

Supplementary Information 1: Portable biographic artworks used in the analysis

Schoch Robe (N.A.4)

Found in the collections of the Bernisches Historisches Museum in Bern, Switzerland, this robe was collected in 1837 by Swiss merchant, Lorenz Alphons Schoch, who was based in St. Louis (Brownstone 2001). According to his notes, that year he traveled up the Missouri River to an Indian village to trade with the inhabitants (Thompson 1977:149-150). The robe is a large, complete, tanned bison hide with hair retained and the flesh side elaborated with a porcupine quill- and beadwork center strip with rosettes. Figures painted in red and black are scattered both above and below the central dividing strip (Brownstone 2001:70; Keyser 1996:38-39; Thompson 1977:150). Above the strip they illustrate five combat scenes, each involving a pair of fighting pedestrian warriors with guns or lances for weapons. Four additional flintlock long guns, three with tri-bar ferrules illustrated and each with an associated capture hand symbol, are posed adjacent to four of the scenes to represent weapons captured in battle. Other capture hands are found directly within three scenes. A variety of headdresses and garments are worn by warriors in the combat scenes. A line of horse tracks encircles one protagonist. Below the central strip is a series of 12 parallel lines representing war parties. From each line rise symbols representing either or both captured horses or defeated enemies.

Copenhagen Robe, Nationalmuseet, (Hd60)

In the collection of the National Museum of Denmark in Copenhagen is this robe, identified as Crow by several scholars (Brownstone 2001:69-70; Keyser 1996:38-41). Purchased with documentation as to provenience in 1861, the robe shares many similarities with the Schoch Robe, including human forms, clothing and headdresses, weaponry, and the Crow-style capture hand. This robe, however, illustrates six horses with associated horse tack including decorated halters, saddles, and tied-up tails, and several small-sized shields; one with a long, feathered drape. Characteristic “Crow” feathers are illustrated on several weapons. Painted with black, red, yellow, and green pigments, nine individual combat scenes are illustrated between pairs of warriors and two other individuals are shown with their weapons being taken by a disembodied capture hand. Combat is shown between pedestrians, pedestrians and horsemen, and between horsemen.

Apsálooke warrior’s robe (NMAI 1/2558)

A third Crow robe of approximately the same period as those in the Bern and Copenhagen museums is curated in the National Museum of the American Indian. Collected by William Schiefflin from a Cree or Blackfoot man at Fort Benton Montana in 1861, the robe is decorated with 11 humans and 4 horses drawn in an unmistakable Crow style with black, red, and green pigments (Brownstone 2001:71). The five combat scenes show fighting between various combinations of horsemen and pedestrians, but one scene shows a very detailed narrative in which one mounted man overcomes two pedestrian enemies while being wounded in the leg by an arrow. Weapons and headdresses are similar to those on the other two robes, as are the forms of horses and humans. However, clothing and horse tack are much more limited on this robe than the others. To the left of the combat scenes is a tally of 11 powder-and-ball long guns with illustrated tri-bar ferrules and ramrods drawn in two groups of four and seven individual weapons.

White Swan (Seton) Ledger drawings

Probably the best known Crow narrative artist was White Swan, who produced at least 16 different artworks during the period from about 1880 through 1897 (Cowles 1982; Bradley 1991; Lycett and Keyser, in preparation). The latest known of White Swan's drawings are a group of six multi-colored combat scenes executed on butcher paper at the behest of author and naturalist/artist Ernest Thompson Seton. Each drawing is annotated by Seton, describing the action as it was related to him by the artist. Like many of the Barstow ledger drawings, these White Swan drawings represent the height of Crow ledger art. Weapons, clothing, headdresses, face paint, horses, and horse tack are naturalistically illustrated with near-photographic precision. But the drawings still retain the traditional biographic art elements such as muzzle blasts, flying projectiles, name glyphs, and bleeding wounds, which accompany the latest elaborations showing facial profiles and the first halting attempts at incorporating European perspective.

