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THE WASHITA CHIEF BLANKET: PART I, TEXTILE ANALYSIS

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A unique historic textile treasure of the early American West, the Washita Chief Blanket (Figure 1) originated in the early to mid-1800s trade to the Plains Indians. It served Southern Cheyenne people for many years as a fine and expressive garment. In 1868 in a tipi village along Lodge Pole, or Washita, River, in western Indian Territory, it survived a major Indian Wars attack that is now known as the Washita Massacre. A soldier's "battlefield pickup," the blanket has been preserved and respected for 133 years as a war relic, a collectors' trophy, and a museum heirloom of sensitive nature. Cheyenne descendants today are beginning to know the textile as cultural heritage from a sacred site. Research in progress on this remarkable fragmentary textile is reported for the first time here and in the following paper.

In anthropology collections at The Denver Museum of Nature and Science (DMNS, formerly Denver Museum of Natural History) since 1968, the trade blanket is protected in secluded sacred storage along with another Washita remnant that has always accompanied it, a Cheyenne buffalo hide painted with a warrior's special designs and used as his robe (catalog number AC.4791). A handwritten tag pinned to the painted hide contains the following information: "Buffalo robe, was taken from an Indian Teepee at the Battle of Washita Nov 27, 1868. From whom I purchased it the following day, \$10-- E. S. Godfrey" The signature is that of General Edward S. Godfrey, a noted 7th Cavalry veteran.

Significance has always attached to this Cheyenne woolen blanket (often referred to as a robe) and the buffalo robe but their function and meaning have varied over time. Originally the robes served needs for personal warmth and protection and marked special tribal roles and rankings. Furthermore, Cheyennes expressed a culturally specified "language of the robe" in its positioning around the body and head or holding by arms and hands: the wearer would fit the drape of the robe to particular activities, such as addressing the tribe, running, and watching, or to the wearer's feelings, such as anger and hesitation (Fletcher and La Flesche 1905-1906: 360-2). Later in the history of these robes, the non-Indian possessors and exhibitors focused on their important historic provenance and the resulting personal meanings, such as remembrance and investment value. Today, the painted hide and blanket stand most of all as historic-cultural statements from a time and place sacred to the Cheyenne people and significant to the American experience.

More than objects, the Cheyenne robes together are a metaphor enwrapping the passing of the early American Indian West. The hide--hand-harvested, tanned, and decorated as an individualized wearable art--stands for the horse and buffalo way of life. The blanket--new, fashionable, and versatile, made in commercial multiples--represents Native American society opening to the encroaching Euroamerican world.

Leaving the ceremonially painted buffalo robe for future queries, museum staff have focused on the Washita Chief Blanket because of not only its provenance but also its distinctiveness as a trade item. That the blanket was traded to Cheyennes is a given, for no weavers are documented among pre-reservation Plains Indian tribes. The textile does have stylistic fit as an extreme variant of a blanket widely traded to Plains peoples--the earliest or Classic Phase of the renowned Navajo Chief Blanket (First Phase 1800-1850). However, the piece is materially, technically, and stylistically unusual and apparently undescribed in Indian trade studies.

The current definitive research effort began in 1998 when the Cheyenne-Arapaho Tribe of Oklahoma accepted the Museum's invitation to consult under the Native American Graves Protection and Repatriation Act (NAGPRA). Gordon L. Yellowman, Sr., NAGPRA Coordinator, and Alfriech Heap of Birds, Southern Cheyenne Elder, inspected the Washita robes with great respect for their connection with a site sacred in tribal history. They supported study and preservation of the pieces at the Museum. Museum staff developed a research design that focuses first on the blanket itself, describing it through textile analysis and establishing its provenance through documentation. A second phase includes wider object comparisons and ethnohistoric search in collections and archives, the literature, authorities' knowledge, and Cheyenne Indian art and oral history. These steps will define the Washita Chief Blanket, place the piece within cultural-temporal contexts, and furnish materials for theory building, especially about the blanket's origin and its meanings. Joint tribal and scholarly knowledge will be served.

Discoveries, questions, and directions emerging from first-phase research that begin to define the textile are set forth in the present linked papers. The authors extensively contacted Southwestern textile specialists, provided for their inspections of the textile, and surveyed on site eight museum textile collections (see Acknowledgments). Second-phase research thus far is presented to confirm negative directions (what the textile is not) as well as to begin promising avenues for future study.¹

Description and Technical Analysis of the Blanket (textile terms follow Hedlund 1990)

In overall appearance the textile is a worn, stained, and damaged rectangle with slightly undulating sides and missing ends (Figure 1). It's patterning is bold, geometric, and symmetrical with dark brown and red compound or zoned weft bands crossing a white ground. The regularly spaced and repeated full-width bands include a broad zoned center band, flanking plain bands, and vestiges of end zoned bands.

