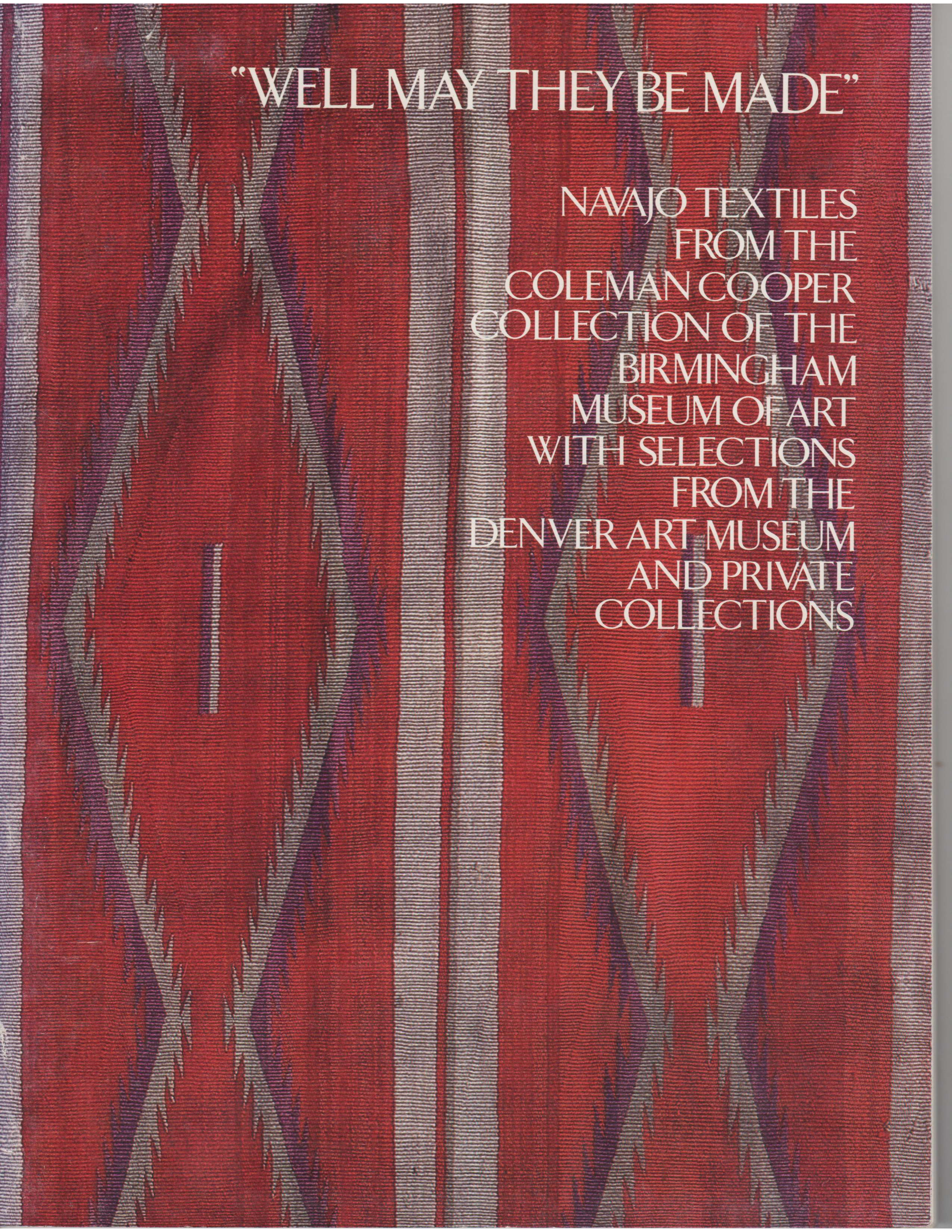
"WELL MAY THEY BE MADE"

NAVAJO TEXTILES FROM THE COLEMAN COOPER COLLECTION OF THE BIRMINGHAM MUSEUM OF ART WITH SELECTIONS FROM THE DENVER ART MUSEUM AND PRIVATE COLLECTIONS



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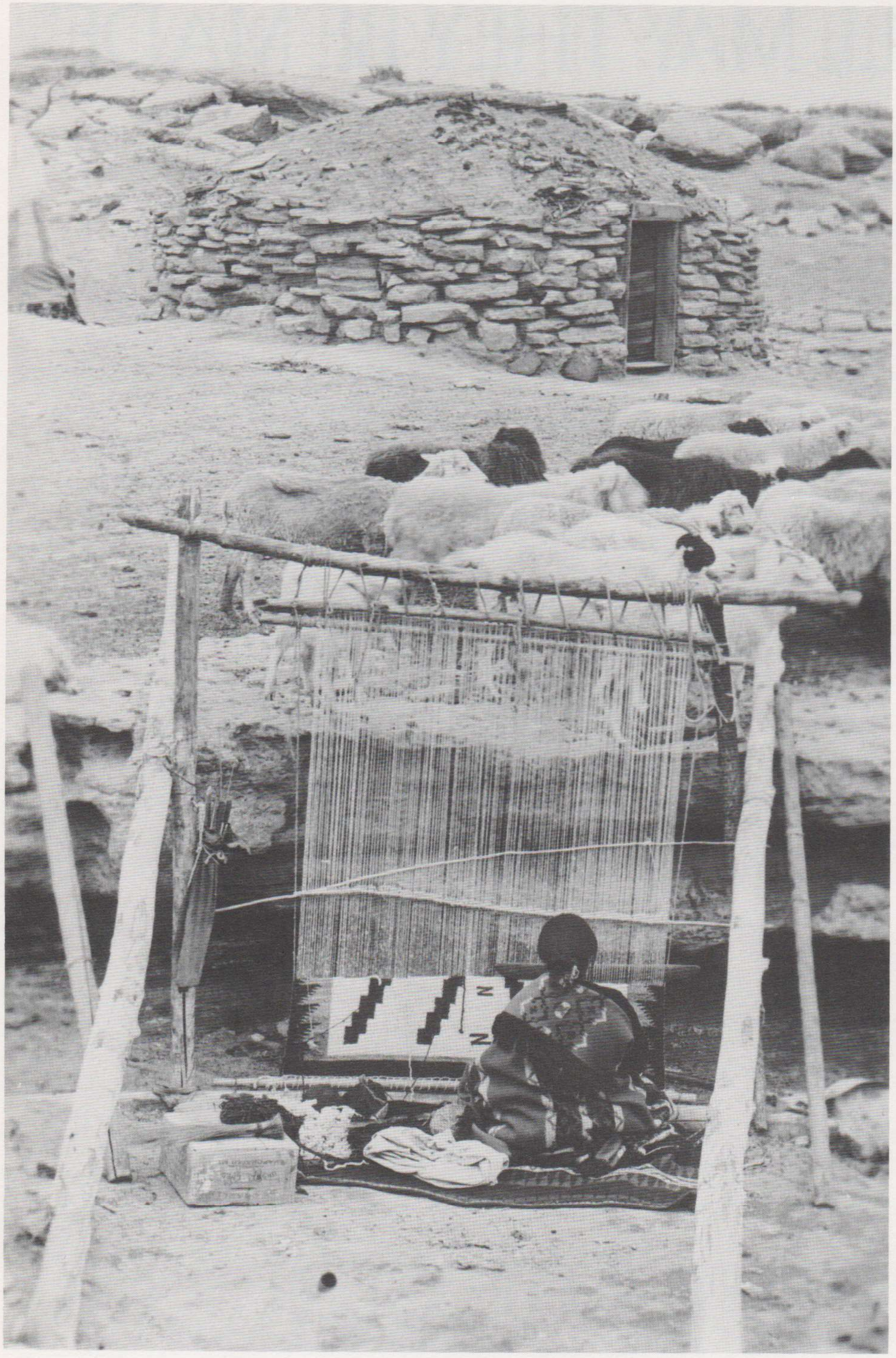

May it be delightful, my fire;
May it be delightful for my children; may all
be well;
May it be delightful with my food and theirs;
may all be well;
All my possessions well may they be made.
All my flocks well may they be made.

