

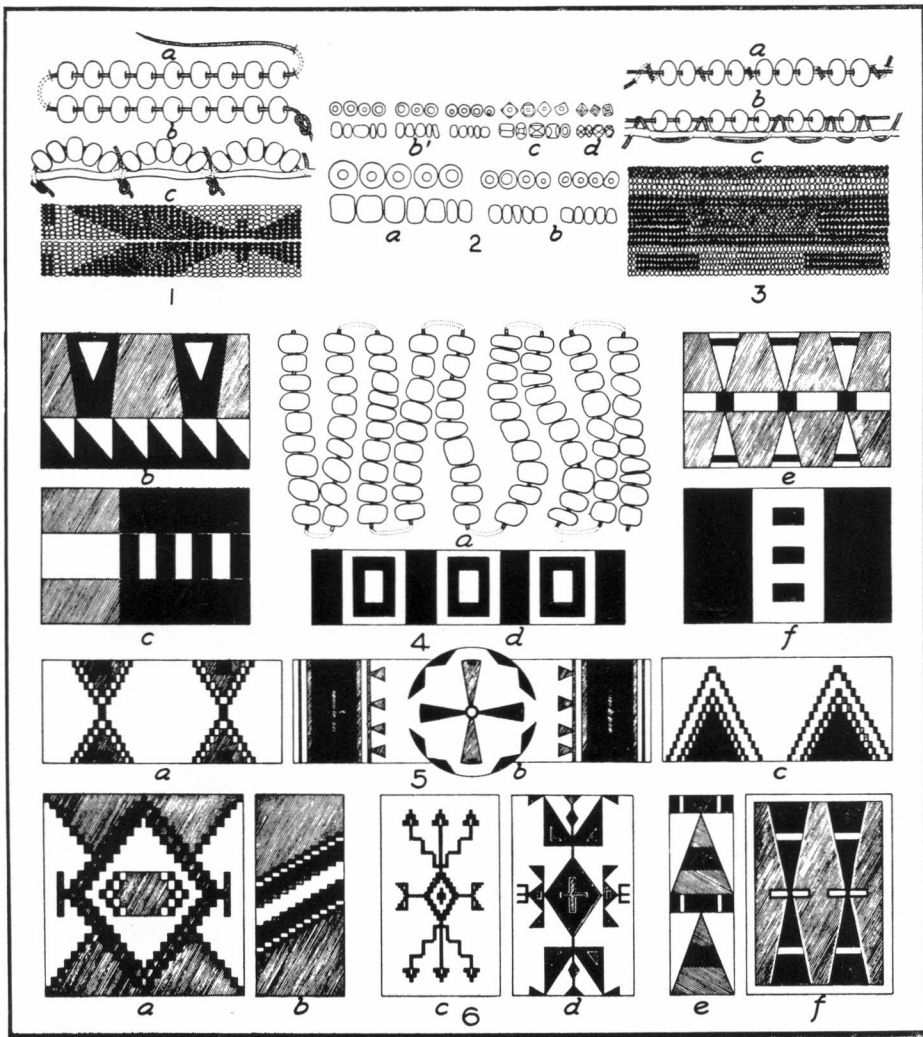
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DENVER ART MUSEUM

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DEPARTMENT OF INDIAN ART

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Drawn by Betsy Forbes.

PLAINS BEADS AND BEADWORK DESIGNS

LEAFLET 73-74

DECEMBER, 1936

1. BEADWORK reached its highest development on the central and northern Plains. Except around the Great Lakes and in the upper Mississippi Valley, where, in the last 60 years, the tribes have decorated their large shoulder bags with panels of beadwork, the covering of large areas with small glass or china beads has been restricted to the Plains area mentioned above. Here the section to be decorated was entirely covered with beads, one color forming the background for the designs. Elsewhere such beads were used for borders, small trimmings and the execution of rather delicate designs on backgrounds of skin or cloth.

