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A STUDY OF THE CHANGES IN OJIBWA, TLINGET, AND HOPI BASKETRY AS RELATING TO ECONOMIC, POLITICAL, SOCIETAL, AND HISTORICAL CHANGES IN THE RESPECTIVE SOCIETIES

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Elizabeth McDonald

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Elizabeth McDonald

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ABSTRACT

A STUDY OF THE CHANGES IN OJIBWA, TLINGET, AND HOPI BASKETRY AS RELATING TO ECONOMIC, POLITICAL, SOCIETAL, AND HISTORICAL CHANGES IN THE RESPECTIVE SOCIETIES

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A field study was conducted of basket collections at the Field Museum of Natural History, the Heard Museum, the Jesse Besser Museum, and the Arizona State Museum to ascertain whether the basketry of the Ojibwa, Tlinget, and Hopi changed over the years. If it did, how was that related to political, historical, economic, and societal changes through the years?

The pertinent literature in history, anthropology, and art showed that no studies had been conducted in this area. Most of the basket literature is of a descriptive and methodological nature. An interdisciplinary approach has not been taken in relation to the basketry of the three societies.

The study showed that there is a correlation between the changes in the societies and the changes in the baskets over the years. Further studies of an interdisciplinary nature with more museum basket collections are recommended.

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DEFINITION OF TERMS

Basketry Terms

Band--A horizontal area in which designs are placed.

Basket--A textile container or vessel.

Basketry--The art or process of making a basket; a collection of finished products.

Beading--A piece or strip of material run in and out through the spaces or among the stitches in a basket.

Designs--Figures, shapes, or geometric decoration on the baskets.

Embroidery--Ornamentation added after the basket is finished.

False embroidery--Wrapping twined strands with colored material while basket is being woven; used in Tlinget basketry.

Fiber--A flexible material from which baskets are made.

Foot--A strip or band added to bottom of basket to raise it up from the surface.

Herringbone--Design in which chevron patterns are in parallel series.

Rim--The top edge of a basket.

Sewing--Joining parts together with fibers; coiled baskets are sewn, not woven.

Spiral--A basket decoration consisting of whorls.

Splint--A long strip of material, usually wood.

Symbol--The culturally accepted name given to the design on a basket; in some cases, the design has a cultural meaning.

Weft--Also called woof; the filling-in of the basket frame.

Wrapped weft--Plain or twined weft is wrapped with decorative materials.

Basket Construction Terms

Checkerwork--Warp and weft having the same width and thickness; a form of plaiting.

Coil--Bundles of pliable materials known as rods are sewn together with stitches that go over and under the rods. The start of the basket is a spiral.

Coil foundations or rods:

Single rod

Three rods stacked

Two rods

Bundle of split elements flattened

Bundle of split elements round

Two rods and bundles

Five rods stacked

Rod surrounded with bundles

Plaiting--Warp and weft are the same size for over, under, over weave. Patterns are made by varying the number of warps the weft goes over; these include checkerwork, herringbone, and twill.

Twining--Two weft strands are twisted over one another; then one strand passes in back of the warp and one strand passes in front of the warp.

Wickerwork--Flexible weft woven through an inflexible warp.

Basket Materials

Chippewa/Ojibwa

Black ash--Strips peeled from log after soaking.

Birch bark--Used in decoration or as weft; strips of the bark were peeled from the branches.

Hickory--Usually used as carved handles.

Sweet grass--The grass was braided or twisted and then used as the weft or as decoration.

White birch--A soft wood; splints were pliable and used as weft.

Willow--The young branches or "ships" were often used as the warp in twined baskets.

Yellow ash--Splints used as the warp.

Tlinget

Beach rye (Elymus mollis)--The split stems were used as the white material in overlay patterns when other grasses were not available; only used for coarse work.

Bluejoint (Calamagrostis langsdorffii)--The split stems were used as overlay for white patterns.

Bromegrass (Bromus sitchensis)--Split stems were used as white overlay in patterns.

Cedar--Bark was stripped from the tree and used for plaited baskets after soaking and becoming pliant.

Horsetail (Equisetum palustre)--Strips were split from rootstock and used as overlay on cedar root baskets; rich, very dark purple.

Maidenhair fern (Adiantum pedatum)--Stems were split and used as ornamentation; a shiny black strip.

Manna grass (Panicularia noveta)--Strips were split from internodes of grass and used as overlays; either white or dyed.

Sitka spruce (Picea sitchensis)--The root was boiled and split for coarse burden baskets.

Spruce root--Generally used in twined baskets; very thin strips were used as the weft.

Hopi

Assorted grasses--Used in the bundles for coiled baskets.

Galleta grass (Hilaria Jamesii)--Stems were used as rods; leaves were used as bundles in coiled baskets.

Rabbitbush (Chrysothamnus gravelolens)--Twigs were used to form the weft in wicker baskets.

Sumac (Rhus trilobata)--The peeled branches were used as warp; for a weft and sewing materials, the branch was split, and the bark, pith, and brittle tissue were removed. The remaining pliable strip was used.

Twig sumac--Used in wickerware baskets.

Willow twigs (Salix lasiandra)--Used as is or split for warp.

Yucca--After the bark was removed from the back of the leaf, it was used as sewing material for coiled baskets; larger leaves were used for plaited baskets.

INTRODUCTION

There are many books and studies about Native American baskets and basketry. The majority of them are concerned with describing the appearance and techniques of making baskets. Very few deal with the changes in baskets over the years. This study centers on changes in Tlinget, Chippewa/Ojibwa, and Hopi baskets as related to the history and anthropology of the societies.

Although this is not an in-depth historical study or an extensive anthropological study, it does look at the relationship between events and changes in the cultures as indicated by basketry changes. Basket elements examined are the methods or techniques, materials, decoration, and weavers. The cultural indicators examined are economics, politics, labor division, belief system, and social organization.

A field survey was made of the collections of four museums: the Heard Museum, the Field Museum of Natural History, the Arizona State Museum, and the Jesse Besser Museum. After ascertaining the dates of a collection, the baskets were studied in chronological order to observe physical differences. Photographs were taken to record the baskets that are included in the study. Readings of the archival and collection data were made to gain information concerning materials, design significance, origins, and date of collection or

manufacture when available. From this compiled information, assumptions were made concerning the changes in the baskets over time.

A second study was made of historic information centering on the dates of collection or manufacture of the baskets. Readings of anthropological studies and papers dealing with the changes in the societies due to these historic events were also made.

From information gleaned from the readings and the field study, an assumption was made that the basketry of the Tlinget, Chippewa/Ojibwa, and Hopi did change. These changes were due to economic, political, and social alterations within those societies, as well as environmental changes surrounding the societies.

PURPOSES OF THE STUDY

The purposes of the study were (a) to ascertain whether Hopi, Tlinget, and Ojibwa baskets changed over the years; (b) to discover what historical events affected basket making, (c) to relate economic, social, and behavioral changes in the societies to their basket making; (d) to discover the relationship between the environment and basket making; (e) to determine the role of the basket maker and how that changed; and (f) to examine the function of baskets in those societies over the years.

BACKGROUND OF THE STUDY

A survey of pertinent literature showed that few studies have been conducted that ascertained whether baskets of the Hopi, Tlinget, and Chippewa/ Ojibwa changed due to contact with Europeans and Anglo-Americans over the years. Very little has been done in looking at baskets of those societies in a chronological sequence.

Conversely, there is a wealth of information of a descriptive nature concerning baskets, as well as a great deal of literature concerning how to make baskets. Minimum information can be found dealing with the function of baskets within the societies.

Little is known about basket makers as artisans. It is hard to find information on basket weavers in these societies, and it is generally impossible to locate information about specific basket makers. This is because many Native American cultures shun notoriety, as well as the fact that early anthropologists, historians, and collectors did not record information of this nature in their studies.

Museum exhibits of basketry offer scant information concerning the history of baskets or a chronological progression of basket making or usage. The exhibits generally contain only an identification of the baskets, with little or no information concerning materials, technique, date of manufacture, or function of the basket.

STATEMENT OF THE PROBLEM

To ascertain whether Hopi, Ojibwa, and Tlinget baskets are a static or a changing art form, the writer posed the following questions/issues to be examined:

1. Have baskets physically changed?
    a. Have the techniques in making baskets changed?
    b. Did the appearance change through changes in size of materials used to weave baskets?
    c. Did the decoration on the baskets change?
    d. Did the materials remain the same in making and decorating the baskets?
2. If there was a change in the baskets, what are the causes?
    a. What is the relationship between the making of baskets and historical events?
    b. What is the relationship between the environment and availability of materials?
    c. What influences were exerted on basket making by European and Anglo-American contact?
    d. What influence have economic shifts in Hopi, Tlinget, and Chippewa/Ojibwa societies had on basket making?

e. What is the relationship between behavioral and social changes and basket making?

3. How does the role of the basket maker affect making baskets?

a. What roles do the basket makers assume?

b. Do those roles change over time?

PROCEDURE

The first step in researching the question of how baskets change over the years was to investigate existing literature on Indian basketry, as well as historical and anthropological data. The readings on basketry were made to learn about construction methods, materials used, design significance, and use of the baskets within the Native American cultures.

Histories of the Hopi, Chippewa/Ojibwa, and Tlinget were read to understand the events that changed their lives and resulting lifestyles. To understand political, social, economic, and behavioral organization and institutions, readings in anthropology were done.

A field study of basket collections was conducted at four museums: the Heard Museum, the Arizona State Museum at the University of Arizona, the Field Museum of Natural History, and the Jesse Besser Museum. An investigation of the actual baskets, as well as archival and collection information, was included in the research. Photographs of the baskets were made for further study.

The first step in the basket investigation was to collect the data on the targeted groups of baskets, the Tlinget, the Chippewa/Ojibwa, and the Hopi. The next step was to ascertain the dates of the baskets. Many of the baskets had no manufacture dates, so the collection dates were used to best determine the time period in which the baskets were manufactured. Information about the materials,

construction methods, color, designs or ornamentation, and use were recorded, as were any other comments given on the records and data files.

The third step was to select specific baskets to observe. This was based on motif and construction methods. After gathering the baskets into one area, they were displayed chronologically within each specific category. The baskets were examined, and comparisons were made of the construction, designs or ornamentation, colors, materials, and motifs. Results of the comparisons were recorded, both similarities and differences. After a chronological look, individual baskets were studied and photographed.

After examining the data from the observations, assumptions were made as to the changes in the baskets over time. These assumptions were examined in reference to the historical events and the changes within the societies to determine whether there were any correlations. Conclusions were then made as to the relationship between the changes in the baskets and the changes in the cultures investigated.

LIMITATIONS

This study was limited to baskets made by the Chippewa/Ojibwa, Hopi, and Tlinget Indians, as viewed in the collections of the Heard Museum in Phoenix, Arizona; the Arizona State Museum at the University of Arizona, Tucson; the Field Museum of Natural History in Chicago, Illinois; and the Jesse Besser Museum in Alpena, Michigan. Only baskets that had collection or manufacture dates were included. Other baskets made by people of these societies in the collections were looked at for material and construction information of a general nature, but they were not included in the actual statistics and were not considered in resolving the research questions.

The study was limited not only by dated baskets, but also by the styles or types of baskets. Basket styles and motifs that were found over a long period of years were studied. For the Chippewa/Ojibwa, study baskets that were of a global shape, of rectangular style, had a mixture of sweet grass and strips, and lidded baskets were examined. Plaques of both coil and wicker weave having the motifs of an eagle, flowers, kachinas, butterflies, and geometric designs made by the Hopi, as well as Hopi coiled and wicker containers and plaited trays/ sifters, were included. Cylinder, lidded, and unlidded baskets of both open weave and closed weave made by the Tlinget were investigated. All other styles and types were excluded.

This study does not include extensive information concerning the manufacture of baskets. Technology is included as a reference and element of possible changes in basketry. In-depth descriptions of methods and technology, as well as materials, are not included. Descriptive information is given only when it is related to the issues under investigation.

An investigation of historical events and changes both within the three cultures and in the surrounding geographical areas relating to the dates of the baskets was made. Political, social, and economic changes within the societies were examined. Political events and rulings by the United States relating to the three societies were reviewed. Social attitudes toward the Native Americans also were studied.

This investigation was intended to study only the historical significance of the treatment of the Native Americans by the French, British, Russians, and Americans as it relates to the dates of the baskets and to any changes in the basketry. It is not an in-depth historical or anthropological study of any events, changes, attitudes, or resultant problems not related to basket manufacture or use.

REVIEW OF LITERATURE

Many books have been written about Native American basketry, and numerous studies pertaining to the subject have been conducted. The majority of these have dealt with the construction or manufacture of baskets and the materials used. Very few have discussed the uses made of the baskets, the artists who made the baskets, or the changes in basketry over time. Almost no works have presented baskets as an indicator of change within the society. The most common types of books dealing with baskets are the "coffee table" books, those that have many beautiful pictures of baskets but very little information and text. The second common source is a basketry chapter or section that is included in books about Native American art or in books about Native American lifestyles.

Although the subject has been studied, it is not one that has warranted a great deal of attention. Only in recent years has an interest in basketry been revived and writings have begun to appear, especially about the baskets of the Southwest, discussing many aspects of the subject. Two of the most in-depth studies in Native American basketry have been done by Otis Tufton Mason. These studies, conducted in 1902 and 1904, are the most extensive and inclusive ones to date. The first study, Aboriginal American Indian Basketry, was written as part of an annual report of the Smithsonian Institution and is of a very

high quality. The first part of the report discusses the types of basketry, methods of construction, and materials from which the baskets are made. The illustrations of basket construction and various weaves are excellent line drawings. The 46 color plates of the Smithsonian's collection were originally printed from stone engravings, a costly method of printing; these lend authenticity and importance to the work. Great care has been taken to show a variety of baskets from each of the cultures discussed. Mason was thorough in his research about harvesting and preparing materials and the actual construction or methods of making the baskets.

In his reporting of the ornamentation and the symbolism of the designs, Mason laid the foundation for later studies in this area. He made extensive use of information from Boas's studies of the Northwest Indians to gain an understanding of their symbolistic vocabulary, as well as works by Lieutenant Emmons and Dr. J. B. White, who undertook collection and study trips to the Northwest for the government. For information on the Southwest baskets, he referred to studies made by Dr. J. Walters Fewkes for Hopi interpretations. Throughout this report, Mason gleaned information from a variety of sources and presented it in a condensed, informative way. He related the symbols to the mythology and belief systems of the cultures, and gave background information on why the symbols may have been used. He was careful to keep reminding the reader that only the artists could identify the true meaning of the designs, and that he was giving only an interpretation. In his definition of a symbol, he made

this comment: "Care must be exercised in the use of this word. Only the maker of the design knows the symbol or meaning" (p. 196).

The majority of the study was devoted to uses of the baskets and ethnic varieties of basketry. Mason discussed the uses of baskets in defense and war, dress and ornaments, fine arts and culture, preparing and serving food, gleaning and milling, in mortuary customs, as a receptacle, in religion, in social and economic life, and in relation to the potter's art. In doing so, he looked at the everyday life of the Native Americans and showed the relationship between their basketry and how they lived. He saw the baskets as being important on different levels. One level was a functional one, with a multitude of uses in almost every aspect of the society. A second level was one of cultivating intelligence: "Certainly they [baskets] have done as much as any other industry to develop the intellectual life of savage women, both a knowledge of resources of nature and a taste for aesthetic products" (p. 335). A third level was one of status: "The wealth of a family was counted in the number and beauty of its baskets and the highest virtue of woman was her ability to produce them" (p. 335). Using these levels of importance, Mason went on to describe in depth the many uses of the baskets within the six geographic areas of his study. Although these three examples show more about Victorian attitudes about Indians and women than they actually do about baskets, that was the genre of anthropology at that time.

From the uses of the baskets, Mason then targeted the six areas, Eastern North America, Alaska and the North Pacific, the Fraser-Columbia region, the

California-Oregon region, the Interior Basin region, and Middle and South America, to make a closer examination of basketry. Throughout this section of the text are illustrations and photographs depicting basket makers, styles and weaves of baskets, specific designs and symbols, plant identification, and baskets in use. Also scattered throughout the text are bibliographies, lists of collections, and references for further study.

Although this is an excellent study of baskets and their functions, it is typical of the research and prejudice of the day. It is in an easy narrative format, with few or no statistics and tables included. Mason did an excellent job of placing the baskets in the societies and gave the reader a sound base for understanding the importance of basketry in Native American cultures before the introduction of European goods. Yet the study conveys the prejudices of the era. Mason's references to "Aboriginal American" in the title, to "savage women" (p. 335) and "savage tribes," and other similar references are scattered throughout his writings. Although this could be considered a drawback to the work, it does not detract enough to make the research invalid. To date, there has not been a study as comprehensive and rich in information about the function of baskets as this one.

The second book by Mason, American Indian Basketry, includes a great deal of information contained in the Smithsonian report. This book was originally published in two volumes by Doubleday in 1904; it was reprinted as one volume by Dover in 1988. No color prints of baskets are included; few illustrations or line

drawings are given of the construction methods. Black-and-white photographs of collections from the Smithsonian and private collections are incorporated. More information is given about the ethnic varieties of baskets. In this volume as in the first, Mason made extensive use of material gathered by other researchers and conveyed it in an integrated manner that is easily understood within his research. The easy narrative inclusion of the other researchers' materials makes the text interesting as well as informative without causing the reader to labor at reading scholarly works. Mason was not hesitant about giving credit to others' works and inserting them into his writings. In both books, Mason gave an excellent format for later researchers to follow. The format is systematic, methodical, and logical to follow in reporting on basketry.

In the 1980s, several quality books about basketry were printed. The books all have high-quality photographs of the baskets, with text that includes some history and functional information. The baskets of the Southwest have been well documented by two renowned basket scholars, Clara Lee Tanner and Andrew Hunter Whiteford, in their books Indian Baskets of the Southwest (1983) and Southwestern Indian Baskets--Their History and Their Makers (1988), respectively.

In Whiteford's (1988) book, one finds a short but comprehensive history of basket making in the Southwest. He not only discusses techniques and designs but also focuses on the people and their involvement with baskets. He is able to describe how baskets met people's particular needs at different times.

"Historical and gathering peoples such as the Paiutes . . . used baskets for transporting loads on their backs, cooking, parching seeds" (p. 6). He talked of the needs of earlier people and recognized that today, "Many Hopi baskets are used in ceremonies, but most of them are made for sale" (p. 12). Unlike other books on basketry, Whiteford looked at the current status of basket making in the Southwest as an art form and speculated on the future of the art and artisans. Although this study was not as in-depth or extensive as the ones by Mason, it does take a specific look at each tribe's history in terms of basket making and how the methods or techniques evolved through the years. The study is written in much the same format as the Mason ones, a readable narrative with excellent illustrations and photographs scattered throughout the text.

Clara Lee Tanner's work, Southwestern Indian Baskets--Their History and Their Makers, is the result of 20 years of studying basketry in the Southwest. This work centers more on the designs, symbolism, and techniques than Whiteford's and less on the histories and evolution of the baskets. Tanner also touched on the aesthetics of the art. "The aesthetics vary from tribe to tribe . . . within the cultural history. . . . Sometimes the whim of the moment may become a fashion. . . . Spatial and temporal considerations also influence the aesthetics. . . . Aesthetics are also dependent on the immediate environment" (pp. 2-3). Her comprehensive section on design analysis is similar to the design analysis of pottery studies by Margaret Harin Friedrich. The analysis includes design elements such as variations of the line, dot, rectangle, circle, diamond step, and

fret, while explaining the characteristics of designs, rectilinear and curvilinear, overall design, random design, and banded designs. This is in addition to discussing the designs themselves and their meaning, as well as the methods or techniques of making the design elements. From this thorough discussion she highlighted individual cultures within the Southwest and gave a brief history and look at their baskets. Basket function is mentioned, but not as a main component of the study. The emphasis is more on the finished basket and differentiating the types of basks, such as a plaque, deep container, bowl, and so forth. As with other contemporary basket books, the illustrations and photographs are of the highest quality and are well placed in relation to text information.

Both Tanner's and Whiteford's books provide excellent overviews of Southwest basketry and give a solid introduction into that area of baskets. In addition to these two books are two museum publications, Traditions in Transition--Contemporary Basket Weaving of the Southwest Indians (Mauldin, 1984) and The Basket Weavers, Artisans of the Southwest (Breunig, 1982). The first publication was written by Barbara Mauldin in connection with an exhibition and catalog of contemporary baskets for the Museum of New Mexico. A very brief description of materials and methods is used as an introduction to the main text of interviews with contemporary basket makers in the Southwest. The page format includes a photograph of the weaver, a brief quotation about their weaving, and a photograph with data of one of their baskets. This is not an

extensive study, but it is one of very few that has recorded information about actual basket makers. For future research it is invaluable.

The second museum publication, The Basket Weavers, Artisans of the Southwest (Breunig, 1982), published by the Museum of Northern Arizona, is a collection of essays by four basket researchers. The essays touch on function and symbolism of Hopi basketry, the hundred years of work by the Havasupai, Apache basketry, and wicker, plaiting, and coiling techniques. As in the above books, these two museum publications have superior photographs and readable texts.

A small paperback book published by the Jesse Besser Museum gives information on the Chippewa baskets. Black-and-white photographs of medium quality have text next to them, giving information about size, materials, construction methods, and origin. A very brief introduction about basket making is included, as is a general description of construction methods. The booklet was published in connection with an exhibit of the museum's basket collection.

A recent book published in 1990, The Art of Native American Basketry, edited by Frank W. Porter, is a collection of essays concerning basketry. Several essays deal with change, aesthetics, and style. The essays are concise and shed new thinking in terms of writing about baskets. They are not the lengthy, descriptive tomes usually found in basket books, but relate more to the people who made the baskets and the events surrounding the basket makers. It is an exciting, refreshing collection of readings concerning baskets.

Basket information is also included in many books on the arts of the Southwest. The Bureau of Indian Affairs published many pamphlets on Native Americans. One titled Pueblo Crafts by Ruth Underhill (1979) includes a section on Hopi basketry. Even though the section is only six pages long, it has a great deal of information about the materials used for dye colors and methods of making the baskets. It does not delve into function or history of baskets. A very small reference to basketry is made in a slick publication aimed at tourists: Southwestern Indian Arts and Crafts by Mark Bahti. An essay by Jerold L. Collings (1987), "Basketry From Foundations Past," is included in the beautifully published Harmony by Hand--Art of the Southwest Indians. The essay is focused more on the ancient forms of baskets and basket makers rather than on contemporary work. It gives a good account of the history of basket making and relates the baskets to the lifestyle of the makers. It does not touch on how baskets were made or the methods or techniques, other than naming them.

Another book published in the 1980s is Indian Baskets by Sarah Peabody Turnbaugh and William A. Turnbaugh. The aim of this book is to serve as a guide to the diversity of Native North American basketry. The authors documented the rich traditions of many tribes, even the lesser-known basket makers, and systematically organized the many regional, cultural, and tribal basketry styles. Information is presented in a holistic manner that not only includes methods of construction but also integrates the manufacture with ecological and anthropological data. The illustrations and charts are well

organized and give an organization to the abundance of material that is unique to basket books. As a reference for Native North American baskets, this is an excellent book.

One of the "coffee table" variety of books on baskets is Indian Baskets of the Pacific Northwest and Alaska by Allan Lobb (1990). The photographs of the baskets are excellent and very artistically composed, but the text is not scholarly. The information is of a basic nature and does not go into depth about the historic, construction, or materials aspects of basketry. Brief mention is made of the function of individual baskets that have been photographed, and a brief explanation is given of the groups who produced the baskets. This is a nice book to own, but as an academic reference it is rather light.

Many articles, essays, and studies that have been made concerning baskets can be found in museum publications, magazines about Native Americans, collectors' magazines, anthropological studies, and arts magazines and pamphlets. Most of these deal with construction methods or historical information about basketry; very few deal with the changes in baskets over time or relate baskets to the changes in lifestyles of the Native Americans. The articles found in current anthropological studies are generally of a statistical nature, charts of data about design, construction methods, and materials. Information found in earlier studies is more narrative and explanatory rather than statistically based. Many of the earlier resources were written by museum curators/collectors.

A survey was made of basket resources. Of the 227 examples found, the majority were papers or essays rather than books. Table 1 indicates the years and number of resources published in those time spans. One can chart the interest in Native American societies by the number of references published. Table 1 is only a sampling of references and is not all inclusive.

Table 1: Number of resources on baskets that were found, by date.

1806	1880	1890	1900	1910	1920	1930	1940	1950	1960	1970	1980
1	4	4	15	10	6	33	15	9	18	65	22

Readings that were made in history basically covered events and had a political slant to them. Very few delved into the actual life of the Native Americans, but rather centered on the policies generated toward Native Americans or simply recorded events. The essays gathered in the Handbook of North American Indians are brief accounts of history in terms of dates, events, and policy. They do not tell much about the lifestyle of the Native American except as background information for what happened on specific dates. For a quick summary or introduction to the societies, these essays are very good. But they do not contain much substance concerning cause and effect. Two books that discuss the treatment of Native Americans, The Dispossession of the American Indian by Janet McDonnell (1991) and Native Americans in the Twentieth Century by Olson and Wilson (1984), both deal with the history of

Native Americans but have a strong political nature to them. Most of the examples and references are policy based--how and what policies were foisted on the Native Americans by the government. Neither one deals with the events from a humanistic point of view; they are just dry accounts of what happened. Although written in 1991 and 1984, respectively, they do not relate to the Indian as a human being, but only as the receiver of policy. The actual people get lost in the reciting of incidents.

Older writings of history were often the results of journals kept while on expedition. These dwell more on the people than current histories, but they still gloss over what it was really like to live as a Native American. The Tlinget Indians by Krause (1956) and History of the Ojibwa People by Warren (1984) are good examples of this. Both discuss what they encountered when they visited or lived with the societies. But in recording what they saw, it was the events that interested them. They told about going fishing or hunting, but they did not relate how the Tlingets or the Ojibwa fished or hunted or what they used. Warren tells that the Ojibwa grew crops, yet does not tell what they used to till the soil, to hold the seeds, or to harvest the crops. Discussions about the material culture or material history do not enter into the writings. Material history is given little space in most of the readings, and the arts and crafts receive even less. Perhaps a paragraph or two or a scant chapter will simply name the arts or products, but there is no discussion of them. Most mentions of implements or craft items are

made in passing while discussing the division of labor or the industry and economics of the societies, rather than a discussion unto themselves.

The same can be said of anthropological writings. The emphasis is on the activity rather than on the results or product of that activity. Very seldom is the function of the product related to behavior. Earlier writings were of a narrative and descriptive nature, relating how the Native Americans lived. Very little writing deals with the material culture. In the work Social and Economic Change Among the Northern Ojibwa (Dunning, 1959), a great deal of information is given about how the economy and division of labor changed throughout the years, but very little is provided about the implements and materials needed to generate the economy. The same is true of Tlinget Indians of Alaska (Kamenskii, 1906), a work that deals with the lifestyle of the Tlingets, written by Russian Orthodox missionaries.

To gain insight into the material culture and have an understanding of basketry within Native American societies--its function, waxing and waning of production, and physical changes in baskets' attributes--one has to glean information from art books, histories, anthropologies, and technical works. No one source of information exists at this time.

CHANGES IN BASKETRY

Over a period of time, changes took place in Hopi, Tlinget, and Ojibwa basketry. Many of these changes came about due to economic and social changes in the cultures, as well as ecological changes in their areas. If one accepts the argument that material culture is an indicator of social and economic behaviors, then the changes in those two factors influenced the material cultures of these three Native American societies. Because baskets are directly related to the environment, the materials to make baskets coming from available vegetation, then any change in that environment that reduces or changes the vegetation would directly affect the materials from which baskets are made.

The study of basket change can be approached in two ways. One can study the cultures in terms of social and economic behaviors, outside influences, and environmental conditions, and then look at the baskets to note the change. The research approach also can be taken. One can study the baskets, not the changes, and then relate those changes to the events and social and economic behaviors, as well as environmental studies. In either approach one can see the correlations between the basket changes and the changes within the societies that made the baskets. Conclusions can be drawn about those relationships, and a better understanding not only of the baskets but also of the cultures can

result. The writer notes appearance and changes in the basketry of the three Native American societies in the following text.

Changes in Ojibwa Basketry (Jesse Besser Museum)

Global Lidded Baskets

A comparison of three global lidded baskets dated 1895, 1900, and 1910 indicated that all three had added splints to the rim for support. They all had braids of sweet grass at the rim, overlashing the rim to hold it in place. All three had curls on the lid for decoration (Figure 1). There is not much difference in these baskets; all are very similar (see Table 2).

Table 2: Sizes (in inches) of the baskets' warp and weft (Ojibwa global lidded baskets with ash warp splints, Jesse Besser Museum).

Year	Body Warp	Decorative Body Weft	Additions	Lid Warp	Lid Weft
1880	1/2	1	0	1/8	1/16
1895	1/2-1/8 T	3/4	BSG	1/2-1/16 T	BSG
1900	1/2-1/4 S	1/8	BSG	1/2-1/8 T	1/8 + BSG
1920	1/2	1/16	BSG	1/2	1-1/2+BSG
1920	1/2	1/16	BSG	1/2-1/16 T	1-1/2+BSG

N = 5 0 = No additions
T = trimmed S = split BSG = braided sweet grass

Note: Table 2 indicates the size of the body and lid warp and weft plus the addition of braided sweet grass as part of the weft. The body warp stays the same size through the years, but the weft gets smaller through the years. The oldest basket has a body weft of 1", whereas the 1920 basket has a body weft of 1/16". In contrast to this, the lid wefts get larger in later baskets. The 1880 basket lid has a weft of 1/16", and the 1920 lid has a weft of 1-1/2".

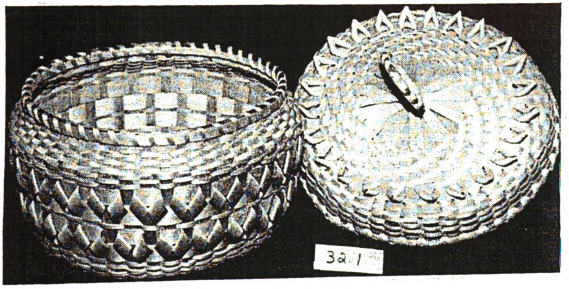


Figure 1. Globe-shaped basket with lid made of plaited black ash splints. Both the lid and basket have large decorative curls. Ca. 1895 (Jesse Besser Museum).

Cylindrical Lidded Baskets

Five cylindrical shaped, lidded baskets with curl trim decoration on the lids were compared. The baskets date 1910, 1910, 1915, 1920, and 1970. All have a decorative loop handle on the lid and curls on the lid for decoration. All have two rows of large splint decoration on the body, with one row of curled splint in a single curl decoration. All of the decoration is in the middle of the body on each basket except 1970; the decoration is more toward the top of the basket. All but one of the 1910 baskets are dyed a color or have colored splints added; 1910--small warp is dyed green; 1915--all warp is dyed; 1920--all but the sweet grass braid is dyed green; 1970--warp is dyed orange.

Baskets 1910 and 1970 have side loop handles. The 1915 and 1970 baskets have a centered decorative curlicue trim on the lid. The 1920 basket has added lid decoration of braided sweet grass alternating with ash splint weft; it also has a hinged lid. The larger 1910 basket has only four rows of lid weft; all others are wefted the entire lid. There are no major differences in style of the baskets, only in the size of the materials. The materials of the weft and warp become thinner and narrower in later baskets (see Tables 3 and 4).

Lidded Sweet Grass and Ash Baskets

The five baskets compared date 1880, 1895, 1900, 1920, and 1920. The sides of all of the lids fit down over the top rims of the baskets. All have a stabilizing strip on the body rim, with an overlash stitch to hold it in place. The 1880 and 1920 baskets have an ash strip on the lid rim with an overlash stitch;

Table 3: Sizes (in inches) of basket warp and weft through the years (Ojibwa cylindrical lidded baskets, Jesse Besser Museum).

Year	Base Warp	Weft	Lid Warp
1910	1	1/8	5/8 NS
1910	3/4	1/8	1/2-1/4 S
1915	3/4	1/8	3/8 NS
1920	3/4	1/8	3/4-1/8 T
1970	3/4	1/8	3/8 S

N = 5
NS = not split S = split T = trimmed

Note: According to Table 3, one of the baskets collected in 1910 has a larger base warp and lid warp than the rest in this series. It has a base warp of 1" and a lid warp of 5/8", compared to the other baskets with a base warp of 3/4" and various smaller lid warps.

Table 4: Comparison of decorative elements on baskets through the years (Ojibwa cylindrical lidded baskets, Jesse Besser Museum).