Woman's chant from the dedication of a Navajo *hoghan*.[1]

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Ellen F. Elsas
Birmingham Museum of Art

Ann Lane Hedlund
Arizona State University

BIRMINGHAM MUSEUM OF ART

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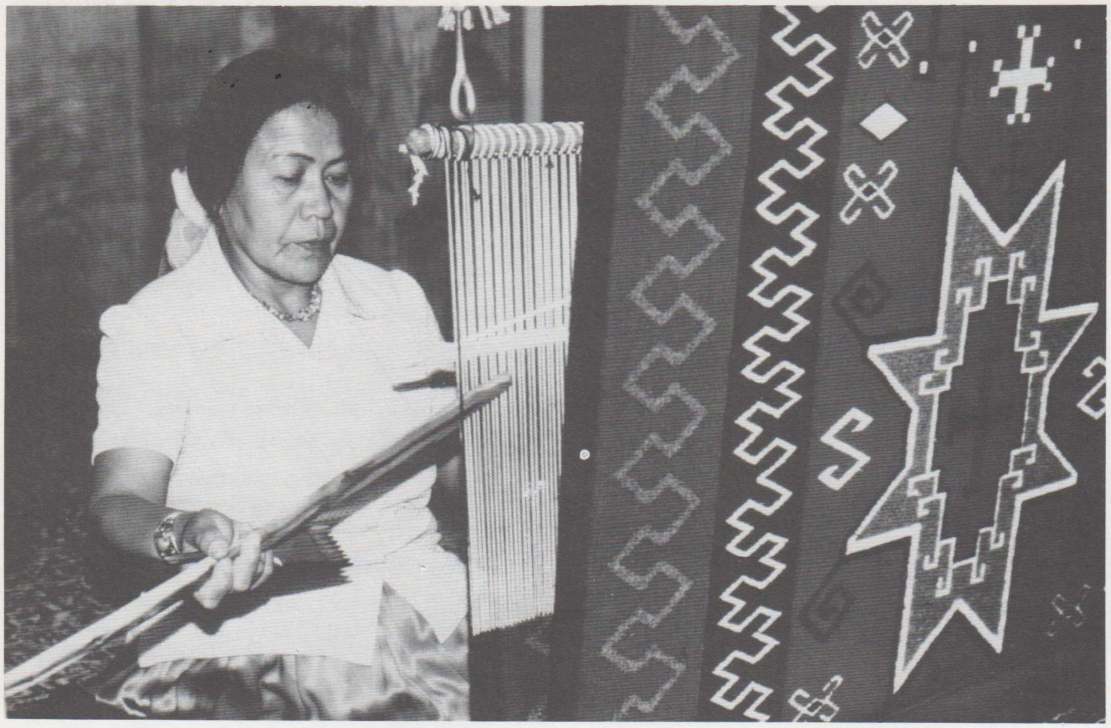

Fig. 15. Evelyn Curley inserting the weaving batten through the warp yarns of her Ganado Red rug; photograph by Ann Lane Hedlund.

THE WAYS OF THE WEAVER - SURVIVING WITH STYLE

Ann Lane Hedlund

INTRODUCTION

Navajo weavers in the twentieth century share many aspects of life and craft with their counterparts from the nineteenth century, while at the same time demonstrating a strong capacity for innovation and experimentation. One key to appreciating contemporary weaving lies in understanding these contrasting points of continuity and change that are inherent in modern textile production. While a woman weaving on the Navajo Reservation in the 1880s would recognize most of the tools, equipment, and weaving techniques used by her 1980s successors, specific yarns, designs, and the final product's overall form would be strange to her. Perhaps most surprising would be the modern lives that many of her fellow weavers now lead, and the fact that weaving is still incorporated into their much-changed schedules. In this essay, some of the differences and similarities between nineteenth and twentieth century weaving are illuminated, and the features that make today's craft particularly vital and exciting are discussed.

There are many cultural and aesthetic connections among the historic stages of Navajo weaving, from the Classic and Late Classic, through the Transitional and Reservation periods, and into modern times. The craft, spanning three centuries, has always been female-dominated, passing from one generation to the next through the women in a family.[1] Production has occurred predominantly in the home, the proceeds serving the household. From the earliest known records, Navajo handwoven products have had commercial value and been traded or sold to outside buyers, first to other tribespeople and then to the Spaniards and Anglo-Americans. Past and present woven designs are primarily based on geometric patterns—triangles, diamonds, blocks, bands—often arranged to give a layered effect with visual interplay of the foreground and background. Humor is timeless and often evident in weaving, whether it is the visual pun of three-dimensional qualities in a two-dimensional work (fig. 4) or the preciousness of pictorial motifs in a 1980s tapestry (fig. 7).

Navajo style continues as always to be a unique amalgam of indigenous and introduced elements. The relative importance of internal creativity versus outside influences is, in my opinion, a conundrum—a chicken-or-egg question. Clearly, both are important to nineteenth and twentieth century weaving and, today, the Navajo "tradition" is the result of both. The Navajos gained much from the Pueblo Indians, Mexicans, and Spanish-Americans who indirectly provided many models and raw materials for Navajo craft production. Reservation traders have been an integral part of the craft's evolution since the late 1800s; their interaction has been essential. In the final analysis, however, it is the Navajo artisans who wove before the Spaniards and Anglo-Americans entered the Southwest, who control the looms today, and who respond in their own ways to outside suggestions.

Throughout this essay several themes are interwoven: continuity with the past; flexibility in incorporating outside influences; and innovation with new materials and designs. These principles reflect *the ways of the weaver* and of the Navajo people as a whole, showing them to be adaptive and resourceful, independent and reflective.

THE WEAVERS

While most weavers still live on the Navajo Indian Reservation, they must deal with two worlds—the traditional Navajo and the Anglo-American. Their lives are a mixture of old and new ways. Many still do not speak fluent English. Polyester pantsuits and other modern clothing are slowly replacing the gathered cotton skirts and velvet blouses that have been worn since the late nineteenth century. Traditional values and respect for the land, livestock, individual freedoms, and group harmony are still upheld, and native religious beliefs and practices are important. Many Navajo homes are without electricity or plumbing, but conditions are rapidly changing with housing developments becoming a prominent feature on the landscape. In the past, contacts with the outside world were made primarily through local trading posts; people are no longer so dependent or isolated. Roads have improved, pickup trucks and cars are common, and small businesses and shopping centers are growing up on the reservation as well as in neighboring towns. More children are in school than ever before. Although unemployment is dangerously high, families with both parents employed outside the home are increasingly common.

Along with changes in the Navajo people's overall lifestyles, options for weaving have increased during the last century; there are more stimuli to which to respond, more materials to incorporate, more places to market rugs. Production schedules and work habits for weavers today as compared with the past are often intensified and frequently specialized. In addition, there is more competition for time from other activities—jobs, school, sports, politics, church. There certainly are far fewer active weavers *per capita* now than in the nineteenth century, but when current trends such as those discussed below are taken into consideration, the craft does not yet seem to be in any danger of disappearing.

