). Drawings by David A. Kaiser adapted from various winter count images.

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introductions to major texts on Biographic art often begin with some other type of pictographs or petroglyphs, such as the fantastic spirit beings of the Dinwoody Tradition, or shield-bearing warriors and V-neck humans in Ceremonial Tradition poses and compositions.[12] Conversely, Keyser (1996, 2000, 2014a; Bouma and Keyser 2004; Keyser and Brady 1993) has done extensive research in all three major Biographic art media—rock art, robe art, and ledger art—and has spent most of his career (e.g., Keyser 1987, 1996, 2008b; Keyser and Klassen 2001, 2003; Keyser and Cowdrey 2008; Keyser and Mitchell 2001; Keyser, Kaiser, and Brink 2014; Lycett and Keyser 2017, 2019a, 2021a) studying and elucidating the relationships between these various expressions. Likewise, Linea Sundstrom (1987, 1997, 2004b; Sundstrom and Fredlund 1999; Sundstrom and Keyser 1998; Jordan, Sundstrom, and McCleary 2016) has written extensively on rock art, ledger art (including historic Indian maps), and winter counts and has used many different examples from these non-rock art media to aid in interpreting pictographs and petroglyphs. Mark Parsons (1987) also published the seminal study interpreting Texas rock art in terms of other media; but unfortunately, he has apparently not continued this work. Finally, Michael Jordan (2012, 2015; Jordan, Sundstrom, and McCleary 2016) has recently begun to amass an impressive publication record doing essentially the same sort of comparative work using Biographic art on perishable media to expand the interpretation of rock art imagery in the Southern Plains. Future studies of this sort are planned and will greatly increase our understanding of rock art from that large—and until now, largely understudied—region.

The primary result of this research has been the realization that many annotated examples of Biographic art (typically ledger drawings but also a few painted bison robes and some winter count images) can be used as a sort of Rosetta Stone to decipher Plains Biographic rock art. Initially, discovery of Karen Petersen's (1971) "Pictographic Dictionary for the Fort Marion Ledger Drawings" led Keyser (1987) to propose that many aspects of that work could be directly applied to rock art imagery. And then a decade later, the opportunity to study the Five Crows ledger drawings (Keyser 2000) provided the ultimate blind test of this Rosetta Stone hypothesis, since the annotations on these drawings came directly from Five Crows himself but were written in French by Father Pierre-Jean DeSmet. Because Keyser does not read French, he was able to study and "read" the ledger drawings before having the annotations translated. The result was a notably close correspondence between what could be read from the drawings and what was reported by the artist (Keyser 2000:32). Lastly, Kaiser (2021; McCallister, Keyser, and Kaiser 2021) has shown winter counts to be an excellent source for determining conventions and understanding perspectives so as to better interpret Biographic rock art. The ultimate result of these last several decades has been the development and use of the Biographic art lexicon over the course of more than thirty years

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of our own research, which has built on more than a century of interest in the basic topic.

Notes

1. When Europeans first saw North American bison (*Bison bison*), they referred to them as both bison and buffalo. While both bison and buffalo belong to the same Bovidae family, buffalo are native to Asia and Africa and lack the distinctive hump, among other differences. However, since both terms are commonly used interchangeably for North American bison throughout the literature and in everyday conversation, we use both terms herein.
2. These pictorial narratives are not technically read, as such, but interpreted. Objects, actions, and conventions need to be recognized, connotations understood, and then all these are considered based on the interrelation of images. This is a more fluid and interactive process than simply reading a manuscript. However, we use the term "read" as an easy shorthand for this interpretive process.
3. The name Writing-on-Stone refers both to the Provincial Park in southern Alberta and to a more expansive area stretching downstream along the Milk River from Coffin Bridge to private property just east of the designated park. When we use the term without modification, we intend to refer to the greater Writing-on-Stone area in general, but occasionally we will add the Provincial Park modifier to refer directly to the park or sites within it.
4. Throughout the book we use both site names and official site numbers to reference rock art sites containing images of interest. For sites with widely accepted names, we typically use that name but in the first instance also include the official site number, so the reader will be able to recognize that both refer to the same place. A few named sites (e.g., Turner Rockshelter) do not have an official site number due to the wishes of the landowner or other factors.

   Site numbers primarily follow two major systems. In the United States they are usually part of the Smithsonian Trinomial system (STS), where the first two-digit number refers to the state in alphabetical order (minus Alaska and Hawaii, which were added as 49 and 50), the following two letters are an abbreviation of the county name, and the following number represents the site's position in a sequential listing of sites within that county. Thus, Vaquero Shelter's number, 41VV77, indicates Texas (41), Val Verde County (VV), and the fact that it was the seventy-seventh site recorded in that county. However, some states do not use the STS. For instance, New Mexico uses "Laboratory of Anthropology numbers" so we must occasionally use them in this volume.

   The situation in Canada is different. There, archaeologist Charles Borden designed a numbering system based on major and minor blocks of latitude and longitude designated by capital letters and lower-case letters with a sequential site number within that particular block. Thus, DgOv-2 represents the second site sequentially recorded in a block of land measuring 16 km (ca. 10 miles) on a side.
5. The explicit coup-counting function of Biographic Tradition rock art in the system of recounting one's war honors is summarized best by Fowles and Arterberry (2013:76), who write, "Indeed, it is increasingly clear that scratching out a battle or horse raid, probably with an accompanying narrative, may have served as another means of counting coup, with certain [rock art] sites serving as locations where such war honors were repeatedly performed."
6. The recollections of an aged Cree Warrior named Saukamappee, recorded by David Thompson in 1787, provide a firsthand account of warfare during this early period and are used as the basis for much of this reconstruction.

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7. It must be noted that George Catlin, who painted and drew several pictures of this horse and his owner, mistakenly thought the man's name was "He-Who-Jumps-Over-Everyone" (Catlin 1973:192), but this misunderstanding was corrected in the 1880s when a Crow delegation viewed one of Catlin's paintings of this man and his horse and set the record straight (McCleary 2010).
8. In these two drawings, and another at Grinnvoll Rockshelter, 24JT401 (Conner and Conner 1971:Figure 11), each stallion's penis is drawn approximately life-size in its extended tumescent state. These are the only drawings we currently know of that show Plains horses with the penis emphasized in this way.
9. Crow warriors often augmented the natural length of their own hair by incorporating additional human or horse hairs attached with daubs of pine pitch, white clay, or some other fixative. Such hair extensions for a few well-known warriors were sometimes long enough to reach the ground, and one famous chief, named Long Hair, had tresses that measured ten feet in length in the 1830s (Denig 1976:194, editor's footnote 40).
10. Given that rock art dating to at least the 1600s (and probably as much as a century earlier) features all sorts of Biographic imagery, it seems almost certain that there were perishable examples (e.g., tipi covers, war shirts, bison robes) made for possibly two hundred years prior to the first examples being collected. Unfortunately, no specimen has survived in the Plains archaeological record.
11. In addition to winter counts, elements of the Biographic art lexicon, and the conventions used with them, were also used in some name glyphs, as seen in the Lakota reservation census recorded by Red Cloud and other tribal rosters (Mallery 1886:174–81).
12. Exceptions to this general truism are the work of Evan Maurer (1992:26–27), which includes some of the key Biographic rock art compositions at Writing-On-Stone, and the work of Arni Brownstone (2001a, 2001b), in which he has successfully integrated various rock art images into his work with decorated robes and war shirts.

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