Year	Loop Handle on Lid	Lid Curls Decoration	Curl Decoration on Body	Side Loop Handles	Dyed Splints	Dyed Warp
1910	X	X	X	X	O	X
1910	X	X	X	O	X	X
1915	X	X	X	O	X	X
1920	O	O	O	O	X	X
1970	X	X	X	X	X	X

N = 5 X = yes O = no

Note: Five baskets have loop handles on the lid. Five baskets have curls as decoration on the lid. Five baskets have curl decorations on the body or sides of the basket. Two baskets have loop handles on the sides. Four baskets have dyed splints. Five baskets have dyed warp.

the rest have bundles of sweet grass and a strip of ash at the rim, fastened with an overlash stitch (see Table 5). The 1880 basket has braided sweet grass decorative trim on the lid and side of the basket toward the lower portion (Figure 2). It has no lid handle. The 1895 basket and both of the 1920 baskets have a braided sweet grass lid handle with double loops at the ends (Figures 3a and 3b). The 1900 basket has a crocheted lid handle backed with cloth. The 1895 and 1900 baskets have green warps. Both of the 1902 baskets have multicolored warps, and the 1880 basket is all natural, with no added color. All have natural colored sweet grass braid. All are very similar in tight braid weave, and there is not much differences in shapes or manufacture. The main difference is in the row patterns of braid alternating with the ash splint weft.

Table 5: Comparison of basket features of lidded sweet grass and ash baskets through the years (Ojibwa baskets with fitted lids, Jesse Besser Museum).

Year	Fitted Lids	Rim Stabilizing Ash Splint	Sweet Grass Added to Rim	Lid Handle	Natural Sweet Grass	Dyed Warp
1880	X	X	O	O	X	O
1895	X	X	X	X	X	X
1900	X	X	X	X	X	X
1920	X	X	O	X	X	X
1920	X	X	X	X	X	X

N = 5 X = yes O = no

Note: Five baskets have fitted lids that fit over the sides. Five baskets have a stabilizing ash splint fastened on the inside of the rim. Three baskets have a bundle of sweet grass added between the rim and the splint. Four baskets have a braided lid handle. Five baskets have natural colored sweet grass trim. Four baskets have a dyed warp.

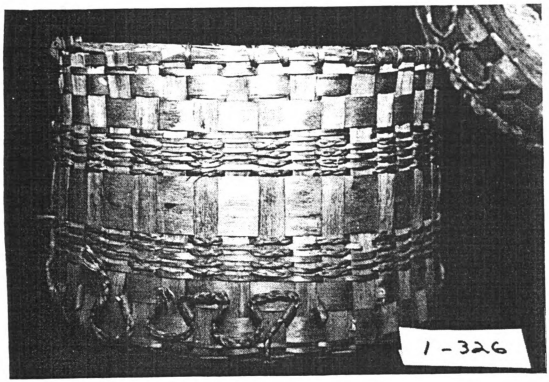


Figure 2: 1880 plaited basket with sweet grass braid decorative trim at base and on lid. Sweet grass braid is also used as weft (Jesse Besser Museum).

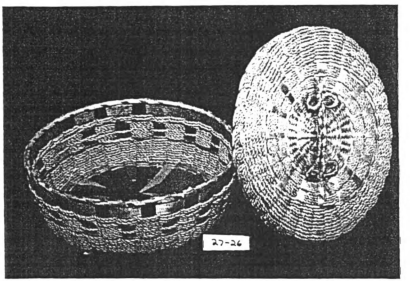


Figure 3a: Oval-shaped covered basket made from plaited black ash splints and sweet grass. A sweet grass handle is attached to the lid with double loops. The warp is multicolored dyed splints, and the weft dyed splints are interspersed with twisted sweet grass. The double rim is overlashed with a very narrow dyed splint. Ca. 1920 (Jesse Besser Museum).

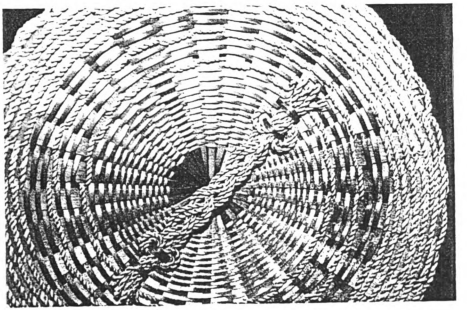


Figure 3b: Detail of twisted sweet grass used as weft and as decorative trim. In this case the sweet grass is a handle for the lid of a basket.

Market or Utility Rectangle
Baskets With Handles

Seven baskets were compared: 1875, 1875, 1885, 1885, 1890, 1900, and 1915. All are very similar in shape and manufacture, with square bases and slightly rounded rectangular tops. The baskets are very sturdy and have a plaited weave. All have an inside and an outside stabilizing splint at the rim with an overlash stitch to hold it in place (see Table 6).

Table 6: Sizes (in inches) of warp and weft of the baskets (Ojibwa market/ utility rectangle baskets with carved handles, Jesse Besser Museum).

Collection Year	Height	Body Warp	Body Weft	Base Weft per 2 Inches	Base Weave
1875	9	1	1/4	7	H
1875	8	1	1/4	6	P
1885	5-1/4	3/4	1/4	6	P
1885	4-3/4	3/4	1/4	6	P
1890	5-1/4	1/2	1/4	5	H
1900	4-3/4	1/2	1/2-1/8 T	5	H
1915	5-1/4	3/4	1/4	6	P

N = 7
T = trimmed H = herringbone weave P = plaited weave

Note: According to Table 6, the older baskets have larger warps and more wefts per inch than the newer baskets. The basket collected in 1875 is 9" tall and has a 1" warp and seven wefts per 2", whereas one of the 1900 baskets is only 4-3/4" high with five wefts per 2". The baskets are smaller in the later years.

The 1890 basket has a bundle of sweet grass between the two rim splints; the others are plain (Figure 4a). All have carved wooden handles notched on the inside below the rim to hold them in place. The 1875 and 1915 handles are shaped with a dip in the center; the others are smooth across the top. The differences in the baskets are the width of the warp and weft. The older baskets have larger warp and weft (see Table 7).

Table 7: Comparison of basket features through the years (Ojibwa market/ utility rectangle baskets, Jesse Besser Museum).

Year	Inside, Outside Rim Support Splint	Sweet Grass Added to Rim	Carved Dip in Handle	Carved Wooden Handles
1875	X	O	O	X
1875	X	O	X	X
1885	X	O	O	X
1885	X	O	O	X
1890	X	O	O	X
1900	X	X	O	X
1915	X	O	X	X

n = 7 X = yes O = no

Note: Seven baskets have support splints at the rim. One basket has added sweet grass bundle between the rim splints. Two baskets have dips carved into the tops of the wooden handles. Seven baskets have carved wooden handles.

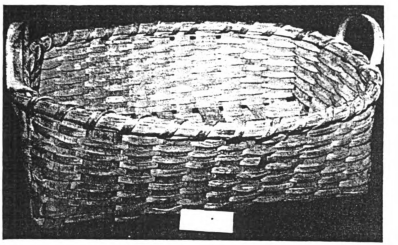


Figure 4a: Plaited splint basket with carved bow handles. It has a heavy, double splint rim for strength. The base is of a checker weave. Ca. 1885 (Jesse Besser Museum).

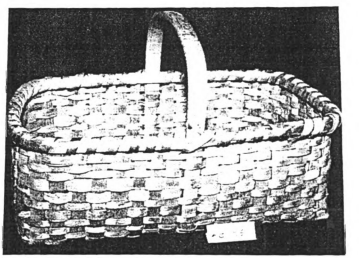


Figure 4b: Utility or "market" basket made from plaited black ash splints. The rim has carved, wooden double splints held in place by overlashing. Ca. 1890 (Jesse Besser Museum).

Other observations include the shapes of the baskets. Those made for utilitarian use have little or no shape changes. The baskets made for the tourist industry came in a variety of unusual shapes to entice the purchaser or to meet the demands of tourists. Needle cases, vases, yarn holders, and coasters are a few that were made strictly for commercial purposes (Figures 5 and 6). Some of the lidded boxes made for trade or sale were lined with satin rather than being left plain on the inside.

Baskets made in the past 20 years have primarily been for exhibit or demonstration. These baskets are of high artistic merit in their construction and utility of materials. The innovative use of traditional decorative elements such as the curl results in a basket made more for show than for utility. When compared to the baskets of earlier times, they are much more delicate.

Summary

Although there are no major changes in the utilitarian shapes or the methods of manufacture, the baskets of later years have weft and warp of a smaller size. This can be seen when early baskets are compared with baskets made in the 1970s and 1980s. Decorative curls on the 1978 basket range from 5/8" to 1/8" (Figures 7 and 8), whereas the curls on the earlier ones are as large as 1". The decorative curls on lidded baskets also become smaller in later years. A basket in the 1910 collection has decorative curls twice as large as those on a basket of 1985 (Figure 9a).

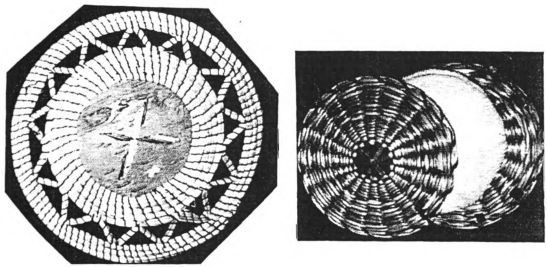


Figure 5: Examples of tourist items. These unusual shapes were made for tourists. Yarn holders, coasters, and flower baskets were not part of traditional Ojibwa basketry. Left: A hot-dish coaster, made from coiled sweet grass (Jesse Besser Museum). Right: Needle case made in 1910 for tourists; has a flannel liner to hold the needles. Red dyed weft is used to make decorative bands and to overlash the rim. The wicker technique is used (Jesse Besser Museum).

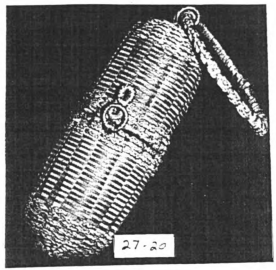


Figure 6a: A yarn or string holder, hinged and clasped in the center, made for tourists. It is made from black ash splints with aniline dyed decorative weft. It has sweet grass braided trim and weft. Ca. 1900 (Jesse Besser Museum).

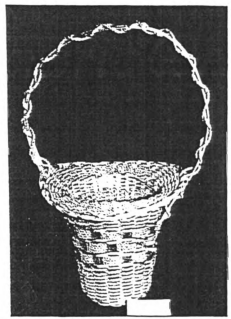


Figure 6b: "Flower basket" made from black ash splints and twisted sweet grass. It was made for tourists rather than for Ojibwa home use. Ca. 1920 (Jesse Besser Museum).

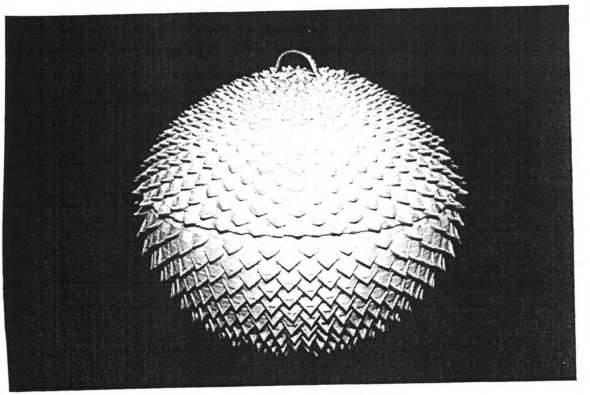


Figure 7: A "porky pine" basket woven in 1978 by Edith Bondie for show in the traveling exhibit "Contemporary Native American Art." It is made from black ash splints. A smaller version is in the collection of the Smithsonian Institution. It is an example of baskets made as an art form rather than utility (Jesse Besser Museum).

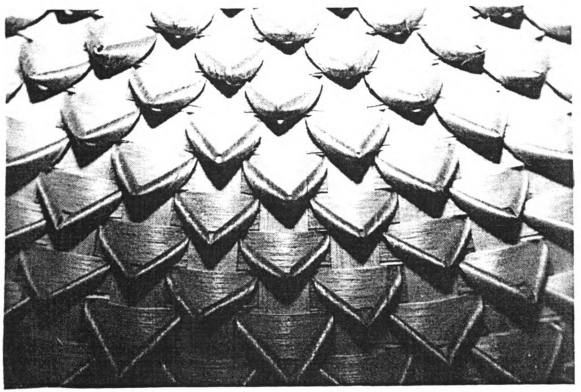


Figure 8: Detail of Edith Bondie's "porky pine" basket. The curls measure 1/8" at the base of the smallest curl and 5/8" at the base of the largest curl (Jesse Besser Museum).

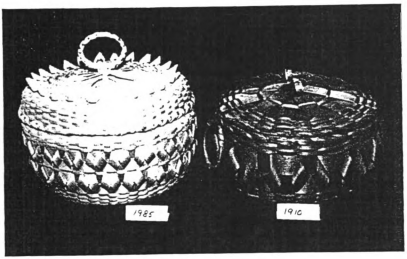


Figure 9a: Ojibwa lidded baskets show the "curl" decoration. The curls on the 1910 (right) basket are twice as large as the curls on the 1985 (left) basket (Jesse Besser Museum).

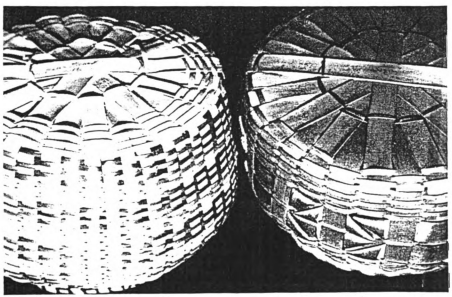


Figure 9b: Two examples of base warps. Both baskets are globe shaped. The basket on the left is dated 1900 and does not have the warp split at the base edge. The basket on the right, made in 1988, has the base warp split as it turns up for the sides. The 1900 warp is 1", and the 1988 warp is 3/4" split to 3/8" (Jesse Besser Museum).

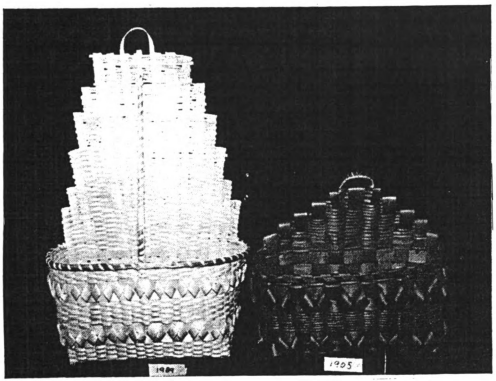


Figure 10: Ojibwa letter holders or "comb holders," another example of baskets made for tourists or the commercial market rather than for the Ojibwa home. The 1989 basket on the left has smaller weft and decorative curls than the 1905 basket on the right. Both baskets are made from split black ash. The 1989 basket also includes the use of sweet grass (Jesse Besser Museum).

A 1988 lidded basket has 1/8" weft woven four weft per inch, whereas an 1875 basket has 1/4" weft and is woven three weft per inch. Also, the weft was usually left unsplit on earlier baskets, whereas on later ones it was split to make smaller weft (Figure 9b). Older baskets usually have one or two colors, whereas a 1989 basket uses five colors in the "sunrise" pattern.

Baskets made for a commercial market were made in a variety of shapes that would appeal to tourists. Even in the baskets made for the commercial market, one can notice larger weft, warp, and decorative curls on earlier baskets compared to later ones, as in this comparison of comb holders (Figure 10). Many of these were lined or stuffed and had additional decoration. Although the baskets were made using the traditional techniques, the results were very modern.

Changes in Tlinget Basketry

Arizona State Museum

Although 73 Tlinget baskets are listed in the collection, only 16 were identified by date, and these were collection dates. Manufacture dates were not given. One can assume that if a basket was collected in 1890, it had to be manufactured before that date. Using the collection data as a guide, the following observations about changes in the baskets were made.

Before 1922, the designs are confined to small sections of the basket, one or two bands toward the top (Figure 11). After 1922, there is more overall banding, and the designs take up most of the basket (see Table 8 and Figure 12).

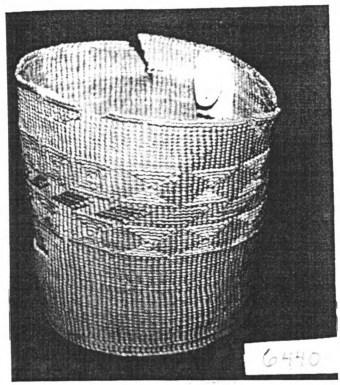


Figure 11: Berry basket--a basket used to gather berries. It is twined and decorated with false embroidery in the patterns of "laberat" and "flying." Leather loops are attached to the inside rim for adding a cord or handle. The decorative bands are confined to the small section near the top of the basket. Col. 1890s (Arizona State Museum).

Figure 12: Twined basket. The five bands of design include the "salmon head berry" pattern in a vertical line in the top and bottom bands. The second and fourth band pattern is called "crossings," and the middle band is "cross and tattoo." False embroidery is made of various grasses. Collected in 1930, it is an example of expanded banding that covers a larger area of the basket (Arizona State Museum).

Table 8: Number of decorative bands on baskets (Tlinget collection, Arizona State Museum).

No. of Bands	Collection Date and Number of Baskets				
	1800s	1890s	1900s	1920s	1930s
All-over design	0	0	1	0	1
0	1	1	0	0	0
1	0	0	0	0	0
2	1	1	0	2	0
3	0	1	0	2	0
4	0	0	1	0	1

N = 16 (Although there were 16 dated baskets, some were not available to view or had an indication of banding on the information cards.)

Note: Table 8 indicates the number of baskets using a specific number of decorative bands. For example, in the 1920s collection, two baskets have two bands and two baskets have three decorative bands, whereas no baskets have an all-over design, one band, or four bands.

As with other collections, one can notice the increase in banding decoration in later years. Of the two baskets collected in the 1800s, one had no band decoration and one had only two bands near the top of the basket. Of the three 1890 collection dated baskets, one had no bands and one had three bands, again in the upper portion of the body. Of the two baskets collected in the 1900s, one had an all-over design and one had four bands spread out over the body. Two of the four baskets collected in the 1920s had two bands of very large patterns, and the other two baskets had three bands. One of the baskets collected in the 1930s had an all-over design, and one had four bands spread

evenly over the body (Figure 13). Although 16 baskets were collection dated, not all were available to view, had photographs available, or had information concerning banding written on the index cards.

Before 1922, the designs are simple and may be repeated in one or two colors (Figure 14). After 1922, the designs are more involved, with two or more combined patterns, or if one design is used it is repeated multiple times.

In regard to the use of colors, the baskets collected in the 1800s had fewer colors used on them. Only brown, yellow, and red were used on one of the baskets, and red only on the other one. The three baskets collected in the 1890s used red, yellow, black, and green on them, whereas those from the 1900s incorporated purple, pink, and green into the designs, in addition to the yellow. The baskets collected in the 1920s were more colorful; three had black, blue, yellow, brown, and red designs. One basket from the 1930s used orange. Again, information concerning color was often not available, nor were all of the baskets available for viewing (see Tables 9 and 10).

Before 1900, the weave is thicker; larger warp and weft are used. Also, the false embroidery is a thicker or wider strip. After 1900, smaller strips are used for the embroidery; a tighter basket weave is used, and the false embroidery is tighter.

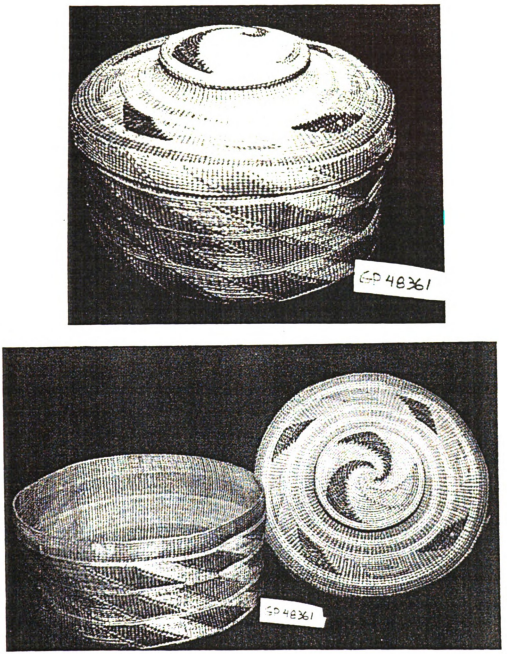


Figure 13: Women's work basket with a rattle top. The small knob on the top of the lid contains small stones or seeds that rattle when the lid is lifted. The basket was used to store household items and small tools the women used in their work. The design on the lid is the "fern fond" pattern. The patterned bands on the body cover the entire side of the basket rather than a portion. The basket is dated 1936 (Arizona State Museum).

Figure 14: Deep tub. The large, deep basket with side fiber cord handles was generally used to transport goods or to hold the surplus while gathering food. The only decoration is three thin stripes below the rim. Col. 1910 (Arizona State Museum).

Before 1900, no natural designs of a zigzag or flying design pattern were woven into the basket. After 1900, woven designs appear frequently; five out of the eight baskets include woven decoration.

These summaries were made from direct observation of available baskets. Although not a complete, in-depth observation of all 75 baskets, it does give one an overview of changes.

Table 9: Number of colors in the decorative bands (Tlinget collection, Arizona State Museum).

No. of Colors	Collection Year and Number of Baskets				
	1800s	1890s	1900s	1920s	1930s
1	1	1	0	1	1
2	0	2	1	2	0
3	1	0	0	1	0
4	0	0	1	0	0

N = 15 (some baskets have no dyed fibers added to their design and were not included in this chart).

Note: Table 9 indicates the number of colors included in the decorative bands on baskets. For example, in the 1920s collection, one basket has one color, two baskets have two colors, and one basket has three colors as part of the design.

Table 10: Colors used in the decorative bands on baskets (Tlinget collection, Arizona State Museum).

Colors	Collection Year and Number of Baskets				
	1800s	1890s	1900s	1920s	1930s
Red	1	2	0	1	0
Orange	0	0	0	0	1
Brown	1	0	0	2	0
Yellow	2	1	1	2	0
Blue	0	0	0	2	0
Black	0	1	0	1	0
Purple[a]	0	0	2	0	0
Pink	0	0	1	0	0
Green	0	1	2	0	0

N = 15 (some baskets used more than one color in the band patterns).

Note: Table 10 indicates how many baskets made use of a specific color in the band decoration. For example, of the baskets in the 1800s collection, one basket includes red, one basket includes brown, and two baskets make use of yellow, whereas no baskets use orange, blue, black, purple, pink, or green.

[a]Purple could be a faded black. No indication was given on index cards concerning exposure of dye to light and aging.

Field Museum of Natural History

The majority of the baskets at the Field Museum are dated according to their collection or acquisition dates. For the 30 baskets observed at the Field Museum of Natural History, the following conclusions were drawn.

The baskets collected in 1894 have two, three, and four bands of design placed near the top of the basket; one basket has seven bands, and one basket has no design bands. Of the baskets collected in 1902, two have no banding or designs, three have an all-over design, and three have one decorative band. Of the baskets with a collection date of 1903, one has no bands or design, one has an all-over design woven into it, two have one decorative band, and two have two bands. Of the three baskets from 1919, one has no bands, one basket has two bands, and one has three bands. One basket from the 1921 collection has two bands of design. One basket collected in 1945 has four bands, but the bands are spread over the entire surface of the basket. The same is true of the basket recorded in 1958; its three bands are spread over the surface of the basket rather than being clustered near the top of the basket (see Table 11).

In the collection of 1894 baskets, nine colors are used in different combinations in the various patterns; five have black and three purple. (It should be noted that the purple could be a faded black as no information was given as to the origin of the dye or the effects of light fading the color.) Seven baskets have red, and brown is used three times, whereas green and orange are used twice. Tan is in one pattern. Eight baskets use yellow as part of the design. Three baskets have no colors; the patterns are done with natural weave or no designs are added to the baskets (see Table 12 and Figures 15 and 16).

Table 11: Number of decorative bands used on baskets (Tlinget collection, Field Museum of Natural History).

No. of Bands	Collection Date and Number of Baskets						
	1894	1902	1903	1919	1921	1945	1958
0[a]	1	2	1	0	0	0	0
All-over design	0	3	1	0	0	0	0
1	0	3	2	0	0	0	0
2	4	0	2	1	1	0	0
3	4	0	0	1	0	0	1
4	1	0	0	0	0	1	0
7	1	0	0	0	0	0	0
Total baskets	11	8	6	2	1	1	1

N = 30

Note: Table 11 shows the number of baskets using a specific number of decorative bands within a given collection series. For instance, in the 1894 collection, one basket has no banding, four baskets have two decorative bands, and four baskets have three bands, whereas one basket has four bands and one basket has seven bands.

[a]Does not include lid bands. No added design elements, just weave pattern.

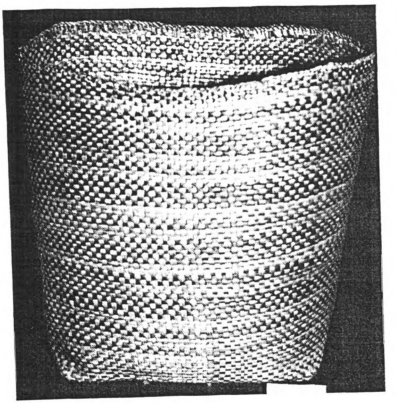


Figure 15: Berry tub. Cedar bark, plaited, is the weave of the berry tub. Dark brown cedar bark weft alternating with natural cedar bark weft make the decorative bands. The checked effect is achieved by equal size warp and weft strips (Field Museum of Natural History).

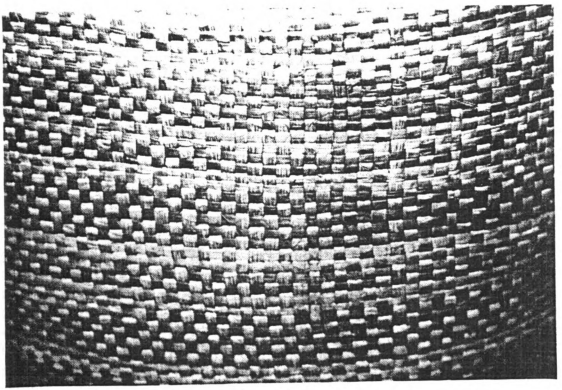


Figure 16: Detail of natural light and dark cedar bark, showing the checker pattern, plait weave (Field Museum of Natural History).

Table 12: Number of decorative colors used on baskets (Tlinget Collection, Field Museum of Natural History).

No. of Colors	Collection Date and Number of Baskets						
	1894	1902	1903	1919	1921	1945	1958
0/natural	1	1	1	1	0	0	0
1	0	2	2	1	0	0	0
2	1	2	1	0	1	0	0
3	7	0	1	0	0	0	1
4	2	3	1	1	0	1	0
Total baskets	11	8	6	3	1	1	1

N = 30

Note: Of the baskets with the collection date of 1894, one uses natural-colored fibers for the decorative pattern, one has two colors in the decorative pattern, seven use three colors, and two have four colors in the decoration. In the 1902 series, one basket makes use of natural colors, two have one color added, two have two colors in the design, and three have four colors added. One basket collected in 1903 makes use of natural fibers in the pattern, two have a one-color design, and one each has two, three, and four colors worked into their patterns. Of the three baskets collected in 1919, one uses only natural-colored fibers, one uses only one color, and one uses four colors. Whereas one basket collected in 1921 has a two-color decoration, a basket of 1945 has a four-color design, and one basket collected in 1950 has a three-color pattern.

In looking at the eight baskets with the collection date of 1902, one notes that three baskets have no colors added and are of natural materials (Figure 17). Four baskets have green as part of the decorative band patterns, whereas red, yellow, and brown are each incorporated into designs on three baskets. Black is used two times, as is purple (see note on purple above). In the 1903 collection series of six baskets, only one has no additional color and only one includes

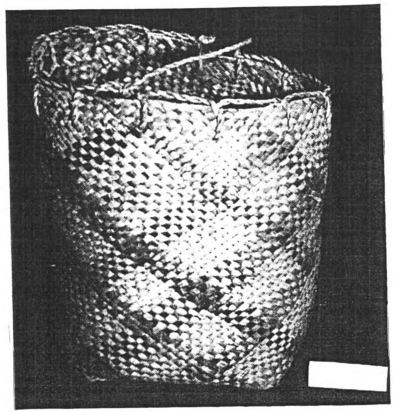


Figure 17: Household basket exemplifying diagonal plaiting, made from inner cedar bark. A twisted cord is sewn along the rim to form a handle. The warp and weft are folded over at the rim and tucked under the last row to finish the basket. This type of basket was used to hold small articles in the household. The pattern is made by using the natural light and dark bark. Col. 1902 (Field Museum of Natural History).

black in the designs. Two baskets have red, purple, and green in the patterns, and four baskets show yellow in the design.

Of the two baskets collected in 1919, both use red and one uses green and purple. The 1921 basket uses purple or black and yellow. The basket collected in 1945 uses orange, yellow, green, and black. The basket recorded in 1958 uses only yellow, red, and green in the design pattern (see Table 13).

Table 13: Number of baskets using various colors (Tlinget collection, Field Museum of Natural History).

Colors	Year of Collection and Number of Baskets Using a Color						
	1894	1902	1903	1919	1921	1945	1958
Natural	2	3	1	0	0	0	0
Black	5	2	1	0	1	1	0
Red	7	3	2	2	0	0	1
Yellow	8	3	4	0	1	1	1
Purple[a]	3	2	2	1	1	0	0
Brown	3	3	0	0	0	0	0
Tan	1	0	0	0	0	0	0
Green	2	4	2	1	0	1	1
Orange	2	0	0	0	0	1	0
Total baskets	11	8	6	2	1	1	1

N = 30 (some baskets use more than one color).

Note: Table 13 shows how many baskets have a specific color used in the decorative bands or in an all-over woven pattern.

[a]Purple could be faded black; no information was given about fading dyes.

Baskets made before 1900 have added strands of twining at the base for strength, or an extra row of twining at the top edge for stability. Some of the baskets after the 1900s have splints of wood wired inside of the bottom for strength, whereas others have wire at the rim over which the warp is folded and fastened. Still others have a woven fabric attached to the inside rim for firmness.

Heard Museum

The Tlinget collection at the Heard Museum has only 17 baskets identified by date of acquisition or collection, 36 baskets identified post-1880, and 38 baskets with no dates at all. Eighteen baskets were used to make the following analysis.

Three baskets collected between 1890 and 1900 have three bands of decoration each, one baskets having the bands between three open-work sections. Of the five baskets dated post-1880, one basket has one band, in the middle of the basket; three baskets have two bands--two have bands near the top, and one has bands between open work; and one basket has three bands. Four baskets were dated early 1900, of which one has one band of decoration, one has two bands of decoration, and two have three bands--again, two with the bands near the top of the basket (Figure 18) and one with the bands between open work. The one basket acquired in the 1930s has two bands in the middle. Of the four baskets labeled as having been acquired in the 1940s, two have two bands and the other two have three bands. The bands on these baskets are

Figure 18: A two-strand twined basket made from spruce root and maidenhair fern for the design. The principal horizontal band design is "blanket border," and the middle band is upright and inverted "salmon berry." This basket is typical of the ones made by the Yakutat division of Tlingets in the early part of the 1900s. Col. early 1900 (Heard Museum).

spread out or placed in the middle of the baskets. Finally, the basket dated 1960 has five bands evenly spaced from top to bottom (see Table 14).

Table 14: Number of decorative bands on baskets (Tlinget collection, Heard Museum).

No. of Bands	Collection Year and Number of Baskets					
	Post-1880	1880-1900	Early 1900s	1930s	1940-1950s	1960
1	1	0	1	0	0	0
2	3	0	1	1	2	0
3	1	3	2	0	3	0
4	0	0	0	0	0	0
5	0	0	0	0	0	1
Total baskets	5	3	4	1	5	1

N = 19

Note: Table 14 shows the number of decorative bands found on baskets.

Baskets with a collection date before 1900 used fewer colors in the pattern than those with collection dates after the 1900s. Pre-1900, one basket has one color, and one basket has two colors. Of the baskets collected from 1900 to 1940, two baskets use two colors, two display three colors, and two show four colors in the designs, usually as an overlay stitch in false embroidery. After 1940, the collected basket samples show one basket with one color, one basket with two colors, two baskets with three colors, two baskets with four colors, and

two with five colors in the patterns. There was an increase in the number of colors used to decorate the baskets over the years (see Tables 15 and 16).

The baskets before 1920 have a larger, coarser weft than the later baskets. In the baskets after the 1920s, overlay or false embroidery is tightly or closely added so that it looks like a part of the basket rather than lying on top. In the earlier baskets, one can observe the decoration lying on top of the weave.

Table 15: Number of colors used on a basket (Tlinget collection, Heard Museum).

No. of Colors	Collection Date and Number of Baskets		
	Pre-1900	1900-1940	1940-1960
1	1	0	1
2	1	2	1
3	0	2	2
4	0	2	2
5	0	0	2

N = 19 (some baskets did not have any colors as part of their patterns but were a natural color only; they were not included in this table).

Note: As indicated in Table 15, more colors were used in decorative bands in the years after 1900 than before 1900.

Table 16: Colors used in the pattern and decorative bands (Tlinget collection, Heard Museum).

Colors	Collection Date and Number of Baskets		
	Pre-1900s	1900-1930s	1940-1960s
Red	3	4	2
Black	1	1	0
Yellow	0	3	2
Purple	0	1	2
Orange	0	0	2
Green	0	1	0
Pink	0	1	1
Brown/blue	0	4	3
Natural	3	2	1

N = 19

Note: Many of the descriptions did not include a color indication, and the black and white photographs did not lend themselves to identifying colors. The above information was determined from descriptions and observation of baskets available to be handled and observed in storage.