Why do women weave in the first place? Some weave for money, some for creative expression, some because their mother and grandmother wove before them, and some out of pride for their native heritage. The incentives of economic gain and the recognition that weaving is culturally and aesthetically significant are frequently combined in a person's approach to the craft. While the balance of these issues differs from individual to individual, four major orientations that reflect essential motivations and actually represent a continuum of behavioral types can be outlined.[2]

Household weavers are the most conservative group and weave because it fits into the traditional roles of Navajo women as keepers of the household, fields, and flocks. Producing a range of quality from excellent to mediocre, these weavers make and sell a rug approximately every one or two months. Their rugs generally provide a steady, if moderate, income to a family.

Professional weavers place their craft high among their priorities, produce superior quality rugs, and often delegate other responsibilities so that they are able to weave full-time. Their names are often well known in collecting circles and they frequently maintain waiting lists of prospective buyers. Large rugs may take as long as a year to complete and will cost many thousands of dollars.

Occasional weavers only weave sporadically through their lives. They may have learned as young girls but did not continue the practice when they grew older, or they may have learned later in life but quit when other activities competed for their time. Their rugs are usually mediocre in quality, representing the lower end of the weaving spectrum. Earnings from such weaving are small but often much needed by a woman and her family. Because traditional Navajo culture recognizes *thought* as tantamount to *action*, the fact that these people consider themselves to be weavers because they know how to weave, regardless of how much or how well they actually weave, makes this group important.

Revival weavers are the one group without economic motivations, they weave because the craft is an integral part of Navajo heritage and an important marker of their ethnic identity. Only a very few weavers ever save their rugs or give them to family members, but those that do acknowledge the cultural and spiritual importance of weaving. One woman who is wealthy by her community's standards learned to weave when she was in her forties because, she says, "I want my grands [grandchildren] to know their grandma knew how to do this." Recognizing that the roots of weaving are deep in Navajo culture, it is perhaps this group that represents a major trend for the future.

THE TECHNOLOGY

The tools and equipment of a Navajo weaver have always been relatively simple, generally made with the aid of ordinary hand tools. The loom is an upright frame of wood or metal, onto which the warp yarns are secured so that the weft yarns can be interlaced. Today, some looms are placed outdoors, anchored between two living tree trunks; others are made of handhewn logs, just as many were in earlier days. Still others are made from milled lumber, with special notches or holes cut in the vertical supports to allow for special adjustments of the horizontal bars that support the rug in progress. A growing number of looms made of welded steel are being used on the reservation today. Metal turnbuckles and cables are replacing old hemp or cotton ropes used for lashing the loom beams together and tensioning the warps. Still, all the motions of weaving must be made *by hand*; no automatic fly shuttle or ingenious machine has been developed to expedite the traditional processes. A nineteenth century weaver would recognize the modern counterparts to her own tools and could sit down and weave, picking up the stitches without any trouble—opening the warp "shed" with stick and string heddles; separating the warps with a handsmoothed batten; manipulating each thread with her fingers; and beating the wefts into place with a carved wooden weaving fork.

Neither have the specific techniques and weaves used to make a Navajo rug changed significantly through time. Weft-faced tapestry weave[3] is still the most commonly used structure and has always been the mainstay of Navajo weaving. All but one of the pieces illustrated in this catalogue are woven in a tapestry weave. The exception is an all-over patterned twill rug (fig. 16). The twill weaves in diagonal, herringbone, and diamond configurations are derived from earlier Pueblo Indian twills but were considerably changed by the Navajo. Thick, modern twill floor rugs are the outgrowth of Navajo saddle blankets woven since at least the late nineteenth century.

There are a number of conservative technical traits that link most Navajo textiles across time and that distinguish them from those of other cultures around the world. These can be used to identify Navajo weaving of almost any period. Whether a piece is a 1850s wearing blanket, an 1890s eye-dazzling pillow cover, a 1940s bed blanket[4] (fig. 17), or a 1980s wall tapestry, most of the following traits will be present as few of them have changed significantly through time. A continuous warp system is generally used (somewhat similar to that used by Mesoamerican and South American backstrap weavers) in which the warps are uncut and strung continuously within the loom frame resulting in a finished woven fabric with four complete selvages (no cut edges). In addition, close examination of the edges of the fabric will show that extra heavy cords have been interlaced along the selvages to strengthen and decorate them. These twined end and side selvages, adopted from the Pueblo tradition, are a prominent feature of Navajo blankets and rugs. At each corner of most Navajo textiles will be another identifying element: a tightly knotted tassel made from the yarns of the selvage cords.

While some things stay the same, others change more readily. Types of sheep's wool, yarns, and dyes used by Southwestern weavers have changed continuously throughout the nineteenth and twentieth centuries, almost decade by decade in some instances. Weavers' positive responses to such introductions are linked partially to aesthetic appeal and partially to the time-saving advantages of ready-made materials. It is these material changes that provide the greatest clues to dating undocumented specimens in museums and private collections. Joe Ben Wheat of the

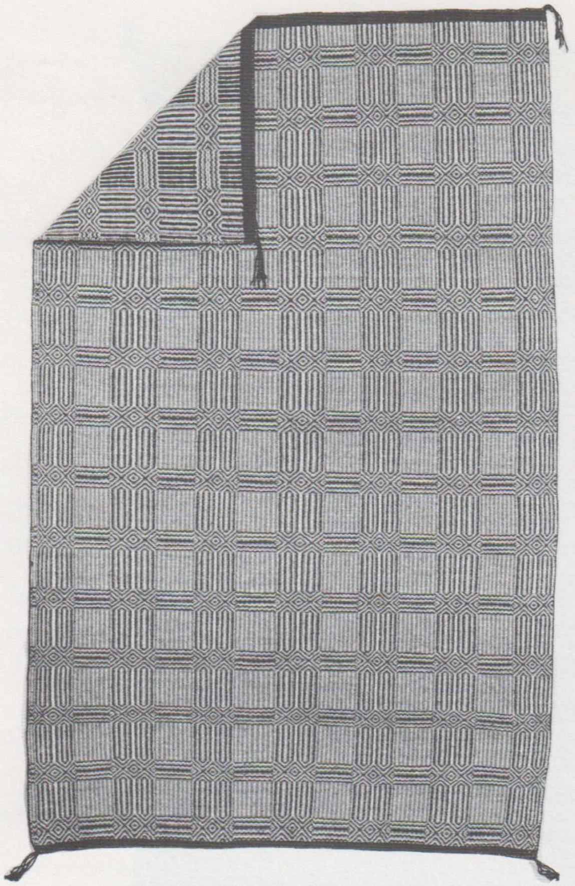
Fig. 16. Twill weave saddle blanket; Woven by "Sam's Sister" circa 1956; Loan from Georgine and Jack Clarke. Photograph by Melissa Falkner.

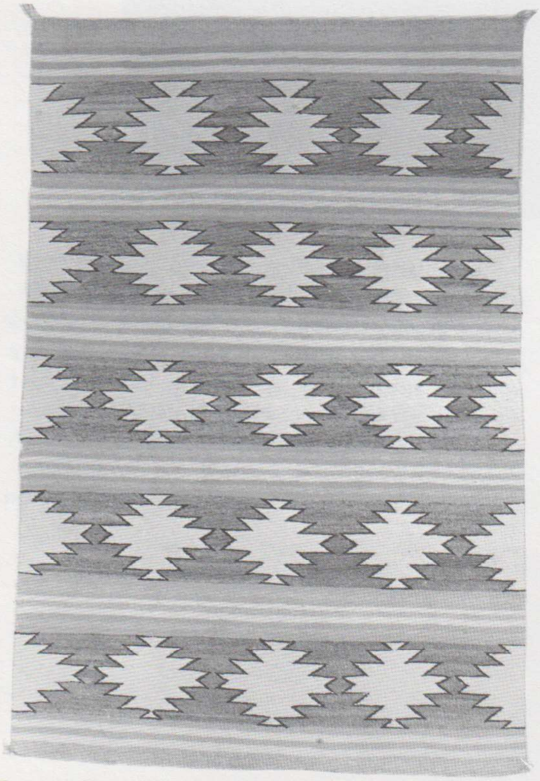
Fig. 17. Chinle rug; circa 1960s. Birmingham Museum of Art, gift of Coleman Cooper. Photograph by Melissa Falkner.