White Swan muslin (Lindesmith Collection)

Purchased in 1881 at the Custer Store in Crow Agency, Montana by U.S. Army chaplain, Eli Washington John Lindesmith, while he was stationed at Fort Keogh, this painted muslin is in the collection of the Snite Museum of Art at the University of Notre Dame in Indiana (Bradley. Work by Douglas Bradley (1991) and Candace Greene (2012) has identified White Swan, famous Crow warrior and scout with the U.S. military, as the artist of this piece. Nine different scenes, painted in a rainbow of colors including red, green, yellow, blue, brown, grey, and black fill this

rectangular muslin sheet. Fine details of weaponry, clothing and beadwork, horse tack, headdresses, face paint, and wounds are drawn in almost every scene, and many of the specifics mimic those of earlier robe art. Styles of depicting horses' hooves and tack items have changed from the earlier robes in our sample; however, as have the kinds of weapons—especially guns. There is less emphasis on body painting, but profile facial features are usually shown for both protagonist and enemy. In total, the art on this piece—like that on many of the later drawings—shows an increase in sophistication over the earlier Crow artworks. However, as noted by Greene (2012) this work shows a more traditional style and overall arrangement compared to White Swan's later works (see also Lycett and Keyser 2019).

Barstow Ledger Collection

The Barstow ledger drawings are a series of 66 biographic style artworks penned by more than a dozen different Crow artists and one Hidatsa man (Heidenreich 1985). The loose-leaf drawings were collected by Charles Barstow, a clerk for the Bureau of Indian Affairs at Crow Agency, Montanan from 1879 to 1897. After being kept in private hands for about 20 years after Barstow's death in 1908, the drawings were purchased by Eastern Montana College (now Montana State University-Billings) in 1930. For many of the drawings, Barstow provided annotated information listing the artist, the date drawn, and a simple description of the subject. In a few cases, there appears to be some question as to whether the artist named was actually the person who drew the image, but among the artists whose work can be identified in the Barstow collection are Medicine Crow, Deaf Bull, Curley, and Takes Away the Enemy, all of whom are well-documented in Crow history. Other drawings show war deeds that famous chief Plenty Coups identified as being his own, but at the same time indicated were drawn by someone else. Such recording of a famous man's exploits by another artist happened relatively frequently in Plains Indian societies. Other, less well-known artists are also represented by many different drawings, and a few drawings are even listed as artist unknown, when Barstow's captions are incomplete. A total of 24 drawings from the collection are of interest to us here because they show war records of combat and coup counting. Others not relevant to this study are illustrations of dancers, tipis, and animals in the national zoo in Washington, D.C.

Minneapolis Robe (89.91)

This is a painted buffalo hide, illustrated in Maurer (1992:240), is now held at the Minneapolis Institute of Arts (Cat no. 89.91). It shows at least 12 biographic events, including horse raiding and interpersonal combat. Some 24 horses are illustrated, more than half of which are drawn in three large horse raid scenes. The horses and humans on this robe were drawn by an accomplished artist, who used detailed facial profiles to set both his animals and warriors apart from many of his contemporaries. Weapons, clothing, face paint, and headdresses are carefully illustrated, but less attention is paid to horse accoutrements than on many other contemporary artworks. Surprisingly, there are few if any wounds, flying arrows or bullets, or muzzle blasts that give other Crow biographic art of the period its detailed story line.

White Swan Robe (Cat. No. 78.38.105)

Currently in the collections of the Montana Historical Society, this robe lacks specific provenience to explain why an artist other than White Swan painted the vignette scenes on its top half. On the bottom half White Swan authored half a dozen scenes of combat that are clearly among his earlier works, based on the absence of his later stylistic sophistication (Cowles 1982). Another five combat scenes are drawn by the currently unknown artist on the robe's top half. The drawings on both halves show a broad, but relatively darker-toned color palette than is typical of later Crow artworks, but the art is quite similar with weapons, clothing, face paint, and horse tack depicted in considerable detail.