The patterns of the decoration are more simplistic in the earlier baskets and more complicated and involved in the later ones. Whereas the earlier baskets may have two or three bands, the bands usually have only one design repeated throughout the band or have two bands of the same design. Later baskets have many designs repeated within the same band and a complicated alternation of band patterns (Figure 19). One basket made after 1900 includes the word "Alaska" woven into one side. A similar basket with "Alaska" woven into it was also in the Arizona State Museum collection.

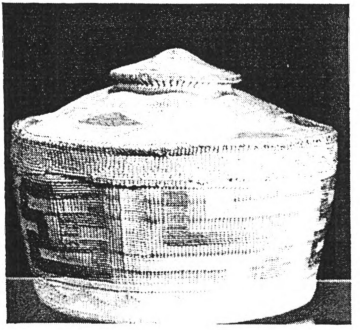


Figure 19: Lidded basket. The lidded basket is larger than most and is an excellent example of an older-type basket. It was used for trinkets and small household goods. Two strands of spruce root are twined, and xerophyllum is used for the false embroidery. The principal band is a "shaman hat" pattern, with "salmon head berry" the principal lid band. The lid knob has the "fern fond" design, and the "fish flesh" pattern is found in both the top rim and the bottom band. This is an example of repeat patterns in banding. Post-1880 (Heard Museum).

Summary

Baskets before the 1920s have a more simplistic look than later baskets. They have fewer designs within a band and fewer bands on the basket. The bands are clustered near the tops of the baskets. The exception to this is the decorative bands that alternate with open work (Figure 20). One or two colors are used to enhance the patterns.

Baskets made after the 1920s have more decorative aspects. The bands are spread out to include most of the surface, rather than being clustered near the top. A complicated pattern of designs is alternated within one band. Many times the bands are repeated in an alternative fashion, with bands one and three being the same while bands two and four are the same, or all three bands may be different.

More colors are incorporated into the design patterns in the later baskets, with as many as four or five colors being used in one band pattern. In addition to colored false embroidery, a natural color decoration is woven into the later baskets. Bands of these natural decorations are often at the top and bottom in bands, with the colored, false-embroidered patterned bands in between. These zigzags or flying patterns are not seen on the earlier baskets.

Early baskets garner their strength from the weave and additional twined strands at the bases of the baskets. Later ones have added wooden splints at the bottom and wire at the top edge, over which the warp is folded and secured.

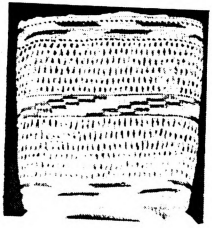


Figure 20a: An example showing open and closed weave by the Yakutat Tlingets. It was made for the tourist market and has no practical use in the Tlinget society. The "waste basket" shape was popular with tourists. Post-1900s (Heard Museum).

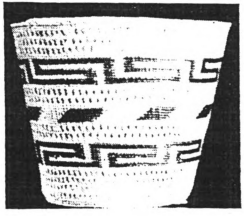


Figure 20b: A small basket (2-1/4" diameter and 2-1/2" height) made for the tourist trade. The design is a variation of the "shaman's hat" pattern and is made from spruce root and dyed maiden hair grass overlay. Post-1880 (Heard Museum).

Later baskets are also made with fewer strands of twining; older ones may have three twined strands, whereas later ones have only two.

Changes in Hopi Basketry

Arizona State Museum

Wicker baskets. The 1900, 1920, and 1985 baskets are all very plain, with large, centered designs. The designs are simple, in one or two colors. The weave is rugged and coarse. Wicker baskets made in the 1930s and 1940s have involved multicolor designs. The designs are of an all-over nature rather than just being centered (see Figure 21). The weave is much finer and tighter than is that of the earlier work (see Tables 17 and 18).

Table 17: Number of colors used in the decorative designs (Hopi wicker baskets, Arizona State Museum).

No. of Colors	Collection Year and Number of Baskets		
	1900-1910s	1930s	1940s
1	0	0	0
2	0	0	0
3	0	0	0
4	2	1	1
5	0	0	1

N = 5

Note: According to Table 17, two baskets collected in 1900 to the 1910s have four colors in the design, whereas one basket from the 1930s collection also has a four-color design. Of the baskets collected in the 1940s, one has four colors and one has five colors.

Figure 21: A very tightly woven wicker bowl. Five colors were used in the band decoration. The bands are spread evenly over the basket. Ca. 1940 (Arizona State Museum).

Table 18: Number of baskets using a specific color in the decorative design (Hopi wicker baskets, Arizona State Museum).

Colors	Collection Year and Number of Baskets		
	1900-1910s	1930s	1940s
Red	0	0	1
Yellow	2	0	2
Black	1	1	1
Blue	1	1	1
Orange	2	1	1
White	0	0	1
Green	2	1	2

N = 5 (more than one color was used on some baskets).

Note: According to Table 18, there is a wide use of color throughout the years. Yet the baskets collected in the 1940s do have more color usage; one basket has red, two baskets have yellow and two have green, one has black, one has blue, one has orange, and one has white as part of the decorative designs.

Coil baskets. The 1898 and 1930s baskets have very large, fat coils, loose weave, and fat yucca strips. These baskets have very lush attributes. The designs are simple, in one or three colors, and are repeated around the center or middle of the basket in a simple band. The 1940s and 1950s baskets are multicolor, with involved designs. The coils are thinner, and the yucca strips are also narrower than those of earlier baskets. The weave is much tighter, with a "rigid, sparse" appearance (see Tables 19 and 20).

Table 19: Number of colors used in the decorative designs (Hopi coiled bowls/baskets, Arizona State Museum).

No. of Colors	Collection Year and Number of Baskets			
	1890s	1900-1910s	1920-1930s	1940-1970s
1	0	0	0	0
2	1	2	2	1
3	1	3	1	1
4	0	1	0	1
5	0	1	0	0

N = 15

Note: Given the information in Table 19, baskets collected during the 1900-1910 period have more colors used in the decorative designs than do baskets collected in other years. Two of the baskets have two colors in the design, three have three colors, one has four colors, and one has five colors as part of the decoration. The baskets collected in the 1890s have the fewest colors used; one basket has two colors, and one has three colors.

Plaited baskets and trays. The 1940s baskets and trays are made from unbleached and bleached fibers that form the design. The base is large, with a small wicker edge. The weave is very loose, and the designs are simple. The 1960s plaited trays and bowls are made with both natural and dyed fibers; the designs are smaller and of a tighter weave, so the design is repeated. The edges have wider borders of wicker.

Table 20: Number of baskets using a specific color in the decorative design (Hopi coil bowls/baskets, Arizona State Museum).

Color	Collection Year and Number of Baskets			
	1890s	1900-1910s	1920-1930s	1940-1970s
Red	2	5	0	1
Yellow	0	4	2	2
Black	2	4	3	2
Blue	0	1	0	1
Green	1	4	0	0
Brown	0	3	2	2
White	0	0	0	1
Tan	0	1	0	0

N = 15 (some baskets have more than one color in the decorative design).

Note: A wider range of colors is used in the decorative patterns of the coiled baskets collected during the 1900s than before that time. In the 1890s collection, only two baskets have red, two baskets have black, and one basket has green in the designs. Of the baskets collected in the 1900-1910s period, five have red, four have yellow, four have black, one has blue, four have green, three have brown, and one has tan as part of the design.

Coil and wicker plaques.

1880 to 1898:

1. Three coil--one flower, one kachina, and one butterfly with dissecting line. The colors used are black and dark brown. No decorative bord ers are woven at the edge of the plaques. The coils are fat; wide yucca strips are used, and the weave is loose.

2. Five wicker--one kachina, two whirlwinds, and two geometric designs. The colors used are red, black, white, and green. The 1880 whirlwind plaque is very plain, whereas the 1898 designs are more involved, with multicolor. The wicker wefts are wide and the warp bundles large.

1900 to 1919:

1. Thirteen coil--five kachinas, five stars, one flower, and two unidentified designs. Thirteen use brown, five yellow, and eight black (or dark purple). There are no decorative borders on the edges of the plaques. The kachina plaques vary in design: three have checkered bodies, and two have solid bodies; two have feet, and two have deer above the headdress; all five have fingers. The star plaques all have "open" centers and stepped points; the points are not a solid color. Four plaques have three "parts" or bands of points that include natural areas. The flower plaque has an open center area, and the petals are simple black edges. The two unidentified designs are symmetrical, with large, simple designs. All of the coils are fat and the yucca strips wide. The plaques have a lush, flat look to the weave. The colors are muted and blend with each other.

2. Four wicker--one kachina, one whirlwind, and two band designs. Two of the plaques use red, four use black, and one uses white. Two of the plaques have a border design of solid color at the edge. The kachina face is simple, with one color used to band the body. The whirlwind is in two colors, with a red center and a checked red and white band around the edge.

1920s:

1. Three coil–two kachinas and one plain with no design. Black and red are used on the kachina figures. There is no rim border. The kachinas are very simple, solid bodies with fingers and feet detailing and plain headdresses. Both have rain clouds with rain at the side of the headdresses. The yucca strips are wide, but the weave is tighter than that of the earlier plaques. The plain plaque has very fat coils and a loose weave.

2. Seven wicker--two eagles, one kachina, two butterflies, one whirlwind, and one unidentified geometric design. Four use yellow, seven use black, two use white, and one uses red. The kachina has a large face and a small headdress. The plaque has a bordered edge. The eagles on both plaques have the feet outside the tail feathers. Both are facing left and have an eye detail. Both have feathered wings and white checks on the breast. One has a solid tail, and one has a checked tail. Both eagle plaques have bordered edges of black/yellow or black/white pattern. The butterfly is plain, with a single color for the wings. The border is black alternating with natural color at the edge of the plaque. The whirlwind has two solid-colored "arms" around a colored center. The rim is bordered in black. All of the wicker plaques have large weft and what looks like a bundle warp causing large ridges in the plaque.

1930s:

1. One coil--geometric design in brown. The design has not been identified, but four sections radiate from an open center in three steps. The coils are not as fat as those of previous work.

2. One wicker--a whirlwind or lightning design. The "arms" are in a checkerboard design of black and white on an orange background. The center is plain and open. The rim is bordered in black and white. The wicker weave is very tight, and the design is bold (see Figure 22).

1940s:

1. Three coil--three flowers, or two flower and one star (identity was confused because one was identified as both a star and a flower by two different people). Two use yellow, one uses red, two use white, three use black, one uses brown, and one uses orange. One plaque has a solid center, and two have open centers. One has the edge bordered in black, whereas two are plain rimmed. The petals of the flowers are bordered in black. The yucca strips are slender, and the weave is tight. The coils are smaller than in previous years.

2. Six wicker--two whirlwind, one eagle, one butterfly, and two band designs. Six use black, one uses purple, four use white, three use blue, and two use yellow. All have rim bands. The eagle faces to the left, with a large eye detail. Its feet are on the outside of the solid tail. The wings are stepped or feathered. A small white checker pattern is on the breast, and white is used with black as a border. The figure is centered and large. The whirlwind plaque has

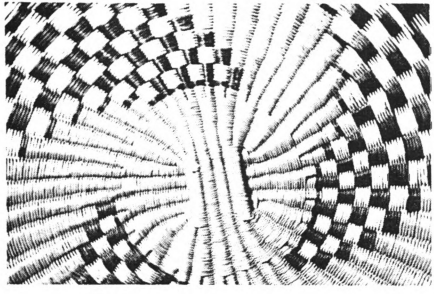


Figure 22: An example of wicker work showing thin, tight weave of the 1930s and after. This is a checkerboard whirlwind design (Arizona State Museum).

one "arm" that is a solid color in the center, with black and white checked edges. The rim is black and white checked. The check pattern is also used on the butterfly plaque. It is used to decorate the rim of the plaque and the edges of the butterfly's wings and body. Green, orange, and yellow are used in alternating strips, with a solid green strip for the wing decoration. The butterfly rests on a colored background. On the whirlwind plaque, the three "arms" are black and white checked surrounding an open center. This design is repeated on the border. The banded plaques have checkered bands that alternate with solid colors to form a multicolor design.

1950s to 1970s:

1. Four wicker--two spirals or whirlwind, one banded, and one unidentified design. Two of the plaques use red, four use black, three use yellow, one uses green, three use blue, and three include white. One of the whirlwind or lightning designs has four black and white checkered "arms," center circle, and border on the rim. It also has two red and blue spirals. The second whirlwind design has a solid center with two "arms" bordered in black. The rim is decorated in a yellow and black checkered border. The banded design contains six bands that are solid colors alternating with checked bands. The rim is bordered in a check pattern. A red center with black and white checked border begins the unidentified design. Yellow and black complete the design, and a border of black and yellow check finishes the rim. All of these plaques have a very involved design with more than one element; all are multicolored. The

weave is very tight and ridged, done with very narrow weft splints. The over-all appearance is well controlled, sparse, and technically perfect (see Tables 21 through 24).

Table 21: Number of colors used on coil plaques (Hopi coil plaques, Arizona State Museum).

No. of Colors	Collection Year and Number of Baskets			
	1880-1890s	1900-1910s	1920s	1930s
1	1	1	0	0
2	2	7	0	0
3	0	7	1	3
4	0	1	0	1
5	0	0	1	0

N = 25

Note: Table 21 indicates that more colors were used on baskets during later years. For example, in the period from 1880 through the 1890s, one basket has only one color and two baskets have a two-color design, whereas in the 1930s, three baskets have three colors and one has four colors in the decorative design.

Table 22: Number of baskets using a specific color in the decorative design (Hopi coil plaques, Arizona State Museum).

Colors	Collection Year and Number of Baskets			
	1800-1890s	1900-1910s	1920s	1930s
Red	0	6	1	3
Black	2	7	3	3
Blue	2	1	0	0
Green	0	2	1	0
Yellow	0	9	2	3
Brown	1	13	3	2
Tan	0	2	0	0
White	0	0	1	0

N = 25 (more than one color is used on many baskets).

Note: Table 22 indicates how many baskets in a collection period use a specific color in the decorative design. Looking at the 1800-1890s period, two have black and blue in the designs, and one basket has brown in the decoration, whereas no baskets use red, green, yellow, tan, or white in the design. The rest of the table is read in the same manner.

Table 23: Number of colors used in the decorative designs (Hopi wicker plaques, Arizona State Museum).

No. of Colors	Collection Year and Number of Baskets					
	1800-1890s	1900-1910s	1920s	1930s	1940s	1950-1970s
1	1	2	0	0	0	0
2	0	2	1	0	0	0
3	0	1	3	0	4	0
4	1	0	1	1	0	4
5	0	0	1	0	0	1
7	0	0	1	0	0	0

N = 24

Note: Table 23 gives an indication of the number of colors that are incorporated into the decorative designs on the wicker plaques. Looking at the table, one can see that no baskets in the 1800-1890s collection have three colors, one basket in the 1900-1910s collection has three colors, and three baskets collected in the 1920s have three colors in the decorative design. Continuing across the table, one can see that no baskets in the 1930s collection have three colors, yet four baskets collected in the 1940s have three colors, and again no baskets collected from 1950 through the 1970s make use of three colors. The rest of the chart reads in a similar manner. It can also be seen that baskets have more colors in the decorative design in later years than in earlier years. Baskets in the 1950-1970s period have four and five colors, whereas those of the 1900-1910s period have one, two, and three colors.

Table 24: Number of baskets using a specific color in the decorative designs (Hopi wicker plaques, Arizona State Museum).

Color	Collection Year and Number of Baskets				
	1800-1890s	19000-1910s	1920s	1930-1940s	1950-1970s
Red	1	3	3	0	0
Black	0	2	5	5	4
Blue	1	1	2	2	4
Brown	1	1	2	1	2
Tan	0	1	1	0	0
Yellow	0	0	5	3	3
Orange	0	0	1	2	2
Green	1	1	5	1	4
White	1	0	3	3	2

N = 25 (some plaques have more than one color in the designs).

Heard Museum

The collection at the Heard Museum includes 215 baskets that are dated and 165 that are undated. The dated baskets have dates of collection or acquisition listed; very few have a manufacturing date. These numbers exclude the Fred Harvey Miniature Collection. Only those with photographs and catalog cards available are included in the following observations.

Coil and wicker plaques.

1900s: Four wicker and six coil plaques were examined. The wicker plaques have whirlwind and band designs. The coil plaques have kachina and

deer, spiral, bands, radiating design, and kachinas. Five plaques use red, ten use black, three use yellow, five use green, and one uses orange. The coils have foundation bundles of shredded yucca and hilaria grass. The coils are rather large, and the yucca strips are wide and moderately tight. The wicker warps are sumac, and the weft are rabbitbush. The wicker weft bundles are fat, generating ridges over which the weft is woven. The rims are overlashed with yucca strips.

1910-1920s: Eleven wicker and 12 coil plaques were examined. The wicker plaques have bands, eagles, stepped bands, pentagon, checkerboard, and kachinas. The coil plaques have four-point stepped "star," deer, kachinas, checkerboards, crow mother, kachina headdresses, deer and shalako, figures, shalakos designs. Nine plaques use red, 10 black, 11 yellow, 6 green, 2 orange, 4 white, 11 brown, and 2 purple. The coiled plaque with the crow mother design is done in plant dyes, resulting in various shades of brown. Others incorporate aniline dyes, as well as natural plant and mineral dyes. The coil bundles are shredded yucca and hilaria grass, with yucca strips binding the coils. The coils are fat and loose, and they are soft to the touch. The wicker warp is sumac twigs, and the weft is rabbitbush. Most of the wicker warp are bundles, some with two, three, and four rods.

1930-1940s: Eight wicker and 12 coil were examined. The wicker plaques have kachinas, bands, butterflies, and eagles. The coil plaques have flowers, four-point stepped star, a maiden and clouds, and geometric designs.

Six plaques use red, 14 black, 9 yellow, 3 orange, 3 white, 3 brown, 1 tan, and 1 maroon. The coiled plaques are made from bundles of galleta grass and shredded yucca and hilaria grass sown with yucca strips. The wickerware is sumac and rabbitbush. More colors are being used in the decorative patterns, and the designs are beginning to become more involved. The coils are beginning to get smaller and stiffer, with tighter sewing. The wicker bundles are getting smaller; thus, the plaques are starting to have a flatter look; the ridges are not so prominent. The weave is also getting tighter.

1950-1960s: Thirty-nine wicker and 49 coil plaques were examined. The wicker plaques have the following designs: wedding kilt, Supai kachinas, butterflies, whirlwind and lightning, eagles, clouds and rain, bands, flowers, kachina masks and headdresses, crow mother, butterfly dancer, stepped triangles, Niman kachina mana, Hocha mana, Navajo wedding design, checkerboards, and stars. The coil plaques have the following designs: wedding, star, Ota kachina, eagles, war god, sun face god, mud head, sunflowers, kachina Shalako, crow mother, rain clouds, summer clouds, turtle, corn, butterflies, flowers, Supai, and clouds with rain. Thirty-five plaques use red, 81 black, 58 yellow, 45 green, 25 orange, 30 white, 19 brown, 17 blue, 4 rust, 3 purple, 3 turquoise, 3 gold, 7 cream, 1 tan, and 1 pink. The same materials are used to weave the plaques as in previous years. Decorative beading begins to appear in quantity on the coiled plaques. It is very prevalent on the plaques of the 1960s collection (Figure 23).

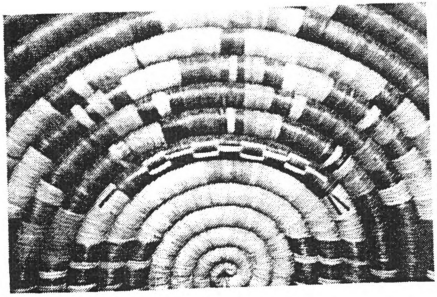


Figure 23: Detail of coil plaque with beading added to the coils as decoration (Arizona State Museum).

The coils are very small and tightly wrapped or sown with thin yucca strips. The plaques are ridged. The designs are very intricate and involved. A high level of technique is employed, making for a highly polished presentation. The coils are no longer soft and pliable.

Similarly, the wickerwork has attained a stiff, tightly woven aspect. Like the coiled plaques, the wickerwork ones have involved designs of many colors. The weft is now woven over a single rod, so the plaques have a flat look, with no ridging or ripples on the surface. The weft is very small and tightly woven. A great many color choices have been made. Most plaques from this period make use of four or five colors on a single piece.

1970s: Eleven wicker and 13 coil plaques were examined. The wicker plaques have the following designs: lightning and raindrops, butterflies, bands, crescents, whirlwinds, wedding kilts, kachinas, and fun face. The coil plaques include the following designs: rainbow and cross and clouds, Kocha mana and snow clouds, Kokopelli mana, corn ears, rain clouds and rainbow, Quogle kachina, crow mother, clouds and cloud houses, and deer. Twelve plaques use red, 20 black, 20 yellow, 19 green, 6 orange, 15 white, 2 brown, 4 blue, 2 rust, 2 purple, and 1 pink. In addition to sumac for wicker warp, willow twigs are also used. Aniline dyes are used extensively to obtain the wide variety of colors on both the wicker and coil plaques. Loops for hanging the plaques appear on the coiled ones during this time. Beading on coil plaques is continued and increased (see Tables 25 and 26).

Table 25: Number of baskets using a specific color–coil and wicker plaques combined (Hopi plaques, Heard Museum).

Color	Collection Year and Number of Baskets				
	1900s	1910-1920s	1930-1940s	1950-1960s	1970s
Red	5	9	6	35	12
Black	10	10	14	81	20
Yellow	3	11	9	58	20
Green	5	6	7	45	19
Brown	0	11	3	19	2
Blue	0	0	0	17	4
Orange	1	2	3	25	6
White	0	4	3	30	15
Purple	0	2	0	3	2
Rust	0	0	0	4	2
Pink	0	0	0	1	1
Turquoise	0	0	0	3	0
Tan	0	0	1	1	0
Gold	0	0	0	3	0
Cream	0	0	0	7	0
Maroon	0	0	1	0	0

N = 165 (some plaques have more than one color in the decoration).

Note: Plaques from earlier years have fewer colors in their designs than do later plaques. Plaques in the 1900s make use of only five colors, whereas those in the 1930-1940s collection have nine colors, those in the 1950-1950s period have 15, and those in the 1970s have an 11-color span. Throughout the years, black is used the most, followed by yellow, green, and red.

Table 26: Number of colors used in decorative designs--coil and wicker plaques combined (Hopi plaques, Heard Museum).

Collection Year	Number of Colors Used in Design
1900	5
1910-1920s	8
1930-1940s	9
1950-1960s	15
1970s	11

Note: The plaques in the early 1900s had a color span of only five colors, whereas those in the 1970s collection make use of 11 colors. The plaques in the 1950-1960s collection include the most colors: 15 colors were noted. Generally, plaques in the 1900-1920s have only two colors, whereas those after the 1940s average four and five colors each.

Coil and wicker baskets.

1900s: Six wicker and two coil baskets were examined. Designs in the wicker baskets include bands, checkerboard, geometric shapes within bands, and geometric designs. The coil baskets have zigzag and band designs. Six baskets use red, five black, three yellow, three green, five brown, and one blue. The coil baskets are made from yucca foundation bundles and yucca strips. The coils are large and soft, and the basket is flexible due to a loose stitch. Both aniline and natural dyes are used on both the wicker and coil baskets. Often sumac is used for the ribs or warp, and the weft is rabbitbush. The warp is thick, making the sides of the basket look as if it has ridges where the weft passes over

the warp. The bottoms of the wicker baskets are "kicked in" or are indented in the center.

1900-1920s: Three wicker and three coil baskets were examined. The wicker baskets have bands, checkerboards, and diamond designs. The coil basket designs include figures and rain clouds. Three baskets use red, six black, two yellow, two brown, two orange, and one gold. Again, both natural and aniline dyes are used for the colors in the designs. Color choices are limited to two or three per basket. The designs are simple and are repeated in a small area of the baskets. Materials are the same as in earlier years. The coil baskets are flexible due to loose stitching, fat bundles, and large strips of yucca. The rabbitbush weft of the wicker baskets is rather coarse and thick.

1930-1940s: Three wicker and four coil baskets were examined. The wicker baskets have band and checkerboard designs. The coil baskets have deer, kachinas, and geometric shapes as designs. Two baskets use red, three black, three yellow, two green, two blue, one rust, two orange, two cream, and one tan. The coiled baskets are made of bundle foundations with bleached and dyed yucca strips. The wicker baskets have a sumac warp and a rabbitbush weft. Both make use of aniline dyes for the colors. The coils and the wicker weft are getting smaller than those in baskets from earlier years. The coiling is tighter and the wicker smoother, making for more ridged baskets. The designs are getting more involved and cover a larger portion of the baskets. Use of more colors per basket is also the trend.

1950-1960s: Two wicker and ten coil baskets were examined. The wicker baskets have spiral designs, as well as bands of eagles. Designs on the coil baskets include crow mother and deer, crow mother, Heheya kachina and rain clouds, geometric designs, Heheya kachina, deer, war god and corn, and long-hair kachinas and rain clouds. Most designs are repeated around the basket and take up a large area rather than being confined to a small band. Twelve baskets use red, 20 black, 13 yellow, 12 green, 1 brown, 1 blue, 7 white, 5 rust, 1 orange, and 2 cream. The coiling is getting tighter due to smaller bundles and thinner yucca strips. The smaller and tighter coiling allows for more intricate and involved designs. It also makes a stiff, rigid basket that has no flexibility. Technically, these baskets appear perfect but have lost their lush fullness. The wicker baskets also have smaller warp and thinner weft that is tightly woven into more involved patterns. With the warp being smaller, more warp can be inserted, thus allowing more leeway for intricate patterns.

1970s: Two wicker and seven coil baskets were examined. Designs on the wicker baskets include bands and checkerboard. The coil baskets have the following designs: crow mother and cow kachina with clouds, deer and clouds, four-point flower, geometric designs, and the American flag. Five baskets use red, eight black, eight yellow, four green, two blue, six white, and one rust. Beading is prevalent on the coil baskets. There is not much change in the techniques of tight weaving and involved designs, or in the smaller, thinner aspect of the materials (see Tables 27 and 28).

Table 27: Number of baskets using a specific color in the decorative designs --coil and wicker baskets combined (Hopi baskets, Heard Museum).

Color	Collection Date and Number of Baskets				
	1900s	1910-1920s	1930-1940s	1950-1960s	1970s
Red	6	3	2	12	5
Black	5	6	3	20	8
Yellow	2	2	3	13	8
Green	3	0	2	12	4
Brown	5	2	0	1	0
Blue	1	0	2	1	2
Orange	0	2	2	1	0
White	0	0	0	7	7
Rust	0	0	1	5	1
Gold	0	1	0	0	0
Cream	0	0	2	2	0
Tan	0	0	1	0	0

N = 50

Note: No colors were given on the catalog card for three baskets collected in the 1930-1940s period, nor could they be discerned from the black and white photographs available. The baskets themselves were not available for direct observation. Table 27 indicates that the colors used on the earlier baskets number only six, whereas ten are employed on the baskets in the 1950-1960s collection. Baskets of later years are more colorful.

Table 28: Number of colors used on baskets--coil and wicker baskets combined (Hopi baskets, Heard Museum).

Collection Year	Number of Colors Used in Design
1900s	6
1910-1920s	6
1930-1940s	9
1950-1960s	10
1970s	7

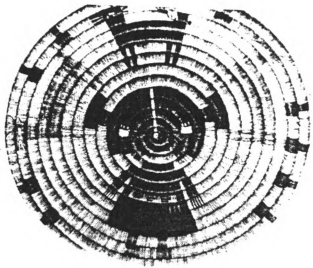
Design and Manufacture Comparisons

Comparisons were made of the eagle, flower, and kachina motifs on plaques that represent a span of time to ascertain whether the designs and techniques changed over the years. The observations are discussed in the following paragraphs.

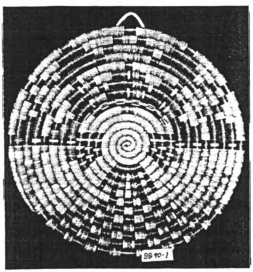
Plaques with eagle motif (1920-1968). The eagle warrior is the protector of the clans and is related to the sun (Heard Museum notes). The motifs become more intricate in later years. The 1927 plaque is very plain, whereas the 1968 one is highly decorative. The 1920s eagles face right; all others face left. The two older plaques have the eagle's feet on the outside of the tail feathers, and the newer plaques have the feet inside the tail feathers. In the older plaques, the tail feathers are separated, whereas in the newer ones the tail is all one shape. As the baskets become more modern, the coils get smaller and tighter.

Plaques with kachina motif (1911-1970). The 1911, 1920, and 1930 plaques have fat coils; they are twice as fat as the later plaques. The early work uses natural browns and black colors primarily, whereas the later ones employ four colors or more. The early kachina figures have more of a design quality. The bodies are often a checkerboard design and the faces abstract designs, whereas the later kachinas' bodies are more solid and the figures simplistic. Details such as hair whorls and long, thin fingers and feet are included in the earlier ones but are missing in the later ones. The 1970 plaque was the only one with a rim border. Added surface decoration of beading started to appear mid-century and becomes more elaborate. Separate but attached "earrings" are found on the later plaques (Figures 24 through 26).

Plaques with flower motif (1900-1970). The 1900 plaques have coils twice the size of the 1960 and 1970 plaques. All of the plaques before 1940 have an open area for the center of the flowers, with "petals" radiating out from a negative circle. After 1940 the centers are open, with a solid border, or they have a border around a solid color. The 1900 plaque has a stepped design that resembles petals, whereas on the plaques made after 1940 specific petal shapes are used. Also, the plaques made after 1940 have checked or solid borders surrounding each petal, whereas on the early 1900s plaques the checked borders are the petals. Sharp contrasts in color appear in the later baskets compared to a blending or softness of color in earlier ones.

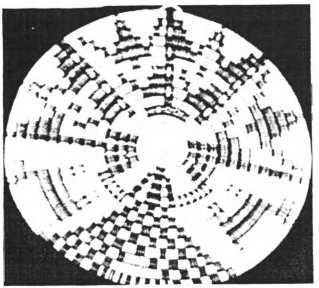


1900 (Heard Museum)

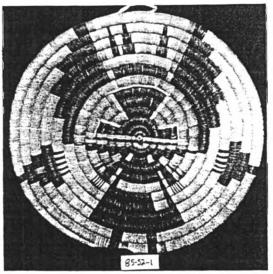


1900 (Arizona State Museum)

Figure 24: Examples of 1900 kachina designs. The photographs in Figures 24 through 26 show how the Kachina design on coiled plaques changed over the years. The earlier designs are abstracted, with the bodies and headdresses a pattern rather than a figure. The later designs have more figurative qualities to the kachinas and are simplistic in treatment.

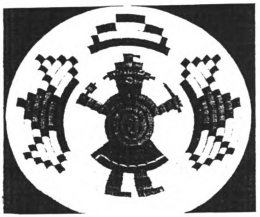


1911 (Heard Museum)



1925 (Arizona State Museum)

Figure 25: Examples of 1911 and 1925 kachina designs.



1968 (Heard Museum)

1969 (Heard Museum)

1970 (Heard Museum)

Figure 26: Examples of 1968, 1969, and 1970 kachina designs.

Baskets (1900-1960). As with the plaques, the baskets made from 1940 to 1960 are very ornate, with complicated designs. The ones woven before then are simple in design decoration. They usually have only one simple figure of a kachina or a deer or an antelope repeated around the basket in a band in the center. Later baskets have several figures in a repeat pattern, and the figures have a great deal of detailing. In addition to the central figures, the rims are decorated with multicolor bands, bands of clouds, or geometric designs. Beading is also added to the later baskets. As with the plaques, the coils on the older baskets are fat, large, and loosely woven, whereas the newer baskets have very small, tight coils with thin yucca strips. The earlier coil baskets are flexible; later ones are stiff.

Summary. Wicker plaques and baskets are of a coarser weave, with thicker warp and weft elements, before 1930; the later ones have thinner warp and weft and are of a tighter weave. Designs on wicker plaques before 1930 are simple and have few colors, whereas the later ones use many colors and more attention is given to decorating the rims (Figures 27a and 27b). Coil plaques and baskets made before 1930 are very soft, with large, fat coils that are pliable. The coil work done after 1930 begins to get stiff, with thinner coils and yucca strips (Figures 28a and 28b). In the most recent work, the coils are very thin and taut. The technique in later coil work is perfected to a rigid, harsh degree. The designs on the later plaques are very involved, with rim treatment, added detailing, and multicolor work. The earlier plaques have a more simplistic design

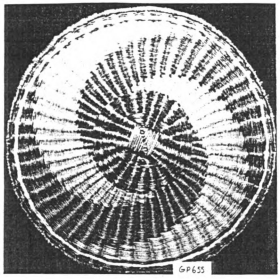


Figure 27a: A wicker plaque having a "whirlwind" design. The warp is made from sumac twigs, and the weft is rabbitbush. It is a one-color design and is an example of simple pre-1930 designs. Col. 1926 (Arizona State Museum).

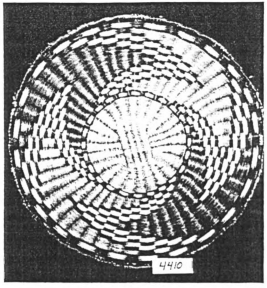


Figure 27b: A "whirlwind" design using five colors. This is a post-1930 example of the designs becoming complicated in later years. Ca. 1959 (Arizona State Museum).