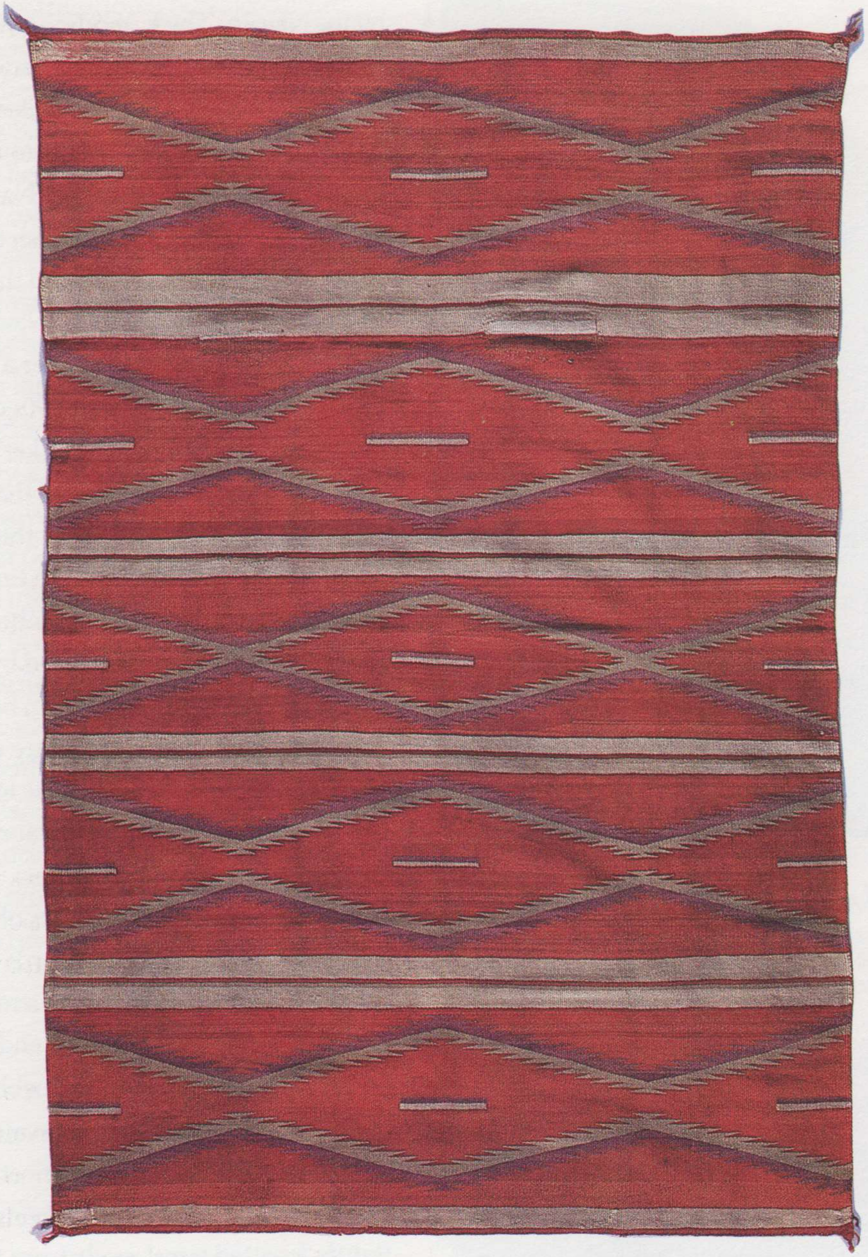

Fig. 18, Blanket, circa 1875-1885. Birmingham Museum of Art, gift of Coleman Cooper.
Warp: handspun
Weft: handspun, aniline and vegetal dyes

The simple repeated design and soft texture of this textile indicate that it belongs to a class of nineteenth century wearing blankets, rather than to later rugs made for floor use. The narrow rectangles of two colors are known as "rainbow lines" or "sun dogs." They are short segments of a rainbow as it is commonly depicted in sandpaintings and other Navajo art forms. Although they can be identified and named, it is doubtful that these motifs serve more than a basic decorative function.

University of Colorado Museum in Boulder has contributed immensely to our understanding of such changes by carefully analyzing the dyes and wools in textiles of known dates, comparing them with information in historic documents, and applying the new knowledge to textiles with unknown histories.[5]

Both handspun and commercial materials reflect different periods of weaving. The texture and appearance of handprocessed sheep's wool changed as new breeds of sheep were introduced into the Southwest. Such changes can be examined by comparing the smooth, shiny quality of the thick Andalusian *churro* sheep's wool in an 1870s blanket (fig. 18) against the kinkier, dull finish of the finer Merino wool in a rug of the 1930s (fig. 6). Red yarns extracted from commercial fabrics and rewoven into native textiles vary significantly from each other in coloration, texture, weight, and construction, and were also used at very specific times during the nineteenth century (figs. 19 and 20).

As trading posts and retail outlets became established on the reservation, machine-made yarns and synthetic dyes were increasingly used by weavers always ready to adopt and adapt new materials. For example, from 1850 to 1880 one can see the movement from three-ply yarns with vegetal dyes to three-ply aniline-dyed yarns and finally to four-ply aniline-dyed yarns (fig. 20). At the turn of the century, J. L. Hubbell briefly introduced coarse, single-ply yarns that mimic handspun ones more exactly in their varied weights and textures (figs. 9 and 21). One striking development has been the introduction of a new series of pastel colors applied to store-bought yarns; some are dyed with native plants and others are dyed with vegetal-colored synthetic dyes. The evolution of materials continues in today's weaving, with women making use of a wide variety of wool, acrylic, cotton, rayon, and

