FIBER AS MEDIUM:
FROM CRAFT TO FINE ART

By

Virginia Bullock

A THESIS

Submitted to
Michigan State University
In partial fulfillment of the requirements
for the degree of

MASTER OF ARTS

Department of Art

1977

ABSTRACT

FIBER AS MEDIUM:
FROM CRAFT TO FINE ART

By

Virginia Bullock

Today, as the new international fiber movement reaches maturity, critical acclaim and recognition are emerging. This thesis focuses on the twentieth century evolution of fiber from craft to fine art. Three converging influences are explored: the revival of the tapestry tradition, the impact of the development of modern aesthetics, and the rediscovery of the artist-craftsman through individual support and such corporate efforts as the Centre International de la Tapisserie Ancienne et Moderne (CITAM). The revolutionary contributions of Lenore Tawney, Sheila Hicks, and Magdalena Abakanowicz are discussed, representing progressive stages of the fiber art movement.

During the 1950's Lenore Tawney played a critical role when she investigated yarn, structure, and formal arrangements for their expressive potential and began to present fiber as an art form. Sheila Hicks continued this expressive pursuit by combining ancient or modern weaving methods with Bauhaus principles of design for personal or utilitarian aesthetic statements. Lastly, in the final transition from the functional associations of fiber to purely aesthetic considerations, Magdalena Abakanowicz manipulated fiber solely for aesthetic and conceptual statements. Currently, fiber artists are continuing their explorations of materials, techniques, and space by emphasizing content. This qualifies them for inclusion in the arena of the fine arts.

To my mother
whose enthusiasm for the possibilities of fiber
is contagious

ACKNOWLEDGEMENTS

I would like to express my sincere gratitude to my advisor, Dr. Linda O. Stanford, of the Department of Art, Michigan State University, for her guidance and attention in the preparation of this study. I would also like to thank committee members Dr. Eldon VanLiere of the Department of Art and Professor Rebecca Bailey of the Department of Human Environment and Design for their time and consideration.

TABLE OF CONTENTS

LIST OF ILLUSTRATIONS

Figure Page

INTRODUCTION

The arts of this century have undergone a startling, brilliant transition. Concepts and themes, materials and techniques, as well as social or aesthetic functions have abandoned past traditions. The lines between the fine and applied arts have become uncertain, and, at times, they have vanished. Today, the disciplines of painting and sculpture are merging. Painting is no longer limited to the application of pigment to canvas or wood, and sculpture is no longer confined to marble or bronze. Often the painter builds his surface with layers of sand, glass, paper, cloth, or even adds 'real' objects, so the physical two-dimensionality almost disappears. The sculptor welds, blasts, digs, or even sews a wide variety of materials. Frequently, artists abandon the concept of the isolated art object, with its frame or pedestal, by relating their art to its architectural or natural environment.

A metamorphosis, paralleling other visual arts, has occurred in the fiber medium which was traditionally labeled 'applied art' or 'craft.' Thread constructions, formed by creative, international artists, are among the most important and exciting art statements today. Experimentation with materials, techniques, and space has produced formal innovations which should encourage us to recognize this medium as a serious and valid art expression.

Today's fiber artist may work solely with natural fibers or he may combine them with a rich variety of synthetic yarns, either on a loom or off-loom. To achieve his form, he may select multiple element techniques (knotting, coiling, twining, and braiding) or

single element techniques (looping, netting, knitting, or crocheting) or combinations. He may rework ancient techniques in a manner yielding new expressiveness and fresh interpretations. These departures allow him to produce works "possessing form and space with surface and mass interchangeable"[1] and to improve the aesthetic quality of the fiber medium.

An emphasis on structure and the imaginative use of materials, employed for their inherent properties, have helped the creator design artistic statements, no longer expected to serve a utilitarian need. Critics and scholars have long recognized that the quality of art lies in its content, not in its materials, tools, or function. We should soon witness an application of this standard to those fiber artists whose work deserves recognition equal to that received by artists working with traditional media.