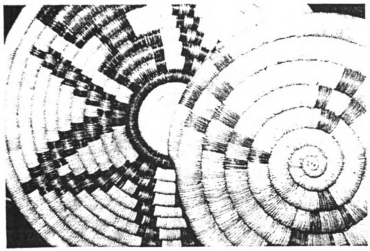


Figure 28a: Hopi coil plaques with varying thicknesses of coils. The plaque on the left is dated 1960, and the one on the right is Ca. 1920. The earlier plaques have coils twice as thick as those of newer plaques. Also, the yucca strips on the newer plaques are thinner and tighter (Arizona State Museum).

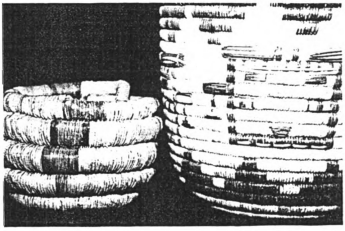


Figure 28b: Hopi coil baskets with varying thicknesses of coils. The bowl on the left is Ca. 1900s, and the basket on the right is Ca. 1960. As with the plaques, the older baskets have looser and thicker coils, whereas the newer baskets have tighter and thinner coils and yucca strips. The design on the older basket is simpler (Arizona State Museum).

treatment of fewer colors. On earlier plaques, figures such as the kachina and animals are abstract designs; on later plaques, the figures are much simpler. This is just the opposite with the floral motif. The earlier flower motifs are very abstracted, and the later ones are simple petal shapes.

HISTORICAL OVERVIEW AND THE EFFECT OF HISTORY ON BASKETRY

Chippewa/Ojibwa

By the mid-1800s, the Ojibwa had experienced a great deal of contact with Europeans. The French missionaries and fur trappers brought about some changes in the economic system of the Native Americans but did not destroy the basic culture and lifestyle--a lifestyle of hunting, fishing, and gathering that required large territories and included clan or tribal resource rights. The French traders basically fostered the skills and activities the Ojibwa already used. The traders were middlemen, selling and trading the furs that the Ojibwa gathered. The missionaries did try to change the belief system of the Ojibwa, but even though many Native Americans adapted the tenets of Christianity, they maintained a strong sense of their own religion and ceremonial practices. The Midewiwin society remained active despite the efforts of the Jesuits. Many Frenchmen married into families and settled with the Ojibwa, accepting their lifestyle and values.

The British and the Americans have had the greatest effect on the Ojibwa culture. Due to the alliance between the French and the Native Americans, the Ojibwa fought with the French against the British. After being defeated by the British, the Ojibwa were considered enemies of the Crown and were treated as

such. Their lands and lifestyles were in jeopardy. Many were used to obtaining European goods and food supplies in exchange for their hunting efforts. The Ojiba's dependence on these goods, as well as guns and ammunition, was a deterrent. The British consolidated many of the French trading posts and required that any trades be made at the few points of trade. Many of these were long distances from where the Ojibwa lived and hunted. Thus, they endured the hardship of a long transport to exchange their goods. The British also reduced the amount of guns and ammunition the Ojibwa received because they were considered the enemy. This reduction of the equipment and power to hunt greatly affected the number of furs that could be traded for necessary supplies. Expanding colonization and settlements were a major interest of the British. Land that traditionally had belonged to the Ojibwa was being taken over by European settlers whose interests were farming, lumber, and mining.

The Treaty of La Pointe in 1842 opened the land to copper and iron mining. This was just one of many treaties designed to acquire Ojibwa land. In addition to land redistribution, other factors have changed the culture and lifestyle of the Ojibwa. Some of these are a shift from a gathering, hunting, and fishing economy to one of farming and then to a wage-earning economy. The introduction of liquor greatly affected the Ojibwa lifestyle. The move from rural areas to urban settings changed not only employment habits but economic status as well. The influx of non-Native Americans into Ojibwa areas as settlers and tourists gave rise to new outlets for earnings. Governmental programs affected

the arts and crafts as well as other aspects of the Ojibwa culture. World War II provided new opportunities for the Ojibwa and changed their views of many things.

With much of their land being usurped, the Ojibwa had less territory in which to augment their yearly cycle of hunting, fishing, and gathering. Euro-Americans were rapidly moving into the area to farm and establish towns and villages. The Ojibwa began to rely on more agricultural endeavors as their land area shrunk. They also began to fish on a commercial basis, selling their catch to the settlers. When the mining and lumber industries offered employment, many Ojibwa were lured by the wages. This did not last, however, as the industry quickly stripped the resources and collapsed. The Ojibwa, having given up gathering and hunting lands and their fishing economy, were at a loss economically. Resorting to commercial fishing often was not feasible, as by then many commercial fishing industries had taken over the waterways and established a monopoly on the retail market.

The land and fishing areas that were retained by the Ojibwa were small and could not support the population. The introduction of liquor by the French brought about a dependence on alcohol. The Ojibwa's initiative to find viable employment, if any was available, was greatly reduced by the effects of alcohol. The availability of employment for the Ojibwa was very limited due to the whites' racism and prejudice.

From the 1930s to the present, due to lack of employment opportunities in rural areas and near reservations, many Ojibwa migrated to urban settings in hopes of gaining employment. Many lacked the skills and education to find high-paying jobs. They were often hired at hourly pay and at the lowest wages. Often they were the first to be laid off as they were the last to be hired. Lacking the opportunity to find suitable employment caused the Native Americans to have one of the lowest standards of living; poverty became a way of life.

As with other Native Americans, the Ojibwa were subject to many governmental programs. The 1900s were years of many policy changes in regard to the Native American culture. In the early part of the century, a curiosity about Native American culture generated many studies, museum collections, and interest in "what was best" for the Native Americans. By mid-century, assimilation was the main theme; schools were established, programs offered, and laws regulating Native American practices were made, all of which were aimed at destroying the Native American culture. In the 1960s through the 1980s, a revival of interest in Native American traditions and traditional lifestyles generated governmental programs to salvage many of the traditional skills and arts and crafts. In the early part of the century, schools were established near the reservations, and the Ojibwa were forced to send their children. As with all other government-sponsored schools of the times, traditional culture was suppressed, and children did not learn the skills or ideology of their culture.

During World War II, many Ojibwa joined the armed forces and experienced non-Native American culture on an extensive basis. The returning soldiers had lifestyle expectations that were not met on the reservations. Educational and employment opportunities for Native American soldiers were less than those for Euro-Americans. Many did take advantage of educational programs, but after their schooling, fewer jobs were available for Ojibwa than for non-Native Americans. But the war experience did broaden the general outlook for those Ojibwa who participated.

The postwar years brought much prosperity to the Great Lakes area. In 1958, the Mackinaw Bridge was completed. Now the two peninsulas of Michigan were linked by a road. The increase in tourism brought many new enterprises, among them numerous gift shops. Tourism had always been a sizable industry, but the prosperous postwar economy allowed extensive travel, new road construction, and an overhaul of the state park system. Michigan's automobile industry was booming, employment was up, and factories were hiring workers. The 1950s was a materialistic decade in which families were taking to the roads and cities.

The materialism of the 1950s gave way to a new, critical look at the attitudes and practices of society. The baby-boom generation was beginning to look at values and the effects of various practices on the environment, as well as government policies, and was calling for a change. There was a renewed interest in Native American cultures. Social-conscience groups descried 2the

outrageous conditions of the Ojibwa in the Great Lakes area. Social programs were developed during the 1970s to help with education, training, employment, and developing Ojibwa industry. Courts were confronted with numerous cases dealing with disputes over land and fishing rights. An effort was being made to preserve the traditional culture and to teach young people many of the arts as well as their heritage. A greater awareness of their heritage spawned more participation in tribal councils and agencies. Museums, cultural centers, schools, and governmental programs are helping bring an awareness of Ojibwa and other Native American cultures to the attention of the general public.

The Effects of History on Chippewa/ Ojibwa Basket Making

Before their contact with Europeans, the Ojibwa were self-sufficient. Their economy was based on a cycle that included hunting, fishing, and gathering. These activities required a range of space in which to achieve success. Using natural materials, the Ojibwa made baskets to hold the produce they gathered, especially the wild rice harvested in the fall, dried fish, and berries. Cooking utensils were also woven or made from bark. With the coming of French traders, the availability and importance of European goods increased in the Ojibwa society as in other Indian cultures. Bone and shell tools gave way to steel and metal items, woven cooking pots were replaced by iron ones, and eventually plastic storage bins replaced woven storage baskets.

With the break-up of family territories came the disintegration of the social order governing the food-quest cycle. Land was no longer the exclusive property of the Ojibwa, and resources on that land were being exploited by Euro-American industries. As with other areas in the United States, land that formerly had supplied raw materials for baskets was no longer available. Men who had usually gone out to hunt and fish to supply the family with food to supplement the produce gathered by the women were now employed in the lumber, fishing, and mining industries. They were earning wages so that they could purchase goods. Women found it more economical to buy containers than to make them. Yet when the resources were depleted, the Ojibwa were laid off and had a difficult time providing for their families. To supplement the family income, many women made baskets to sell to trading posts and tourists and collectors.

When settlers pushed into the area and started to farm extensively, this curtailed Ojibwa movement. Eventually, many Ojibwa engaged in farming. As non-Native American villages became more populated and increased in number, the Ojibwa's contact with the settlers increased. Market baskets became very popular in the late 1800s. Because the Ojibwa did not traditionally "go to the market," they did not need baskets of this nature. But as the farming economy increased and produce was taken for sale and goods purchased at trading centers or "markets," the use of the baskets increased. Utility baskets made by the Chippewa were traded for goods, either at trading centers or with neighbors.

With the move from rural areas to urban settings and to a wage-earner economy, almost all traditions were relinquished and the Ojibwa were becoming assimilated. Those who did not move to the urban areas also were trying to assimilate into the local economic systems and cultures. A great deal of pressure was placed on them to "become an American" by the Euro-American society that surrounded them. There was no longer any need to make baskets, so many of the traditional basket-making skills began to die out when the basket makers died.

Governmental programs were begun to educate the Native Americans and train them for employment. This training did not include basket-making skills until the late 1960s and 1970s. In the 1930s, the interest in rejuvenating Native American arts and crafts as part of the New Indian Deal act prompted museums' interest in the arts. Many museums sent collectors out to purchase items for their collections. Baskets were a popular item to collect. "The Smithsonian Institution would bring large trucks into our village to collect baskets that the villagers made. Before just a few women made baskets for trade or use, but with the interest in adding to the family's income, many residents learned to make baskets just so they could get the few pennies paid for a basket. Children, old people, women and young girls were all making baskets" (Bussi, 1988, p. 10). It was not until the late 1970s that government-sponsored programs to reeducate the Ojibwa in their traditional skills and crafts were developed. The Council for the Humanities and the Folk Art division of the Smithsonian Institution sponsored

weavers to teach young people their craft. In the 1980s, groups of weavers were sent to Russia to exhibit their baskets and demonstrate how they employed their skills. This current interest in basketry has influenced weavers to experiment with their skills and materials to bring the craft to a new art form. The pieces they make do not serve a utilitarian function, but are a work of art.

The prosperity of the postwar years brought many tourists to the Chippewa areas. These tourists wanted to buy mementos of their trips; hence, baskets were sold as souvenirs. As early as the 1920s, tourists were visiting the areas, but it was not until the mid-1950s that the tourist industry really brought the need for many trading posts and "Indian stores." The new highway system made it easier to get to previously inaccessible places, and tourist shops increased. Eventually, tourists became unwilling to spend large amounts of money on handcrafted baskets and other items when they could buy less expensive foreign-produced trinkets. "Although these art objects now sell for higher prices, the volume of sales has been lost to the 'rubber tomahawk/totem pole industry' of Hong Kong and Japan. The lack of import controls on these items indicates that even the prerogative to commercially exploit the Native American craftsmen can be and has been exported" (Cleland, p. xiv). Yet a few weavers continue to produce high-quality baskets. Private collectors and specialty art shops usually are their customers. The increase in upscale developments along the Great Lakes in Michigan has brought a population who have the money to spend on quality art work. Some of these people seek out

quality baskets and purchase them, thus generating a small market for the time-consuming basket-making industry. In these affluent tourist towns, many galleries are now beginning to carry Native American crafts, including baskets.

Tlinget

The traditional lifestyle of the Tlingets was based on an annual cycle of spring hunting, summer salmon fishing and curing, fall harvesting, and winter potlatching. This cycle required freedom of movement over a wide area that was an established family and tribal territory. The intrusion of Euro-Americans destroyed this cycle and changed how the Tlingets lived. The Hudson Bay Company's acquiring trading rights, the United States's purchase of Alaska, the canning industry, the mining craze, land disbursement, and governmental programs all worked together to eradicate traditional Tlinget culture.

In 1839, trading rights were acquired by the Hudson Bay Company from the Russian-American Company. These rights allowed the Hudson Bay Company to serve as a middleman in trading European goods for Native American goods and supplies. A massive influx of European goods was available to the Tlingets. Dishes, blankets, cloth, dyed feathers, glass beads, weapons, and tools were some of the sought-after materials. By mid-century these European goods were essential to the Tlinget culture.

When the United States purchased Alaska from Russia in 1867, the Tlingets were enraged because they thought that the land belonged to them and that Russia had no right to sell it. If the Americans wanted to buy the land, they

should have paid the Tlingets, if it had been for sale. With the purchase of the land, traditional fishing and hunting rights were ignored, and American canning companies soon set up business. They used large traps at the mouths of the rivers, causing an eventual depletion of the salmon. The Tlingets were not allowed to fish those rivers. The canning companies hired Native Americans at a much lower wage than they paid non-Native Americans.

Along with the fishing industry came the mining industry. Large portions of Tlinget lands were taken over by mining companies when the discovery of gold was made known and other minerals were found in abundance. Actual Tlinget villages such as Juneau were "off limits" to the Tlingets once the miners took over. The United States military was employed to remove the Native Americans from their villages.

This was the era of Navy rule. From 1879 to 1884, the U.S. Navy engaged in the removal of Tlingets from their land as miners, canning companies, and squatters claimed the land for themselves. It was the Navy that began the process that altered Tlinget codes of land ownership and usage. Until this time, each clan had had exclusive territorial rights over land use and resources of a specific area. In 1881, a formal treaty was signed at the instigation of Commander Henry Glass. This treaty stipulated that the Stikine Tlinget at Wrangell and the Hutsnuwu Tlinget at Hoonah agreed that each clan was free to travel, hunt, or fish in the territories held by the other clan. Another Navy intervention transpired when an officer reported that the Tlingets had been

paid for their land by settlers and miners. The legality of this practice was questioned because the immigrants could not obtain land until Congress settled the land question. The report by the officer was intended to ease the conscience of the Secretary of the Navy, Richard Thompson, as it was not established that immigrants could take over Tlinget land. The Navy aided the settlers in this action, however.

As more and more settlers came into the area, the Tlingets lost their claim to vast areas of resources. The United States government also was at fault in taking quantities of land. Two major national parks--Tongass National Forest, which was established in the early 1900s from land that had not been "claimed," and the Glacier Bay National Monument, which was established in 1925--covered a total area of 18 million acres. The Organic Act of 1884 stated that the Native Americans could not be disturbed in the land that they occupied and used, but it did not give the Tlingets any legal means of defending their rights or of gaining title to their land. They were not citizens yet; thus they were denied any legal recourse.

Another governmental program involved the education of Native Americans. Schools were established for the Tlingets that were separate from the American schools. In these governmental schools, the Tlinget culture was dismissed; all classes were held in English, and no "foreign" languages were tolerated. Tribal customs and traditions were censored; skills and the arts were not taught. The children were to be assimilated into the "American way." That

"American way" included discrimination, prejudice, and racism toward the Native Americans. The schools were examples of this attitude.

Other American rulings outlawed basic religious and traditional ceremonies. The potlatch was banned, and to conduct or attend one was to break the law. Maturity rituals were subject to scorn, and death rituals were replaced by "acceptable" American funerals.

Enculturation and assimilation were the terms used to eradicate the last of the Tlinget ways--those ways that land decimation and resource depletion did not eliminate. By the 1970s, the Tlingets were attempting to revitalize their culture and traditions. Throughout the 1900s, the Alaska Native Brotherhood worked for the rights of the Native Americans through legal actions, through cultural programs and educational demands, and by conserving and renewing the pride and unity of the Tlingets.

The Effects of History on Tlinget Basket Making

Before the Russians and the Americans intervened in Tlinget life, the Native Americans had a self-sufficient lifestyle. They hunted, fished, gathered, and made all that they needed to exist. Trading between Northwest Coast Native American societies was carried on extensively, materials and goods from one area traveling to distant coastal and interior regions. Baskets were often traded for southern shells, for woven items or caribou skins used for clothing, for sinew with which they sewed, and/or for lichen with which to dye their dancing blankets.

The Sitka and Huna were famed for their excellent baskets, which were in demand as trading goods (Krause, 1956, p. 127).

This trading of baskets for goods did not stop with the Hudson Bay Company enterprise. The introduction of European goods caused a demand for items not manufactured by the Tlingets. Dishes, woven blankets, iron and metal tools, and metal cooking pots were all sought after by the Tlingets. Although this reduced the demand for woven cooking pots, it increased the demand for baskets for trade. Weavers began to increase their production of baskets to trade, and they reduced their efforts in making household baskets. The introduction of steel and metal knives made the labor of preparing basket materials much easier. Before the introduction of steel knives, shells were used for scraping, and bone or stone knives were used to cut or split the materials. A finer fiber could be cut from the cedar bark; peeling the rough backside of the bark was accomplished more quickly than with bone knives. "The knife of steel vastly improved their art" (Mason, 1988, p. 218).

The Hudson Bay Company brought Europeans and Americans into the area. Many of these people were collectors for various trading posts and trading companies, museums, and private collections. They purchased baskets in quantity. Another element of change besides quantity in basket making was the change in designs. "Even though these woven pieces are very pretty, nevertheless they do not have the variety present in the wood, bone and stone carvings. . . . In order to help out this dearth of design the missionaries and

traders have recently given the natives new patterns for their weaving" (Krause, 1956, p. 145). Not only did the patterns change, but many shapes were made according to specifics of the traders. Although more variety was developed, "much of the original artistic value has been lost" (Krause, 1956, p. 145).

When major canning companies took over the rivers, the Tlingets lost many of their fishing rights and territory. This affected their need for fishing-related baskets. No longer were they gathering large numbers of fish from which to render oil. As a result, the demand for large oil-rendering baskets slackened. Dried fish were no longer needed in such large quantities as a winter staple because the Tlingets were beginning to purchase food staples to supplement their diet with their canning wages. In addition, the rivers from which the fish were taken were now off limits to the Native Americans. The baskets used to store the fish, a previous necessity in every household, were not as important to survival through the winters as they had been in the past. Thus, the baskets were no longer made.

The mining industry limited the Tlingets' movement through their territory. They were not allowed to roam through vast tracts of land gathering berries and other produce. Baskets used in the gathering and storing of the produce were not a primary need. These baskets, like the oil-rendering and dried-fish-storage baskets, ceased to be important to the overall subsistence of the Tlingets; thus, fewer of them were manufactured. Being deprived of their land also caused problems for the Tlingets in obtaining raw materials for the baskets. The Native

Americans could no longer roam vast territories to gather cedar bark, spruce roots, and other materials required to make baskets. Without ample supplies of materials, baskets could not be made in quantity.

Another deterrent to continued basket making was the government-sponsored schools. Traditionally, young girls learned basket-making skills at home as part of their education in being part of the household. When they were sent to school, they did not learn the traditional skills and crafts, but were taught American values and "book learning." Many of the schools were discouraged from including any traditional culture in their curriculum. This suppression of culture made it extremely difficult for young people to learn skills that were usually handed down from their elders. A few were able to keep the art alive, but the number of weavers was drastically reduced as old weavers died and there were no young ones to take their place.

Traditionally, potlatches required the stockpiling of items, baskets among them. Weavers would make many baskets for the event. When potlatches were outlawed by the American government, the need to stockpile baskets also disappeared. "Some younger and more Americanized Tlingets turned away from potlatching altogether" (DeLaguna, p. 224). Thus, the popularity of the ceremony waned, especially with governmental restrictions being enforced. "Underground" potlatches continued and were incorporated into Christian holidays. The Alaska Native Brotherhood has been instrumental in the revival of traditional culture. In the late 1960s, the Tlingets began to hold potlatches once again. Now that

potlatches are again being held, most of the items that are given are purchased rather than being hand crafted. Therefore, the baskets of the old potlatch traditions are not being made.

Hopi

Many events changed the lifestyle of the Hopi throughout modern history and thus affected their basket making. The main events were the infiltration of outsiders, drought and disease, completion of the railroads, Navajo encroachment and raids, decreases in land holdings, mandatory state education, turning to a cash economy, and paved roads intruding into Hopi areas. Any one of these events would alter a way of life, but all of them, combined, resulted in drastic changes in the Hopi's subsistence, economy, social and political organization, and religious observances.

Before the mid-1880s, the Hopi were basically isolated from intrusion by non-Native Americans. After the Pueblo Rebellion, their area was not altered or populated by any other than the Hopi. They were able to retain their way of life as they had through the centuries. It was an agricultural and small animal husbandry style that made for small family work units. The land was partialed through a matrilinear system, with an extended family unit working together to provide subsistence. The women were in charge of household needs, food preparation, storage of surplus, and child care. The men took charge of the agriculture and animal husbandry, as well as ceremonial needs. Both genders wove baskets. The women made household baskets and wedding plaques. The

men made large agricultural burden baskets and baskets used in their ceremonies. Basket making was an extension of their work and lifestyle.

The Hopi encountered few non-Native Americans during this time of isolation. They might have met a few stragglers trying to get to the West Coast or a few missionaries, but not any numbers that would affect how they lived. Their main intruders were the Navajo, who continually raided the herds and communities. The Navajo were slowly encroaching on the Hopi land and taking it as their own, thus eliminating new areas of growth for Hopi agriculture. As Hopi families increased in size, this became a concern.

From 1849 to the present, the Hopi would see a great deal of change, for with the appointment of John S. Calhoun as an official Indian Agent headquartered in Santa Fe, the Hopi isolation was to end. This was the start of government intervention, government programs, and non-Native American rule.

As the Navajo raids and land encroachment became more blatant and disruptive, and curiosity grew about the new political situation involving the Indian Agent, the Hopi sent a delegation to Santa Fe to petition for military protection against the Navajo. Their request was granted, and a new military post, Fort Defiance, was established in 1851 to protect the region from the marauding Navajo. From this non-Indian establishment, military personnel entered Hopi territory. As this was an outpost for "civilization" day tourists, expeditions to the West Coast and researchers traveled into villages and Hopi lands.

The main result of this first invasion was a smallpox epidemic, which killed hundreds of Hopi in 1853 and 1854. Immediately following the outbreak, there was a severe drought. The people, already in a weakened condition, fell victims to the famine in great numbers. The population of Oraibi fell from 800 to 200 (Dockstader, 1985, p. 524).

A second drought, in 1864, was more extensive and serious than the previous one. In the following two years of famine, groups of Hopi were forced to travel to Santa Fe and other towns to ask for food. One incident established the tone of white-Hopi relationships. A group went to Prescott to ask for food and help. The officials, misunderstanding that this was a peaceful mission, put the group in jail. They were released when the misunderstanding was rectified, but the political damage was done; the Hopi were alienated. A second plague of smallpox erupted after soldiers came into villages. Again, many were lost to the disease.

Other groups of non-Native Americans began to enter Hopi areas. These were the Mormons and the Baptists. They both coveted Hopi land to start their religious communities. The Mormons located at Moenkopi, a western colony of Oraibi, and the Baptists founded a mission at Mishongnovi. A third religious group founded a Moravian mission at Oraibi. From 1870 to 1875, these three religious groups made serious inroads into Hopi areas, the first since the Spanish attempts at missionary work in 1680.

During this time, and Atlantic and Pacific Railroad was started in northern Arizona. Upon its completion in 1881, the railroad was fewer than 70 miles from the major Hopi villages. The impact of the railroad was very diverse but extensive. First, it allowed easy access to Hopi areas that previously had been hard to reach. Scholars, teachers, tourists, settlers, military personnel, and traders flocked to the area. They brought their European and American ideas, values, and standards with them. Although some respected the Hopi lifestyle, the majority were negative; "white supremacy" began to reign.

The non-Native Americans imported the goods and materials they needed to survive in their traditional way. These goods often were traded to the Hopi. Metal tools and cooking utensils were far more easily obtained and serviceable than the bone tools and cooking baskets they had to make. The shift from making subsistence needs to purchasing them shifted the economy from a self-contained, self-reliant one to a cash economy. The need for cash brought the need for ways to earn it. The Hopi turned from domestic employment to other areas for jobs. This did not happen in a short period, but over time, as a result of adapting outside material goods to their culture. The railroads facilitated transporting the goods into Hopi territory.

From the late 1880s through the early 1900s, a split in Hopi unity developed as a result of the intrusion of Americans. One faction, the Friendlies, believed the Hopi should tolerate and accept governmental programs and adapt to American ways. In contrast, the Hostiles wanted to keep separate and

maintain the traditional Hopi lifestyles. This split caused a division in power and loyalties and weakened the social and political organization as well as disrupting their religious life. A major area of contention was the building of governmental schools on Hopi land and forcing families to send their children to these schools for a "good" education. By doing so, Hopi family and economic life was disrupted. Children were no longer in the care of families, learning traditional roles and skills; instead, they were being taught ideas and lifestyles foreign to the Hopi.

Most governmental programs discouraged the traditions and culture of the Hopi; many programs were not even bilingual. In addition to not teaching survival skills needed by the Hopi, the schools did not teach any other trades or skills with which the Hopi could earn a living. Many of the schools were boarding schools, so the children were not even allowed to live with their families. Many families objected and refused to send their children to the government schools; even day schools were shunned. Those of the Friendly faction argued that, without the knowledge and education of the white world, the Hopi would not survive. The Hostiles thought that the traditional way of life and home education would keep the Hopi alive.

This split in ideology reached a climax in 1906, when a violent confrontation between the two factions, the Hostiles and the Friendlies, resulted in the Hostile members packing their belongings and moving to the Third Mesa. There they established a new village, Hotevilla. A new school, the Shongopavi

Day School, was built in 1910; once again, parents refused to let their children attend. The American government had the military intervene and apply force to get the children into school. This action by the government only helped aggravate the Hopis' hostile feelings toward it. Even in 1970, militant feelings toward whites were more pronounced in Hotevilla than in other Hopi villages (Dockstader, 1985, p. 530).

By the late 1920s and early 1930s, most of the Hopi were earning their livings in the cash economy, with small animal husbandry and arts and crafts supplementing their earnings. When the Depression occurred in the rest of the United States, it affected the Hopi economy as well. Tourists were not visiting the area of buying craft items. Hopis who had jobs in manufacturing or low-skilled jobs were laid off. Some governmental programs, such as the Indian Emergency Conservation Program, allowed Native Americans to work close to their families while improving conditions on their lands. Work projects such as road paving provided the Native Americans an income, as well as allowing easier access to the Hopi area. After the Depression, these roads were used by tourists to a much greater extent than before. It was during this time that problems of intoxication became prevalent. Until then, this had not been a problem as it was in other Indian communities.

The Indian Reorganization Act of 1934 established means by which Native Americans could govern themselves through chartered councils. This was one of the greatest changes in political organization for the Hopi. Until then,

they did not have a central governing group or force making decisions for all of them. Decisions were arrived at by consensus; everyone had equal status in voting. The chartered council gave the council the right to make decisions about land, economy, and industry. It allowed the council to negotiate with outside industry to use Hopi land and resources for the "gain" of the community. The initial efforts at benefiting the community failed when the B.V.D. factory in Winslow closed. Its history of Hopi worker complaints, not paying rent on donated Hopi land or industrial parks, and the Indians' lack of enthusiasm for relocating off their land to Winslow indicated that this enterprise would not work. The council's second scheme, leasing land to the Peabody Coal Company for mining operations, also caused dissent among the Hopi. The company did not keep its promises to restore the land after strip mining. Also, run-offs from the mining area adversely affected crops, and pumping water from the underground supply that was needed for the mining operation was depleting the scant water resources. In addition, the Hopi had religious objections. The ecological balance was upset, contrary to the religious tenet, "Part of the heart of our Mother Earth [was] granted to the Hopi to hold in trust in a spiritual way for the Great Spirit, Massau. . . . If the land is abused, the sacredness of Hopi life will disappear" (Dockstader, 1985, p. 536).

In the hundred years from 1840 to 1940, the Hopi lifestyle underwent a tremendous change in all institutions. Changes after the 1940s occurred, but not as drastically. The central focus from the 1940s through the 1960s was land use

and control. The Navajo were still encroaching on Hopi land, and governmental programs to ease the dispute did not rectify the problems. The Hopi were still battling both the government and the Navajo.

In the 1960s and 1970s, a new interest in Native American cultures was developing in reaction to the materialistic culture of the postwar years. People were seeking a new lifestyle, a closer reference to the earth, and a new, enlightened spirit. For these things they looked to the traditional lifestyles of the Native Americans. The interest in Indian arts and crafts once again increased. Researchers were undertaking new studies, and Native American problems were receiving more attention in the press. In general, sympathies were with the Native Americans. The trend was to look toward past cultures with a fresh bias.

The Effects of History on Hopi Basket Making

Changes in the Hopi lifestyle affected their basket making. During the isolation period, the Hopi enjoyed an agrarian society with some husbandry. Baskets were made to meet specific household, agricultural, ceremonial, and trading needs. Both men and women wove baskets. The men made agricultural baskets, such as the burden baskets, for transporting goods, and baskets used in ceremonies. The women wove baskets used in food gathering, preparation, storage, and other household tasks, as well as the wedding plaques. In this self-contained society, baskets played a major role in facilitating everyday life.

With the intrusion of outsiders, the Hopi lifestyle began to change. The droughts and epidemics depleted the population to the extent that many of the traditional roles in domestic life and society were disrupted. Many of the divisions of labor were no longer intact. The need for large food-surplus baskets was diminished, as was the need for burden baskets to haul food from the fields to the mesas. With the Navajo raids and their taking of land, the area for crops diminished; again, the need for the large baskets decreased.

When the railroad was completed, it brought not only non-Native Americans into the area, but it also brought manufactured goods. A shift evolved from making baskets for household needs to buying manufactured goods. "Traditional crafts, which required a good deal of time to produce, were greatly affected" (Mauldin, 1984, p. 12). For example, metal cooking pots were very cheap to purchase, whereas cooking baskets took a great deal of time to weave and did not last as long.

The railroads not only facilitated cheap transportation of goods, but they also were a convenient way for tourists and others to travel to the area. Tourists were interested in buying craft items. Collectors and researchers were interested in obtaining artifacts to study. Many museums sent out collectors to buy items to start their now-famous collections. "Fred Harvey Company . . . filled orders from the Field Museum in Chicago, the Carnegie Museum in Pittsburgh and the Museum fur Volkerkunde in Berlin" (Whiteford, 1988, p. 147). Because of the increased demand for baskets, these goods were now being made for non-

Native Americans. The traders influenced the designs and types of baskets that were produced, as dictated by the need to fill orders and attract buyers. The quality of basketry did not diminish. "Hopi workmanship was so consistent that it is nearly impossible to identify baskets . . . made specifically for the market" (Whiteford, 1988, p. 147).

The availability of manufactured goods initiated the use of aniline dye to achieve bright colors. Again, it was easier to use a manufactured dye than to go through the lengthy process of obtaining dye from natural materials. The colors were also stronger and allowed for an extensive palette, which appealed to tourists and collectors. Some researchers have considered the use of aniline dye a detriment to basket quality. Tanner (1983) stated, "Hopi basketry degenerated with the use of aniline dyes in the late 1800s and very early 1900s. It is quite likely that this was true in some areas of basket weaving but not in all" (p. 50).

With the change to a cash economy, many Hopi supplemented their earnings by weaving baskets for trade or sale. No longer was basket weaving part of one's daily needs, but it became an "extra." No longer did every woman weave baskets--just those who wished to earn extra income. Baskets were taken out of the everyday realm and put into an artistic or craft realm by this adjustment in the economy.

The governmental programs to enroll Hopi children in boarding schools and day schools took them away from their traditional roles. At the government

schools, much of the Hopi culture was suppressed, so the children did not have a chance to learn many of the traditional skills, i.e., basket making, as they were educated. Traditionally, they had been able to learn from their families as part of role modeling; not having that role model to follow denied them a chance to learn these skills. It was not until 1932 that a new administration policy allowed the teaching of pueblo arts in the schools. This revival of the arts was part of the policy to help the villages be self-supporting. Although it was uneconomical for a woman to make her own baskets when she could buy cheap containers at the store, it was highly worthwhile for her to make baskets to sell at a high price to supplement the family income (Underhill, 1979, p. 8). Thus, the skills were introduced into the school curriculum.