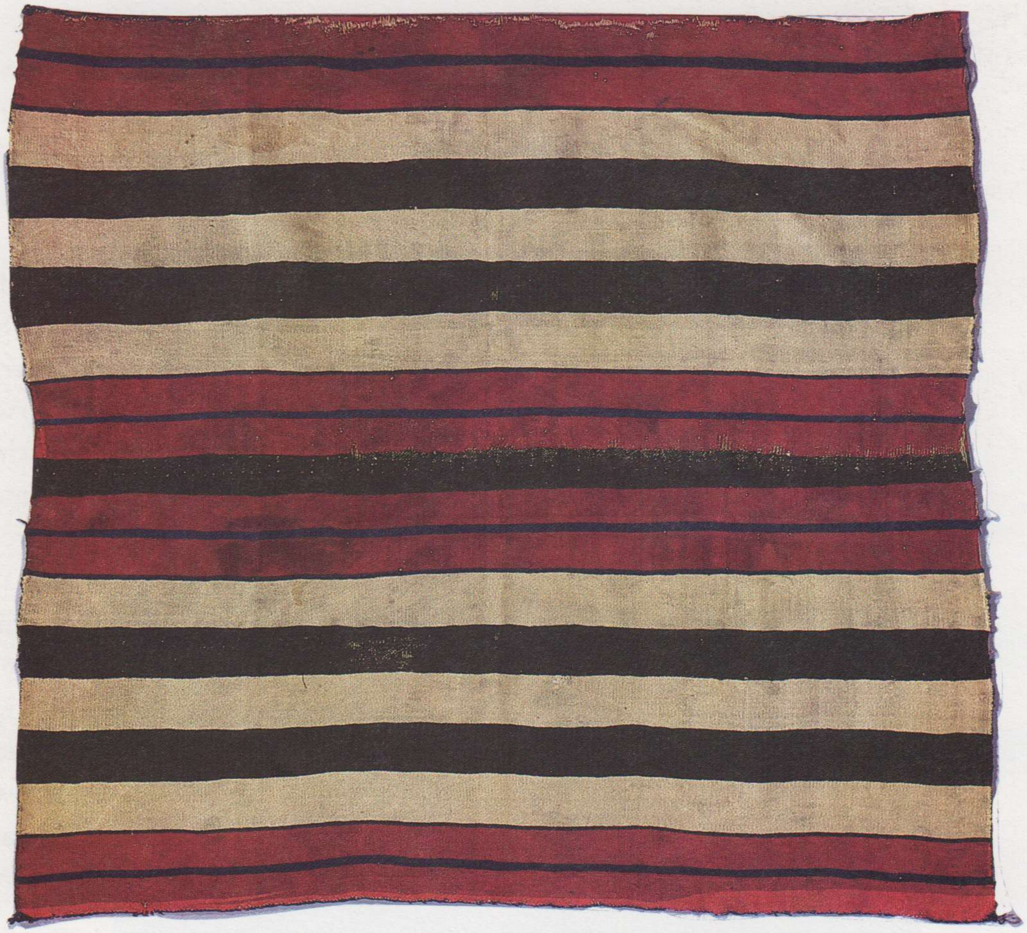

Fig. 19, First Phase chief blanket, circa 1865-1870.
Birmingham Museum of Art, gift of Mrs. Harold Simon.
Warp: handspun
Weft: handspun, 3-ply commercial (red), raveled (red)

Chief blankets are denoted by their wider-than-long shape (as woven), and the three horizontal pattern bands separated by bold black and white banding. The earliest chief blankets contain only black, white, and indigo blue: by the mid-nineteenth century, however, weavers were incorporating red into the style as well. Through time, the designs within the three major pattern bands grew more and more elaborate. This blanket was owned by Will Crawford, a well-known magazine illustrator and artist who traveled to the West in the 1920s and '30s.

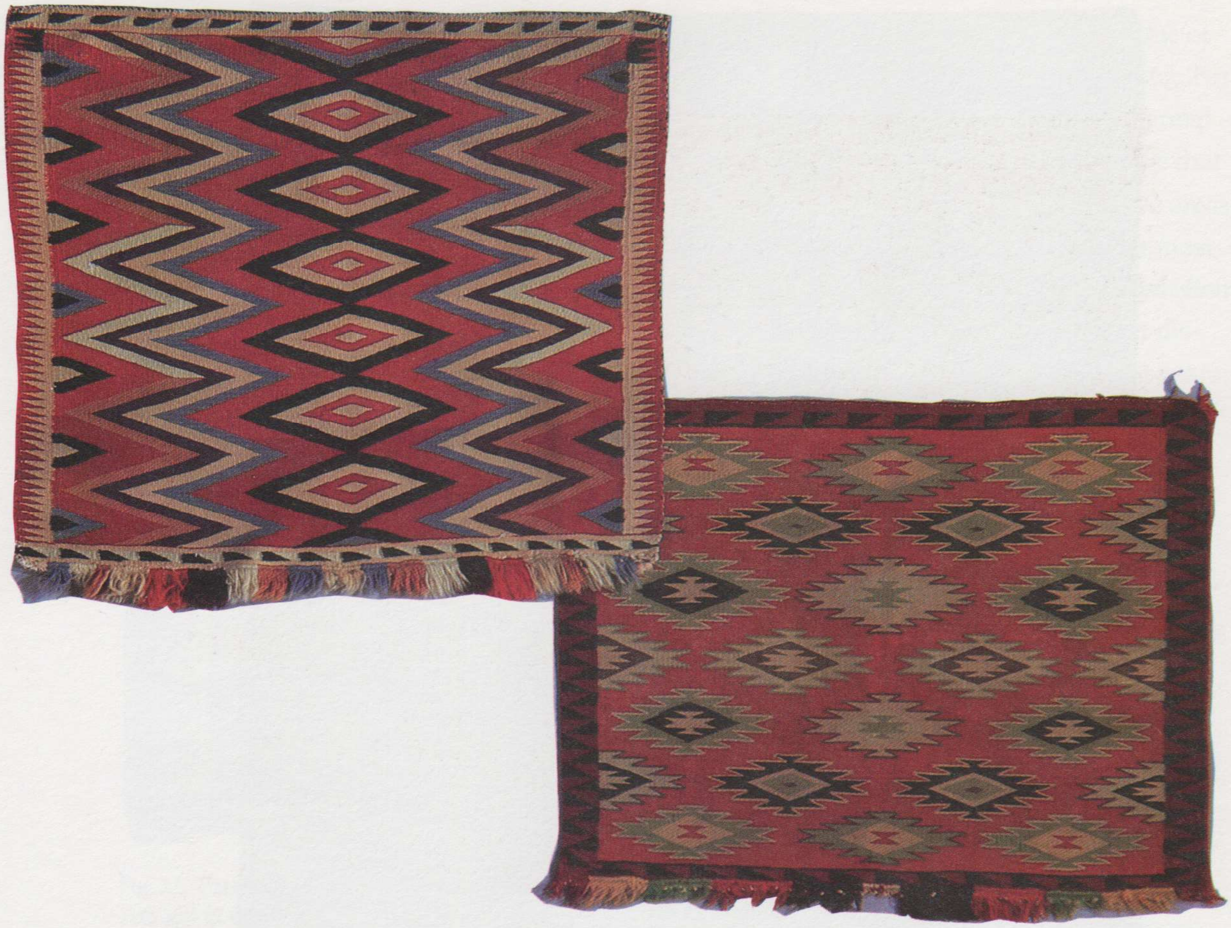

Fig. 20, (left) Single saddle blanket, circa 1890.
Birmingham Museum of Art, gift of Coleman Cooper.
Warp: handspun
Weft: raveled (red); 4-ply Germantown yarn

Fig. 20, (right) Single saddle blanket, circa 1890.
Birmingham Museum of Art, gift of Coleman Cooper.
Warp and selvage cords: handspun
Weft: 4-ply Germantown yarn

Fancy saddle blankets were woven around the turn of the century in eye-dazzling patterns with commercial aniline-dyed yarns. The yarns and the handwoven textiles made from them became known as Germantowns, *from the name of the town in Pennsylvania where some of the yarns had been manufactured. Along one or both ends, weavers often applied multicolored fringe as further decoration.*