While today's fiber art may be in search of nomenclature, it demands and deserves attention. The art form embodies a wide range of concepts and ideologies, often emerging concurrently; linear history of the movement is impossible. Yet, intelligent appreciation of contemporary fiber expressions requires some knowledge of the historical situation and the aesthetic climate creating the conditions favorable to this recent evolution.

This paper concerns four areas in which the prevailing changes in thinking affected the fiber designer. Many of the early efforts of weavers to create an art form involved the emancipation of tapestry. Chapter One will deal with the characteristics, history, and revival of the tapestry tradition. Standards of design have changed drastically within the last hundred years, encouraging artists to reassess their approach to formal elements, materials, techniques, and function. This development of modern aesthetics is explained in Chapter Two. The resurgence of interest in the materials and techniques traditionally associated with crafts and the growing recognition of

artist-craftsmen and their organizations are discussed in Chapter Three. Of particular significance is the contribution of Le Centre International de la Tapisserie Ancienne et Moderne.

These opening chapters provide a background for the introduction of three specific weavers who exemplify differing aspects of the fiber movement. The fact that these selections are women reflects the roots of fiber art in the domestic craft of handweaving practiced by women in Scandinavia and eastern Europe early in the twentieth century and in the United States during the 1940's. Their consideration of the nature of materials, rather than painterly problems, was the point of departure for Lenore Tawney, Sheila Hicks, and Magdalena Abakanowicz. Today, the influential fiber artists are either men or women, although females do predominate.

Lenore Tawney is recognized in Chapter Four as a pioneer figure who first presented weaving as an art form to the public.[2] Her purely aesthetic statements inspired a generation of young fiber artists to follow her example of uncharted directions. Chapter Five acknowledges Sheila Hicks for her transformation of ancient techniques into contemporary thread forms functioning on two levels: as exclusively personal expressions or as expressive, yet utilitarian, objects.[3] Her collaboration with architects and with the staffs of provincial workshops and technically sophisticated factories is unique and exemplary. Chapter Six focuses on Magdalena Abakanowicz, chosen for her emphasis on content. Her imaginative and rebellious conceptual statements place her on an artistic level above the mass of fiber artists and equal to progressive contemporary sculptors.[4] Chapters Four, Five, and Six, while discussing these three pace-setters, also relate their work, when relevant, to contemporary painting and sculpture. The Conclusion summarizes the essential developments of the fiber art movement and suggests possible future directions.

FOOTNOTES TO THE INTRODUCTION

[1]Rose Slivka, "The New Tapestry," Craft Horizons, March-April 1963, p. 10.

[2]Referring to Lenore Tawney, Adela Akers commented: "She was the first to present weaving to the public as an art form." Pamela Scheinman, "Adela Akers: The Loomed Plane," Craft Horizons, February 1977, p. 25.

[3]Monique Levi-Strauss, Sheila Hicks (London: Studio Vista, 1973), pp. 46-58 passim.

[4]Jasia Reichardt, "Magdalena Abakanowicz in the 1970's," p. 31 passim. In Malmö Konsthall, Abakanowicz: Organic Structures (Malmö, Sweden: Malmö Konsthall, 1977).

Chapter 1
TAPESTRY: ITS CHARACTERISTICS, HISTORY, AND REVIVAL

As fiber art emerged in the 1960's and 1970's, it had often been referred to as the 'new tapestry,'[1] acknowledging the roots of the movement in an old weaving tradition. The time-honored concept of tapestry is explained first in this chapter because the historical techniques and vocabulary continue to be used. Tapestry is defined before the techniques, characteristics, and loom types are described. Highlights of the history of tapestry are briefly covered to indicate periods in which weavers find inspiration, and also to recognize periods of decline. Revival of weaving as an autonomous art occurred in reaction against early twentieth century French tapestry with its painterly concerns and its adherence to the designer's demand for thread and color complexities which disregarded the nature of the yarns and the creativity of the weaver. Two ideals were achieved by a complete emancipation from the tapestry tradition: the authority of the artist-weaver to create his own design, and the autonomy of the woven object, unrelated to painting and expressing the unique properties of yarn. What is critical to this chapter, then, is a recognition of the tapestry of the past as the precursor for the fiber art of the present.