As more and more people came to settle in the area, land that held the natural resources for basket materials was being put to different uses. The availability of materials diminished, and weavers had to look to other materials from which to make their baskets. "Once-plentiful weaving materials have fallen victim to progress and have been sacrificed in the names of 'phreatophyte eradication, channelization, watershed management' and other programs said to be in the public interest" (Collings, 1987, p. 34). Not only did they have to look at substitute materials, but they also had to travel greater distances for the raw materials. "As more land comes under cultivation or is turned into pasture for cattle, native plants become more difficult to find. There is a limit to how far

basketmakers can travel for collection--even with pickups" (Whiteford, 1988, p. 179).

The renewed interest in Native American cultures in the 1960s and 1970s brought about an interest in basket making. The Museum of Northern Arizona in Flagstaff started an annual Hopi Craftsman Show to encourage Hopi craftsmen to make and exhibit quality work and to help preserve the crafts. Workshops and seminars are held to teach Hopi basket weaving and to encourage young people to learn the skills. Many of the classes are filled with middle-aged or older women "who had never learned to weave baskets or had forgotten how. For these women basket weaving is a creative outlet" (Mauldin, 1984, p. 12).

The renewed interest in basketry as an Indian craft also enabled the weavers to increase the prices for their quality work. On the Second Mesa, the Hopi Craft Guild has its own building to display and sell work by any Hopi artisan. The paved roads in the area make it easier for travelers to get to the Mesa and other craft stores to buy the baskets. Renewed interest has developed in helping Native Americans market and distribute their wares. New publications dealing with Hopi and other Native American arts and crafts are aimed at collectors, both private and institutional. These publications provide an outlet for advertising baskets for sale. As the history of the Hopi changes, so, too, do the events affect the tradition of basket weaving.

BASKETRY

Periods of Change in Basketry

The Native Americans' baskets were an integral part of their lives in traditional culture. Over time, the needs for baskets altered with the transformations of lifestyle and culture. The changes can be broken into "periods" relating to the modification in their culture. The historic or classic period includes baskets that were made in the traditional ways. These baskets were indigenous to the regions and were made before acculturation. Nonnative influence is absent from these baskets. A transitional period is evident from the influences of European and nonnative forms, weaving techniques, and materials as Native Americans became acculturated. There was a hiatus period when basket making declined and adoption of European goods replaced baskets' usage. It was also a time of social and political upheaval when Native Americans were being relocated, placed on reservations, and deprived of their customs. The modern or contemporary period labels the era when the revival in basket making occurred due to baskets becoming a commercial and marketable commodity. This commercial aspect generated a renewed interest in the craft. The increase in non-Native American demand for baskets fueled the incentive for production. It is also during this period that baskets came to be viewed as an

art form. A return to traditional materials and dyes, coupled with experimental techniques and designs, can be noted (Turnbaugh, p. 66).

The Historic/Classical Period

During the historic or classical period, basket making was an extension of daily routine and activity. It was directly related to the food quest, survival, and belief system. The baskets were an integral part of the culture. Making a basket for parching corn was a direct survival task, as was making baskets to gather berries. Without these utensils, the food quest would have been harder to facilitate. Making baskets for ceremonial purposes was considered a task integral to the presentation of rites. Making a basket was just one of many labors that made up the daily and seasonal routines of the Native Americans.

Traditional materials and styles were used that were indigenous to the particular culture. "Each generation of basket makers followed the accepted artistic tradition of its time" (Collings, 1987). In the Southwest, coiled and plaited baskets have been dated to be 9,000 years old, whereas twined baskets of more than 10,000 years old have been recorded (Turnbaugh, p. 68). In the East, basket making appears to have been an ancient craft, with plaiting made 10,000 years ago, twining 8,000 years ago, and coiling at least 3,000 years ago (Adovasio & Andrews, 1984). Baskets of the "Locarno Beach phase of prehistory from 1,000 and 500 B.C. were found in British Columbia. These show a wrapped cross-warp weave using split cedar roots and branches" (Lobb, 1990, p. 5).

There are design and style influences from other Native American tribes due to the extensive trading network that was in place. One can find Navajo wedding designs on Hopi plaques, shades of Aleutian techniques in Tlinget baskets, and Huron similarities in Chippewa work.

The Transitional Period

From the very first contact with Native Americans, colonizers were interested in baskets. Early accounts and descriptions of basketry and basket manufacture were given by explorers. "Baskets quickly became a major trade item" (Porter, 1990, p. 4). In his account of an expedition with George Vancouver in 1792, Menzie indicated that the women he saw were employed in "manufacturing of Garments, Mats & small Baskets & they did not fail to dun us for presents . . . which convinced us that they were not unaccustomed to such Visitants. . . . Had also some curious wrought baskets which were much admired & eagerly purchased as articles of curiosity" (p. 315). This interest in buying baskets as souvenirs did not slacken throughout the settling of North America to the present.

With the invasion of non-Native Americans into Indian areas, the contact brought about many changes in lifestyles and culture. This influence can be noted by the odd shapes of baskets that the Indians believed would appeal to Anglo-American tastes--"compotes with conical bases, sewing boxes with fitted lids, large laundry hampers, basket cups, fishing creels. . . . Baskets were 'enhanced' with fancy rims, handles, lids" (Whiteford, 1988, p. 182) and by the

use of manufactured rather than natural dyes. It was also a time when baskets were being made in quantity, to the specifications of traders and collectors, for sale to museums, institutions, and private collectors (Whiteford, 1988, p. 9). Many of these collections were part of the "studies" being conducted by anthropologists and museums. Lt. Emmons was sent to the northern West Coast to gather items for the Field Museum in Chicago to record information on the baskets and other arts (Field Museum Notes). Ruth Underhill was making her studies of the Southwest Pueblo Dwellers and writing for the Bureau of Indian Affairs.

This was a time of transition not only in basket making, but also in lifestyles. Traditional lands were being taken by non-Native Americans for settling, industry, and recreation. Tourism was becoming an industry, and many wanted a souvenir of their travels; baskets were an easily portable novelty. The era of Easterners traveling West on extensive collecting trips is noted in Hopis, Tewas and the American Road (Walker & Wyckoff, 1983) as the Melville family traveled throughout the Southwest collecting Native American arts and crafts. It was also an era of Anglo artists "discovering" Native Americans and traveling to their areas to capture them on paper and canvas, and in metal and print. These artists and their affluent friends collected baskets as part of their Native American arts collections. The Dorothy Hune Museum in Taos, New Mexico, is the result of one of these collections.

This was also the era of the Arts and Crafts Movement in the United States and Europe, which was a reaction to the increased mass production of goods of poor design and quality. The Arts and Crafts Movement celebrated hand-crafted items of superior design and quality. Objects made in the genre of the movement were made by the traditional methods. Led by William Morris in England, designers began to use hand-printed wallpaper and hand-tooled leather book bindings as major components of interior decor. In the United States, the "Mission style" wooden furniture and tine- or copper-tooled lamps became the "look." Many interior design magazines and decorators took an interest in Indian art as quality pieces to include in their decors. Collectors looked to the Native American rugs, blankets, and baskets as exemplifying beautiful, high-quality, hand-crafted objects that had a tradition.

The increase in availability of manufactured goods made aniline dyes, glass beads, embroidery floss, silk, linen, and wire easily accessible; these items were used in the manufacture and decoration of baskets. The bright colors achieved with the aniline dyes were attractive to tourists and other non-Native American collectors. Words were added to the decoration to indicate the area of manufacture and to attract souvenir buyers (Arizona State Museum Notes). A decrease in availability of natural materials occurred when land was being used by non-Native Americans for industrial and recreational purposes.

The Hiatus Period

The hiatus period (1920s-1940s) was a time of great upheaval in Native American life; many were being displaced and relocated. They were moving from a self-contained economy to a wage-earner economy. They were no longer totally dependent on an agrarian, husbandry, and gathering and hunting economic system. Many became wage earners, many depended on governmental economic programs, many were seasonal hourly workers, and many supplemented their incomes through production and sales of craft or art items. Often families had a combined income of several components.

Many times the work did not relate to household activities. In historic times, it was work and employment to make a basket, but it was related to the maintenance of family and home. Work was a continuous employment in survival, with the tasks directly related. Now, employment is still related to the maintenance and survival of the individual and family, but the tasks are often not directly related to family maintenance. Working as a miner or in the county hospital is not directly related to family maintenance, but it is indirectly related in that the product gained, money, is an intermediary to buy household necessities or food and shelter.

In the hiatus period, baskets were no longer needed to haul produce to market in exchange for necessities, but baskets were exchanged for money, which, in turn, was exchanged for household necessities. Baskets were no

longer used to cook in, but they were exchanged for money to buy the cooking pots.

With the change in economic procurement came a change in the way time was spent. Rather than being able to spend all day working around the household, in nearby fields and ranges, or in preparing for ceremonies, hours were devoted to work away from the homestead and villages. Time was no longer a continuance but was segmented into "at work" and "at home" portions.

This division of time for work and leisure or "after work hours" is not unique to the Native Americans. It is similar to the national shift from an agrarian society in the late 1880s and early 1900s to an industrial economy throughout the United States and the industrial world. Rural farmers and plantation owners were self-sufficient in that they made the majority of household and agricultural implements and tools, to some degree. Workday tasks were integrated into the total effort of survival. When the farmers moved their families to urban settings and found work in commerce, civic employ, and manufacturing industries, their days were segmented into work hours and leisure hours with tasks not directly related to survival (Rosenzweig). During this time, baskets were not being produced in great numbers. "The traditional craft degenerated and died in many regions as native cultures became fragmented and peoples moved onto reservations. The aboriginal Americans needed fewer of their traditional crafts as their lifestyles changed" (Turnbaugh, p. 70). "Basketry, practiced in the

Southwest long before pottery making, is now practically a low art among the pueblos, except the Hopis" (Stirling, p. 569).

Not only did the lifestyles of labor change, but the availability of manufactured goods increased, as well. It was more economical to purchase storage and food-preparation items than to make baskets for household use. "It has been said that 'civilization killed the basket.' When pots, pans, kettles, boxes, and cloth containers became the preferred domestic utensils, the need to spend days, weeks, or months in basketmaking was blunted" (Lobb, 1990, p. 7). The few baskets that were being produced during this period were basically for the tourist market or for abbreviated ceremonial use.

Another factor in the decrease in basket making was the downturn in the market for baskets. A major economic depression in the 1930s was engulfing the United States, and people did not have the money for extended tours into Indian country to make unnecessary purchases. Museums curtailed collecting as they, too, were faced with cutbacks in finances as major contributors became scarce.

Faced with the realization that major traditional crafts were on the verge of becoming extinct, several programs were designed to save and teach crafts. "The National Park Service held Indian field days to encourage the production of basketry and beadwork and to stimulate interest in Indian art on the part of the general public" (Porter, 1990, p. 9). The Museum of Northern Arizona began having exhibits and competitions of Hopi arts and crafts to encourage Hopi

artisans to continue and renew their traditional work. The Indian Arts and Crafts Board was established in 1935 as part of Collier's New Indian Deal to help Native American artisans promote and market their work. In 1931, the Exposition of Indian Tribal Arts was produced to serve as a showcase for Indian work. It was intended to "give the Indian a chance to prove himself to be not a maker of cheap curios and souvenirs but a serious artist worthy of our appreciation and capable of making a cultural contribution that will enrich our modern life" (Sloan & LaFarge, p. 53). Many private citizens and anthropologists and collectors began to help preserve the basket art through offering their services to museums and institutions, and encouraging Native American artisans to teach their skills to the youths in their societies.

The Contemporary/Modern Period

After World War II, a renewed interest in Native American crafts came about with the national movement to return to past and alternative values. Native Americans were beginning to save and relearn traditional skills and practices. Weavers were teaching workshops, giving lessons, and being part of folk art studies sponsored by museums and institutions. The Smithsonian Institution funded a trip to Russia for weavers from Michigan to participate in a folk arts festival. The basketmakers demonstrated their art and exhibited contemporary baskets. The Museum of Northern Arizona sponsors an arts and crafts competition every year to encourage quality crafts and innovative ideas.

Baskets are no longer made for use in the home, but are made in greater quantity to sell to tourists and collectors. Weavers have begun experimenting with traditional designs, shapes, and techniques. They have begun to generate baskets as an art form rather than as a utility item. A return to traditional materials has been noted. The establishment of native guilds has resulted in setting and maintaining high-quality work.

Ojibwa/Chippewa Basketry

Many of the Native Americans who lived in the upper portion of Michigan, Wisconsin, and Canada are Ojibwa or Chippewa. For the remainder of the discussion of their basketry, the term Ojibwa will be used. The Ojibwa lived in a vast area that contained different terrain and resources. The ones who lived in the far northern area did no farming due to the rocky land and short growing seasons. They relied on hunting, fishing, and gathering for subsistence. The northern Ojibwa made great use of the available birch bark for containers and canoes and did not employ woven baskets. Woven baskets took a great deal of time and effort to make, whereas the bark containers were relatively easy and simply to make, and were less time consuming. Therefore, very little, if any, basketry was done by the Ojibwa in northern Canada.

The Ojibwa who lived in the lower peninsula of Michigan and lower Wisconsin hunted, fished, gathered, and farmed. Ojibwa living in the southern areas made baskets and used them for storage of food and household items, as well as in agricultural and gathering enterprises.

Historical Basket Utility

Household uses. The main use of baskets in households was to store items. The baskets were plaited and often were round and had lids. Rectangular-shaped ones with or without handles were used as general utilitarian containers. "Laundry hampers and clothes baskets were generally made from white ash and basswood" (Levi, 1956, p. 259). Elm bark was used for larger, strong baskets that could withstand the elements. Both round and rectangular plaited baskets with stable carved or woven handles were used to carry goods from one area to another.

Coiled sweet grass was used in making small baskets. These baskets were made to hold trinkets and small items. The Ojibwa also used coiled sweet grass for shallow dishes and trays.

Gathering uses. Wild rice was one of the main crops that the Ojibwa gathered. Baskets were used to facilitate this activity. The Ojibwa placed large baskets in the middle of the canoes and paddled out to the rice flats. While the front person paddled and stabilized the canoe, the second person gathered the stalks of rice with hooks and harvested the grain into the baskets. Immediately after gathering, the rice was parched to prevent spoilage. The grain was then stomped in large pits to separate it from the chaff; large, flat sifters were used to winnow the grains. The grains were tossed into the air, and the wind sifted the chaff from the gains. Rice was stored in several types of containers, including plaited baskets.

Small baskets were used to gather berries, which were cooked and dried for winter supplies. These baskets often were made from thin plaited strips of ash or willow. Nuts also were gathered and stored in small baskets for later use.

Agricultural uses. The southern Ojibwa grew a variety of crops. Corn, of course, was the main crop, but squash and pumpkins also were cultivated. Potatoes were introduced by the Anglo-Americans, and the Ojibwa grew these also. Small seed "bags" or pouches were woven from basswood strips and carried by a strap over the shoulder, keeping hands free to broadcast the seeds. Large plaited baskets were used to harvest the crops and store the dried slices of pumpkin, squash, and potatoes. Some Ojibwa planted corn seeds in the spring on their way to fishing grounds. They made baskets of the tall grasses that grew near the shores of the rivers and lakes to harvest the corn on their way back to the winter lodging (Church).

Economic uses. Historically, baskets aided in the food-quest and storage tasks. White birch bark containers were also used. Baskets had their place in the daily lifestyle of the Ojibwa. The baskets were light weight for easy transport, an important feature of the household items of nomadic Ojibwa. The making of baskets was an extension of daily tasks and was a part of the overall economy of the Ojibwa.

Social utility. When baskets were used to facilitate daily tasks, they represented a group effort. Not only were many of the tasks done by groups, such as gathering, parching, and winnowing rice, but the preparation of basket

materials was also a group task. Gathering sweet grass, stripping bark, and carving handles were all group activities. "Sometimes a whole family may devote a day or two to gathering [sweet grass]" (Lyford, 1982, p. 63). When the baskets were being woven, several weavers would gather to work on their baskets. Young girls learned to make baskets from their elders as part of the family group.

Baskets also indicated the division of labor. Women did the actual weaving of baskets, but men helped gather materials and carve the wooden handles used on utility baskets. Because baskets were woven by women, young girls in learning to make baskets were enculturated into their roles within their society. The same is true of young boys; they learned their roles by imitating their role models in carving wooden handles and helping gather materials or strip bark.

Contemporary Basket Utility

Household uses. With the introduction of Anglo-American and European goods, baskets were no longer produced for home utility. It took too much time and effort to make a container when inexpensive ones were available to buy.

With the opening of trading centers and stores, and the influx of settlers, a new type of basket was produced. It was modeled after the European "market" basket. This rectangular, plaited basket was made in a variety of sizes to haul produce to market and to carry purchased goods back to the lodges (Jesse Besser Museum Notes).

Gathering uses. The activity of gathering berries and nuts for subsistence was no longer a major necessary when commercial foods were available for purchase. The baskets made for this activity were not needed in the previous large quantities; thus, they have not been made in abundance in recent years.

Agricultural uses. As the Ojibwa joined the wage-earner society, there was less need for continuing agricultural pursuits as the main subsistence activity. The baskets made for agricultural use were not a dire need, so they were not made in any quantity. Individuals may have made the baskets for their own use, but not for major employ in the subsistence quest.

Economic uses. Baskets no longer play an important part in gathering and agricultural subsistence. But in contemporary times they have played an important part in the economy of the Ojibwa. When settlers and later tourists became a part of the area, Ojibwa made baskets to trade or sell. By doing so, the basket makers were able to supplement their wage income and add to the family coffers. From the 1940s through the 1960s, major highways and roads were completed in Michigan and Wisconsin, allowing for greater accessibility by tourists. As the increase in tourists generated a demand for souvenirs, baskets initially were made to fill the demand. But as the availability of cheap trinkets and souvenirs that were made overseas became available in gift shops, the demand for quality baskets diminished because tourists did not want to pay the price of quality art (Cleland). Museums, institutions, and private collectors continued to buy baskets and became the major sources or outlets for basket weavers.

With the increased interest in Indian art over the past 20 years, government programs designed to save traditional arts have resulted in grants or project monies for weavers to continue and teach their art. The Michigan Council for the Arts has granted funding for weavers as part of folk art awareness and has funded programs that include weavers. Many of these programs offer an outlet for sales of baskets, as well as stipends for teaching workshops or giving demonstrations. The Smithsonian Institution's Folk Art Program has funded travel and demonstrations of Ojibwa basket weavers throughout the United States, as well as abroad.

Social utility. In modern times, the social utility of basket making has changed from a family group to a more universal aspect. Groups of village weavers would make baskets in quantity for sale to the tourist market or for museum collections. The emphasis changed from a family utility item to a mass-market item. With that change came a change in the approach to making baskets. It was no longer a daily extension of family tasks by family members, but one of production for market carried on by several members of the society.

Groups of weavers from many villages gather together at programs and arts evens to display their weaving. This socialization of weavers is more encompassing than tight family weaving groups. The weavers interact with each other in learning new techniques, admiring or commenting on each other's baskets, competing for prizes, and generally sharing their skills and interests.

Baskets are the link between Native Americans and non-Native Americans because the baskets are one of the vehicles that bring the two groups together. Through selling baskets of non-Native Americans, demonstrating their skills, and exhibiting their weaving in museum shows, the basket makers are entering into the social process of the art.

Ojibwa Baskets

Wicker Baskets

Wicker baskets have a rigid warp over which a flexible weft is woven in an over, under, over method. It is usually a coarse weave, not very refined due to the materials used. Willow twigs and small branches were readily available and were used to a great extent. The baskets were usually round or oval shaped; some had handles of twisted willow twigs.

Decoration was not applied to willow baskets, but the baskets were enhanced by using different-colored willow strips. By gathering willow at different seasons and at different stages of growth, the Ojibwa had a variety of colored twigs available for weaving. "By peeling some of the willow and leaving the remainder green" (Lyford, 1982, p. 60), contrast could be achieved. Gathering blighted branches also increased the color palette. Greatly blighted branches took on a red color, whereas those that were only slightly blighted were brown. Weavers also used natural dyes to gain more colors.

The larger willow baskets were used for storage and carrying goods. Smaller ones were used for gathering eggs when Ojibwa raised poultry. "Many of the older workers continue to make willow baskets today" (Lyford, 1982, p. 61).

Cedar root also was used in wicker baskets. After the roots were pulled from the ground, they were soaked in nearby lakes or ponds for several days. After soaking, the roots were scraped, split into small strips, and dried. Many times the strips were dyed with natural dyes before being used in weaving. In melon-shaped baskets (Figure 29), a frame of stiff twigs was made in which a handle was incorporated. Over this frame, the cedar strips were woven. The shape is attributed to European influences (Jesse Besser Museum Notes).

Wicker baskets also were made of basswood. Stiff strips of the inner bark were used for wicker work. Long strips of bark were taken from linden trees. Before being dried out, the bark was planed, and the inner strips were soaked before using. A variety of basket shapes were made for different purposes.

Plaited Baskets

The materials for making a plaited basket were ash and basswood. The underwood of the ash tree and linden tree was stripped in long pieces. These pieces were then pounded so that thin strips could be peeled away. The strips were then cut to length and soaked for pliability in weaving. When dry, the baskets were sturdy and strong but had thin walls and were light in weight (Figure 30).

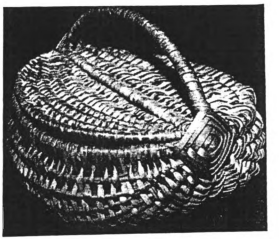


Figure 29a: An example of a ribbed basket made for tourists. The design shape, melon, is European in origin. Ca. 1920 (Jesse Besser Museum).

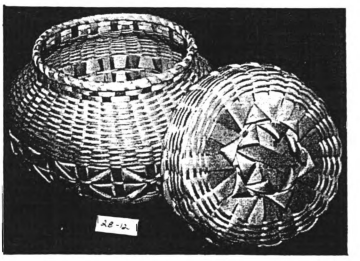


Figure 29b: An Ojibwa globe-shaped basket with lid, made from black ash splint; natural dyes used for weft color. The lid has decorative curls. The basket was made for the tourist trade. Ca. 1900 (Jesse Besser Museum).

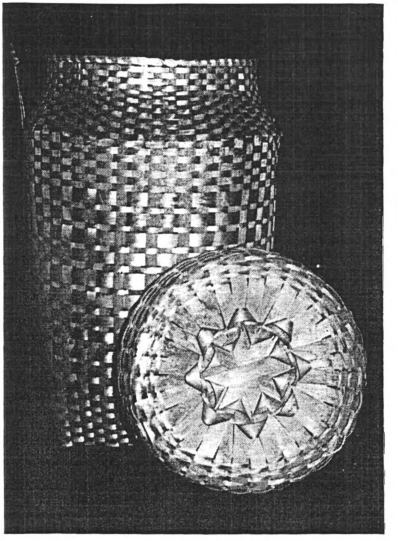


Figure 30: A large hamper or storage basket with lid and handle, made from black ash splints and plaited into a sturdy but lightweight basket. The rim is strengthened with two carved wooden hoops. This was a popular tourist basket. Ca. 1910 (Jesse Besser Museum).

In baskets that were plaited, the warp and weft were usually the same thickness and width (Figure 31). Both could be of a flexible or rigid material, but both were the same and were usually flat rather than round, as in wicker. Plaited baskets could be made in rectangular or round shapes. The rectangular "market" baskets and square baskets started with a mat for the bottom; then the warp was bent up at the edge of the mat to form the sides.

In round baskets, warp spokes formed the base, and the weft was woven in and out to hold the spoke warp in place (Figure 32). As with the rectangle and square shapes, the warp was bent up to form the sides of the basket. To make a tighter weave, the warp spokes were split at the bending point to double the number of warp for the sides of the basket.

The rims were formed by folding the warp to the inside and tucking them into the last weft row (Figure 33). Many times, two strips of stiff wood sandwiched the rim for strength. The wooden strips were held in place by overlashing thongs of grasses or braided sweet grass cord.

Handles for plaited baskets were added by incorporating a stiff wooden strip into the warp and fastening with the weft. At times, these handles were carved from wood. A swing handle was added by making loops at the rim of the basket from weft strips to which a carved handle was attached. Many times, the weft loops were used as handles (Figure 34).

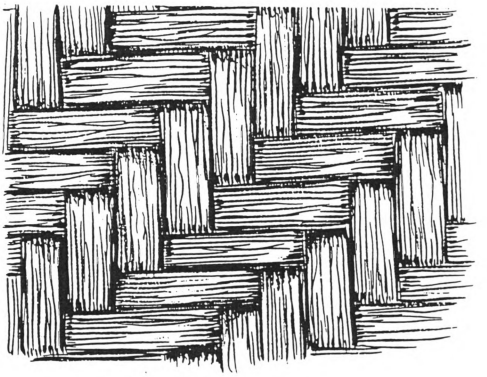


Figure 31: Plaiting--herringbone pattern.

Figure 32: A utility or "market" basket plaited with black ash splints. The handle is carved and wrapped; rim hoops are held in place by overlashing. Ca. 1900 (Jesse Besser Museum).

Figure 33: A round utility basket with a carved wooden handle. The decoration is large curled splints in two rows to form a triangle pattern. At the rim is a wooden ring held in place by overlashing, which helped strengthen the basket. Ca. 1880 (Jesse Besser Museum).

Figure 34: An example of a swing handle, black ash splints. Ca. 1890 (Jesse Besser Museum).

As a decorative element, braids of sweet grass were used as the weft in alternate rows with the flat weft to form a pattern. These braids were also attached to the sides and top of lids in a scroll or frog design (Figure 35). By varying the size of the weft, patterns in weave could be achieved.

Dying the warp and weft strips with natural dyes, or later with aniline dyes, color bands were created. Alternating the colored bands formed a decorative element. If just the weft or just the warp was dyed, a "checker" pattern was made, especially if the warp and weft were the same size.

Stencils or cutout designs were printed on the baskets for added decoration. Again, natural dyes were used to stamp the patterns onto the basket. This was done mainly after contact with Europeans and Anglo-Americans, in meeting the demand for tourist or commercial baskets to make them "fancy."

Another decorative element was the Great Lakes curl or "porcupine work." "A thin horizontal splint is carried over the vertical splints and twisted or curled at regular intervals to produce a series of outstanding points or 'curls' that provide an effective relief decoration on the surface of the basket" (Lyford, 1982, p. 63) (Figures 36 and 29). Because the points of the curls stick out from the surface of the basket, the term "porcupine work" describes the texture; it does not mean that quills were used.

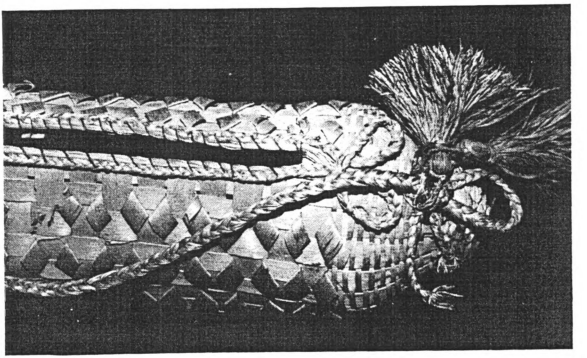


Figure 35: Oblong, slotted ceremonial basket with plaited splints. Braided sweet grass forms the handle, the rim around the opening, and the decorative braided elements. There are three natural dyed red tassels at each end. An ear of planting corn was placed in the basket and presented to a bride at her wedding ceremony. Ca. 1890 (Jesse Besser Museum).

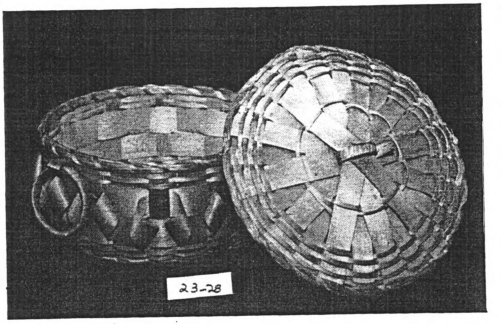


Figure 36: A round, covered plaited basket made with black ash splints. A sweet grass bundle is lashed in place at the rim. "Curls" form a center decorative band and are very large. The lid fits inside and has a rim of bound sweet grass. Ca. 1910 (Jesse Besser Museum).

Plaited baskets were used for many purposes and were a general utility item. Many were made with lids to hold small items or trinkets. Others were large rectangles and were used to took goods to market or later on "picnics." Shallow square ones were used as trays to hold foodstuffs or to be used as servers. Large, flat plaited baskets were used as winnowing baskets for rice.

Coiled Baskets

Coiled baskets were not woven; they were sewn. Bundles of sweet grass were formed and coiled. The coils were stitched in place with thin threads of sinew or braids of grasses. An awl was used to make a space in the coil through which to draw the threads. Historically, the awls were made of bone and later of metal. The end of the awl was rounded to slip between the fibers and not pierce or break the grasses. The thread passed around the free portion of the coil, back into the previous coil, and under the stitch of the last round. The result was an interlocking stitch that was pulled tightly to bind the coil to the last round. Sometimes the bundles of sweet grass surrounded a core of birch bark strip for added strength.

The thickness of the coils varied with the size of the basket. Handles were not generally affixed to coiled work. Lids of birch bark with incised designs were added to the coiled baskets. The rims were finished by winding the thread tightly around the end of the last coil and sewing it to the side of the basket.

Coiled baskets were used as dishes, shallow trays, and round and oval bowls. Coiled work was generally small, due to the time and effort as well as amount of material it took to make a coiled basket.

Natural Dyes

The Ojibwa weavers made great use of the plentiful vegetation in their area for making dyes. Roots, buds, bark, leaves, flowers, seeds, branches, and juice were used in the preparation of dyes. Clay, wood ash, and minerals were also used to impart color. To achieve the desired shade, two or more plants were used, or the time the strips were soaked varied. Mordants were used to set the colors; some colors faded, whereas others retained their brilliance. "Red or black mud, grindstone dust, and water in which iron had rusted served as mordants for some dyes" (Lyford, 1982, p. 152).

Vegetation Dyes:

Black	Bur oak--inner bark used with hazel bur, butternut Hazel--inner bark used with butternut; green hazel burs used with bur oak arbor vitae
Blue	Red oak Quaking aspen
Brown	Butternut--root and inner bark used with hazel bark
Green	Lamb's quarters--the whole plant Red oak and red maple--punk wood
Red (mahogany)	Cedar red--inner bark Hemlock--inner bark used with rock dust

Red	Chokeberry--inner bark Dogwood Red osier--inner bark used with birch, oak, and cedar bark ashes Puccoon--dried root used with ocher White birch--inner bark used with dogwood, oak, and cedar bark ashes Wild plum--used with blood root, red-osier, and alder for bright red; with bloodroot alone for dark red Willow--roots
Purple	Maple--rotted wood Hemlock
Yellow	Alder--inner bark used with bloodroot Bloodroot--fresh root Gold thread--root Lichens--whole plant Sumac--inner bark and pulp of the stalk Spotted touch-me-nots Paper birch Black oak

Mineral colors:

Black	Black earth--rushes and weaving strips were buried in the black mud to soak for several days
Red	Red earth was collected, dried, and fired into bricks, then ground into dust to be mixed with water
Vermillion (*Wunamon*)	Water was scooped from tops of lakes and boiled
Yellow ocher (*ozanamon*)	Water was scooped from surface of lakes and boiled

The preceding information can be found in both Lyford's (1982) and Levi's (1956) works.

Tlinget Basketry

Historical Basket Utility

The Tlingets' gathering, fishing, and trading society made use of a variety of baskets. Baskets were used in the household for storage, food preparation, and gathering. They were used as equipment to facilitate fishing. Specially woven baskets were used in ceremonies and as part of the shaman's material culture. Baskets played an important part in the trading economy of the Tlingets. As with other Native American societies, the dependence on baskets to facilitate everyday life was indicative of Tlinget culture.

Household uses. Berry-gathering baskets were predominant in Tlinget life. These baskets were small and twined, with small loops to which a cord or lace was attached. The cord was put over a shoulder so the hands were free to gather berries, yet the basket was easily accessible. The sizes varied according to who was gathering the berries. Small baskets were made for children and larger ones for adults. Shapes of the baskets also varied. Some were square at the top and gradually became conical at the bottom; others were cylindrical, and still others were deep-bowl shaped. A photograph in Kirk's (1986, p. 129) book shows a young girl collecting berries with the basket slung over her shoulder and onto her back. She was using a square-topped basket.

Although berry-gathering baskets generally were of a medium size, attending men lugged very large, tublike baskets to the gathering area . These were some of the largest baskets made--5.4 to 10.8 gallons, with a diameter of

more than 15.6 inches--and rested on the ground. The baskets were called *kah-tihk ka'r-r.* Into these large tubs, berries were dumped as the gathering baskets were filled. This allowed the Tlinget to gather a large crop at one outing. The baskets were light weight and allowed air to move freely through them; thus, they were ideal for berry gathering (Porter, 1990). These were often woven from young split roots of Sitka spruce and were then decorated using false embroidery of dyed grass stems. They had strap handles sewn into the sides, so one or two people could carry them.

Another type of gathering basket was one of large dimensions for gathering firewood. The baskets were woven for strength and lightness. Weavers used two strong twigs, struts, that were bent by soaking in hot water and shaping, as the base structure. Smaller twigs were used to construct the basket, incorporating the strengthening struts. The large struts were left sticking up from the top of the basket. A tumpline was fastened to two struts and went around the body. The struts also acted like handles to lift the basket. The basket made it possible to carry a heavy load and still have one's hands free for tasks.