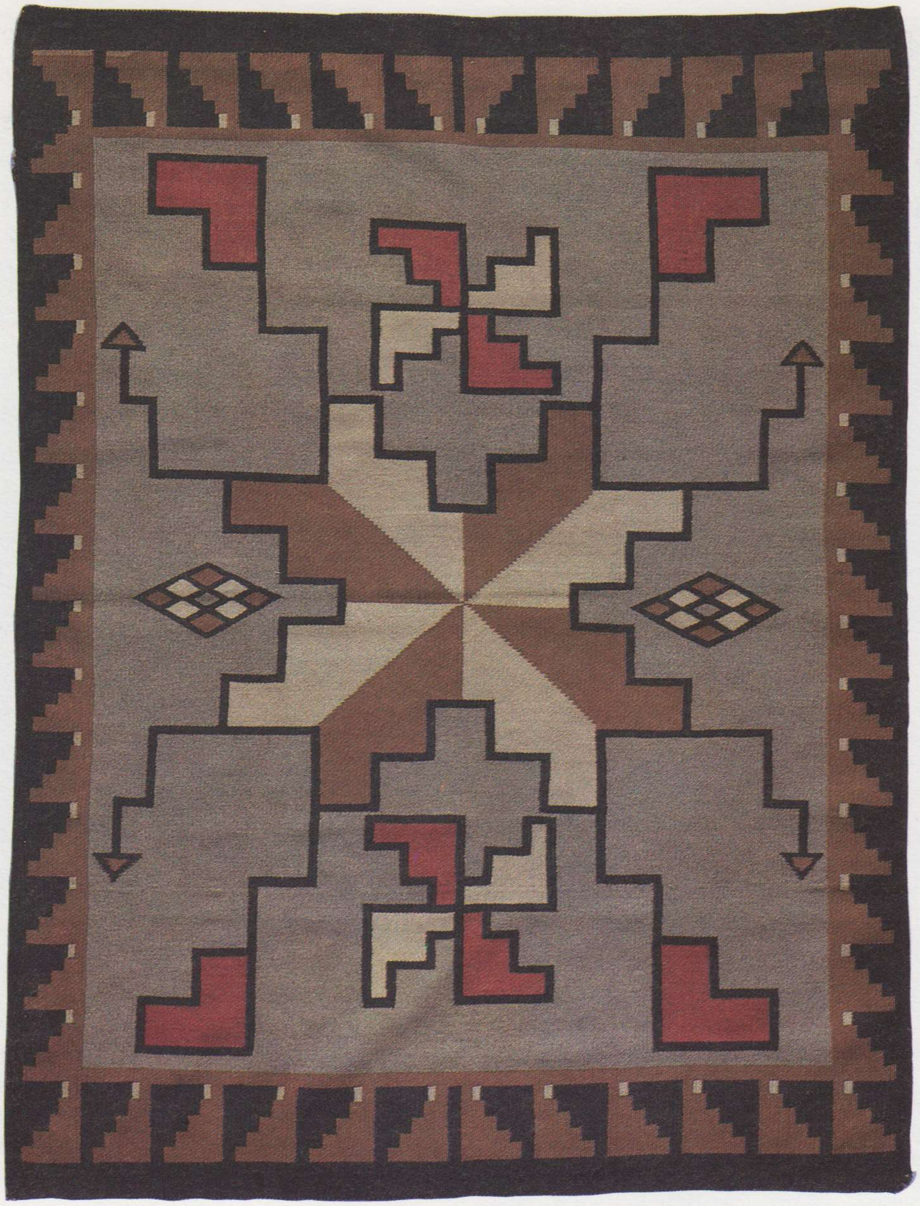

Fig. 21, Rug, circa 1900. Birmingham Museum of Art, gift of Coleman Cooper.
Warp: handspun
Weft: one-ply commercial carpet yarn

With four stepped lines radiating from the central star to the red corner motifs, this design is a variation on the well-known storm pattern. The even texture and tones of these yarns, and the extremely regular weave that resulted, signal the use of a commercial carpet yarn available to weavers on the Reservation around 1900.

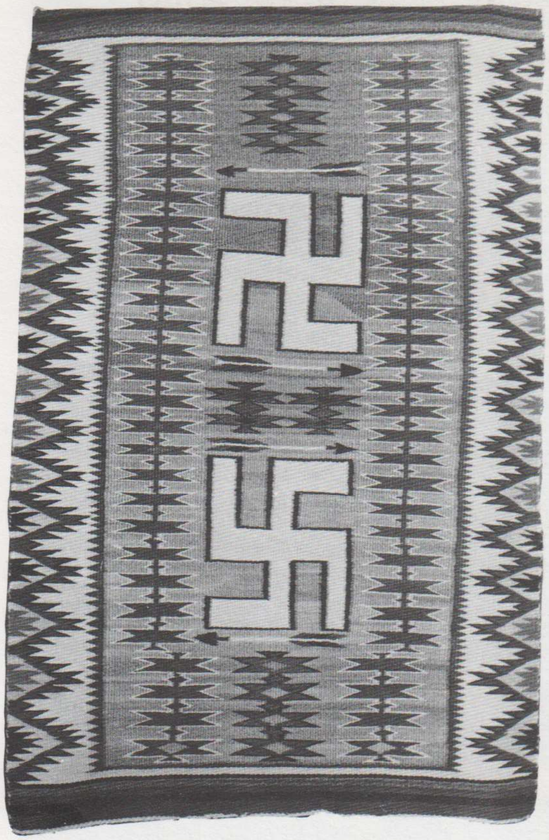

Fig. 22. Early rug; circa 1915. Birmingham Museum of Art, gift of Coleman Cooper.

There have also been changes in some of the technical features of Navajo weaving. For example, lazy lines are the subtle, diagonal lines across the face of a tapestry weave that indicate a physical joining between two areas woven in the same colors. They occur most frequently in textiles before 1950, and less often in contemporary work, having all but disappeared in the best weaving of recent years. Originally, they were employed to make it easier for a woman to weave across wide expanses of fabric. They are particularly evident in areas where natural grey wool is used (fig. 22). Weavers have recently experimented with other, more subtle ways of joining adjacent areas of fabric, thus avoiding the change in fabric texture of a lazy line. Some weavers link wefts together at the join with a darning needle; others have devised an elaborate system of interlacing extra strands of weft into the fabric in order to feather the edges of the joint. These technical changes affect the weavers' efficiency and the subtle appearance of a textile but have not modified the overall visual impact of Navajo weaving as have the bold changes in design schemes. nylon yarns in a myriad of textures and colors.

THE DESIGNS

From the sandstone mesas surrounding their homes to grocery store package wrappers, from indigenous basketry designs to Oriental carpet motifs, from loom-controlled patterns to free interpretations of commercial Pendleton blankets (fig. 23), Navajo weavers have borrowed ideas for their art from a wide variety of sources. Some of these were suggested by outsiders; others were discovered alone; all were incorporated freely and reinterpreted.

Whether through the solemn banding of a chief blanket (fig. 19) or the playful portrayal of a traditional camp scene (fig. 7), weavers express their feelings and their sense of beauty. Weavers today explain that when they begin to weave a rug they see the entire design in their mind's eye. "It is there in my head," as one woman described it, gesturing to the top of her head. Rarely do weavers draw their designs on paper before weaving. This capacity to envision a design *in toto* and then to transfer the pattern to the web on the loom is particularly admirable in large rugs with elaborately balanced geometric patterns (fig. 24).

In their search for something original, weavers may reuse old motifs, recycle appealing patterns, and revive traditional styles. For example, certain wearing blankets of the early to mid-nineteenth century with a specific banded pattern became known as chief blankets (fig. 19). This pattern evolved through the nineteenth century, resulting in three recognizable variations or phases of the chief blanket style: the first phase has continuous bands across the entire blanket; the second phase adds colored rectangles across the three dominant bands; and the third phase uses groups of three diamonds and triangles placed in nine "spots" across the three dominant bands. At the suggestion of traders such as J. L. Hubbell, rug weavers of the late

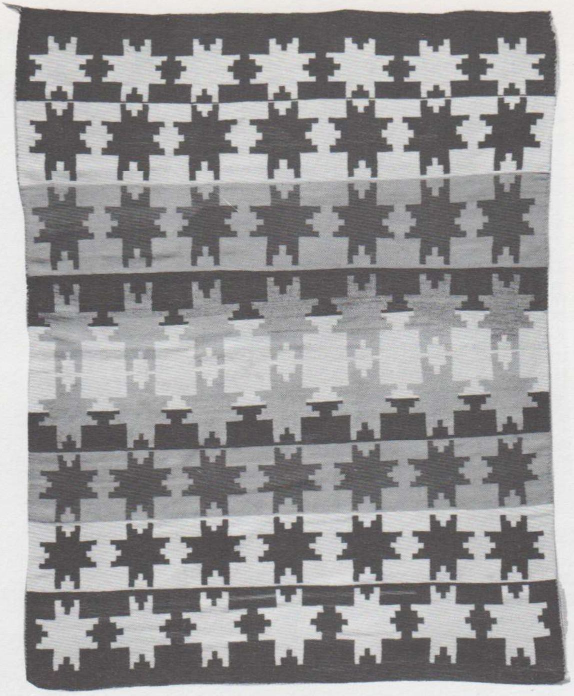

Fig. 23. Eastern Reservation rug; 1915-1935. Birmingham Museum of Art, gift of Coleman Cooper.