The most important elaboration of simple weave is tapestry. The word, coming from the Greek ταπης and Latin tapesium,[2] traditionally refers to a weft-faced fabric woven by hand on a loom. Polychrome design is an integral part of the cloth, formed by the weft threads

on a number of bobbins (one for each color) which are laid over a specific area in accordance with the design and then back, instead of crossing the entire width of the warp from selvage to selvage.[3] The weft thread, having been loosely woven through two alternate sheds, is not drawn tightly so that it completely conceals the warp threads when beaten down. This creates a firm, weft-faced character. The manner in which the weft threads of adjoining areas meet, whether they interlock or simply turn around a warp thread, influence the total appearance of the finished tapestry.

Its classic purpose is to serve as a large mural with only one visible side. The wrong side, which faced the craftsman as he wove, is turned to the wall to conceal the unfinished ends of the weft. Customarily, the texture of the wool yarns has been uniform, stressing the two-dimensional qualities, and drawing attention away from the character of the medium to both the pictorial design and the skillful craftsmanship.

This technique can be used on any loom which can produce a plain weave cloth, even a wooden frame with nails to stretch the warp. Centuries ago, the Peruvians probably wove their primitive tapestries on a backstrap loom, whose name derives from a strap affixed to the lower end of the loom and passed around the lower back of the weaver (Figure 9). Today, the backstrap loom remains a favorite among contemporary weavers who value the manipulative freedom and the emphasis on structure made possible by the unique relationship among the parallel wooden rods, the small cords, and the warps.[4]

On a more sophisticated level, recent professional tapestry weavers use two kinds of looms: the high-warp (haute-lisse) which is a vertical upright loom, and the low-warp (basse-lisse) which is a horizontal loom operated by foot power. The low-warp looms with the cotton warp strung between two roller beams are used at the Aubusson

workshops.[5] The full-scale cartoon, designed by an artist but woven by a craftsman, is placed face up immediately below the warp. Since the weaver faces the wrong side of the textile, the artist must create his design in the mirror image of how he wants the finished tapestry to appear. As a consequence, the weaver can never see the front of the tapestry until it is entirely finished and off the loom, although he can see a few inches of the face by putting a mirror below the warp threads.

In the Gobelins studios the same general weaving process is used, but the warp beams are vertical.[6] Often the term 'Gobelins' refers to the type of tapestry woven on these haute-lisse looms. The cartoons cannot be placed immediately near the warp. Instead, they are traced directly on the warp and then placed behind the weaver, who uses small mirrors in front of him to verify the execution of his work. As a result, the procedure is slower than on the low warp looms. And, obviously, in both high and low warp procedures, the artist designs without using the yarns and the weaver mechanically follows his pattern with no freedom to react to the materials spontaneously.

The tapestry techniques practiced with precision at these classic studios have a long and rich history.

> Tapestry today is not so much the revival of an ancient art as the continuation of a living tradition. Changing and developing to suit the changing needs of modern society but still, in the main, firmly rooted in a tradition which springs from the early days of human history.[7]

Samples of woven material exist in the Museums of Cairo which were found in the tomb of Thutmose IV, dating from 1420-1411 B. C.,[8] and early writings praise the beauties of Babylonian and Assyrian tapestries although none of these have survived. Considerable sums were paid for them in ancient Greece and in Imperial Rome.

From the third to the twelfth centuries A. D. the Copts, or Egyptian Christians, were noted for the tapestry weavings they created for wall hangings and for church

decoration. Highly decorative and individual in conception, these tapestries displayed powerful, contrasting colors in bold and original designs. Twentieth century weavers admire the impressive aesthetic effects achieved without employing a wide variety of warp-and-weft variations despite a meticulous attention to detail. In the naturalistic samples, reality was intricately constructed; in the symbolic tapestries, an imaginative fantasy emerged that seems totally modern.