The Tlingets used baskets in food processing and storage, as well. After catching salmon and other fish during the season they were running, women dried the fish for winter consumption. The fish were tightly packed and stored in tightly woven, lidded baskets. Women gathered seaweeds of many types and brought them home in large baskets; the seaweeds were then dried in the sun, chopped up, and stored in airtight baskets (Oberg, 1973). A variety of roots were

also dried and packed away in baskets for the winter. These baskets usually were plain and were not decorated by the false embroidery method. Sometimes the weave was varied to form a subtle pattern in the twining.

Other lidded baskets were used by women to hold their working utensils or items. These were plain twined, with false embroidery added to embellish the baskets. The lids had a small "handle" or flat knob on the top that included a compartment to hold pebbles. When the lid was handled or taken off, the pebbles rattled. This type of basket has often been named the Tlinget rattle-top basket due to its unique feature of rattling.

Open-work twined baskets were used to hold wooden and horn carved spoons. The open work allowed the water to drain as the spoons dried. Other household open-work baskets were those used for cooking and straining berries and trying out fish oil. Because these were of an open weave, no added decorations were needed. The weave was a design of space and materials. These baskets were usually known as "khart [a 'strainer' literally, 'will not hold water']" (Mason, 1904/1988, p. 407).

Other open-work baskets are the tarlths. These types were bowl shaped and had large areas between weaves and were decorated with dyed weft elements. These were used as a basket maker's work basket for holding materials and equipment to make baskets (Porter, 1990).

Cedar-bark baskets of a checker weave were used for household storage items. The items were packed into these baskets and then stored upon shelves

built onto the walls of the plank houses. These were of a coarse weave, resembling mats. Indeed, the same weave was used in making mats for seating (McFeat, 1989).

Cooking formerly was done in wooden vessels or baskets that were woven so closely that they held water. These were made of roots and split twigs. "They prepare their food by putting heated stones in a willow basket with pieces of fish, seal, porpoise, etc. and closing it tightly. In the same way they prepare broths and fish soups, and they preferred this to cooking even though we at once gave them several copper pots and showed how they could be used" (Krause, 1956, p. 107). The dishes from which they ate were either woven or carved from wood (Kamenskii, 1906). Tight weaves were also used to produce cups for drinking water, the only liquid Tlingets drank before the introduction of liquor by the Europeans and Anglo-Americans. Other water-tight baskets were large bags, *kak*, in which they carried water from fresh-water streams to their homes for household use.

Small double baskets were used for a variety of items. Those that were very small were used to hold shot for guns after guns were available from traders. Tobacco was also stored in these small baskets. Women used the double baskets for holding snuff. These also were employed to hold deer tallow, which was applied as face cream, or powdered mussel shell, used for protection from sunburn. Trinkets of value were also stored in these double baskets (Kirk, 1986). The technique was a tightly twined weave and left undecorated. Rims

were overlashed, and each piece fit tightly into the other. When closed, they looked like one basket with no opening. These were either cylindrical or bowl shaped. The Tlingets also used the baskets to decorate their homes (Lobb, 1990).

Fishing uses. Men owned softly woven pouches to carry whole sets of fish hooks, spare barbs, shanks, and twine. They also carried rations of dried salmon and emergency implements in another pouch that they tucked into their belts (Kirk, 1986).

Open-work baskets were carried in canoes when the men fished for halibut and cod. After drawing the fish up to the surface with lines, the men clubbed the fish and then tossed it into the basket in the center of the canoe. Baskets were also used in the whaling enterprise. The whalers would harpoon the whale several times and then allow their lines with bladders attached to slow down and to weaken the whale. After a time, the whalers would recover the ends of their lines and attach the droguelike line basket to make their prey tow the canoe (McFeat, 1989).

After an extensive harvest of eulachon, an extremely fat fish, canoes were buried in the sand and fires made in the canoes to cook the fish. Boxes were used for the actual cooking. As the fish cooked, their fat rose to the top of the water and was skimmed off with ladles. Large, plain twined baskets were used to press the remaining oil out of the fish after cooking. Another method of rendering fish was to leave them in a pit for 10 to 14 days. The fish were then

cooked to mush and pressed through baskets to gain the oil. These baskets were woven of roots and were coarse so that the oil could be sieved.

Baskets were also used to help catch salmon. A fence with openings was stretched across the river or stream. In front of these fences, up stream, woven baskets were placed; these were woven much like weirs and served the same purpose (Krause, 1956).

Gathering baskets similar to berry baskets were used to gather shellfish, clams, mussels, and other food from the shores and shallow waters. These varied in size but were usually "coarsely woven, open twined baskets" (Kaiper & Kaiper, 1978, p. 44) to drain water from the harvest. Because most of these foods were for immediate consumption, storage baskets to hold the catch were not needed.

Trading uses. Baskets have been a trading commodity between northwest coast societies for many eras. The Tlingets traded baskets, in addition to other goods, to inland societies for raw weaving materials, large animal furs and meat, minerals for dyes, and copper for ceremonial use. "In exchange for these commodities, . . . they produced . . . water-tight baskets of cedar bark" (Oberg, 1973, p. 108). Baskets were also traded for the highly prized Chilcat blankets. This intertribal trading was evidenced in records made by major museum collectors in the late 1800s.

> Newcomb collected Tlinget baskets at Ninstints, the southernmost Haid village. . . . Sometimes baskets came from even farther afield; a basket originally made on Vancouver Island was collected by Emmons as part of a Tlinget shaman's kit. . . . The exchange of baskets and objects of

> basketry between regions apparently occurred before the historic period. (Porter, 1990, p. 285)

The baskets that were used in carrying the trading goods to other communities needed to be strong, yet lightweight. Often trumplines were attached to give the trader better mobility. The large envelope wallet basket was designed for this purpose. It was extremely flexible and could be folded flat, yet when it was opened it had strength due to its multi-twined construction, and it was large enough to carry many items.

> [This is] a twined basket wallet of the Tlinget Indians. It is of band-box shape when spread out, but . . . folded for transportation. . . . The boundary of the bottom is a single row of three-strand twine. This method of ornamenting and strengthening their work was used by the Tlingets, not only at the bottom, but along the sides and near the top. (Mason, 1904/1988, p. 409)

Baskets were also used as "coinage" within the Tlinget society. Although tradition established that what a person made or gained through a work process was his or her own property, many items were held in communal trust within the larger house unit. There was no barter system within the society, and people were not commissioned to make specific items. It was not acceptable to ask someone to do a specific job or make a specific item or to "pay" for labor. The institution of gifting took the place of direct hire and payment.

In the chapter on the consumption of wealth in The Social Economy of Tlinget Indians, Oberg (1973) went into great detail concerning the division of labor and how the exchange of wealth was made. A member of a household unit could make a gift of baskets to other members, especially those of prominence,

as reciprocation for other gifts or services. Baskets made for food preparation and consumption as well as storage were "given" to the household unit for communal use. One could say that the weavers, women, "gave" their baskets to the household in exchange for the fish and hunted animal meat "given" to the household unit by the men. They exchanged their products of labor for other products of labor.

Ceremonial uses. As part of the religious beliefs of the Tlingets, a shaman, called *ichta*, was one who could intercede in the power of the spirits. He could cure the sick by driving out the evil spirits, call out good weather, bring about large fish runs, and help break the powers of spirits who were interfering with people's lives. The ability of the shaman depended on how many spirits he had under his control.

Because the shaman was called on to perform many rituals, he had a great deal of paraphernalia. The shaman used both large and small baskets to hold many of the items used in ceremonies. Small double baskets or lidded ones held down feathers; others held carved bone spikes, rattles, or face masks (Field Museum notes). The shaman also used tightly woven glasses, from which the drank salt water before ceremonies or during fasting (Field Museum notes). When the shaman died, his body was dressed in his brightly colored costume, with gloves on his hands and moccasins on his feet. Then his body was laid on a board, and a basket made from branches was placed over his head before he was placed in the grave house (Krause, 1956).

To gain his power, the shaman went into the woods or to the mountains for a few weeks to months. There he meditated and feasted on the roots of Araliaceae (devil's club) until he finally met the spirit of the land otter. The land otter's tongue contained the whole secret of shamanism. Upon hearing the would-be shaman exclaim "Oh" four times, the land otter fell over dead, with his tongue protruding. "The shaman tears the tongue out, saying 'May I be successful in my new calling, may I conjure and dance well,' and putting the tongue in a basket which he has prepared for the purpose, he hides it in an unapproachable place" (Krause, 1956, p. 195).

During the winter ceremony, young men were exorcised of the spirits that possessed them. To restore them from their holy madness, specific eating and drinking rituals were followed. To help return the novices to their senses, women and the shaman performed songs and dances to catch their attention. The youths underwent ceremonial purification before they were allowed to take part in ordinary pursuits of daily life. They had to "drink water from a wing bone of an eagle, as their mouths must not touch the rim of the cup" (Krause, 1956, p. 183). The cup was used only for this ritual and was woven tightly, with little decoration.

Other uses of ceremonial basketry were facilitating the rituals by holding or containing special foods, ritual implements, serving containers, and drinking cups. These baskets were used only during the ceremony and were not used for daily household tasks. Baskets needed for large ceremonies like the potlatches were made by the house unit of the host. These were not requested

potlatches were made by the house unit of the host. These were not requested but were "given" to the host for his use at the ritual. Not only were the baskets utility items, but they also represented the solidarity of the family unit and the riches the host had accumulated.

The Tlinget clans were grouped into two phratries, the Raven and the Wolf. Each phratry had several clans, each of which could use the phratry crest of the wolf or raven. Besides the principal crest, each clan had one or more emblems of lesser value. One of the Raven clans had the crest of the Mother Basket for its identification. Crests could be gained in a number of ways. They could be given at potlatches, they could have historical or mythological significance, or they could be heirlooms. By being on display during a ceremony or potlatch, the crest gained in importance. "The Mother Basket in particular was displayed merely as a large food basket originally, but it has been used so many times that its emblematic value is now very high" (Oberg, 1973, p. 45). This crest was related more to events in the lives of the Tlingets than to the supernatural. Crests could represent both.

Social and symbolic uses. Baskets were not only a utility item, but an item that functioned in the social context as well. The large baskets used to lug berries can be viewed as representing the group effort of filling the baskets with berries and the need for more than one person to carry it to the village site. The household unit was responsible for gathering the berries for that household. The men from the household often accompanied the children and women to the berry

"fields" to carry the large baskets back and to protect the gatherers from any danger they might encounter. Although the men would not participate in the actual gathering of the berries, they would be responsible for the transportation of the crop (Oberg, 1973).

Like the berry baskets, the baskets used in fishing also represented the social activity of group fishing. Whaling and shellfish gathering were group activities carried on by the household unit. It also took several men to place the salmon basket traps in the rivers and to empty them. The baskets used to render oil were large and heavy, especially when they were filled with oil; again, this was a group procedure.

In ceremonies, groups gathered and made use of baskets as part of the rituals. Baskets were one of the items in the material culture that were part of the Tlingets' social rituals.

The social custom of exchanging gifts between the families of the bride and groom was done through a series of sham battles. The gifts were the price for "buying back" the groom or the bride. The gifts were displayed in front of the parents' house for all to see. If the gifts were sufficient, the groom could then "take" his bride. Boas recorded many of these ceremonies and listed the gifts. In one account, 500 cedar baskets were part of the "bride's price."

Baskets played a major role in the interaction or socialization between Tlingets and non-Native Americans. By selling them and trading them to tourists, military personnel, collectors, and settlers, the Tlingets made social contact with

these factions. Women sat at the docks to sell their wares as the intruders came off of the boats. The social interaction of the trade or purchase centered on the baskets.

Not only was the utility of baskets representative of social activity, but the gathering and making of baskets can be considered instrumental in socialization. Whole families would go out to gather the materials used in basket making. Men often helped with peeling the cedar bark and stripping it for use in basket making. Groups of women dug for spruce roots and carried them back to the house for preparation. Although the actual weaving was women's work, gathering and preparation were done by both sexes. Many times, the Tlingets had to travel distances to gather the cedar and spruce, and this would be done in groups. Other times, several women or children gathered grasses and ferns locally (Oberg, 1973).

Baskets can also indicate the division of labor. Although both men and women participated in gathering materials for baskets, the men generally were the ones who stripped the bark from cedar trees and gathered cattails. Women and children gathered ferns and grasses for weaving. The actual weaving was women's labor.

Basketry is also an indicator of the economy. The gathering of basket materials was part of the economy, based on the seasonal growing cycles. "The commitment to gather materials and dyestuffs as the season presented opportunities was built into the traditional economy" (Porter, 1990, p. 284).

Baskets were made during the winter months. Women in a household unit would spend time indoors during inclement weather and weave the baskets they would need in upcoming months. Later, when weaving baskets for sale or trade, "Tlinget women spent the long winter evenings making *[i]shkats* or baskets of various sizes and shapes . . . [and] preparing objects for the summer tourist season" (Kamenskii, 1906, p. 52). Several women in the household unit would gather to make baskets and to visit and socialize.

The designs and patterns on the baskets cannot be considered symbols, as such, but they can be considered symbolic or representative of the idea of natural surroundings and beliefs of the Tlingets. As in many cultures, designs and decorations related to the environment and surroundings of the society. Many of the small berry baskets had designs called salmon berry heads or half salmon berry heads. The designs usually were repeated in a horizontal or vertical line or mixed with other patterns.

Representing some of their beliefs were the designs that included the raven's eye and the raven's tail. Because the Tlingets' social construction consisted of the Raven and Wolf phratries, the designs using these indicated social structure and beliefs. The pattern called the shaman's hat related to the hats worn by the shamans during rituals. The design called labaret originated from the lip decoration Tlingets wore.

Some patterns did not have a natural or social context but were simply designs. The blanket border design and the cross, the tattoo, and the crossing designs are examples of these.

Economic uses. Baskets served many necessary functions in the food quest. Storage needs were accommodated by the use of baskets. Baskets also were important in the trading industry, not only as a trade item but also as a transportation item. Goods were transported in large baskets slung on the backs of the Tlingets.

Contemporary Basket Utility

"The oldest of the arts--basketry--has been preserved and renewed by many contemporary Indian craftspeople, but it is something of a miracle that basket making has managed to survive in the modern world" (Highwater, p. 114). Baskets are no longer being used as part of the Tlingets' daily routine and lifestyle. Even ceremonial utility has been replaced by purchased goods. Due to the ban on religious rites and practices, many of the ceremonies have been abandoned or severely curtailed. Current potlatches revolve around store-bought items rather than the traditional copper, slaves, and foodstuffs.

Household uses. Acculturation into the Anglo-American economic life has decreased the Tlingets' need to make baskets for home use. By embracing the wage-earner society, the Tlingets have found it noneconomical to produce baskets for their own use. It is much cheaper to buy plastic and metal containers. The time-consuming chore of gathering materials, preparing

materials for weaving, and the actual weaving makes the baskets cost prohibitive for everyday use. Also, many natural harvest fields for materials have been "civilized," so it is harder to find materials for weaving.

Tlingets no longer gather berries in great quantities as part of the food quest, so the berry-gathering baskets are no longer needed in great numbers. Processed foods found in stores supply the majority of the food needed. The same is true of the cooking and storage baskets. It is more practical to purchase and use metal pots and pans, as well as plastic storage containers.

Fishing uses. As with the household baskets, baskets used in the fishing industry are no longer needed. Thus, they are not produced in any quantity for daily use.

Trading uses. The majority of baskets produced after the Tlingets' encounter with Europeans and Anglo-Americans were made for trade and commercial sale. "With the coming of the White man to the Northwest Coast, a brief period followed during which the economic and aesthetic levels of art production enjoyed a vast increase. . . . Unfortunately, this quality approach soon degenerated into curio-shop goods" (Dockstader, 1961, p. 15). "By 1820, the demand for curios had created a souvenir industry. Great quantities were turned out" (Holm & Reid, 1975, p. 13). The period of interaction with tourists increased in the late 1800s, when ships from San Francisco began to stop regularly in southeastern Alaska. By 1880, significant tourist activity could be noted in most villages (Porter, 1990). To satisfy the high demand for baskets, weavers

modified their designs and techniques to save manufacturing time. Also, the baskets were no longer needed to haul heavy loads or to contain water, so many of the strengthening and tight-weaving techniques were omitted. More open-work basketry became the norm. A great deal of time was needed to process spruce root for basket weaving; thus, by doing a more open weave, less material was required per basket. New forms were also being woven. Purses, tea pots, eyeglass holders, and covered bottles were all made for tourists.

Photographs taken by the commercial studio of Winter and Pond during the late 1800s and early 1900s in Juneau show many women lined up at the docks to sell their baskets to tourists getting off the ships. Some of these photographs were posed, but the intention was to make them realistic recordings of the times. Other photographs of trading centers and shops show rows upon rows of baskets for sale, on the shelves and on the floors (Winter & Pond, pp. 26, 38). Another image is of the outside of their store and studio room, with the advertising emphasizing their "curios, totems, baskets, silver, carvings, souvenirs, special Indian calendars and post cards."

Ceremonial uses. Although the potlatch has been revived, many of the yearly ceremonies have been abandoned. With the intensifying efforts of Christian missionaries and churches, the Tlingets' traditional beliefs have been phased out. With the lessening of the need for traditional rituals, the need for ritual implements also has diminished. Few, if any, baskets currently are being made or used for ceremonial purposes.

Social and symbolic uses. Today, there is an interest in preserving the traditional basket skills. The Alaska Native Brotherhood is providing programs and workshops for teaching weaving skills to those who wish to help preserve Tlinget and other cultures. Baskets are being made to help teach about the past and to hold onto traditions. These baskets are used to connect with a previous era of independence and living with nature. Although they no longer are utilitarian, these baskets have gained another function--that of being representative of a past way a life, a symbol of Tlinget culture and society.

> The basketry tradition and the knowledge it encompassed were eventually threatened by logging, changes in demographic patterns, the demands of an imposed educational system, and the demands placed on women's time by the need to work for wages. However, basket makers continued to work . . . combining traditional innovative techniques and forms. (Porter, 1990, p. 284)

The weavers were able to continue the core of tradition and to adapt, to experiment with properties of traditional materials and use new methods to achieve traditional effects, all to maintain a continuance of their art. Even though the end use of baskets is mainly for commercial purposes, the art continues.

Weavers still gather to make baskets and enjoy a social time. Many times they discuss the past while teaching weaving to newcomers to the art. In recent photographs by Ruth Kirk and Louis Kirk, groups of men are shown stripping bark from cedar trees and harvesting cattails for the preparation of basket materials. "Basketry materials come from only certain places, at certain times of the year. Such knowledge, as well as gathering and processing techniques, is

as essential to continuation of the art is that of weaving itself" (Kirk, 1986, p. 102).

Baskets are still being decorated in the traditional patterns, even though the designs do not represent specific environments, but rather accepted styles. "A basketry style is a set of ideas echoed in practice until the ideas themselves are forgotten" (Porter, 1990, p. 286). Whereas the basketry styles and decoration encode the identity of the Tlingets, they are also a link to people of a large area and history; they speak to the issues of origin and communication (Porter, 1990, p. 286). In addition, the baskets tell about the economy, industry, and labor of the people, both historically and contemporaneously.

Economic uses. The household and food-quest usage of baskets has waned. However, the use of baskets as a trade or commercial item has flourished and continues today. Weavers are able to augment their hourly wage incomes with baskets made to sell to tourists and collectors.

Tlinget Baskets

Baskets made by Tlinget weavers have a very distinct look and feel. The baskets are pliable yet very strong, with thin sides. The weave is extremely even and refined, with the exception of the open fishing baskets. An overlay or false embroidery used to decorate the baskets is executed in such a manner that it is hard to decipher it from the basket itself. It is so tightly applied that it looks like part of the basket rather than an addition.

The materials used to make the baskets include bear grass, huckleberry, moss, and lichen for dyes. Foundation materials are strong elements of rye grass, bark from cedar and birch, roots and limbs of young spruce, cattails, young shoots of hazelnut and willow, juniper roots, rushes, and bulrush. The overlays or false embroidery are thin strands of rye, bear, bromegrass, reeds, maize, maidenhair fern, horsetail, cherry, the inner bark of cedar, and birch bark (Lobb, 1990).

Plaited Baskets

Plaited baskets are strong and sturdy. They were often made from cedar bark strips left natural and dyed. The men of the household unit stripped bark from the trees in slender sheets. Women then split the bark into narrow strips with a knife and finally with their fingernails. The strips were soaked for several days to make them pliable for weaving. The actual weaving consisted of vertical and horizontal strips woven in the basic over, under, over flat weave. By interjecting a dark strip, a pattern or plaid design was achieved (Figure 37). This work is called a checker weave because the weave has the appearance of regular squares forming a checker pattern. Usually both the weft and the warp are the same size and are pliable. It is hard to differentiate the warp from the weft. Variations are obtained by varying the width of the warp or weft.

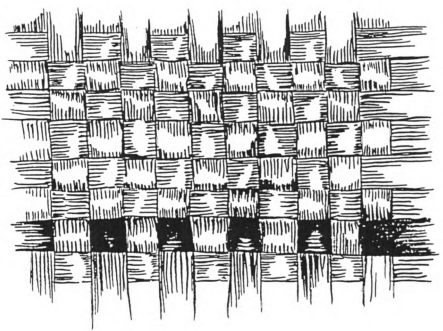


Figure 37: Plaiting--natural fibers form the pattern.

Twilled plaiting is made by crossing over and under two or more warp strands. Changing the number of warp strands crossing over and under varies the twill design, making larger or smaller zigzag patterns in the weave. Additional decoration was not added to plaited baskets.

The rims of plaited baskets are simple. The extending warp is folded down over the last weft row and tucked into the next to the last weft row on the inside of the basket. In later years, a thin wire was added to the last weft row, and the warp was folded over that. The wire gave more structure to the top edge of the basket. In some cases, this last row of wire and weft was covered by a woven strip of cloth sewn to the inside of the basket.

These baskets were used mainly for storage, wallets, and burden baskets (Figure 38). Their coarse strength was achieved through the strength of the materials. The baskets were very thin and light in weight.

Wickerwork is a variation of plaited weaving. Either the warp or the weft is rigid, and it is usually made of small twigs or rods. Generally, the weft is pliable and the warp is rigid. Wicker work was commonly used for large burden baskets that had large struts added for strength and handles or tumplines. The rims of wickerwork burden baskets were left unfinished, with the warp sticking up above the last weft row. The warp was cut to an even height, but was not folded over or tucked into the weft. No decorations were added to these baskets as they were valued for their utility rather than for their aesthetic appeal.

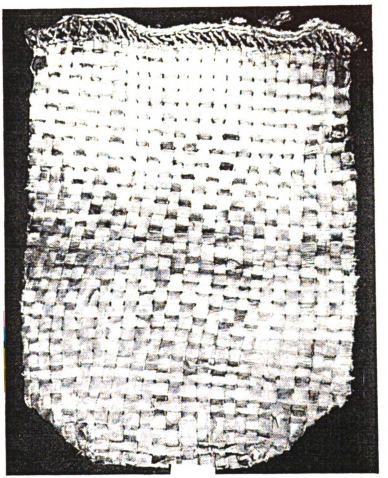


Figure 38: Tlinget "wallet" made of natural cedar bark. The plaited wallet was used to carry goods to trading centers. The basket folded flat when not in use. An example of a coarse weave (Field Museum of Natural History).

Generally, wood and trading items were carried in these baskets, which were slung on the carriers' backs.

Twined Baskets

The twined baskets have very thin sides and are pliable yet strong due to their construction. The weave or stitches are very small and tightly executed. The refined look of these baskets has generated much awe over the years. To twine a basket, two or more weft strands are twisted or twined in half turns around each other as they weave in and out between the warp. The more strands that are twined, the stronger the basket.

Plain closed twining consists of two weft strands twined around each successive warp and tightly driven down (Figure 39). Closed twining produces a vertical ridge on the line of the warp on the exterior of the baskets. If the weft is packed down tightly enough, the basket becomes water-tight (Figure 40b). Plain closed twining was used to make jugs for carrying water and small drinking cups for both fresh water and ceremonial salt water (Figure 41).

A looser twine weave was the main weave for most of the Tlinget basketry. Overlay or false embroidery was added to twined baskets for decoration. Storage baskets, berry baskets, hats, utility baskets, and the lidded and double baskets are all of the closed twine weave (see example of berry basket in Figure 42).

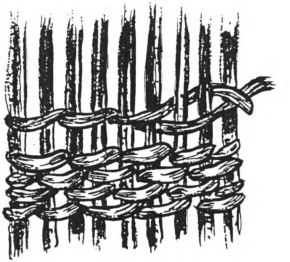


Figure 39: Twining with two wefts.

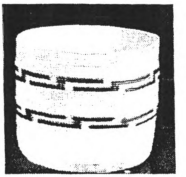


Figure 40a: Open weave. This spruce-root basket has open cross-twill weave and closed twining and was used for holding spoons. The middle band is the "flying" pattern. Col. in Alaska 1947 (Heard Museum).

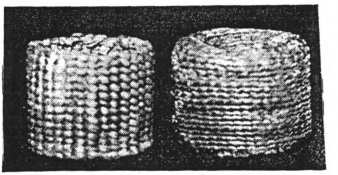


Figure 40b: Small, double basket used to hold shot, face salve, or fish hooks. It is twined with no added decoration. The top fits down over the bottom, so when closed it looks like one basket. Col. 1895 (Arizona State Museum).

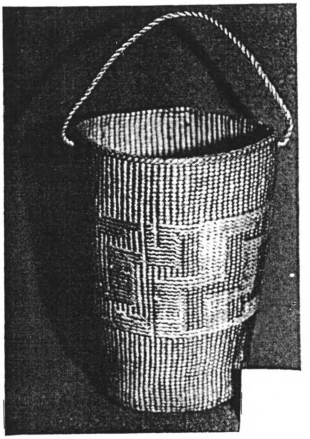


Figure 41: A water-tight drinking cup used by the shaman. He drank salt water from the cup while fasting before participating in ceremonies. The false embroidery is the "shaman's hat" design. The basket has twisted cord for a handle. Col. 1902 (Field Museum of Natural History).

Figure 42: A twine woven berry basket. The basket has two leather straps attached and is lined with silk or taffeta cloth. The design bands cover the entire basket. The second and fourth bands are a "blanket border" pattern. Col. 1923 (Field Museum of Natural History).

Open twine weave was used for baskets needing open spaces to let water or oil flow through. In open twining, warp strands are parallel, with open spaces between rows of weaving (Figure 43). Spoon baskets, clam- and shellfish-gathering baskets, and oil-rendering baskets were all made of open twined work (Figures 44 and 45).

Another open twined work is the crossed warp twining (Figure 43). Two sets of warp strands are used, each inclining, one to the right and one to the left. The twined weft holds the warp in place and makes an open mesh effect. These baskets were used for drying. Open twined baskets usually did not have added decorations, the mesh being the decorative element. Sometimes open work was combined with closed twining for strength (Figure 44). Baskets used for fishing were often made of a combination of the two twinings.

Another combination weave is the twine and checker weave. A row of plaiting is added between rows of twining. A single weft strand is woven in and out over the warp in one row, and the next row is twined. Although this reduces the amount of materials needed for a basket, the basket loses its strength, rigidity, and density.

The rims of twined baskets are finished by folding the warp over to the inside; a single row of twining holds it in place. The ends of the warp can be seen just below the twining.

Twined baskets are started by laying warp strands in a spoke pattern, crossing each other at midpoint. The first row of twining holds the spokes in

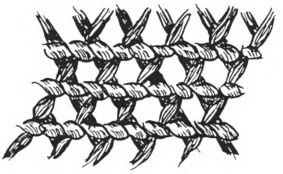


Figure 43a: Cross twine weave--open work.

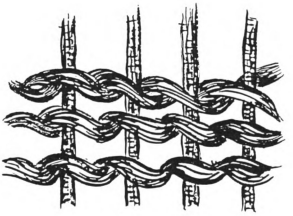


Figure 43b: Open twining--spaces are left between the weft.

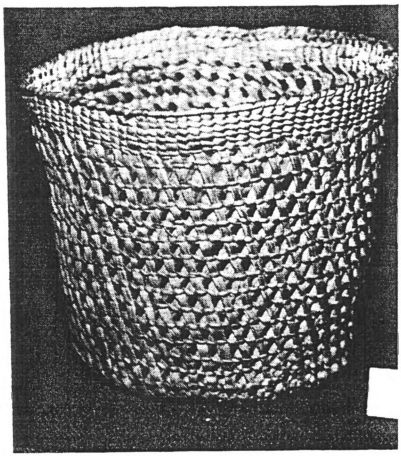


Figure 44: An open, cross twined basket used to collect seaweed or shellfish. The water drained out of the open areas and allowed air to circulate. For added strength, the top rows are double-strand twining. Col. 1895 (Field Museum of Natural History).

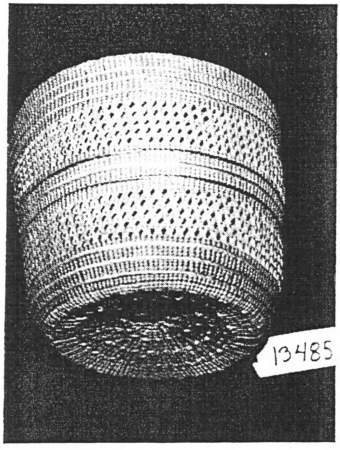


Figure 45: A twined spoon basket with two open diagonal twined areas. The basket is made from seaweed. Col. 1887 (Arizona State Museum).

place. As the base is worked, more warp strands can be added for a stronger, tighter weave. At the point where the warp is bent up to form the sides of the baskets, a twisted or rope-effect row is added for strength. This can be done by adding an extra strand to twine or by adding several strands. After work begins on the sides, the extra strands are deleted. This extra row of twining forms a "foot" for the basket, as well as adding strength to the base (Field Museum notes).

Decorative Designs

Most of the decoration is done in horizontal bands. Plain-colored bands are intermixed with designs. The designs are repeated around the basket in bands. The designs are geometric patterns rather than being figurative. Although they are geometric patterns, the patterns do have names.

Drawing from the natural environment, some of the names of the patterns are bear paws, scallop shell, strawberry, beaver skin drying on a frame, shark's tooth, and flying (the pattern made by birds in flight) (Figure 40a). A wild celery design was used on larger utility baskets. Another natural element used as the basis for patterns was the waves found in the sea. Waves and troughs was a popular pattern to be intermixed with plain-colored bands (Field Museum notes).

As noted earlier, some of the patterns drew from the Tlingets' belief system; these include raven's eye, raven's tail, and shaman's hat (Figure 46).

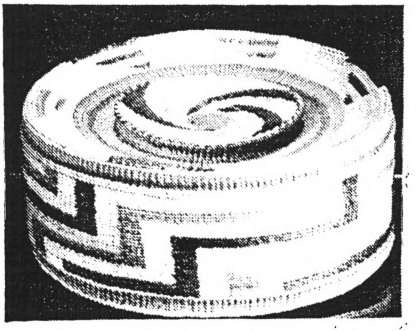


Figure 46: Lidded basket. This basket is a typical women's work basket. Its standard features are the shallowness and the single band of design plus the cover with the rattles in the knob. Aniline dye was used to color maidenhair fern for the false embroidery on spruce twining. The design pattern is "shaman's hat" on the body; the lid is edged with "bear paws," and "fern frond" decorates the knob (Arizona State Museum).

Other patterns are simply designs, such as crossings, cross and tattoo, blanket border, chevrons, and stripes.

Natural Dyes

Most of the fibers in the baskets were left natural. But soaking them in mud or charcoal changed their character. Leaving the stems or leaves of grasses--shore, bear, brome, and hairgrass--natural provided the white color in decorations. The inner bark of cedar also provided a white material. Tlinget weavers used natural vegetation to dye the decorative elements of their baskets before weaving (Lobb, 1990).

Black	Charcoal, bark, or roots of horsetail, maidenhair fern stems
Brown	Willow bark
Dark purple	Bark or roots of horsetail
Red	Bark of wild cherry, alder bark
Purple	Huckleberry juice
Yellow	Twigs and bark of Oregon grape or moss

After the introduction of Anglo-American and European goods, many of the colors were made with aniline dyes. New colors were used--green, pink, turquoise, and orange. These bright colors gave way to the traditional, natural colors with the return of interest in traditional arts.

Hopi Basketry

Historical Basket Utility

The Hopi agricultural, gathering, and husbandry society made extensive use of baskets. The baskets were used for household purposes, agricultural implementation, and ceremonial execution. Baskets have played a major role in facilitating everyday life within the Hopi culture.

Household uses. An all-purpose Hopi utility vessel was the *Tuchaiya* or yucca sifter. These sifters were of a twilled design with a wooden ring for the rim to add stability. They were used to sift hot sand from parched corn, the corn being parched in the sand. Other uses were purifying pitch, washing and cleaning food, acting as a work surface, and serving as a temporary container for virtually everything. The shape could be round, rectangular, or square.