Charges-Strong Robe

This painted bison robe was purchased in 1907 by ethnologist, Robert Lowie, for the American Museum of Natural History (Lowie 1922: 316-317, 1935:217-218). It shows a series of combat and horse-raiding vignettes drawn below rows of symbols representing Charges-Strong's leadership of war parties and service as a war party scout. The vignette scenes show relatively modeled humans and horses in fairly simplistic portrayals of the actions. Colors are not used as freely or as extensively as in later art, and weapons, costume elements, and horse tack are all relatively simple. Based on our own analysis (Lycett and Keyser 2019) the Charges-Strong robe appears to have been drawn at least 30 years before its collection date.

Heard Museum Muslin (NA-PL-CR-0-1)

This muslin was painted by White Swan at Crow Agency, Montana, *c.*1890 (Bradley 1991). It is now housed at the Heard Museum, Phoenix, Arizona (Accession No. NA-PL-CR-0-1). On this muslin we can recognize many of the same scenes White Swan painted in his other robes, muslins, and ledger drawings. Of the dozen scenes, some of White Swan's most famous are duplicated, including his killing of a deserting soldier at the Little Bighorn battle, his spying on an enemy camp, and his removal from a fight on a travois pulled by a government mule. As is typical of White Swan's later work, the colors are vibrant and details of weapons, clothing, face paint, horse tack, and a military pennon are clearly portrayed. Flying projectiles, muzzle blasts, wounds, and the protagonist's tracks in one scene serve to animate the story line.

White Swan muslin, Buffalo Bill Historical Center, Cody, WY (NA.702.40)

This muslin, painted by White Swan *c.*1887, has been illustrated in Cowles (1982); (Bradley 1991); Hansen (2018). It is composed of 13 biographic scenes, using watercolor paints, pencil, and ink (Hansen 2018). Originally owned by the Paul Dyck Foundation, it now resides at the Buffalo Bill Center, Cody, Wyoming (Hansen 2018). Its scenes focus mainly on White Swan's exploits at the Little Bighorn Battle of 1876, and thus many of the scenes are duplicated in other of his artworks. The colors of this muslin are not as vibrant today as are those of other White Swan pieces, but some of that is due to bleeding associated with some of the colors. In his work on this muslin White Swan illustrated more secondary actors than is typical for many of his other works, but his attention to detail for weapons, pennons, clothing, headdresses and hairstyles, and horse tack is characteristic of his oeuvre. Flying projectiles, multiple muzzle blasts, and fatal wounds serve to fully animate several of the scenes.

References

- Bradley, Douglas E.
1991 *White Swan: Crow Indian Warrior and Painter*. Snite Museum of Art, University of Notre Dame.
- Brownstone, Arni
2001 Seven war-exploit paintings: a search for their origins. In *Studies in American Indian Art: A Memorial Tribute to Norman Feder*, Christian F. Feest, editor, pp. 69-85, University of Washington Press, Seattle.
- Cowles, D.C.

- 1982 White Swan: Crow Artist at the Little Big Horn. *American Indian Art Magazine* 7 (4): 52-61.
- Hansen, Emma I.
2018 *Plains Indian Buffalo Culture: Art from the Paul Dyck Collection*. Norman, University of Oklahoma Press.
- Heidenreich, C. Adrian
1985 *Ledger Art of the Crow and Gros Ventre Indians 1879-1897*. Yellowstone Art Center, Billings.
- Keyser, James D.
1996 Painted bison robes: the missing link in the biographic art style lexicon. *Plains Anthropologist* 41:29–52.
- Lowie, Robert H.
1922 Crow Indian Art. *Anthropological Papers of the American Museum of Natural History*, 21:171-132.
- Lowie, Robert H.
1935 *The Crow Indians*. New York: Holt, Rinehart, & Winston.
- Maurer, Evan M. 1992 *Visions of the People: A Pictorial History of Plains Indian Life*. Minneapolis Institute of Arts, Minneapolis.
- Lycett, Stephen J., Keyser, James D.
Time's arrow: toward a social history of Crow biographic art using seriation and multivariate statistics. *American Anthropologist*, in press.
- Thompson, Judy
1977 *The North American Indian Collection. A Catalogue: Berne Historical Museum*. K. J. Wyss Erben AG, Bern, Switzerland.