The textile currently measures 69.6 inches wide, 59.5 inches long including raveled end warp threads. Its condition is termed "fragmentary" because of missing end margins at bottom and top and holes 3 to 8 inches across at left center body, mid-left selvage, lower right body, and lower right corner. Circumstances of loss are unknown, but bullet or saber cut damage is not evidenced. The loose, unknotted fringed end margins indicate unevenly worn warp threads remaining after raveling of weft threads from side to side.

Extensive fiber and dye analysis established that all yarns are sheep wool of two varieties and that some yarns are natural and some dyed, with strict segregation of these

characteristics (Reed 2000). Most important and used throughout for all white and brown yarn is lustrous “churra” wool, commonly called Navajo Churro wool. This fiber comes from the churra sheep breed introduced to New Spain in the 1500s by Spanish colonists. The wool was processed before fabrication into yarns so that it was very clean and graded. White fiber is natural white churra wool of varying quality: the white warp contains mainly outer guard hairs (kemp fibers) of churra with some secondary fibers; while white weft has been carefully sorted to remove outer guard fibers (or kemp). Brown weft is natural dark churra made up of both guard hairs and secondary fibers and over-dyed with a small amount of anthragallol, a vegetal dye.

The red weft threads, however, are not churra but merino wool, which at this period was mostly used in commercial yarns from Europe. The red weft is dyed with natural insect red dyes, which tested ninety percent cochineal and ten percent lac. These dyes were available to the Hispanic community at the time of the provenance (Reed 2000:3). A few red and brown lines show discontinuous color shift due to varying dye properties.

All weft yarns average 27 microns diameter (17-60 microns). Warp yarns average 48 microns diameter (27-100 microns). Whether the yarns are handspun or machine spun is undetermined. All the yarns have exceptionally even twist consistent with commercial yarns. However, consultants do not all agree that the yarn was commercially spun and some strongly believe that all the yarn was produced on a spinning wheel.

The textile contains no raveled yarns, i.e., machine spun threads that have been raveled from woven cloth and re-plied for use as weft yarn. However, the fine quality or small diameter of the yarn is noted as similar to that of raveled yarns (Reed 2000:1). The early Navajo weavers made such plied yarns from raveled flannel (referred to as bayeta).

Structurally, the blanket is woven of plied wool yarns in weft-faced plain weave with paired warps (Emery 1995: 77, Fig. 88; 87). The warp threads are two ply Z-twist S-plied threads, laid in multiple units of two warps--an unusual technical feature (Figure 2). The weft threads throughout are two ply Z-twist S-plied. Both the warp and weft contain inconspicuous knots. The warp thread count is 7 per inch. Weft thread counts are 36 per inch for white threads, 38 per inch for red threads, and 40 per inch for brown threads. Excellent shed control during weaving is indicated by the even weft lines and the consistent spacing of warps.

Several structural features that would indicate vertical loom weaving are absent, namely, selvages using extra cords, floating wefts caused by missed warp, and lazy lines (typical of Navajo blankets although sometimes lacking in Pueblo blankets).

Floor loom weaving is usually evidenced by the type of side selvages used in the Washita blanket, consisting of warp threads turned over two sets of multiple (four) weft threads. The wavy side edges could result from different loom take-up of coarser brown fibers compared with finer red and white fibers, differential fiber shrinkage caused by cleaning chemicals, or other factors. The missing ends deprive us of crucial evidence of cut and knotted warp ends and/or fringe, characteristics of floor loom manufacture. However,

since the present worn off warp ends in no way preclude such endings, the possibility remains that this blanket was fringed at bottom and top.

Nevertheless, floor loom fabrication is unclear for two reasons. First, the textile is much wider than available floor looms, which were generally less than thirty inches wide at this time (Fisher 1979: 194-5). Secondly, the textile lacks a double weave ridge (multiple-threads) at the center warp, characteristic evidence of double-weaving, the usual width-achieving expedient of Hispanic weavers using narrow looms of the period.