In the light of present knowledge it appears that there have been two periods in the development of the designs used in such beadwork. The first began sometime, but not long, before 1800 and lasted up till about 1850. In this period all of the tribes in the area used designs which were very much alike. In the second period, from 1850 till the present, several schools of design have been developed, each marked by certain definite characteristics. This leaflet is an attempt to indicate the character and distribution of the design styles of the two periods.

2. BEADS of china, glass and metal were introduced among the Indian tribes by American and European traders, who had obtained them very largely from Venice. At a later period Bohemian or Czecho-Slovakian, French and English beads were also used, and more recently, Japanese and German. In the modern types of opaque white beads there is a slight difference in the color between the Venetian and the Bohemian, the latter being a trifle darker and inclining to a semi-translucent bluish tinge. Except for the Hidatsa, a tribe of North Dakota, beads of the type used for bead embroidery were not made by Indians. The Hidatsa learned how to melt glass and cast rather large beads, but their production was too slight to have any effect on the trade.

3. TECHNIC. Beadwork in the area under consideration is made by sewing beads to the surface of cloth or dressed animal skin. Sinew made from the tendons of large animals is the common thread, though commercial cotton thread has also been used. Usually sinew is used on skin and thread on cloth. The sinew is not applied with a needle, but is pushed through holes made with awls of bone or steel, the latter having been used for many years. Two methods of stitching are used.

The first of these, usually called the lazy stitch (1), is the common method of the central Plains. By this method beads are strung on threads which are fastened to the surface at the ends of short parallel rows (1a), the strings of beads tending to bump up between the stitches. A ridged effect is the result of this technic (1b). The beadwork done with the lazy stitch (1c) closely resembles in appearance certain quillwork technics, both showing rather narrow bands, set close together, made up of short parallel rows running at right angles to the line of the band. This resemblance seems to indicate that this bead sewing technic was strongly influenced by that of the older quill-

work. The second method is called the overlay or spot stitch (3). In this case strings of beads are tightly attached to the surface, in close set rows, with other threads, thus producing a smooth finish. (3a, from above; 3b, from the side; 3c, finished work.) This method is preferred by the northern tribes.

The nature of the lazy stitch restricts it to the execution of angular designs, though sometimes curves of a sort are made. Curves are easily made when the spot stitch is used.

If skin is the background the stitches do not pass through but only under the surface, so that nothing is visible on the under side (1b). If cloth is used the thread passes through and shows on the back (3b).

For additional information about these technics and other phases of beadwork see Leaflet 2.

EARLY PERIOD

4. HISTORY. In order to discover something about early beadwork the writings of a large number of 18th and 19th century explorers, traders and soldiers were gone through. The results of the survey were very slight in the matter of detail, but a strong impression was gained that beadwork hardly existed until about 1835-40. Another source of information is the body of paintings and drawings produced by early artists, a source which confirms the impression made by the written records. A final means of tracing the history of the art is what remains today in the way of specimens collected in the early days. Very few such remain, but this scarceness is not to be taken as a true indication of the early rarity of beadwork, for few specimens of any kind have survived from this period.

5. BEAD TYPE. From this survey sufficient data have been gathered to make possible the drawing of at least the outline of a picture. The type of beads used is well established and gives an excellent clue toward the dating of specimens. Their chief characteristic is size. Full-size drawings of a number appear on the cover (2a). The beads are about one-eighth of an inch in diameter, almost twice as large as those used since the mid-19th century. They are made of opaque china. White and a medium sky blue are by far the most common colors, black being the next most common. A rather deep buff, light and dark red and a darker blue have also been noted. One specimen shows a translucent red with a white core. The beads are quite irregular in shape and size. The name "pony bead" is usually applied to this large early type. Indian clothing collected by Lewis and Clark in 1805 shows these beads and the Journal of the expedition mentions them often.

Besides this large bead a very small form reached the Plains toward the end of this period. Such beads do not appear on existing specimens, but their profusion around old forts and stores would indicate that some use was made of them, possibly on moccasins.