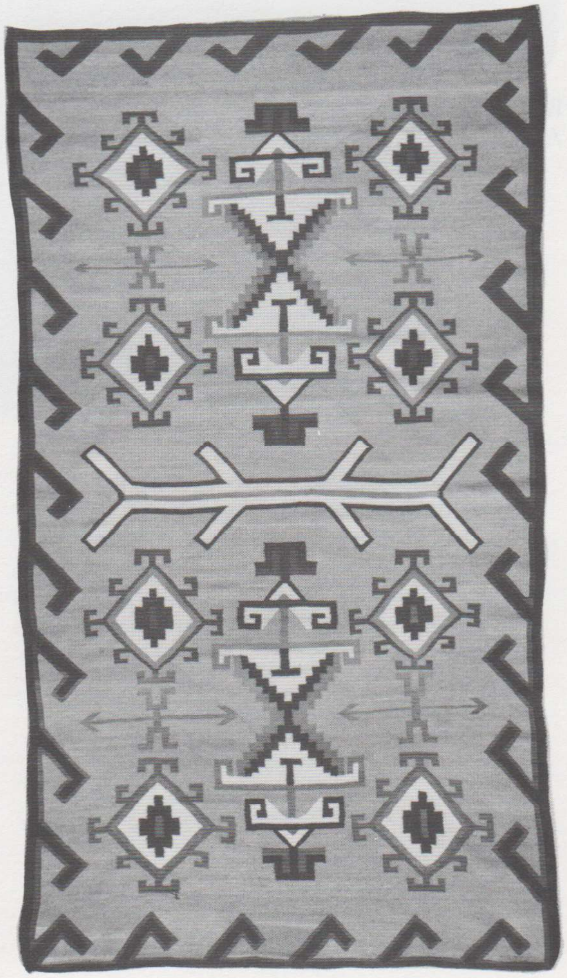

Fig. 24. Eastern Reservation rug; circa 1915-1925. Birmingham Museum of Art, gift of Coleman Cooper.

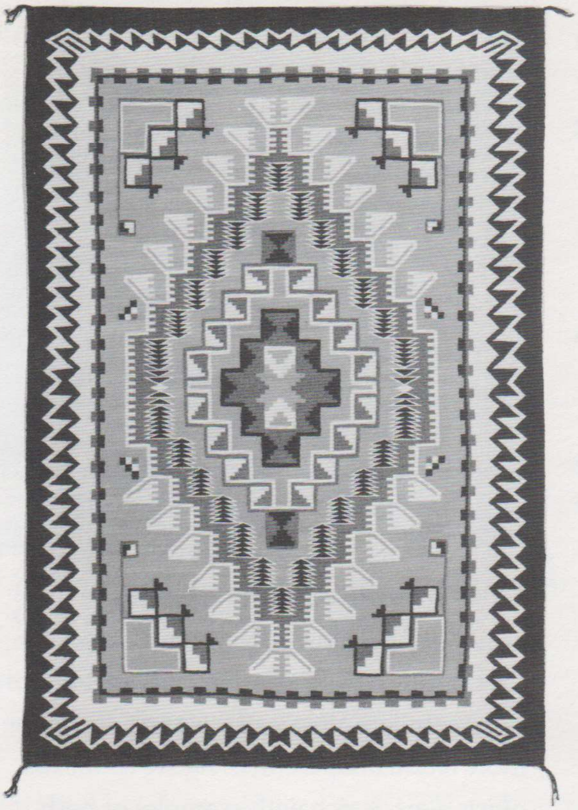

Fig. 25. Two Grey Hills rug by Audrey Wilson, 1981. Loan from the Denver Art Museum.

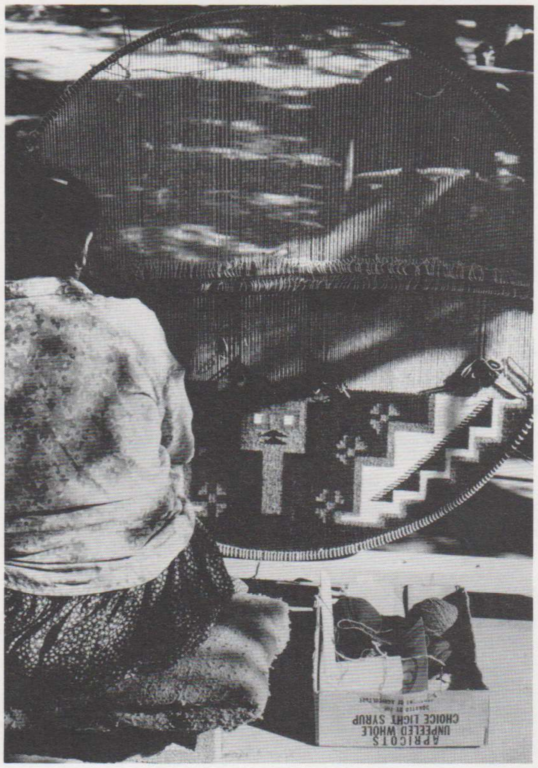

Fig. 26. Rose Owens with round rug in progress, woven on a wagon wheel rim mounted within a traditional vertical loom; Photograph by Ann Lane Hedlund.

nineteenth century revived these patterns that originally marked distinct stages of textile development, and today weavers continue to use and adapt designs from earlier chief blankets. From photographs, it is sometimes difficult to assign a date to many of the textiles woven in this style; only with a close-up analysis of the materials and construction techniques could one distinguish an original chief blanket of the 1850s from a chief blanket-style rug of the early 1900s, or a chief blanket-style tapestry or wall hanging of the 1960s.

Early in this century, particular designs became associated with specific regions of the reservation through weavers' interactions with trading posts. Weavers responded to traders' requests for bordered or borderless patterns, for more natural colors or more red, and for "Indian" motifs such as arrows and feathers or geometric Oriental motifs. As a consequence, regional rug styles were established. Trading posts such as Ganado, Crystal, Two Grey Hills, and Wide Ruins became the centers for specific styles of weaving.

Since the 1950s, however, regional control over specific styles has weakened because of improved transportation and communication on the reservation, and because of the differential valuing of certain rug styles over others. When a craftsperson sees a Burntwater style rug selling for twice the price of the type she normally weaves, there is an incentive to experiment and to ignore geographic boundaries. Today, it is possible to find a Navajo Mountain woman in the northwestern corner of the reservation making a Ganado Red rug, a style originally from the central reservation, and an Indian Wells woman from the southern edge of the reservation weaving a Two Grey Hills style that originated in the eastern corridor (fig. 25).

A few weavers have changed the actual shape of modern weaving; the round rugs of Rose Owens (fig. 26) are her personal experiment, and there are probably less than a dozen other weavers who can make circular rugs. Mrs. Owens says that she began weaving them in the late 1960s as a result of a dream about Spider Woman, the holy being who brought weaving to the First People according to traditional Navajo religious beliefs. She had watched a spider weaving its circular orb one morning and believed that she too should weave circular forms. She does so with the aid of the hollow rims from wagon or bicycle wheels, which are lashed to the framework of her rectangular loom and serve to hold the warps in place.