Figure 3 digitally reconstructs the blanket's pattern to undamaged state, as evidenced by remaining fragmentary patterning of brown and a single red strip at blanket ends and by similarly patterned blankets in photographs of the period (see below). Possible fringes are not reconstructed. The resulting textile is almost square (69.6 inches wide, 63.6 inches long). Three main pattern components are shown. First, a brown central compound or zoned band is edged with sets of four narrow red (overall 14 inches wide, each red-band set 5 inches wide). Second, flanking the center on both sides is a triple-banded section of solid brown, red, and brown on white (each band from 1.5 to 3 inches wide). Finally, each blanket end (bottom and top) has a brown compound band with quadruple narrow red bands that mirror the zoning of the central band.

Comparisons with Banded Blankets of the Southwest

Can the Washita blanket be identified with "the usual suspects," i.e., the known Native American and Hispanic weavers of New Mexico and Arizona? No closely similar textiles were found during initial extensive viewing of the Washita blanket and consultations with numerous authorities on Southwestern Indian and Hispanic textile styles (see Acknowledgments). However, linkages of salient features exist, as shown by the chart below, which compares the Washita Chief Blanket with Southwestern banded blankets from the same period. The data derive from textiles in eight museums and published analyses (Fisher 1979; Kent 1983:64-67; Hedlund 1990:35-36).

Type	Washita Chief Blanket	Navajo First Phase Chiefs Pattern	Rio Grande Hispanic Striped	Pueblo Striped
Construction	Single width	Single width	2 widths sewn together or double woven with paired warps at center	Single width
Width	67.5" to 69.6"	63.4" to 82"	43" to 60"	43" to 62.7"
Length	Now 59.5"; reconstructed 63.6"	48" to 64.4"	67" to 103" (1.5 to 1.85 times width)	46" to 77.1"
Format or Shape	Reconstructed: slightly wider than long	Wider than long	Longer than wide	Use determines wider than long or longer than wide

End Selvage Treatment	Original ends missing; warp combed as a fringe	Selvage cords two 2-ply or 3-ply	End of warp yarns cut and knotted into a fringe	Selvage cords usually present two or three 2-ply
Side Selvage Treatment	Weft yarn over multiple edge warps	Extra selvage cords: two 2-ply or 3-ply	Weft yarns turn over paired warps	Same as either Rio Grande or Navajo selvage
Corners	Missing	Tight knots; augmented tassels	Knotted fringe	Loose knots
Lazy Lines	None	Yes	None	Hopi none; Zuni may have
Warps	Unknown	Continuous	Cut and knotted	Continuous
Count warp/weft	7 / 36-40	6-12 / 20-100	5-7 / 25-50	3-5 / 10-20
Yarn	2 z-S	1 Z	1 Z or 3 or 4 s-Z commercial	1 Z
Weave	Weft faced plain; knots joining warp and weft fibers	Weft faced tapestry; joins overlap, dove-tail or interlock	Weft faced plain; knots joining weft fiber	Weft faced plain; joins overlap or interlock
Fiber	Churra wool, commercial merino wool	1800-60 churra wool, 1860-80 mixed breed wool (crimps present)	1800-60 churra wool; 1860-80 mixed breed wool (crimps present)	1800-60 churra wool; 1860-80 mixed breed wool (crimps present)
Dyes	Cochineal/lac, brown over-dye	Indigo, brown over-dye, raveled red	Indigo, brown natural, raveled red	Indigo, brown over-dye, raveled red

From the information above, the Washita blanket can be seen as an anomaly among Southwestern blanket types. As one consultant phrased it, “This is a distinctly different and unique weaving” (Reed 2000:4). Broadly, in technique it is closest to Rio Grande Hispanic blankets and in pattern and size it corresponds to some Navajo/Pueblo weavings.

Links with the Navajo Chief Blanket

Because the Washita Blanket resembles the zoned banded Navajo First Phase, or Classic, Chief Blanket (sometimes called “Ute style”) that evolved between 1800 and 1860, the two styles were closely compared in the study. As a known trade blanket widely used by Plains Indians from Canada to Texas (Bennett 1981), the Navajo style is often attributed to blankets described only as “striped” or “black and white” or “Spanish” in older journals and accounts. However, the similarity of the earliest Navajo Chief’s and the Washita Chief style should caution that attributions may have a degree of error.

In reconstructed size and shape the Washita Chief Blanket is similar to the classic Navajo wearing blanket--wide, but only slightly wider than long--in a size suitable for a large man (Figure 4). The reconstructed end bands also bring the Washita textile's pattern into general balance with the Navajo Chief Blanket banded layout (Wheat 1976:428; Kent 1985:52-3; Blomberg 1988:55-7; Hedlund 1990:79).