6. TECHNICS. The beads are usually sewn in place by the lazy stitch method. But the distance between the stitches passing under the skin is greater than that used later, which gives the work a rather loose effect (4a). Some examples of the overlay stitch exist, but here again the work is more coarse than now. The existing specimens indicate that sinew alone was used for sewing.

7. DESIGNS. The designs worked out with these beads and technics are extremely simple and appear to have been common to all of the tribes in the area, if existing specimens and old pictures give a true picture. Equilateral and isosceles triangles, usually pendant from a bar or stripe (4e); sawtooth bands (4b); bars and oblongs (4c, 4f); and sets of concentric oblongs are the elements used (4d). The forms are large and heavy, showing nothing of the delicacy seen in modern work of the Siouan type (see section 14).

8. OBJECTS DECORATED. The large areas of beadwork made in the second period do not appear. Bands even six inches wide are uncommon, though they appear on women's dress yokes and on men's shirts. There survive at least two rather narrow pipe bags with perhaps 40 square inches of beading. In general narrow bands or stripes, often with pendant figures, were the rule. Dresses, shirts, pipe bags, the headbands of war bonnets, and moccasins are the articles surviving today with beaded decorations. Old pictures bear out this distribution, though there is no reason to think that other articles may not also have been beaded.

MODERN PERIOD

9. BEAD TYPE. About 1840-1850 a bead of smaller size, or of several smaller sizes, appeared on the Plains. These are usually called seed beads (2b, 2b'). This term is sometimes misunderstood as meaning that the beads were made of seeds, whereas they were really glass or china. These beads are one-sixteenth to three thirty-seconds of an inch in diameter and in the older specimens vary considerably in thickness. That is, the distance across the bead at right angles to the central opening is quite uniform in any given size, but the diameter parallel with the hole varies considerable. Often one edge is thicker than the other. In recent times this irregularity hardly exists, probably because of improved methods of manufacture. The presence or absence of this unevenness is a clue to the age of a specimen. The older beads of this type are opaque and have softer, richer colors than are seen today. Translucent beads do not seem to appear before 50 or 60 years ago. Besides the rounded beads there is a type which has a facet on two to four sides (2c). These angular beads are often smaller than the rounded forms. Metal or glass beads, colored silver or gilt, and faceted throughout were introduced after 1885 (2d). In very recent times transparent tubular beads, with a greater length than diameter, have had a limited use on the Plains.

10. HISTORY. The examination of old photos and of dated specimens in museums shows that beadwork in the modern period attained its fullest development in the period 1880-1900. The art is still widely practiced, though its quality is not, on the whole, as high as formerly.

11. TECHNICS. Both of the methods of sewing described in section 3 are used, but appear more perfectly executed in the modern period. The smaller beads have made closer and tighter work possible. The lazy stitch is used exclusively by the Sioux, Cheyenne and Arapaho, and partly by the Crow and Shoshoni, Gros Ventre, Ute, and Assiniboin. The overlay stitch is used entirely by the Blackfoot, Sarsi, Plains Cree and Flathead and in part by the Crow, Shoshone, Assiniboin and Gros Ventre. Smaller tribes near these groups were influenced by them in choice of technic. Occasional specimens may, of course, prove exceptions to these statements. An example is the use by the overlay stitch group of the lazy stitch in narrow border bands. Tribes on the southern Plains who only use beading for trimming, such as the Pawnee, used the lazy stitch. Tribes on Oklahoma and nearby who do similar work, such as the Omaha, prefer the spot stitch.

The bead weaving technics so common in the Great Lakes and Mississippi Valley regions have only been used on the Plains in very recent times. Government and other schools seem to be responsible for their introduction.

12. OBJECTS DECORATED. Practically everything which the tribes made of cloth or skin shows beadwork. Every kind of garment for both sexes, bags of all sizes and shapes, cradles, horse furniture, toys and tipi furnishings, and ceremonial paraphernalia are the principal classes of objects which are beaded. The contrast between this profusion and the relative scarcity of beadwork in the early period point to the great increase of the craft in the modern period.

