# DENVER ART MUSEUM

1300 LOGAN STREET, DENVER, COLORADO

DEPARTMENT OF INDIAN ART RICHARD G. CONN, CURATOR

COLORS IN INDIAN ARTS; THEIR SOURCES AND USES

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LEAFLET 56

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1. INTRODUCTORY. This leaflet attempts to clear up certain apparently widespread ideas about the colors in Indian handicraft. Children in the grades which are studying Indians seem to feel that the "root, bark, nut" formula covers all the colors which they see in Indian work of every kind. To correct this the principal kinds of colors are given and their distribution outlined in the following sections.

## VARIETIES OF COLORS

- 2. NATURAL COLORS. Many naturally colored materials are used by the Indian without treatment. The list includes stones, bark, colored leaves, stems and roots of plants, wood, undyed wools and other textile fabrics, seeds and unpainted clays in pottery.
- 3. VEGETABLE DYES occur in bewildering variety, though many of them have gone out of use. See Leaflets 63 and 71.
- 4. MINERAL DYES AND PAINTS. Naturally colored earths and rocks of many shades are ground to powder and mixed for paints. As dyes they are less common.
- 5. ANILINE DYES. The first aniline dye, mauveine, was invented in England in 1856. In the next 12 years only 8 more shades were found, though these were made in sufficient quantity to warrant an American tariff in 1864. By 1870 dyes of this kind had spread through the more civilized portions of Europe and America, and 5 to 10 years later had become known almost everywhere. Materials colored with aniline dyes and packages of dyes seem to have come to the Indians in the seventies.
- 6. METHODS OF USING ANILINE. Objects to be dyed were boiled with powdered dye or with dyed cloth of the desired color. The latter method was extremely common.
- 7. DYED CLOTH, colored either with anilines or their predecessors, provided much of the color in Indian costumes and manufactures. Except in the Southwest the "blanket" Indian of the books was wrapped in such cloth. It is a common trimming on many kinds of objects. In the Southwest it was raveled and woven into blankets by the Navaho. The best of this raveled material was English baize, called bayeta in Spanish.

#### BASKETRY

- 8. ALEUT or ATTU. The colored patterns are made with thread or bits of raveled cloth obtained from the whites.
- 9. NORTHWEST COAST. Before anilines came in, the Tlinkit used the following colors: black, sulphur-spring mud, hemlock bark and iron scrapings in salt water; 2 shades of purple, huckleberries; red, alder bark and wood, sea-urchin juice, nettle and hemlock bark; yellow, the lichen *Evernia vulpina* or wolf moss; greenish-blue, hemlock bark with oxide of copper. Straw color is undyed grass, and blackish purple is either maiden-hair fern or *Equisetum pales!re*. The brown background is spruce root, undyed.

Haida basketry other than hats shows black, mud dyed stripes. The hats have painted designs. Before modern commercial paints came in they used the following colors: black, charcoal, lignite coal and charred fungus; red, ochre and cinnabar; white and brown, ochres. Vegetable juices are mentioned.

- 10. SOUTHWESTERN BRITISH COLUMBIA. The Salish coiled and imbricated basketry from this area shows a background of undyed brown cedar root. The colors commonly used follow: white or straw color, reed, and rye-grass; red, cherry bark or grass dyed with alder; black, grass or bark dyed with mud, charcoal, tea, balsam bark or dogwood bark.
- 11. COLUMBIA RIVER BASIN. Most of basketry from this area is trimmed in one way or another with the smooth, shiny, white or light yellow squaw grass, Xerophyllum. Before aniline dyes came in colors were few and of the same types as those listed in the section above. An additional yellow came from the Oregon grape. Two varieties of brightly colored work are made today. On Cape Flattery the Makah and nearby tribes make little white baskets with brightly colored boats, animals, etc., in aniline colors. In the west of the area the Nez Percé and their neighbors make flat wallets with highly colored geometrical patterns. Today many of these colored figures are made with threads and yarns dyed by the whites.
- 12. CALIFORNIA. In the northern part of the state red, black and white basketry is found. The red is fern root dyed with alder, the black is maiden-hair fern and the white is squaw grass. Through the central part of the state red and black are the colors used. In the northern part of this section the red is commonly redbud bark and the black fern root, or any of several materials dyed by soaking in mud. The light backgrounds are undyed. In the southern part of the middle section and the southeastern part of the state the red is usually tree yucca root and the black the skin of the seed pod of the devil's claw or martynia. The light backgrounds, as above, are natural color. In the southwestern part of the state the predominant basketry is the Mission type. The characteristic mottled

brown is the natural color of the *Juncus* rush leaf. Black dye is made from elderberry, seablight, or blackberry juice, and yellow from leather root, parosela and *Dalea Emoryi*.

13. SOUTHWEST. On Pima, old Papago, western Apache, Chemehuevi, and Havasupai basketry black from the martynia or devil's claw seed pod is the only color. Mescalero Apache work shows various shades of yellow, green and brown, all from various parts of the yucca plant. Modern Papago colors are also from the yucca. Jicarilla Apache basketry has bright aniline colors. In the Navaho and Piute "wedding" baskets the black is a mixture of coal, sumac leaves and rosin, and the brown a concoction of mountain mahogany and juniper roots with alder bark.