A combination of two techniques was employed in making the *piki* tray. The bottoms were plaited or twilled and the sides wicker. These trays were used primarily during the baking of *piki*, the wafer bread used in ceremonies. As the thin strips of bread were pulled from hot stones, they were "rolled and stacked on the tray, sometimes to a height of two or three feet" (Wright, p. 61). The trays of bread were then carried to the kivas for the ceremony.

In the same style, trays were made to dry fruit. Large trays of peaches and other fruit crops were left in the sun to dry for winter storage. These trays were valuable to the survival of the Hopi. If this ability to dry and store food for adverse times had not been available, starvation would have occurred and was

a realistic possibility in such an adverse clime. These wicker peach trays were sometimes used as sifters as well as drying trays.

Cooking utensils are another form of using basketry; such baskets were the Hopis' china, leather, glass, and metal (Oglesby, p. 56). Baskets that were tightly woven to hold water were filled and placed on a rock near the fire. Hot stones were added until the water boiled; stones were replaced in the fire to reheat and then added to the water. Baskets of a shallow bowl style were used to hold grains, mainly corn, as it was being ground on the earth-set stones by the fire. These baskets were usually wicker or twill weave.

Flat, coiled plaques served as food trays, while small, globular coiled baskets were used for seed storage (Tanner, 1983, p. 50). Bowls and jars were used to store household items. Deep forms were larger than jars and bowls and were used in the same manner as the coiled baskets. In addition, smaller baskets were used to gather berries, roots, seeds, and wild grains. "In the gathering of wild fruits, berries, nuts, seeds, they found need for a container in which to collect these foods and transport them to their homes. . . . The baskets they made were used . . . for storage or other household uses" (Robinson, 1954, p. 1).

Another use of baskets in the home was decoration. Many families had baskets hanging on the walls as a decorative touch to their homes. Photographs by Vroman made in 1895 and 1904 show baskets hung around a fireplace and in a row high above a shelf (Tanner, 1983, p. 49). Although many of these were

sifters and other utilitarian baskets, they were still being displayed in a decorative manner to enhance the interior of the homes.

Agricultural uses. The tops of the mesas were dry and were used for limited grazing of small herds of sheep, cattle, and a few horses, while the base lands were used for agriculture. Because the soil was fertile from runoffs that were directed toward certain areas, a crop could be grown in a relatively arid clime. Large cistern baskets, lined with clay or pitch, were placed on top of the mesas to catch whatever rain could be hoarded; they were also placed at the edge "spouts" of the mesas to catch the rain as it ran off the tops. These baskets were usually wicker.

Additional agricultural uses of baskets were mainly those of burden baskets. As crops ripened, transporting the harvest to storage areas built under the living areas of pueblos necessitated containers large enough to carry crops easily over distances that included steep, rocky climbs. The large, lightweight wicker baskets were often conical. One style was made to be carried on the farmer's back with a tumpline for support. A second burden basket style was one made to be placed on the sides of burros or horses. A third style, the peach basket, was smaller and made with a flatter bottom.

Another agrarian need was to transport water from the springs to the mesa tops. "Water is extremely scarce. . . . Water is supplied principally by springs. . . . On top of the mesa . . . are found extensive terraced gardens which are irrigated by water from nearby springs" (Robinson, 1954, p. 50). The need

to carry large *ollas*, water vessels, to transport water from the springs resulted in the making of an annular mat woven from yucca fibers, to put between the vessels and the head. These mats were used with other convex-bottomed vessels carried on the head.

> Sometimes the carrying ring may still be seen. This ring [helps] the women balance a . . . basket or bowl on her head. Coronado was so intrigued with this gadget that he sent two to the Viceroy of Mexico with this message: ". . . One of these Indian women with one of these rolles [sic] on her head will carry a pitcher of water, without touching the same up a lather [ladder]. (Oglesby, p. 51)

Ceremonial uses. As food and ceremonial equipment/tools and props as well as elaborate costuming were needed for the many ritual dances and rites, containers were in demand. A natural carryover from survival containers to ceremonial ones was due to many of the ceremonies celebrating or appealing to a deity for the rain and abundant harvest. Throughout the year, tribute was given for seasonal life-giving activities. Both genders participated in the production and execution of the clan-designated observances.

Flat plaques or trays, *po:tas*, were used to hold cornmeal to sprinkle on the ground as part of the Dance of the Corn Maidens. Similar plaques were used in the marriage rituals. On the fourth day, after a complicated series of rites for both the husband and bride, "the bride followed by her relatives and all carrying baskets heaped with corn proceeds to the home of the groom's parents. These laden baskets are given to the groom's mother, with the exception of the basket carried by the bride. This basket, which is the largest of the group, is given to the groom to be kept until his death and is buried with him" (Robinson, 1954, p. 158).

Without the wedding basket, a groom could not be transported to the underworld after his death. The corn was "payment" for the groom.

Another ceremony in which the *po:ta* was used was the Dance of the Basket Bearers. This Lalakonti dance was by far the most important use of basketry in Hopi ceremony. It was held in the open air after nine days of private observation in the underground kivas. It was the harvest festival of the Rain Cloud clan. The basket throwers personified the mythical ancestral mothers of the clan. Young women threw plaques into a ring of men and boys, who scrambled for the trays as the females left the ceremonial area.

Three other ceremonies were also basket dances. One was a diluted ceremony of the Lalakonti and was called the Owakulti. This included the wearing of basketry fragments. Another rite was the Kohonino Basket Dance, in which baskets of the Havasupais, who traded with the Hopi, were used exclusively. Maids with elaborate headdresses danced and moved baskets in time with the drumbeat as part of the Mamzrauti ceremony.

In the legend of the Spider Woman, Tiyo, the mythical snake hero, was given a *po-o-to (po:ta)*, a "basket tray made of yucca, heaped with food" (Oglesby, p. 52), as he started out to solve the mystery concerning the flowing away of the water in the Colorado River. As legend has it, the Spider Woman led him to the underworld through a hole in the floor, where he learned all the songs and dances of the prayers and rituals performed today as part of the Snake and Antelope fraternities. As part of the Snake ceremony and dance, special baskets

were used to transport the captured snakes; then a second type of basket was used to mix a charming salve that was used to "charm" the snakes. The snakes then were passed around in a basket to each member of the dance, to be taken out and used to complete the ceremony.

As a child entered the world and was cradled in a woven basket, a new life was celebrated. Conversely, when a person died, he was buried with the basket from his marriage. After the burial, relatives left baskets and woven plates filled with food and liquid. These were set upon stones as offerings to the spirit of the dead. The Hopi believed that the ancestors' spirits hovered around the grave of the dead for a year. The offerings were to insure the spirits and ancestral clan nourishment and drink.

The Eagle Basket or *kwayungyapu* was a small wicker basket that was placed on the graves of eagles. These eagles were captured from their nests and were held until they were filled as part of the Niman rites held in July. These baskets were given as presents and contained offerings of food for the departed eagle's spirit. This was to ensure that the spirit did not become angry and fail to produce new eagles.

A similar style of basket was made to be used in the Plumed Water Serpent ceremony or *Palolokong*. It contained sacred meal to feed the representations of serpents that were operated by men behind screens.

The basket was an important item in Hopi life from birth to death. In the many ceremonies that were celebrated throughout the year, baskets of specific

shapes and decorations/designs were required to carry out the prescribed ritual, which ensured a positive reception by the gods. The majority of the religious ceremonies required baskets of some sort. Thus, the baskets that were used were a tribute to the deities and an integral part of Hopi culture.

Social and symbolic utility. If one accepts the fact that designs, pattern, and color are elements of a visual language that describe or clarify a society, then one can look at the designs on the baskets as being symbolic of the culture. In her description of designs on baskets, Simpson (1953/1971) asserted that the designs were "symbolic-pictographic decoration" that was intimately related to Hopi religion. The repeated use of the crow mother, kachina mana, butterfly kachinas, and other kachina masks visually indicates important figures in their religion. Rain clouds are common on basketry, and one could surmise that this is due to the Hopis' preoccupation with their need for rain to make crops flourish. In this arid area, even the slightest rainfall was of paramount importance in the survival of the community. Designs of flora and fauna were likened to the Hopi environment. Deer, squash blossoms, ears of corn, butterflies, and "eagles" or birds were used the most. According to Simpson, the deer was truly the "Hopi culture-animal" (p. 52) because it supplied many of their needs--the meat, hides, sinew, bone, antlers, and hooves were all of tremendous use to survival.

Many of the wicker baskets did not make use of figurative decoration but had geometric patterns and designs woven into them. Although these did not "represent" any specific figure, they are representative of the high-quality color

and pattern design sensitivity of the Hopis. These whirls, checkerboard, and radiating designs are intriguing and highly sophisticated in size, placement, and color usage. The plaited work also incorporated geometric designs, usually in variations of diamond and diagonal patterns. Once again, the subtlety of the colors and the space usage indicates a highly developed sense of style and artistic "eye."

Both the figurative and geometric designs can be considered symbolic of the artistry, aesthetic preference, belief system, and surroundings of the Hopi. It is through these designs that information about their culture can be ascertained.

Hopi basketry is also symbolic of their social and religious organization and behavior. The extended family gathered for a "plaque-making party" (Whiteford, 1988, p. 150) to make plaques and baskets to give to the groom's family as part of the wedding ceremonies. Looking at the quality and quantity of the wedding baskets, one realizes the industry that was required to make them. No one person could do that amount of quality work in the time taken. A group must have worked on them. Thus, the baskets indicate the group effort and organization.

Because baskets were not made in isolation, but in a family setting as part of daily activities, they also represent the gathering of basketmakers. The young learning from the experienced weavers, the sharing of ideas and techniques, group gathering, and preparation of materials were all incorporated into the

making of baskets. Although there may be minute individual differences in the baskets, on the whole they all look very similar, with little or no individualization. This indicates the sharing of ideas and techniques, as well as group aesthetics. If individualism had been a strong factor in the Hopi culture, the baskets would have strong deviations in design and pattern and techniques. Individual artists would have been acclaimed or "stood out" and worked in isolation or individually. But the socially accepted stance was group effort, working for common survival and unity, which discouraged "individual prominence or fame" (Mauldin, 1984, p. 13).

Baskets are also symbolic of Hopi industry. Baskets, especially those of such high quality as the Hopi ones, are time consuming to produce. They are indicative of the patience and attitudes the Hopi had concerning tasks. Coiling was the most time-consuming technique in basket making. Yet the process was continued and exalted by the Hopi. Persistence in gathering and preparing materials and weaving baskets is exemplified in the continuance of basket making throughout the centuries. Whereas other Native American cultures waxed and waned when it came to basket making, the Hopis continued to weave. "Coiling was an old basketmaker method, given up for a while and then brought back by the Hopi about 1300 A.D., the great Pueblo period" (Underhill, 1944/1979, p. 21). The burden baskets represent the Hopi's persistence and tenacity in developing an agricultural system that helped sustain them in such an arid clime. The water cistern baskets clearly exemplify the resourcefulness of the

farmers in making use of every bit of water. If these attitudes and work habits did not exist, there would have been no reason for making burden baskets for hauling food or water vessels for irrigating.

Baskets were made for harvesting and parching corn, as well. These agricultural and food-storage pursuits were group activities. "Sweet corn is harvested and baked in the field, usually by family or clan groups" (Simpson, 1953/1971, p. 52); thus, the sifters and trays can represent this group's activity and social organization. "Since the harvest was and is a community undertaking, feasts are customary at the end of each harvest day" (Simpson, 1953/1971, p. 54); it can be deduced that the baskets used in holding and serving the food would symbolize this socialization.

Ceremonial preparation and presentation was conducted by specific societies. The baskets made for ceremonial rites represent the efforts of that particular group. Thus, it stands to reason that specific baskets were symbolic of the political structure of the Hopi. The Antelope Society and the Snake Society combined their efforts to hold the nine-day rain ceremony (Stirling, p. 583). The members were responsible for making all of the implements used in the ceremony, including the baskets. Another example is the baskets made by the Rain Cloud clan for the Lalakonti dance. These baskets helped represent the mythical ancestral mothers of the clan (James, p. 42). Baskets were also "identified with the women's societies and [were] an important part of the initiation ceremony of young girls" (Mauldin, 1984, p. 30).

Contemporary Basket Utility

The lifestyle of the Hopi has changed a great deal since historic times. With these changes has come a change in basket making.

Ceremonial uses. Preparation and scheduling ceremonies have changed with outside employment using time. Many ceremonies are scheduled around work schedules and the Anglo-American calendar rather than around seasonal or traditional schedules. The amount of time spent on ceremony preparation is regulated by how many hours of "leisure" are available. In historic times, the ceremonial preparation was part of the continuance of tasks necessitated by traditional culture. Like household baskets, ceremonial baskets were produced as part of the work involved in conducting the ceremony and was allotted the time. Now that time is limited to nonwork hours rather than being considered work hours. Ceremonial baskets are still being produced, but in less quantity. Baskets are still used in the Snake Dance productions. Families still make the groom's baskets as part of the wedding ceremonies (Tanner, 1983). These plaques are still made by the coiling and wicker methods and are decorated with traditional designs. A special "wedding basket" is made to give to the groom; it will be buried with him to help his spirit travel to the underworld.

Household uses. Although plastic and metal equipment has replaced a great deal of storage and food-preparation items, some basket implements are still used. "Like the traditional piki trays, these baskets [plaited yucca ring baskets] . . . will survive because they are still used by the Hopis" (Whiteford,

1988, p. 177). Some women still use handmade baskets to hold food and use in some food preparation. "A Hopi Indian in Arizona once told writer Jerry Jacka, 'You have to have a basket to shell your corn into, and in our lives it's just a must! We can hardly afford to buy a basket and if we can make it . . . well then we won't have to pay for it'" (Turnbaugh, p. 65). But, for the most part, baskets have been replaced by purchased items.

Agriculture use. When crop and food storage was not a vital necessity for survival, the need to produce burden, drying, parching, and storage baskets diminished. Pickup trucks replaced burros, and the pack baskets were replaced by the flat bed. Burden baskets are no longer being made, nor are the baskets to gather berries or to store and dry crops.

Economic use. Both historically and today, baskets have played a major role in the economic life of the Hopi. Initially, baskets were used as part of the food quest, in the agricultural industry, and as an item to trade with other Native American cultures. With the infiltration of non-Native Americans, the basket became the coinage for European and American manufactured goods and food supplies.

Later, when the Hopi shifted from an agrarian, gathering society to a wage-earning one, the baskets became a vehicle from which to earn money. Baskets were sold to tourists, collectors, and institutions. The income from baskets often allowed a family to purchase much-needed foodstuffs and other necessities. Teaching basket making to others became another source of

income for weavers. By winning cash awards in exhibits (the Museum of Northern Arizona offers cash prizes), weavers supplement their incomes with their basketry skills.

Social and symbolic utility. Pride in traditions and cultural heritage is growing among the Hopis. Workshops have been established to teach traditional skills. Basket making is among the arts being taught. Even when other Native American cultures were giving up basket making, the Hopi persisted. "Although basket containers are no longer necessary items in their homes, they symbolize the old ways of their people" (Mauldin, 1984, p. 13). Baskets also symbolize traditional roles. When the commercial market for baskets declined, the Hopi continued to teach the skills because of social and religious practices. "I started weaving baskets when I was initiated into the woman's society" (Saufkie, p. 32). The role of practical training, including basket weaving, is important in the life of the Hopi child. "This training given a girl by her mother and maternal relatives . . . is the fundamental education which fits a youth to take his or her proper place in tribal life, and is of great importance in the preservation of traditional Hopi ways, customs and beliefs" (Simpson, 1953/1971, p. 46). The basket is an object that links the present with the past.

Making baskets today in the tradition and methods of the past serves as a vehicle for continuance. "Generally, tradition is revered by the basketmakers themselves, linking them to their tribal history, their long-enduring relationships with the gods, and their country" (Whiteford, 1988, p. 183). Returning to the use

of natural materials and natural dyes is a return to the "old ways." The contemporary baskets made in traditional ways represent another era, a strong link with the past, a respect for traditional culture.

The contemporary basket also represents the current economic industry of the Hopi. They have continuously made baskets for trade and sale. Even when the tourist market declined in the 1940s, Hopi basketmakers were still making and selling their art to collectors and tourists. It takes a great deal of effort to seek out materials and prepare them for weaving in the traditional manner, when materials are increasingly scarce. The continuous sustaining of quality basket weaving is an indication of the pride in Hopi skills. Even when baskets were being made for mass marketing in the 1920s and 1930s, many Native American artists lessened the quality and increased the quantity of their work. Not so the Hopi; they continued to make high-quality baskets, and it was hard to distinguish those baskets made for market from those made for traditional use (Whiteford, 1988).

The baskets that are entered in arts and crafts competitions are of the highest quality. "In 1963 . . . better coiled work was being produced at that time than ever before. By the late 1960s and throughout the 1970s, another and still higher peak was reached" (Tanner, 1983, p. 50). The increased attendance at weaving workshops and classes indicates not only an interest in keeping traditional skills alive, but also the need to socialize and relate to other weavers. Baskets act as a catalyst for this social interaction. Gathering and preparing

materials, as well as weaving, are not isolated tasks but are done in the company of other girls and women, who are relatives and neighbors. "The women chat, gossip, exchange recipes, talk about their families, plan ceremonial activities and often comment on each other's work" (Whiteford, 1988, p. 184). The resulting baskets are of a high standard because the weaving companions are the first to make judgments through giving encouragement and praise or withholding praise. The men who gather materials to make the ceremonial baskets also enjoy the camaraderie that weaving initiates. Not only are they carrying on traditions, they are also establishing a bond between old and new generations through their craft.

Hopi Baskets

Coiled Baskets

Coiled baskets are not woven; rather, bundles of grasses or rods are sewn together with overlapping stitches. Coiled basketry is an old basketmaker method that was "brought back by the Hopi about 1300 A.D., the great Pueblo period" (Underhill, 1944/1979, p. 21). There are several variations of coiling, but the ones used by the Hopi usually consist of a spiral coil made of bundles of galleta grass or rabbitbrush bound together with yucca strips. The yucca strips are poked through the bundles and laid closely together so no foundation bundle shows. Awls are used to help poke through the bundles to make the stitches. This is a very time-consuming method of making baskets, and the Hopi are the

only ones who continue to make coiled baskets (Figure 47). Most of the coiling is done exclusively on the Second Mesa (Underhill, 1944/1979).

Decorative designs are made by dying the yucca strips various colors before "weaving." These designs are placed against a natural background color. The natural colors vary according to how the yucca is prepared. For an olive-green background, the outer leaves are used, frozen; tender, inner leaves make a white ground, and others are bleached by the sun to generate a yellow or golden background color.

Historically, weavers used their teeth to split the leaves; now many use awls. Basketmaker Joyce Ann Saufkie told about preparing yucca leaves in an interview published in Traditions in Transition. "We pick the yucca leaves in both winter and summer and split them two or three times to make the wrapping splints very thin." While weaving, the yucca splints are kept in wet sand to make them pliable, or they are run through the weaver's mouth to wet them. To dye the strips, vegetable and mineral dyes are combined with natural alum. At the turn of the century, some weavers switched to aniline dyes to accommodate tourists' and traders' demand for brighter colors. But recently there has been a return to natural dyes.

Several forms are made using the coiling technique. The most frequently used is the flat plaque. It is used as a food tray, a decorative item, and as part of the wedding ceremony. Small globular baskets were used for seed gathering and storage. Larger globular baskets were used around the home for storage of

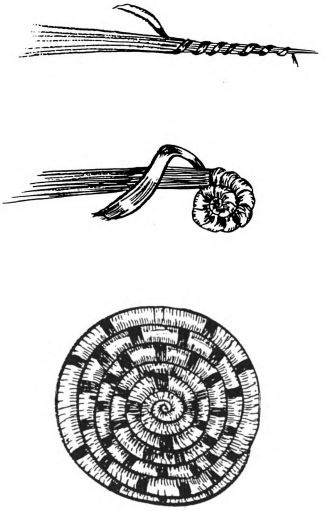


Figure 47: Coiling--yucca strips wrap a bundle foundation.

many food and nonfood items. Larger forms, such as wastebaskets, were made for commercial sale and were not traditionally used by the Hopi.

One characteristic of coiled Hopi work is the "gate." The gate is a traditional finishing-off technique that symbolizes the status of the weaver. When completing a coil plaque, a marriageable virgin will leave the inner grass of the coil loose to "flow out"; this is termed the Flowing Gate. If the coil is closed or tapered, this means that the weaver is incapable of having children. Usually a Closed Gate indicates a married woman beyond child-bearing years or a widow. A matron who has children leaves the ends loose but cut shorter to indicate children (Oglesby, p. 58). The designs on coiled work include weather, plant and animal motifs, and kachina figures and masks. Many plaques have beading work or an overlay of yucca strips added after the basket has been finished. The beading is raised from the surface and is often colored with dyes. The plaques' designs are centered and often extend to the rim. The rim is left natural, or a colored band is added as the last coil. Globular shapes and deep forms also have many of the same designs as the plaques.

Wicker Basketry

"Wicker as produced by the Hopis frequently has been termed the finest and most artistic of this technique in the world" (Tanner, 1983, p. 63). Wicker baskets are made from sumac twigs, squawberry sumac root, rabbitbrush (both the shorter variety, *bigelovii*, and *graveolens*), yucca leaves, and twigs. The warp is usually rigid, whereas the weft can be rigid as in the burden baskets or

pliable as in the plaques. (See an example of the burden baskets in Figure 48.) The highly decorative plaques are "specialties in the villages of Third Mesa: Old Oraibi, Hotevilla, Kyakotsmovi, Bacabi and Moenkopi" (Whiteford, 1988, p. 149). Plaques are usually started by binding together bundles made from four sumac rods and then overlapping them in a cross pattern. The weft is then woven over and under to bind the bundles together. As the weft is woven outward, more bundles of rods are added to increase the number of warp.

For intricate designs such as a kachina mask or figure, there can be as many as 14 pairs of warp plaited together for the starting center. A second method of starting is to wrap a splint around the warp rods to bind them together. These then are also overlaid at right angles to form a cross pattern; the weft holds them together. In the finished basket, one can see that the beginning warps are not connected to each other but are separate. The weft, in being woven over the warp spokes, holds the basket together (Figure 49).

As in the coiled baskets, weft materials are dyed various colors, and a pattern or design evolves as the colored weft is added. Vegetable and mineral dyes are used, and at times aniline dyes for brighter colors. Rabbitbrush is prepared for dying by scraping the stems with a piece of sandstone. White is achieved by bleaching peeled stems of rabbitbrush, or by whitewashing them with clay. The designs are figurative kachina, kachina masks, animals, plants, birds, and other objects from nature. Geometric designs, both symmetrical and asymmetrical, are also popular. The large burden baskets usually were left plain

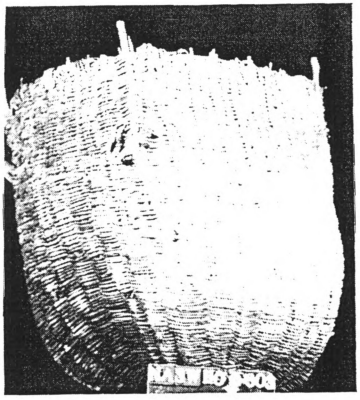


Figure 48: An example of a Hopi burden basket. The weave is coarse and includes loops for attaching a tumpline (Heard Museum).

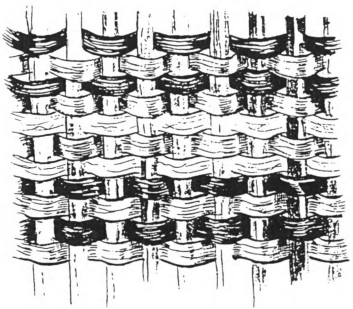


Figure 49: Wicker--colored weft forms the pattern.

and did not have any decoration or designs woven into them. They were more of an open weave and were conical in shape.

The rims are finished in a variety of ways. Some plaques have the spokes or warp simply folded down and overlashed with yucca-leaf strips. Other plaques have braided warp spokes with the ends poked into the last few rows of weaving. Others have a decorative colored border, accomplished either by adding overlashed yucca strips in an alternative pattern or using the last several weft strands in a decorative banding.

Wicker burden baskets were made of rods of sumac or barberry. Sometimes these were peeled for a finer weave. Some have been made of a more open weave. These baskets are rough and coarse, rather than having an even finish. Burden baskets had struts or strengthening larger branches woven into one side to help support the weight of the burden while keeping the basket lightweight. These struts extended beyond the rim of the basket to give "handles" for lifting them unto burros' backs. Burden baskets made to carry on a person's back included woven loops for an added tumpline.

The large wicker cisterns used for gathering and transporting water were tightly woven with small weft. Packed closely together, the weft made an almost water-tight container. To complete the baskets, linings of clay or pitch were added. Cooking baskets were also wicker; they were not lined, only tightly woven to hold water.

Other wicker containers are made in a variety of sizes for storage and food preparation. The plaques are used as food trays both in the household and in ceremonies. They hold cornmeal, dried corn, shucked corn or corn on the cob, piki bread, and fresh and dried fruits. Small wicker baskets are used to hold sprouted beans in the Powamu ceremony. Along with coiled baskets, they are used as part of the wedding ceremony. The bride's family makes many baskets to take to the groom's family, usually heaped with cornmeal. The large baskets were often decorated with simple bands of color, whereas the trays were left undecorated. Wicker bowls are sometimes called trays, but the bowls have straighter sides and a larger, flatter base. Also, the bowls are deeper than trays.

Piki trays are made to hold piki bread and other foodstuffs. They are usually plaited in the center, with wicker rims. Wild currant is split and used for the mat or center of the tray. The designs are generally geometric, made by alternating the number of warps over which the weft crosses (Figure 50). Usually these are chevrons, concentric diamonds, diagonal bands, or checkered. Colors in the designs are achieved by using the dark-brown outer surfaces and the light inner surfaces of the wild currant. The wicker edges are achieved by crossing the split currant with bundles of whole rods in the over, under, over method. The edges are finished by wrapping or overlashing yucca strips around the last few wefts.

With the increase in demand for tourist or commercial baskets, large containers and the wastebasket style are some of the forms that are frequently

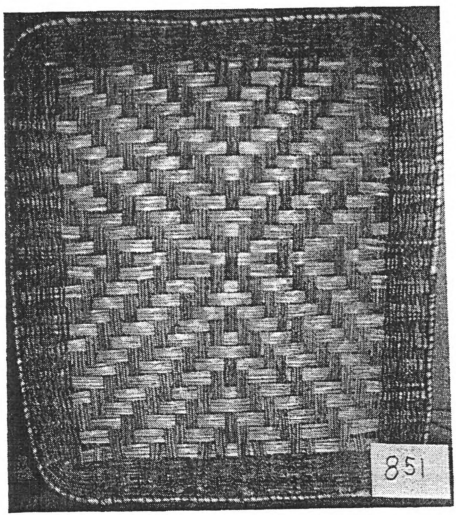


Figure 50: Hopi piki tray. The chevron design is made by plaiting bleached and unbleached yucca strips. The edge of the tray is wicker work, and the rim has a supporting rod held in place by coiling or overlashing. Ca. 1940 (Arizona State Museum).

made. Although the forms are not traditional to the Hopi, they are decorated with designs that are indicative of Hopi designs.

Plaited Baskets

Plaited basketry is in continuous use, so it has never been eliminated from Hopi weaving. These baskets are generally called "ring baskets" because of the added ring of wooden twig of sumac rod or, in later times, wire around the rim incorporated for strength (Figure 51). "The all-purpose plaited ring basket of the Hopis is the oldest kind of basket in the Southwest. They appeared first in the Basketmaker III period (about A.D. 500) and continued to be made and used without a break" (Whiteford, 1988, p. 155). The general weave is twill plaiting of split yucca leaves. The ridge that runs down the center of the yucca leaves is stripped off to make the leaves flat and more pliable. The traditional shape was round, but square, rectangular, and oval baskets have been made to satisfy the commercial market.

A mat is made by plaiting; then the mat is attached to the ring by folding over the warp and weft ends around the ring. The folded edges are then held in place by twining two cords of yucca through them. As with the piki trays, the designs are basically chevron, diagonal, concentric diamonds, a combination of two, or a division of four areas in which chevrons are woven. Mainly these baskets were used as sifters and for winnowing grain. They are large in size, with a gentle slope to the sides; they are very light weight. Traditional baskets are monochromatic, using yucca leaves that were dried in the sun to bleach

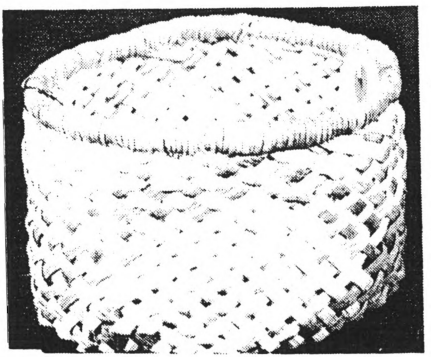


Figure 51: A Hopi basket plaited on the diagonal, made of yucca with a coiled finished rim. The yucca is green and unbleached. The open appearance is due to a loose weave. Purchased at the Heard Museum Hopi Guild Show, 1971 (Heard Museum).

them, or soaked in wet sand to darken them. The design can be seen by the slight variation in the color of the yucca leaves. Recent baskets have incorporated dyes so the designs are often in sharp contrast (Figures 52 and 53).

Decorative Designs

In studying the decorative element of design on basketry, one notices the variations in not only the motifs but also the placement of the designs. On plaques, the designs are organized in one of four ways: (a) a centered figure or design that fills the plaque, (b) a design that is repeated on either side of a center point, (c) a division of four spaces filled with two different designs, or (d) four repeats of the same design. The repeated designs can be symmetrical, asymmetrical, or an exaggeration. The bowls and globular forms have banded design spacing. The bands can be broken or continued and are used in combination with other designs. Wicker and coiled work are treated the same with regard to the limitations of the techniques. Plaited work generally has an all-over design element in that the design covers the entire "mat" surface of the basket. An in-depth design analysis can be found in Tanner's (1983) work Indian Baskets of the Southwest.

In looking at the decoration or designs on the baskets, one must keep in mind that the designs are not symbols. Often one cannot even say for certain what the design represents or looks like. Only the weaver can determine that, and because many of the baskets held in museum collections or found in shops have not documented the artist and the artist's intention, one cannot say with

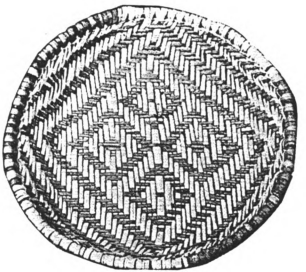


Figure 52a: Hopi plaited sifter with bleached and unbleached yucca strips in a diamond pattern. The basket was finished by wrapping the weaving elements around a rod. This is also called a "ring basket" because of the wooden ring that forms the rim. Ca. 1973 (Heard Museum).

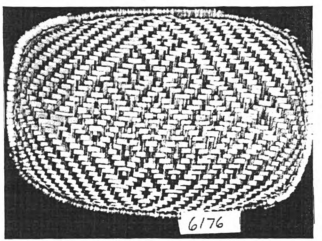


Figure 52b: Hopi oblong sifter made from dyed and natural yucca strips. The diamond pattern is centered, with chevron elements. The woven elements are wrapped around a supporting ring at the rim. The design is much smaller than those on earlier trays and sifters. Ca. 1964 (Arizona State Museum).

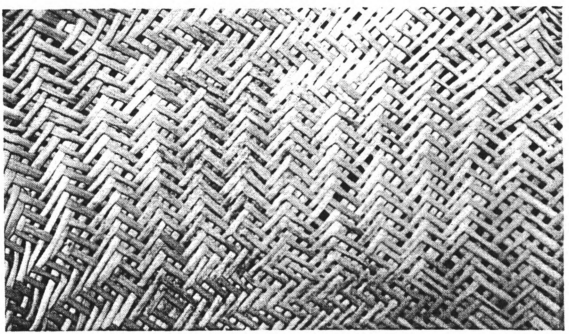


Figure 53: Detail of plaiting weave on trays and sifters.

assurance that the design "is" a deer or a rain cloud, and so on. One can say that the design "looks like" a deer or a rain cloud. The designs are not symbols in themselves but are symbolic of ideas and figures or can be simply a pattern.

On coiled work, the kachina mask and figure appear frequently, the favorite being the crow mother. The figure is centered; many times the body is very small, with the head or "mask" radiating out to the rim of the plaque. In some, deer or other animals are spaced around the head gear. The body of the figure either has arms, hands with fingers, and short legs with small feet, or the body is simply a checkerboard triangle that sweeps to the lower edge of the plaque. The mask shapes are simplistic, with hair whorls or very elaborate geometric designs. The figure is usually placed on a natural background. The exception to this is a 1982 Hopi showpiece that has a kachina placed on a mottled green background (Tanner, 1983, p. 53). Kachinas are worked on both plaques and globular forms, but the most elaborate are those found on the plaques. Beading (overstitching) can be found on the masks as part of the mask design.

Birds or eagles are another recurring motif. These are usually black, with yellow or gold beaks and feet. With their wings spread away from their bodies, they fill the entire plaque. The detailing on these is excellent; even the eye is in place, represented usually by one small strip of yellow yucca. Butterflies are another shape that has been used repeatedly (Figure 54). The wings can be simply indicated by solid colors, with a different band surrounding them, or they

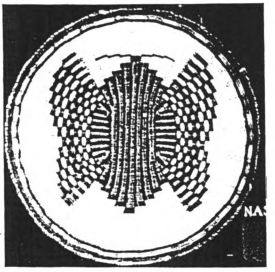


Figure 54a: Butterfly design in wicker. The warp is made of sumac twigs, and the weft is rabbitbrush. 1921 (Arizona State Museum).