13. DESIGN STYLES. Four main design styles have been in use in the modern period. One of these is common to all groups, while each of the other three is very largely restricted to a group of tribes. The widely spread style is very simple and appears almost exclusively on beadwork arranged in long narrow strips, such as the decorations on men's hip-length leggings and on skin robes or cloth blankets. It is also found on early modern pipe bags, cradles and saddle bags. Solid triangles (5c) or hour glasses (5a), often terraced, circles, crosses and oblongs (5b), are almost the only design units used. They vary in size with the object decorated. Photographs taken in the 1870's show such designs as being the most common among all Plains tribes, and up to today they are still used, though the more individual design types have tended to crowd out this simple old style.

Floral designs have been used by some Plains tribes for many years. But they are importations from the eastern tribes and so are not discussed in this leaflet.

The three styles discussed in the next sections are named in this leaflet for the tribes which use them the most. But it should be understood that

they are not the exclusive property of the tribes for which they are named. In each style there are small tribal variations, but space does not permit their description in this leaflet.

14. SIOUX STYLE. This style shows rather light, spread-out designs on a solid color background. Isosceles and right-angled triangles, alone or combined into hour-glasses, diamonds or two-pronged forks (6d), and the thin straight line are the most common design elements. Stripes or bars and small squares or oblongs are also used, but less frequently and in less important positions, except on single saddle bags, where they are common. The lines are chiefly combined into forks, crosses and terraced figures (6c). Many of the individual units in a whole design may be solid and massive, but the prevailing impression of the style is one of lightness and openness. White is by far the most common background color, with medium to light blue next and a scattering of other colors far behind. Reds and blues dominate as design colors, with greens and yellows less common. Any other colors are unusual. The lazy stitch alone is used. The chief tribes using this style are the western Sioux, the Arapaho, Cheyenne, Gros Ventre, Assiniboin, Ute, and to some extent, the Crow.

The origin of the style is not known. Some of its elements, such as the triangle and the sets of concentric oblongs, are derived from the earlier style of the pony bead period. The thin line, the terrace, fork and other delicate elements appear rather suddenly, just about the time fairly permanent settlements began on the Plains. These designs appear in almost identical forms on certain Oriental rugs, which suggests that beadwork design may have been influenced by rugs brought in by the better class of settler. A positive statement on the matter cannot be made, but the hint has interesting possibilities which it is hoped may be developed in a future leaflet. Much beadwork in this style is still made.

15. CROW STYLE. Among the Crow and Shoshoni a design style developed which shows large massive triangular forms often executed on a background of red cloth instead of beads of contrasting colors. The large triangular forms are usually either much flattened or very tall, and may have within them small triangles, squares, oblongs or bars. The large triangles are often joined to form hour-glasses and diamonds (6f); and on narrow bands they are usually set point against base in a vertical row (6e). A band of another color frequently covers the junction of the triangles, and a thin white line may bound the large elements. White is hardly used except in this way. Pale blue and pale lavender are the most common colors. Darker blues and various greens and yellows are also seen. Red beads are more rare, the color being supplied by the scarlet flannel so common in backgrounds. The overlay stitch is used. Bead work in this style is chiefly found on cradles, horse furniture, long narrow legging and robe strips, moccasins, and medium to small bags. It does not seem to be made on shirts or dresses or on large bags. Pieces showing this style are found among the Ute, but it is not certain that they are made by this tribe.

The examination of material in the great collections gives the impression that the style is not very old, seeming to have been at its height in the period 1880-1900. The designs so closely resemble those painted on the rawhide containers called parfleches that a strong impression is received that they are almost directly copied from that source. Parfleche designs are much older, having been much the same in the early 19th century as today. For additional information about parfleches see Leaflet 77-78. Little beadwork in this style is now made.