How the weaving art came to the Americas is not known. Whether the applications made in the course of centuries by the ancient Peruvians were original or acquired, they form an imposing accomplishment justifying contemporary appreciation for their inventive genius. These pre-Columbian artists produced fabrics utilizing almost every tapestry technique known today and expanded these techniques with skillful ingenuity. According to Dr. Junius Bird, curator of South American Archaeology at The American Museum of Natural History in New York, the earliest known Peruvian tapestry weaving was located in debris of the Chavin period and dated "perhaps about 900 B. C."[9]

Raoul d'Harcourt, secretary-general of the Société des Americanistes, examined the technical methods employed by these weavers and analyzed them in his classic work, Textiles of Ancient Peru and Their Techniques. The pre-Columbians knew and applied the following principles:

> rep; discontinuous and interlocked warp or weft yarns; varied construction of warp or weft yarns; varied construction of warp or weft pattern; brocading, supplemental element in the warp or weft; double cloth, two supplemental elements (one weft and one warp); gauze, the crossing of one warp yarn over another; the twisting or twining of weft yarns or warp yarns around each other; and open-work fabric obtained by leaving spaces or by grouping of exposed warp or weft yarns, never by drawn threads.[10]

D'Harcourt considers one of the greatest contributions of the Peruvians to be the "principle of

interchangeability of the role of the warp and weft in the textile techniques."[11] This is a liberating concept to twentieth century weavers; it provides a method for abstraction. The rectangular shape and the relatively small size of the Peruvian woven pieces allows an abandonment of top and bottom orientations. Also, on primitive backstrap looms, the fabric has top and bottom selvages formed by the continuous, looped warp and side selvages created by the weft. The warp is thought of as flexible, as contracting and expanding, rather than stationary and fixed. This is accomplished by hand yarn manipulation and by the establishment of a variable tension in the warp threads. The pliable backstrap loom yields readily to the weaver's body, and accommodates the Peruvian emphasis on construction and yarn manipulation which is so valued by contemporary fiber artists.

A sophisticated sense of color and design is a compelling feature of these Peruvian textiles. Their abstract animal, bird, and human motifs and geometric shapes display a vitality derived from the thread construction.

Another key period in the development of tapestry techniques and philosophy occurred in Western Europe during the Gothic period. Tapestry was a major art form, overshadowing illumination, painting, and sculpture. The most sophisticated centers of production were Flanders and France.

A set called Apocalypse, woven at one of the principle ateliers, Aubusson, illustrates the essential characteristics of Gothic tapestry. It was commissioned in Angers in 1377 by the Duc d'Anjou from master weaver Nicolas Bataille.[12] The designer and weaver worked in close collaboration, the former having a familiarity with the qualities of the yarns and the latter being allowed freedom to interpret details. The design of each of the seven Apocalypse panels was very simple. The varied figures contrast boldly against

alternate deep red and blue grounds, mostly plain, but at times sprinkled with butterflies or flowers. Only a small number of colors were used, approximately twenty, as well as a low thread count per inch creating a coarse weave with linear clarity. The weaver's artistic inventiveness found spontaneous expression in the treatment of details, in rich contrasts of hues, and in the boldness of the lines.

This grand and decorative style suited the prevailing function of tapestry as distinguished from painting. In the Gothic period, tapestry created a bright and pleasant covering for bare walls and provided insulation against drafts in a church nave or a baronial hall. They substituted color for the rough, gray stone and imparted an air of intimate comfort to the vast spaces. At times, tapestries were stretched on wooden frames and placed, like screens, around the hearth. Smaller examples served as table covers, window curtains, bench covers, or other practical needs.

France remained unchallenged in her supremacy in the art until the early years of the fifteenth century, when the disasters of the Hundred Years' War drove away the craftsmen. They found refuge in Flanders,[13] where, during the sixteenth century, the low-warp workshops began to imitate the perspective of paintings, introducing glimpses of distant landscapes and imitating the haze of far away colors in the backgrounds, displacing the simplicity of former approaches.