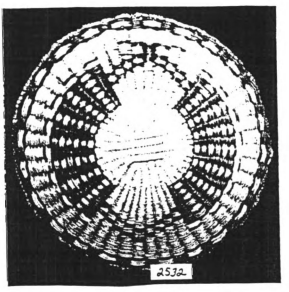


Figure 54b: Butterfly design in wicker. The ribs are made from sumac or willow twigs, and the weft is various strips of rabbitbrush. 1969 (Heard Museum). The examples of the butterfly design in Figures 54a and 54b indicate that the pattern did not change through the years. The two designs are similar in the treatment of the wings, body, and antennae. Only the rim treatment in the later plaque is more intricate.

can be an elaborate geometric design. Again, attention to detailing is evident in the small, thin antennae that protrude from the main body. Both of these can be found on coiled and wicker plaques.

Flowers, squash blossoms, and corn are commonly used plant motifs. The flowers can be very plain, with petals outlined in black, or they are very involved, with checkerboard designs on the petals. Whole ears of corn with kernels depicted are often used in combination with other motifs. These designs are used on plaques and bowl-shaped baskets of both coiled and wicker techniques. In addition, one can identify clouds, rain clouds, lightning, hills, and rainbows on the baskets. These are usually represented in a geometric zig-zag or stepped triangle pattern owing to the constraints of the weaving techniques. On both coiled and wicker work, geometric designs and whorls of multicolors are used. The wedding baskets often have a geometric design made of connected rectangles that signify the continuance of life. The Navajo wedding pattern has been used a great deal in plaques in recent years. The Hopi "borrowed" the design and added their own embellishments of stepped triangles around the design. Many of the designs are surrounded by a band of color at the rim of the baskets, whereas others have a plain rim.

Natural Dyes

Both plants and minerals are used to color weaving materials. The process of preparing the materials for dying, making the dyes, and the actual coloring of the materials is long and involved. When aniline dyes were available

from traders, many weavers began to use them because they were less time consuming and easier. They offered a variety of colors but were not of the quality of natural dyes. In recent years, many Hopi weavers have returned to natural dyes because the colors are more in keeping with traditional basketry. The materials and colors they make are as follows:

Vegetable colors:

These are made by boiling roots or plants, bark, or flowers; sometimes natural alum is used to intensify the colors. To set colors, some are held in the smoke of burning wood--black for dark colors and white for light colors.

Black	Navy bean, sunflower seed smoked over black wool, piñon pitch, sumac
Dark blue	The above used in a weaker solution
Light blue	Larkspur or indigo
Purple	Purple corn, amaranth
Pink	Amaranth, cockscomb (varying intensities of the cockscomb dye give carmine and lavender)
Red	Alder bark, sumac berries, cockscomb flower
Red-brown	A grass (*Thelesperma gracile*), boiled, strained, a native alum added
Yellow	The yellow composite flowers, many of which are known as rabbitbrush; the most common are *Chrysothamnus graveolens, Ch. bigelovii, Howardii, pinifolius.*
Orange-yellow	Saffron (*Carthamus tinctorius*) flowers, Navajo tea, greenthread (*Thelesperma*)

Green	Blue dye and yellow mixed; sometimes the bark of rabbitbrush

Mineral colors:

Clay or rock is ground on small flat stones. It is then mixed with oil that has been obtained by chewing squash seeds.

Black	Ochre, soot, coal
Green	Copper carbonate
Red, brown	Iron ochres
White	Kaolin

Yucca leaves are used natural for a light green color. The leaves are buried in wet sand for a darker green color and bleached in the sun for a white color (Underhill, 1944/1979; Whiteford, 1988).

ROLE OF THE BASKET WEAVER/ARTIST

Because the weaver is an important factor in the economics and the production of baskets, one should look at the roles weavers assume within their society. This is a study of how the weaver functions within the society. Is the artist or craftsperson held in reverence, or is the artist considered a manual laborer? Is the artist's production a respected occupation, or is it simply a part of daily living, with basket making only one phase of daily tasks? Are weavers respected for their talents and recognized as such, or are they considered common?

One must also look to the artistic society to see how weavers are viewed within their own group of peers. Are basket makers as highly thought of as mask makers or wood carvers? In a "user" arts society, are the artists considered differently from those in an "audience" arts society? The former integrates the artists into the society, whereas the latter segregates artists into groups or out of the mainstream of society.

In his essay "Basketry: From Foundations Past," Collings (1987) indicated that:

> The traditional basket weaver was a true folk artist. She created works that were always an inextricable part of the social, economic, and ceremonial activities of her society. She worked within a limited range of shapes and designs that had been collectively established by her society.

> Yet within these culturally imposed limitations, a high degree of individual achievement and seemingly endless variations were possible. (p. 25)

The weaver is not only producing a utilitarian product, but is also producing an object that depicts many aspects of the culture.

In addition to being a manufacturer, the artist also acts as an interpreter of the society. The baskets represent the needs, beliefs, and surroundings of the society. The weavers help clarify these aspects of their culture through the production of baskets. Even though individual artists bring their own skills and interpretations to their work, there is a commonality of their organization that is represented in the shapes and designs found acceptable to their particular culture. Langer (1953) wrote that the "artistic conception is not a transitional phase of mental evolution but a final symbolic form making revelations of truth about actual life" (p. 81).

Baskets are the truth about an agrarian and gathering society; they are the implements of that society. Baskets are part of the ritual and belief systems and are made from local materials, so in their final form, the finished product, the artists or craftsperson has been able to clarify aspects of the culture. In sympathy with the notion that arts are interceptors of their society, Sieber (1987) in The Arts and Their Changing Social Function asserted that "the arts are symptomatic of cultural values. . . . The arts at any time or place, in reflecting cultural values, evolve what might be called the 'visual image' that culture has of itself" (p. 205). If one considers that "the basic role of the artist is the same in any culture--to arouse an emotional response in his audience," as did

Dockstader (1961, p. 17), then one can consider that the basket makers are indeed artists rather than just craftspersons. They are able to elicit a response within their own society and have the ability to communicate successfully with their own people by recognizing and using tradition.

The artist makes choices as to what materials, colors, decoration, and designs to use. In doing so, the weaver is communicating what is important within the society. If it were not acceptable to depict a specific image or design as part of the decoration, the artist would not use it. Conversely, if specific images were popular, the artist would probably incorporate them in his or her work.

> Thusly, society's aesthetic values are established or recognized and displayed in the basketry of that society. In a culture that has set and traditionally basic forms that have evolved, and forms that are true to simple feelings and therefore comprehended by those in the society, the artist, weaver, adopts those current ideas and applies what they have learned. (Langer, 1953, p. 53)

Thus, the basic forms of designs on plaques and baskets have evolved from accepted traditional symbols, shapes, and images. Although the images technically do change on the baskets, the images are still chosen for their traditional aspect. When a society is thrown into chaos or upheaval, the artists "lean entirely on the standardized or . . . the art becomes a haven of refuge, a guarantee of meaning in the familiar mode" (Langer, 1953, p. 54). The people who used baskets and ceremonial basketry on a daily basis were aware of the form's import; they were educated in the semblance of the design, so the decorative aspects of basketry expressed their "feelings and ideas of being."

The societies accepted the symbols that spoke to them and recorded or transmitted their ideas and feelings. Thus, the repetition of certain designs such as the salmon-head berries on Tlinget baskets or the kachina figures on Hopi baskets, yet each has the characteristic of the weaver, the individual stamp of the creator, even if it was established only in the tension of the weave, the choice of colors, or the physical attributes of the weaver's manipulation of the material.

The fact that many designs are "traditional" does not detract from the creative ability of the artists, but rather challenges the artists to make use of tradition in a unique, personal way. Note that in Figure 7 the traditional curls are uniquely incorporated by the individual weaver. The actual visualization of those figures and the visual presentation fall to the role of the artist, for the weavers are actually making visual symbols or designs that represent ideas and their environment.

Langer (1953) said that "the true power of the image lies in the fact that it is an abstraction, a symbol, the bearer of an idea" (p. 47). This can be related to the Hopi images of the kachina, corn, or animals found on many plaques and baskets. It is the idea of the gods, the animals, or corn. Langer thought it is more than just an arrangement of colors and forms that arise from the process. It is something created, not just "gathered and set in a new order" (p. 48), but detached from the actual setting and conjuring up an idea. She likened it to Jung's "Semblance," a reflected illusion, a dream rather than a concrete imitation. Thus, the dream or illusion of the kachina's powers manifests itself in

the images of gods--the colors and shape are arranged to give the illusion or image of the god. As the people's perception or illusion of the power changes, so would the illustration or concrete image found on the baskets. Langer emphasized this notion by stating, "They are symbols for the articulation of feeling" (p. 52); they articulate the society's feelings about the harvest or about their relationships with animals or about the rites and customs of their lives. It is through artists'/weavers' work that these collective and individual feelings are "told."

Tanner (1983) summed up this concept as follows:

> Culture is the great director of aesthetics, but progress in any craft art depends on the ability of creative individuals to develop the artistic potentials that exist within that framework. . . . Style is the product of environment, cultural heritage . . . and individual creativity . . . all combined and channelled into an artistic expression that is the essence of tribal feeling. (p. 2)

By choosing specific materials for their craft, the artists are selectively indicating what resources are in their region. Through these selection processes, the artists become visual historians of their culture.

If one accepts the claim that "basketry is the most expressive vehicle of a tribe's individuality, the embodiment of its mythology, folklore, tradition, poetry, art and spiritual aspirations" (Lobb, 1990, p. 7), then one can understand how the artist's primary role can be considered as an interpreter or communicator for the society through his or her art. The artist's role is more extensive than simply producing utility items. The artist also interprets the traditions of the skills and techniques needed to produce the objects.

Along with being a facilitator of manufacturing traditions, the artist assumes the role of educator. The artist educates the society in the traditional symbol system by continence on the art pieces. The artist is also a teacher of the methods used in producing the art objects. The traditional way of making the objects is preserved and taught by the artists within their society. Not only is the artist a historian of manufacturing skills, but a conduit as well. The weaver is conscious of the past and its relationship with the present. Through the artist, the past is saluted and revered, the present in enlivened with skills and technology, and the future is being seeded for creative progress while honoring the past.

Another role of the artist is one of being an innovator. Not only has the artist been innovative in using the materials at hand, but also he or she has had to adopt other materials when the traditional ones were depleted. When European and American tools and equipment were introduced, the artists willingly set aside their bone and stone ones and made great strides in using the imported ones to improve their art. They were able to adjust the styles and designs of the baskets to meet the demands of an Anglo-American clientele and collectors. Many weavers switched to aniline dyes to accommodate the demand for brighter and more varied colors in basket decoration. Others changed their methods of manufacture, at some detriment to quality, to meet the increased demand for their products. Others managed to reconstruct their time to include basket weaving along with wage earning to augment their incomes. Even before the introduction of European goods, basket weavers were experimenting with

natural dyes, materials, and designs to increase their understanding of and competence with technology and new skills.

By studying the artists of the societies, one can determine some of the division of labor. Were the artists women who trained young girls in the art of weaving? Were the baskets they made for household and food-preparation use, or did they make ceremonial ones as well? Were men basket weavers who taught young boys the craft? Was there a mix of roles in the preparation of basket materials and in the usage of the baskets? These are all indicators of how a society organized their labor. By understanding who made the baskets, one can then understand a portion of the labor management within that society.

Ojibwa Basket Makers

Historically, the Ojibwa basket makers were women of the family. They were responsible for all food preparation, gathering, agriculture, and household equipment. They held no special position in the family as basket makers because weaving baskets was part of the daily tasks needed to survive. They were part of the whole economic group.

As with other basket weavers, they were also horticulturists and plant specialists because they knew what plants to pick and where to find the materials. They were also chemists in their knowledge of how to make dyes for coloring the decorative splints.

Weavers in contemporary times were manufacturers of commercial items. When the baskets were made for sale in gift shops and tourist places, the

weavers became money earners. They added to the family income through producing their art. They were also a link with the "outside" world. They traded and sold their work with non-Native Americans.

The role of teacher was another role of the basket maker, for she taught young girls and daughters in the family the skill of weaving, along with other household tasks. "Mother and daughter were close companions. The daughter learned to do many things by watching and helping her mother" (Levi, 1956, p. 132).

Today, the weaver is a teacher to many. By giving demonstrations at folk festivals, exhibits, and showings of Indian art, she not only explains and shows the art of weaving, but she also teaches about a past way of life. Recently, a group of Ojibwa weavers toured the Soviet Union demonstrating their art as part of an international cultural exchange. Other Ojibwa weavers participated in the Smithsonian Folk Festival in Washington, D.C., as well as other pioneer and folk festivals around Michigan (Jesse Besser Museum notes). Contemporary basket makers are teaching workshops and classes to interested Native Americans and non-Native Americans as part of the resurgence of interest in Indian art. The weavers share their skills and ideas with other weavers. Several have received funds to document their skills for preservation programs of traditional arts

Tlinget Basket Makers

As noted earlier, the basket weavers were and are women. The women of each household unit were responsible for weaving all of the baskets used in

everyday tasks and for ceremony, as well as gifts. They were not singled out as artisans but accepted as a working part of the whole unit. Although the weavers were not independently recognized for their weaving, their baskets were important in the continuing function of the unit. Without their basket skills, many of the food-quest tasks and rituals would not have been as easily completed.

Needing to know which trees and plants would work best for different types of baskets and which plants and minerals produced which colors, the weavers were also horticulturists. Their skill at locating and identifying the vegetation was of prime importance to the basket industry. They were also chemists, in that they had to know what would work in dying materials for the overlay decorations.

The weavers were also teachers and role models. Young girls learned to weave from the basket makers within their household unit (Figure 55). Today, the weavers are teachers of tradition as well as basket making. Through their knowledge of gathering and preparing materials for weaving, land and plant information is passed on to new generations. The designs on the baskets are taught and related to the past symbols of Tlinget life.

The basket makers indirectly taught early collectors and explorers about the work cycle, attributes of plants, industry of Tlingets, and their material culture through their efforts of weaving baskets. Notes made by Newcomb and Emmons on baskets, their uses, materials and techniques, for the Field Museum and

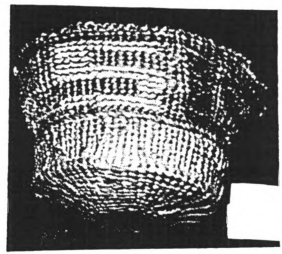


Figure 55a: Child's basket. Young girls learned to weave as part of their training for the feminine role in the Tlinget society. This basket is an early attempt at learning how to weave. It is ornamented with dyed straw. Col. 1902 (Field Museum of Natural History).

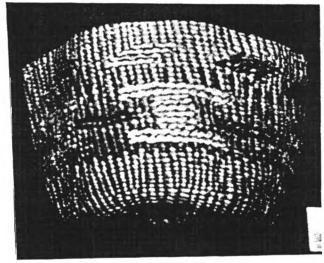


Figure 55b: First weaving–a child's attempt at basket weaving. It is twined spruce roots with dyed straw false embroidery. The weave is uneven and the false embroidery loose. Ca. 1902 (Field Museum of Natural History).

other institutions relate important information about the lifestyle and industry of the Tlingets (Field Museum notes).

The basket makers could also be considered public relations personnel for the Tlingets. They were the first ones tourists and other newcomers to the area met as the boats discharged their passengers. The weavers would congregate on the docks in groups to sell their baskets to the travelers. The sharp trading and bartering over prices gave a positive and significant image of the Tlingets as being astute in business. Although this image did not act as the major industries, with the help of the United States government, rolled over the land, the first image was favorable (Wyatt, 1989).

Hopi Basket Makers

Both women and men make baskets in the Hopi society. The women make ones used for food storage, household management, and domestic service. Women have traditionally been the main weavers of commercial baskets, beginning with the trading of baskets between Native American societies and then with the first missionaries, tourists and researchers, current collectors, and specialty shops. Men have traditionally woven baskets used in religious practices by both men and women. Large agricultural and burden baskets were made by men.

As with other Native American basket makers, the Hopi artists had a variety of roles within the society. They were manufacturers, innovators, historians, translators or interpreters, a link to the past, facilitators of the belief

systems, educators, traders, and skilled artisans or craftspersons. Some of these roles were more obvious than others; some were deliberately chosen, whereas others were a result of the function of basketry within their society. Although the function and utility of the baskets have changed over time, the roles are the same. Perhaps the roles have shifted in importance or in their extensiveness, but to a degree the roles have remained consistent.

The most obvious role is that of being a manufacturer. The weaving of baskets was an extension of daily tasks to facilitate the domestic and ceremonial organization. While groups would go out to gather basket materials and prepare them for weaving, the actual task of weaving was an individual process. Many artisans might have gathered for the camaraderie of weaving, but individuals were responsible for making baskets for their own family/clan unit. Within the society, the basket makers were part of the overall social and economic group. They were not separate from others, nor was their art separate from daily living. It was an integrated art and skill.

The basket makers were very innovative in their work. When many of the natural resources were depleted, they were able to make use of other materials to gain the same high quality of work. With the introduction of large knives, pruning shears, and awls, bone tools were retired. Many mineral and vegetable dyes were discarded for the faster, brighter aniline dyes at the turn of the century, but recently there has been a return to natural dyes. Weavers also adapted the unusual Anglo-American shapes for their commercial baskets to appease the

traders' and purchasers' demands. They made the large "wastebasket" shapes to satisfy the market demand, in addition to shapes that were indicative of their culture (Tanner, 1983).

As historians of the society, Hopi basket makers used designs that were symbolic of their environment (deer, corn, birds, butterflies, flowers, clouds) and of their religion (kachina masks and figures, rain clouds, lightning, and the colors of the four corners). They have gathered the history of their basket skills through their knowledge of weaving. The items they make are a part of their lifestyle; thus, they are recording how they live through producing baskets. As one aspect of Hopi material culture, baskets can be considered a historic record of industry and lifestyles. The makers of these baskets are forming a record of their lives, the same as a story teller or a dancer.

Along with the historian role is one of being a link or bridge to the past and future. The artists have learned basket-weaving skills from their older relatives. These same skills are then taught to younger members of Hopi society, who are the future. Thus, the weaver connects the past to the future through his or her skills and knowledge of making baskets. "Older women, the teachers who themselves learned from the preceding generation, exert a powerful influence for the maintenance of tradition and against strange or different designs and techniques" (Whiteford, 1988, p. 184). The weavers are also a bridge to other cultures. Their skills are transformed into a vehicle that passes from one culture to another, from one Native American society to another, as well as from the

Hopi society to non-Native American cultures. Through the baskets, a connection is made between the cultures. The basket maker facilitates this connection.

By teaching weaving skills, the basket maker then becomes an educator. The artist educates others not only in how to make baskets, but also in the aesthetics and quality of acceptable Hopi basketry. The weavers teach what is acceptable through their selections of decoration and technique.

> They praise excellent work and withhold praise when baskets do not meet their standards. . . . The old ways are retained principally because Indians like them. . . . Adherence to tradition provides a sense of continuity. . . . Those who work only within the bounds of their own tribal aesthetics do so not out of ignorance of other ways but because it is the most satisfying and productive thing for them. (Whiteford, 1988, p. 184)

The baskets made for use in ritual are products that represent and are related to the Hopi belief system. The basket makers produce these items; thus, the artists can be considered to be facilitators of beliefs. They also help interpret many of the ideas connected with the ceremonies. One example is the basket makers of the Rain Cloud clan, who make baskets for the Lalakonti Dance, which represents the mythical ancestral mother. These baskets help relate the Hopi mythology; thus, the basket makers are instrumental in helping propagate the beliefs of their culture.

CONCLUSION

Over the period that begins with the contact of Europeans and Anglo-Americans to the present, Tlinget, Hopi, and Ojibwa basketry has changed. It has not remained a static art form. Rather, the technology of producing baskets, the physical appearance of the baskets, and the function of the baskets all have changed. Many of these changes can be observed. In all three groups of baskets, one notes the use of natural dyes in early periods. Then, as aniline dyes became available, an increase in color usage is noted. Then a return to natural dyes in later years coincided with the revival of folk and natural handicrafts.

Baskets from all three groups indicate a change from wooden and bone tools to the use of metal tools and equipment. The knife is used for cutting smaller splints, and metal awls are used for closer coiling stitches. By looking at baskets in chronological order, one can determine the change in appearance. All three groups of baskets show a tighter, more precise handling of the materials. The coils and wicker work of the Hopi get smaller and tighter in later years. The twining and plaiting materials of the Tlinget baskets are thinner and narrower in baskets of recent manufacture. The Ojibwa baskets have very refined materials and handling of warp, weft, and decorative curls. Decoration on the baskets in all three groups becomes more involved.

The function of the basket shifts from a utilitarian item that is important to the daily home economy, to an item for commerce and an art form. Baskets are no longer needed to harvest the crops, haul water, or store items. Selling baskets becomes a means of adding income in a wage-earner society when baskets are made for tourists and collectors. The ceremonial use has decreased, whereas an increase in making baskets as an art form has been noted in recent years. Other functions such as being indicators of the division of labor and social behavior have remained the same. In recent years, the basket has functioned as a link with the past and an indicator of the society's heritage, both past and present.

By studying the baskets and relating their changes to the shifts in the societies, one gains a better understanding of the process of changes in the societies. The baskets, being part of a material culture, evolve and change with and within the culture. They do not remain a static item. Baskets as an art form slowly change in shape and design as the aesthetics of the societies change. As the demand for the baskets shifts from within the culture to the "outside" commercial market, the art form changes to meet those aesthetics. Basket shapes reflect experimentation and innovation through the years.

When baskets are studied as an integral part of the Hopi, Ojibwa, and Tlinget cultures, one can understand how this art form indeed changed and why it changed. Even though all three cultures had contact with Europeans and

Anglo-Americans at different periods, the overall effect was the same, the influence was the same, and changes were similar.

Indeed, one can see basket changes in relation to those changes in the three societies, but an additional level of awareness must be considered. Why did these societal changes affect basket production? The answer is not a simple one of cause and effect, but deals with the very notion or definition of craft. Baskets are a craft that, of late, have taken on many aspects of an art form. But inherently they are considered a craft, and the weavers are considered craftspersons or artisans.

Craft can be defined by four components or references to preindustrial roots: (a) products are made substantially by hand, (b) they are functional, (c) they are natural-media-specific, and (d) they are founded in cultural traditions. Its past can be considered a reference from which craft can clarify its distinction from fine art or machine-made and mass-produced items.

When products are made by hand, they have a quality that is not seen in machine-produced items. William Morris was well aware of this and wanted to bring attention to this fact. Thus, the Arts and Crafts Movement of the late 1800s was begun as a reaction to the machine-produced items of the Industrial Age. Pieces that are made by hand have an individual or unique quality about them. The public can relate to the fact that this piece has been manipulated by another human being; the maker has actually touched these materials and has put his or her own "sweat" into the effort. The finished product is a link between two

people. It is a "gift" from one human to another. A receiver can appreciate the effort, ingenuity, and skills of the maker; the product has a humanistic quality about it that appeals to people.

The weaver has taken his or her own time to create this piece of work with his or her hands; thus, a period of individual history has been recorded and is on display through the product. It matters not whether the basket took one day or six days to weave; it still defines that time of physical manipulation of material, the time of mental involvement in decision making, the emotional involvement in the process, and aesthetic involvement in the selection of decoration, materials, and method.

When the artisan is put into the context of his or her society, at any given moment, the weaver's decisions and involvement are affected by what is happening in that society at that time. The hand-made product reflects that time and the weaver's responses to that time. One needs to look at the changes in the roles or status of those hands that made the piece, the craftsperson, to note and understand the changes in the finished work. The artisan is not only a conceiver of ideas, pattern, manipulation of materials and need, but also the executor. He or she can be considered the outward manifestation or symbol of the creative purpose, the unbroken link in the traditions that encompass both the producer and the consumer within the social fabric, not only within the individual society, but as a bridge to other societies when the objects become items of trade or for sale.

The historic functional aspect of craft is important in that the function is what integrates the product into the society. Being a utilitarian item, crafts are made for specific purposes, to fill a specific need. They are made following a prescribed method, with prescribed materials that have been found to "work" for that particular society. Because ornamentation is a commonly understood cultural language, a social code, there is a continuum of meaning. The basic fact that aesthetics and function are integrated and that decoration and ornamentation are not separate from utility is a major characteristic of craft. There is little danger of stagnation when the craftsmanship is based on tradition. Each product is, to some degree, free from imitative intention because it is linked to the stream of life rather than being a product of a detached or isolated aesthetic or creation. The craftsperson is in touch with the changes within the society.

Over time, as the society changes, the functions of the product change to meet the needs of that society. Materials may vary according to availability or ease in gaining them. Styles and decoration may change in relation to the functions of the work. Yet there is a basic tradition, and craft can be considered a rudder. It is one of the physical symbols of continence within a society, a seamless continuity. True, there are eras when a craft may not be made in as great quantities, but the making was never totally eliminated. To look at the waxing and waning of a craft and at the changing functions of a craft is to look at the history, social order, economics, and belief system of the society in which

the craft was made. An in-depth study of craft cannot be made by separating the craft from the societal context in which the product was produced.

RECOMMENDATIONS

To further understand the history, anthropology, and material culture of Native Americans, an interdisciplinary approach should be applied. Small entries into this methodology are being made, and the connections between the material culture, historical events, and cultural changes are tentatively being drawn. By increasing the number and depth of studies, using museum collections as a basis for study, and widening the approach, a more holistic view of Native Americans can be gleaned.

Art studies in anthropology should be more than a recording of statistics and descriptions of the materials. They should include the use of the art, the artists' role(s), and historical significance of the piece.

Museums should make an effort to include more information concerning artists, manufacture dates and locale, materials, and methods in their cataloging. Nothing can be done about past neglect in this area, but the practice of recording only descriptions continues today. This should be changed to a more complete inventory of the contemporary collections. Also, contemporary collecting should be increased, not decreased, as funds are limited. It is as important to record current societies as past ones. This is extremely important to see a continuum in peoples.

Last, more studies should be made concerning the changes in basketry, not only in the three cultures examined in this paper, but also in other Native American societies.

BIBLIOGRAPHY

BIBLIOGRAPHY

Allen, Laura Graves. "Wicker, Plaiting and Coil." The Basket Weavers, Artisans of the Southwest, Vol. 53, no. 4. Flagstaff: Museum of Northern Arizona, 1982.

Amsden, Charles. "The Ancient Basketmakers" (Southwest Museum Leaflets No. 11). Ann Arbor, MI: Edwards Brothers.

Breunig, Robert. "Cultural Fiber: Function and Symbolism in Hopi Basketry." The Basket Weavers, Artisans of the Southwest, Vol. 53, no. 4. Flagstaff: Museum of Northern Arizona, 1982.

Brill, Charles. Indian and Free. Minneapolis: University of Minnesota Press, 1971.

Chattopadhyay, Kamaladevi. "Craft and the Craftsman: Manifestations of the Creative Purpose." Handicrafts India Yearbook. New Delhi: Handicrafts India, 1988.

Collings, Jerold L. "Basketry: From Foundations Past." Harmony by Hand. San Francisco: Chronicle Books, 1987.

Columbia, Alan P. "The Arts and Anthropology." In Anthropology and Art. Edited by Charlotte Otten. Austin: University Press, 1971.

Conway, Patricia. Art for Everyday. New York: Clarkson Potter, 1990.

Danzieger, Edmund Jefferson, Jr. The Chippewas of Lake Superior. Norman: University of Oklahoma Press, 1980.

Dockstader, Frederick J. Indian Art in North America, Arts and Crafts. Greenwich, CT: New York Graphic Society, 1961.

_____. The Kachina and the White Man, The Influences of White Culture on the Hopi Kachina Religion. Albuquerque: University of New Mexico Press, 1985.

Dunning, R. W. Social and Economic Change Among the Northern Ojibwa. London: University of Toronto, 1959.

Faris, James. "From Form to Content in the Structural Study of Aesthetic Systems." In Structure and Cognition in Art. 1983.

Feest, Christine. Native Arts of North America. London: Thames and Hudson, 1992.

Herald, Jacqueline. World Crafts. Hong Kong: Oxfam, 1992.

Holm, Bill, and Reid, William. Form and Freedom. A Dialogue on Northwest Coast Indian Art. Houston: Institute for the Arts, Rice University, 1975.

Jaitly, Jaya. Craft Traditions of India. London: Tiger Books International, 1990.

Kaiper, Dan, and Kaiper, Nan. Tlinget. Their Art, Culture and Legends. Seattle: Hancock House Publishers, 1978.

Kamenskii, Fr. Anatoli. Tlinget Indians of Alaska. Fairbanks: University of Alaska Press, 1906.

Kinietz, W. Vernon. Chippewa Village (Bulletin 25). Bloomfield Hills, MI: Cranbrook Institute of Sciences, 1947.

_____. The Indians of the Western Great Lakes, 1615-1760. Ann Arbor: University of Michigan Press, 1965.

Kirk, Ruth. Traditions and Change on the Northwest Coast. Seattle: University of Washington Press, 1986.

Krause, Aurel. The Tlinget Indians. Seattle: University of Washington Press, 1956.

Langer, Susanne K. Feeling and Form, A Theory of Art. New York: Charles Scribner's Sons, 1953.

Layton, Robert. The Anthropology of Art. New York: Columbia University Press, 1981.

Levi, Sister M. Carolissa. Chippewa Indians of Yesterday and Today. New York: Pageant Press, 1956.

Lobb, Allan. Indian Baskets of the Pacific Northwest and Alaska. Portland: Graphic Arts Center Publishing Co., 1990.

Lyford, Carrie A. Ojibwa Crafts. Stevens Point, WI: R. Schneider, Publishers, 1982.

Marcus, George E., and Fischer, Michael J. Anthropology as Cultural Critique. Chicago: University of Chicago Press, 1986.

Mason, Otis Tufton. Aboriginal American Indian Basketry. Glorieta: Rio Grande Press, 1902; reprint 1984.

_____. American Indian Basketry. New York: Dover Publications, 1904; reprint 1988.

Mauldin, Barbara. Traditions in Transition: Contemporary Basket Weaving of the Southwest Indians. Santa Fe: Museum of New Mexico Press, 1984.

McDonnell, Janet A. The Dispossession of the American Indian, 1887-1934. Bloomington: Indiana University Press, 1991.

McFeat, Tom, ed. Indians of the North Pacific Coast. Seattle: University of Washington Press, 1989.

Merriam, Alan P. "The Arts and Anthropology." In Anthropology and Art. Edited by Charlotte M. Otten. Austin: University of Texas Press, 1971.

Metcalf, Bruce. "Replacing the Myth of Modernism." American Craft 53 (February/March 1993).

Oberg, Kalervo. The Social Economy of the Tlinget Indians. Seattle: University of Washington Press, 1973.

Olson, James, and Wilson, Raymond. Native Americans in the Twentieth Century. Chicago: University of Illinois Press, 1984.

Paz, Octavio. Contemporary Crafts of the World. Greenwich, CT: New York Graphic Society, 1974.

Porter, Frank W., ed. The Art of Native American Basketry, A Living Legacy. New York: Greenwood Press, 1990.

Quimby, George Irving. Indian Life in the Upper Great Lakes, 11,000 B.C. to 1800 A.D. Chicago: University of Chicago Press, 1960.

Robinson, Bert. The Basket Weavers of Arizona. Albuquerque: University of New Mexico Press, 1954.

Sieber, Roy. "The Arts and Their Changing Social Function." In Anthropology and Art. Edited by Charlotte M. Otten. Austin: University of Texas Press, 1987.

Simpson, Ruth DeEtte. "The Hopi Indians" (Southwest Museum Leaflet). Los Angeles: Southwest Museum, 1953; reprint 1971.

Stewart, Hilary. Totem Poles. Seattle: University of Washington Press, 1990.

Tanner, Clara Lee. Indian Baskets of the Southwest. Tucson: University of Arizona, 1983.

Underhill, Ruth. Pueblo Crafts. Palmer Lake: Filter Press, 1944; reprint 1979.

Walker, Willard, and Wyckoff, Lydia L. Hopis, Tewas and the American Road. Albuquerque: University of New Mexico Press, 1983.

Walters, Anna Lee. The Spirit of Native America. San Francisco: Chronicle Books, 1989.

Warner, Langdon. The Enduring Art of Japan. New York: Grove Press, 1952.

Warren, William W. History of the Ojibwa People. St. Paul: Minnesota Historical Society Press, 1984.

Whiteford, Andrew Hunter. Southwestern Indian Baskets: Their History and Their Makers. Santa Fe: School of American Research Press, 1988.

Wuthnow, Robert; Hunter, James Davison; Bergesen, Albert; and Kurzweil, Edith. "The Cultural Anthropology of Mary Douglas." In Cultural Analysis. London: Routledge & Kegan Paul, 1984.

Wyatt, Victoria. Images From the Inside Passage: An Alaskan Portrait by Winter and Pond. Seattle: University of Washington Press, 1989.