16. BLACKFOOT STYLE. In this style a single element is used, the square or oblong. Hundreds of these little elements are massed in large units such as terraced triangles, squares and diamonds (6a), crosses, long fairly wide slanting bands with terraced long sides (6b), and various combinations of such elements. The large figures are usually of one color with edges of vari-colored squares. The rows of squares are made clear by the use of contrasting colors. The background is usually white, though other colors may appear. A wide range of colors is found in the designs. The overlay stitch alone is used. Beadwork of this style was placed on almost everything made of cloth or skin by the tribes using it. They are the Blackfoot, Sarsi, Plains Cree and Flathead, and to some extent the Assiniboin.

The history or age of the style are not known. It appears fully developed on a suit collected in the 1860's. The smallness of the elements makes it seem likely that the style is of the modern period, for the large beads of the early period were hardly suitable for executing such small figures. The style has the closest affinity of any on the Plains to that seen in porcupine quillwork. Designs of almost identical character are seen on both old and modern examples of quillwork. This checkerboard style reached its greatest heights of elaboration in the woven quillwork of the tribes adjoining the Blackfoot to the Northeast. Beadwork in this style is still made.

This use of small oblongs often, but not always, appears in the designs of the early and widespread style described in section 13 (5a, c). This strengthens the idea that the style is at least in part derived from the quillwork which preceded it.

Compiled from the following sources by F. H. Douglas:

AMERICAN MUSEUM OF NATURAL HISTORY, NEW YORK

1. *Ethnology of the Gros Ventre*—A. L. Kroeber. *Anthropological Papers*, Vol. 1, No. 4, 1908. The fullest discussion of Plains beadwork.
2. *The Northern Shoshone*—R. H. Lowie. *Anthropological Papers*, Vol. 2, No. 2, 1909.
3. *The Assiniboin*—R. H. Lowie. *Anthropological Papers*, Vol. 4, No. 1, 1909.
4. *The Material Culture of the Blackfoot Indians*—Clark Wissler. *Anthropological Papers*, Vol. 5, No. 1, 1910.
5. *Crow Indian Art*—R. H. Lowie. *Anthropological Papers*, Vol. 21, No. 4, 1922.
6. *The Arapaho; decorative art and symbolism*—A. L. Kroeber. *Bulletin*, Vol. 18, pt. 1, 1902.

7. Decorative Art of the Sioux Indians—Clark Wissler. Bulletin, Vol. 18, pt. 3, 1904.
MUSEUM OF THE AMERICAN INDIAN, NEW YORK
8. Beads and Beadwork of the American Indians—W. C. Orchard. Contributions,
Vol. 11, 1929.

INSTITUTTET FOR SAMMENLIGNENDE KULTURFORSKNING, OSLO

9. Primitive Art—Franz Boas. 1926.
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10. Examination of the literary and pictorial sources mentioned in section 4 and of
the principal large museum collections of beadwork.

Thanks are due to Arthur Woodward of the Los Angeles Museum for suggestions
regarding this leaflet.

Illustration acknowledgments: 1a and 3b, Museum of the American Indian, Heye
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APPENDIX

THE PROCESS OF MAKING GLASS BEADS AT VENICE

A lump of melted glass is gathered on the end of a glass-blowing tube. The blower blows this lump into a pear-shaped bubble. A rod of iron is attached to the top of the bubble. As soon as it is attached the man holding it walks or runs away from the man holding the blowing tube. This draws the glass into a long, very fine tube, sometimes over 100 feet long. The tube is drawn out until the glass cools.

When the tube is entirely cold it is cut up into pieces about a foot long. These are in turn cut into bits the size of beads. These bits have a perforation, because the opening within the original bubble is not destroyed by the drawing out process. The holes in the beads are not made by drilling.

If cylindrical beads are wanted nothing more is done to the bits of tube mentioned above. But if more or less spherical beads are wanted a further step is necessary. The bits of tube are put in an iron cylinder along with a mixture of sand and ashes or of clay and charcoal. The cylinder is then heated and rotated. The heat causes the bits of tubing to soften and the rotary movement of the cylinder rubs these softened bits against each other until the corners are worn off and a spherical form assumed. The mixtures with them prevent the softened beads from sticking together.