Later, an important precedent was established when Pope Leo X commissioned Raphael to design a set of cartoons known as The Acts of the Apostles for the Sistine Chapel.[14] When Raphael finished the designs in 1515, the Pope selected the Brussels master weaver, Pieter van Elst,[15] to translate the works of the master into tapestry. In 1519, the completed set was received in Rome with wild enthusiasm. The tapestry was more indicative of Italian painting than

northern textile art, however, for Raphael emphasized a sense of mass and three-dimensional space, both of which had previously been minimal in tapestry design. During the entire century, the weavers of Brussels continued to produce tapestries based on cartoons furnished by important Italian and Flemish Renaissance painters who were followers of Raphael. Such tapestries were considered precious works of art and intended purely for decoration; they no longer served a utilitarian role.

As a result of this precedent, weaving was subordinated to painting, a condition which lasted four hundred years and relegated tapestry to the field of the 'applied arts.' Cartoons continued to be designed by painters who were unfamiliar with the inherent qualities of wool, so that the pictorial subject ceased to be treated as tapestry, but became a reproduction of painting. This contrasts with the earlier Gothic period during which designs were the work of artists who fully understood yarns and looms and made cartoons especially for them. Also, the role of the weaver changed: he became a tool of the designer. He labored to modify the techniques to include more colors with finer and closer weaving to achieve more subtle copying of details.

The seventeenth century witnessed a great revival of tapestry in France. In 1662 Jean-Baptiste Colbert, all-powerful advisor to Louis XIV (1643-1715), "called upon his country's weavers of tapestries to create new designs and innovations to please the king, as well as to contribute to the prosperity of France."[16] In the Monarch's name, Colbert purchased the Manufactory of the Gobelins. Eventually, with new organization and directorships at Gobelins and Beauvais and at Aubusson and Felletin, French craftsmanship dominated all Europe. Even today, these four ateliers or royal factories remain the standard for the traditional art of tapestry, although there is a tendency to use the word 'Gobelins' to refer to any tapestry with

little concern for the type of execution or workshop in which it was made.

Artistic direction in the royal workshops during Louis XIV's reign was controlled by the painter, Charles Lebrun,[17] who designed subjects dealing with mythology, religion, and history, creating sumptuous and rich compositions which marked the artistic style of the Grand Monarch. While medieval weavers had used from fifteen to twenty strong colors, the number of shades at the Gobelins factory in 1671 had multiplied to about one hundred and twenty,[18] increasing the technical complexities of weaving and assuring the confinement to illusionism.

After a last effort toward grandeur under Boucher (1755-70), tapestry succumbed to a full imitation of mediocre painting.[19] The workshops were severely affected by the French Revolution of 1789, and only designs stressing patriotic themes were permitted. At the same time, an industrial revolution, caused by the invention of mechanical weaving devices, had a profound influence on the entire weaving profession.[20]

The conditions of nineteenth century French tapestry are important for understanding the modern fiber movement because it was against these characteristics that the twentieth century weavers reacted. Tapestry was subordinated to painting. Painters, who lacked understanding of the qualities of yarns and the limitations of looms, created the designs. Their compositions, rather than being suggested by weaving materials or construction, were insipid and lacked strong contrast of hue and value, reflecting the painting of the times. The weaver was valued, not for his creative invention, but for his technical skill in the mechanical duplication of the cartoon. His task became increasingly intricate, expressing the scientific progress of the art of dyeing.

Around 1839, the chemist and theorist, Michel Eugène Chevreul, headed the Gobelins factory.

> He devised a palette of 10 circles of clear colors. Each was divided into 72 scales, each with 20 tones, for the enormous total of 14,400 tones. But even that was not enough. By assembling two threads of different tones to create a third, he raised the total possible number of combinations to nearly 200 million.[21]

Almost imperceptible subtleties of shading were then possible. At the same time the texture of the hangings became finer; twenty to forty or fifty ends to the inch became the rule.[22] As a consequence of these complexities, the time and cost needed to execute a work increased.