Hopi basketry, the most varied and brilliant in color of all, used to have rather limited native colors, went aniline very violently and now has turned to native colors again, more numerous and bright than those used earlier. The full list is too long for inclusion here. Many kinds of plants and minerals produce the great range of shades seen today. See leaflet 17 for a full list.

- 14. SOUTHEAST. This quarter of the country was the home of split cane and oak basketry colored with various combinations of red, black and yellow or tan, the latter being the natural color of the cane. The black was made from black walnut root and the red from puccoon root, Sanguinaria Canadensis.
- 15. NORTHEAST. The wood splint basketry of the north central area and of the east is generally uncolored. When colors were used they were native vegetable dyes, later superseded by anilines.

#### BEADWORK

- 16. BEADS MADE BY WHITES. The small "seed" beads used in Indian beadwork are and always have been made in Europe. Except for one isolated case, the Hidatsa, Mandan and Arikara of North Dakota, the Indians never made colored glass or china beads.
- 17. WAMPUM. The purple color of eastern wampum is natural in the shells from which the beads are made.
- 18. TURQUOISE. The green and blue shades seen in beads of this material from the Southwest are natural.
- 19. SHELL. Most shell beads are white. In addition to the purple of wampum there are reds and oranges seen in Southwestern work. These colors are natural.
- 20. CORAL. This material is all imported for trade with the Indians. The color is natural.
- 21. SEEDS of various natural colors are used as beads.
- 22. PAINTING of carved wood, such as Pueblo kachina dolls and ceremonial altars, and Northwest totem poles, boxes and other objects was formerly done with colored earths. Today commercial paints are used. Colored earths were also used for the Plains skin paintings. Masks were once similiarly treated, but today commercial paints have largely supplanted them. Tribes of a conservative nature probably still cling pretty closely to the old paints, especially for use on ceremonial objects.
- 23. CHARACTER OF PAINTS. Earths and rock colored with iron or copper compounds supplied most of the colors. Iron tinged the earth red, brown, yellow, orange and intermediate shades. Copper produced the blues and greens. Black came from iron and magnesium. Kaolin produced white. The range of earth colors is practically unlimited. The common medium with which these ground up earths are mixed is grease or fat, though water or saliva are probably equally used.
- 24. WATER COLORS AND MURALS. The pictures of these types which the Indian artists are making today are all executed with commercial water color and oil paints.
- 25. QUILLWORK. Before commercial beads were imported the tribes which lived in the northern section of the country, the western mountains and on the great plains used colored porcupine quills for decoration. The dyes were of vegetable origin. The art of quillwork has largely disappeared and with it has gone the knowledge of the dyes, so that only a few sources can be given. Red; root of Galium tinctorum, buffalo berry, squaw current, dock root, tamarack bark, spruce cones, sumac berries, bloodroot and hemlock bark; black, alder bark, wild grapes, hickory and walnuts, and butternut bark; yellow, wolf or fox moss, wild sunflower, cone flower, black willow roots, sumac roots; purple, blueberries; blue, larkspur.

All tribes did not use all of these dyes. Space does not permit arranging them geographically. Aniline colors have long been used.

26. POTTERY paints of the yellow-red series and white are colored clays and earths ground in water. Black is made from the sediment obtained by boiling the bee-plant, from iron or magnesium, or from combinations of the vegetable and mineral. Shiny black is caused by bringing sooty smoke in contact with red hot pottery. The natural colors of the

unpainted clays are seen in some types. In very recent years some pottery has been painted with commercial colors after firing.

### WEAVING

- 27. NAVAHO. Before the appearance of aniline dyes in the late seventies the native colors were few. Red-brown was made from a mixture of alder and mountain mahogany bark mixed, and from red or yellow ochre. Yellow came from rabbit weed flowers, yellow ochre or canaigue root, Rumex hymenosepalum. Blue was made with indigo and possibly a blue clay. Green was made with combinations of the blue and yellow dyes, and black from a mixture of sumac, yellow ochre and pinyon gum. Grey, dark brown and white are natural wool colors. The brilliant red, if not aniline, is cochineal, introduced by the whites, as was indigo. In recent years there has been a revival of vegetable colors, mostly in soft pastel shades. This style of dye is in the experimental stage, all sorts of vegetable materials being tried out. No exact data can be given.
- 28. HOPI AND PUEBLO. Beyond the statement that the Pueblo weavers had vegetable dyes which produced yellows, orange, browns, umbers, greens and black no information can be given. These people also had the natural colored wools and cotton, indigo and cochineal and aniline dyes. The wool embroidery on cotton ceremonial garments is all aniline colored, unless the piece is known to be over 50 years old.
- 29. SALISH. The dog hair and mountain goat wool blankets of the Vancouver Island region show native colors in several shades, but no data can be given as to the sources of these dyes.
- 30. CHILKAT. The mountain goat wool blankets of the Northwest coast, commonly called Chilkat, have three colors, black from hemlock bark, yellow from the lichen wolfmoss or *Evernia vulpina*, and green from copper oxide. Aniline dyes appeared about 1892, but did not last long. Though perhaps today they have come back into use.
- 31. GREAT LAKES AND CENTRAL AREA. The flat woven wool bags and reed mats made by many tribes in this region were formerly dyed with native vegetable colors. But these have long been replaced with commercial dyes.
- 32. SAND PAINTING. The name of this art gives the clue to the materials used. With two exceptions the materials are ground up earths and rocks. The Apache used powdered leaves for green and the southern California tribes use colored seeds. For details see Leaflet 43-44.

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