The Navajo are continuously confronted with new ideas and suggestions for their weaving. In 1979, an intriguing project was initiated between Kenneth Noland, the well-known contemporary painter, Gloria F. Ross, New York tapestry *editeur*,[6] and a small group of talented Native American weavers. In the ensuing eight years, a series of ambitious tapestries have been designed by Noland, translated by Ross, and executed by Mary Lee Begay, Sadie Curtis, Rose Owens, Martha Terry, and a few other weavers. Many of the designs are pure Noland imagery—for instance, his chevrons floating on an open ground. Other works, such as a series in the chief blanket's wider-than-long proportions and an image suggesting the whirling-log sandpainting design (fig. 27) show Noland's acknowledgment of traditional Navajo styles and color schemes. The weavers who have undertaken the Navajo/Noland projects have been eager to be involved, in part because of the steady income and partly because, as one woman says, "I don't get bored or dizzy. These designs give me time to think inside my head while I am weaving."

CONCLUSIONS

The most essential ingredients in a craft of any period are *people*, individually and collectively. It is the creator's instincts and adaptability, the family's and community's support, and the buyer's personal preferences and support that combine to form a successful endeavor. Navajo weaving has personal, social, aesthetic, technical, and commercial dimensions that reflect historic and contemporary interactions between weavers and a variety of other people.

The history of Navajo weaving, since the adoption of blanket weaving from the neighboring Pueblo tribes around 1650, to the transition from wearing blankets to floor rugs in the late nineteenth century, and to the more recent adaptation of native textiles as *objets d'art*, is rich with examples of both indigenous creativity and incorporation of outside ideas and materials. As native and outside features are combined, conservative traits blend with innovative aspects of the art to form a uniquely Navajo product. Whether it is the application of indigenous stepped basketry designs to an elegant classic period shoulder blanket or the *verbatim* incorporation of abstract expressionist elements into a wall hanging destined for a corporate office or museum wall, Navajo weaving has indeed survived with style.

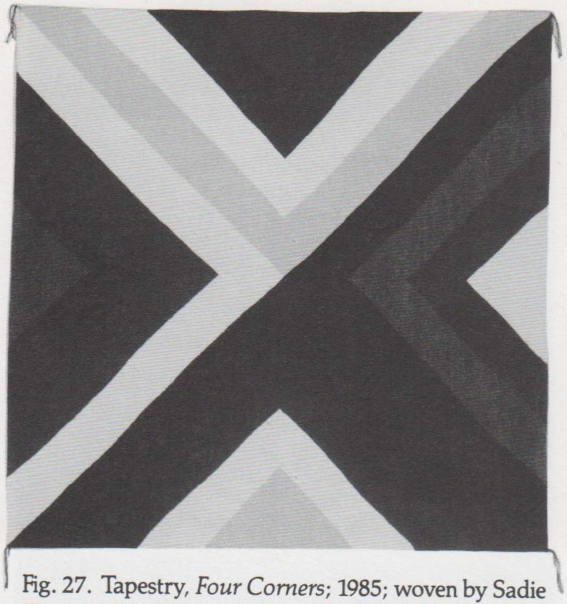

Fig. 27. Tapestry, *Four Corners*; 1985; woven by Sadie Curtis and designed by Kenneth Noland; a Gloria F. Ross Tapestry; Photograph by David Heald.

NOTES

1. There have, however, been male weavers known both in the past and present. Washington Matthews reported that one of the best weavers in the tribe was male (1884). Hosteen Klah was a noted male weaver of the early twentieth century (Newcomb 1964). At present, I personally know of approximately twenty male weavers on the reservation today and would estimate that altogether there are probably two or three times this many.
2. For a complete discussion of this categorization, see Hedlund (1983).
3. Emery (1966)
4. Vegetal dyed rugs made in the 1930s and 1940s at Chinle were originally woven as rugs, but they were also soft, supple, and large enough to be used as bed blankets which is how they are exhibited today in the restored home of trader J. L. Hubbell at Ganado, Arizona.
5. A major work by Wheat (in press) is currently in progress; until it is published one can refer to numerous articles published by him (for example, see Wheat 1977, 1981). Kent (1985) also provides an excellent review of this subject.
6. The role of *editeur* in the tapestry world is to mediate between artist and artisan, interpreting any questionable aspects of the original design, translating penciled or painted scale models into colored and textured fibers, monitoring progress of a tapestry, and representing it to prospective galleries or buyers.

Erratum p. 39

"nylon yarns in a myriad of textures and colors." should begin the page and should be followed by (Hedlund, in press)

SELECTED BIBLIOGRAPHY

REFERENCES CITED

1. Amsden, Charles Avery. *Navajo Weaving: Its Technic and Its History*. 1934. Reprint, Glorieta, New Mexico: The Rio Grande Press, Inc., 1972.

2. Berlant, Anthony, and Kahlenberg, Mary Hunt. *Walk in Beauty: The Navajo and Their Blankets*. Boston: New York Graphic Society; Little, Brown, and Company, 1977.

3. Emery, Irene. *The Primary Structures of Fabrics*. Washington, D.C.: The Textile Museum, 1966.

4. Hedlund, Ann Lane. *Contemporary Navajo Weaving: An Ethnography of a Native Craft*. Ph.D. dissertation, Department of Anthropology, University of Colorado, Boulder, 1983.

5. ______. In press. "Commercial Materials in Modern Navajo Rugs." *The Textile Museum Journal*. Washington, D.C.

6. James, George Wharton. *Indian Blankets and Their Makers*, 1914. Reprint. Glorieta, New Mexico: The Rio Grande Press, Inc., 1974.

7. Kent, Kate Peck. "Pueblo and Navajo Weaving Traditions and the Western World." *Ethnic and Tourist Arts: Cultural Expressions from the Fourth World*. Ed. Nelson H. H. Graburn, Berkeley and Los Angeles: University of California Press, 1976.

8. ______. *Navajo Weaving: Three Centuries of Change*. Santa Fe, New Mexico: School of American Research Press, 1985.

9. Kluckhohn, Clyde, and Leighton, Dorothea. 1946. Reprint. *The Navajo*. Cambridge: Harvard University Press, 1974.

10. Matthews, Washington. "Navajo Weavers." *Third Annual Report of the Bureau of American Ethnology*, 1881-1882. 375-391. Washington, D.C.: Government Printing Office, 1884.

11. Mera, H.P. and Joe Ben Wheat. *The Alfred I. Barton Collection of Southwestern Textiles*. Coral Gables, Florida: Lowe Art Museum, 1978.

12. Newcomb, Franc Johnson. *Hosteen Klah: Navaho Medicine Man and Sand Painter*. Norman: University of Oklahoma Press, 1964.

13. O'Bryon, Aileen. *The Dine: Origin Myths of the Navajo Indians*. Washington, D.C.: Smithsonian Institution, 1956.

14. Reichard, Gladys A. *Spider Woman: A Story of Navajo Weavers and Chanters*. New York: Macmillan Company, 1934.

15. Rodee, Marian E. *Old Navajo Rugs: Their Development from 1900 to 1940*. Albuquerque: University of New Mexico Press, 1981.

16. Wheat, Joe Ben et al. *Patterns and Sources of Navajo Weaving*. Denver, Colorado: Harmsen Publishing Company, 1977.

17. Wheat, Joe Ben. "Documentary Basis for Material Changes and Design Styles in Navajo Blanket Weaving." *Ethnographic Textiles of the Western Hemisphere*, Eds. Irene Emery and Patricia Fiske, 420-444. Washington, D.C.: The Textile Museum, 1977.

18. ______. "Early Navajo Weaving." *Plateau* 52 (4): 2-9, 1981.

19. ______. "(in press) *Blanket Weavers of the Southwest: Navajo, Pueblo and Spanish*.

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