However, many technical differences separate the two styles, as the above chart shows. The classic period Navajo typically used single tightly spun warp yarn rather than the fine paired warp of the Washita textile. The Navajo textile is strengthened with plied cord selvages on all four sides, whereas the Washita blanket shows no signs of ever having had side or end cording. Characteristic Navajo vertical loom lazy lines are not present in the Washita textile, whose fine warp and multiple edge warps point toward a floor loom.

The patterns also differ in major ways. Most Navajo First Phase Chief blankets are brown or black and indigo blue on natural white ground; when added, red is a raveled cloth thread. In contrast the Washita blanket substitutes expensive red yarn where blue would appear in the Navajo blanket. Furthermore, the band rhythms are different. In the Navajo, only two solid-color bands typically appear between the central and end zoned broad bands, giving a dark and light overlay effect. But in the Washita piece three solid bands, brown and red separated with white, alter the balance of dark and light toward a flat appearance. In some sense, the red-banded rhythm gives Spanish flavor to the textile.

We suggest the following synopsis as a working hypothesis, based on the above analysis as well as ethnohistoric evidence in Part II. The earliest, or Classic, Navajo Chief Blanket style developing ca. 1800-1850 preceded the Washita blanket style. The originators of the Washita Chief Blanket's style were familiar with and inspired by the form, dark and light bold colors, and zoned banded pattern of the First Phase Navajo Chief Blanket, as well as its success in trade with the Plains Indians. To mimic the classic Navajo shoulder blanket, unknown weavers in the mid-1800's used wide floor looms and the appropriate yarns and techniques. They created a new design by emphasizing red in place of blue, by varying the rhythm of the bands, and by fringing the ends. The new blanket style was traded to Plains people contemporaneously with other trade blankets ca. 1850 to 1870.

Acknowledgments

We are grateful to Gordon L. Yellowman, Sr. and Alfrieck Heap of Birds, who represented the Cheyenne-Arapaho Tribe of Oklahoma in a November 19-20, 1998 consultation on the two Washita robes at the Denver Museum and gave permission for their continued care and study by staff. A federal NAGPRA Grant to Museums awarded in 1998 from the National Park Service enabled their visit to Denver.

We also particularly thank Gordon L. Yellowman, Sr. for requesting the special viewing of the Washita Chief Blanket at the Seventh Biennial Symposium of the Textile Society of America in Santa Fe and the School of American Research for making possible and facilitating the exhibit and inspection by textile specialists on September 21-23, 2000.

Thanks to all the caretakers of textiles and experts in the field who consulted on the blanket and/or gave access and assistance with collection and/or records, as follows: Ann Lane Hedlund, Gloria F. Ross Center for Tapestry Studies; Suzanne Baizerman, Oakland Museum; Jerry Becker, Evergreen, Colorado; Nancy Blomberg, Roger Echohawk, and Tamara Rogaar, Denver Art Museum; Jeanne Brako, Colorado Historical Society; Diane Dittmore and Cathy Notarnicola, Arizona State Museum; Cheryl Frankenstein-Doyle and Jonathan Batkin, Wheelwright Museum; Kathleen Whitaker, Lee Goodwin, and Deborah Winton, School of American Research; Susan Haskell and T. Rose Holdcraft, Peabody Museum of American Archaeology and Ethnology; Karen Herbaugh, American Textile History Museum; Bruce Hucko, Maxwell Museum of Anthropology, University of New Mexico; David Irving, Denver, Colorado; Helen R. Lucero, National Hispanic Cultural Center of New Mexico; Robert Mann, Denver, Colorado; Martha Otto, Ohio Historical Society; Dianna Pardue, Ann Marshall, and La Ree Bates, Heard Museum; Bettina Raphael, Santa Fe; Marian Rodee, Albuquerque; Barbara Sumberg and Barbara Mauldin, Museum of International Folk Art; Irvin and Lisa Trujillo, Centinela Traditional Arts, Chimayo, New Mexico; Valerie Verzuh and Laurel Holt, Museum of Indian Arts and Culture; Laurie D. Webster, University of Arizona; Mark Winter, Santa Fe; and Will Wroth, Bloomington, Indiana.

We gratefully acknowledge fiber analysis and identification of wools by the following specialists: Lyle G. McNeal, Dept. of Animal, Dairy, and Veterinary Sciences, Utah State University, Logan; Casey Reed, Material Insight – Textile Certification and Analysis, Albuquerque; Gary Moller and Steve Burns, Ball Aerospace Laboratories; Kathy Williams, Textile Laboratory, Colorado State University; and Isabelle Brownfield, U.S. Geological Survey (assisted by E. A. Cuevas). Dyes were analyzed and identified by David Wenger, Haverford, Pennsylvania, spectrophotometric identification of red dye; and Casey Reed, Albuquerque, chromatographic and spectral analysis and identification of red and brown dyes.

The Denver Museum of Nature and Science provided support for the authors' field studies and other research.

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ILLUSTRATIONS

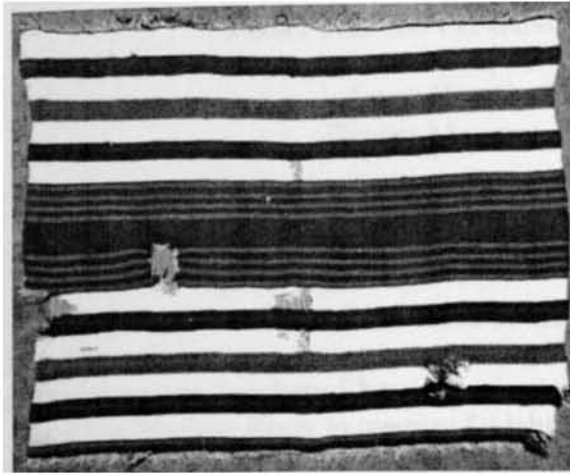


Figure 1 Washita Chief Blanket, collected 1868. 69.6" x 59.5".
Denver Museum of Nature and Science cat. no. AC.4792

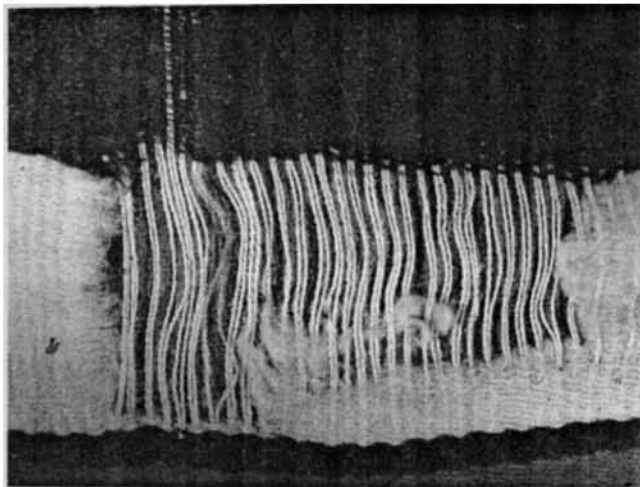


Figure 2 Paired warps in Washita Chief Blanket. 2.6 " wide white band.
Denver Museum of Nature and Science cat. no. AC.4792.



Figure 3 Digital reconstruction of Washita Chief Blanket. 69.6" x 63.6".
Denver Museum of Nature and Science cat. no. AC.4792.

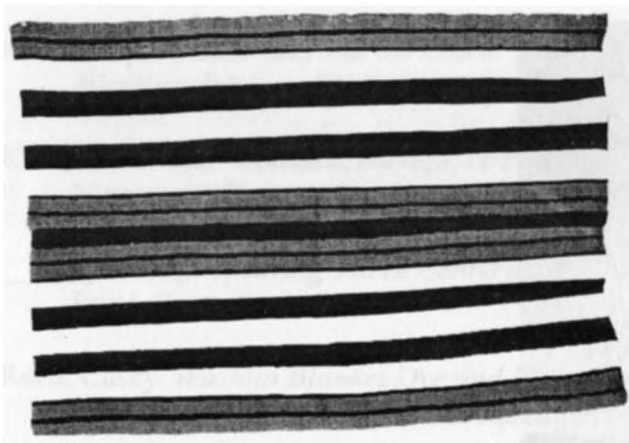


Figure 4. Navajo First Phase Chief Style Blanket, 1840-1850. 75.1"x 52.5"
Denver Museum of Nature and Science cat. no.A.1637.1

¹ Joyce Herold edited this and the following article and traced provenance and ethnohistoric-cultural contexts. Peggy Whitehead, a weaver, spinner and Southwestern textiles analyst, focused on the structural and design evidence and compared objects in Southwestern museums. Gordon L Yellowman, Sr., a chief of the Southern Cheyennes, provided insights into Native American meaning and contexts of blankets, especially the Washita Chief Blanket among Cheyennes today.