A refreshing change took place during the second half of the nineteenth century in England. A great upsurge of interest in high-warp tapestry weaving occurred in 1881 through the efforts of William Morris in the workshop at Merton Abbey in Surrey, with the collaboration of Walter Crane and Edward Burne-Jones.[23] They were not only reacting against the attitude that tapestry be an imitation of painting, but also against the threat of the machine-made tapestry to the survival of the traditional craft. The Industrial Revolution brought developments in tools, materials and dyes, making machine-made tapestries available. The new middle-class market demanded small woven pictorial panels in past painting styles. As a result, handweaving in England was an almost forgotten skill.

In a successful effort to revive the craft, Morris and his fellow artists approached the problem in the spirit of the French Gothic tapestry designers and weavers who worked in close collaboration. The role of the designer was restored to reflect the nature of the yarns rather than a painting style. Morris conceived simplified forms which echoed patterns from nature but rejected pictorial perspective effects. Colors and threads per inch were limited. The weaver's skills were relearned and his role as interpreter rather than imitator was reinstated.[24] Works by Morris, such as Angeli Laudantes

and The Forest, exemplify this approach.[25] They are original in concept although obviously inspired by late fifteenth century tapestry.

In contrast to this fresh start in England, the situation in France remained dismal. The products were of inferior quality and the prices astronomical; tapestry weavers lost their market. Between 1928 and 1930 half of the Aubusson workshops closed.[26] However, under the direction of Madame Marie Cuttoli, an effort was made during the 1930's to stimulate a revival at Aubusson. The results were disappointing because the weavers were asked to reproduce in yarn exact copies of pictures by well-known painters such as Rouault, Léger, Braque, Picasso, and Dufy.[27] The finest shades and most subtle transitions of color were rendered, so that, when new, the tapestries could hardly be distinguished from the real paintings they depicted. Even woven representations of the frames were sometimes included. This was the ultimate subordination of the weaver's technique to that of the painter. While Madame Cuttoli neglected a sensitivity to the qualities of the yarns, she can be appreciated for her understanding of the "close relationship between our contemporary elements in art and the play of abstract symbols in the art of ancient cultures."[28] She encouraged progressive painters to bring living symbols to the craft; tapestry was revitalized by their creative imagination.

One of the artists who participated in Madame Cuttoli's experiments was Jean Lurçat (1892-1966). It is the renaissance instigated by him during the 1940's in France which has really been of significance in the development of modern tapestry. Lurçat's major reform was a return to the medieval tradition of tapestry as a large mural composition. Lurçat felt that a tapestry must be incorporated in a setting with architectural significance and planned with the cooperation of the architect. Against the severe and streamlined form of contemporary buildings, the medium,

texture, and color would serve as a source of warmth. Lurçat's hope was that the tapestry "will qualify then and humanize in the final instance, the place and the abstract space which is given to it."[29]

Lurçat reduced technical complications by simplifying the design and limiting the colors and number of threads per inch. He discarded the naturalistic forms of the past which required perspective and shading and adopted flat, abstract and geometric shapes for designs emphasizing juxtaposed contrasts. Then, Lurçat, like other designers, presented these modern designs to the weaver with simplified instructions. Lurçat used black and white cartoons with numbers to represent the colors and instructed the weaver to follow the instructions for using the limited number of strong, pure hues with a reduced scale of tones and a reduction of threads to approximately twelve ends per inch.[30]

In the French weaving factories, then, tapestry was still a joint creation of the artist and the craftsman. Lurçat perpetuated the idea of the designer preparing cartoons with a manufacturer supporting him, producing work which a private artist would never have time to complete. He sincerely believed that the cartoons were better left in the hands of a master weaver.

As a result of Lurçat's legacy, contemporary French tapestry has enjoyed an undeniable period of prosperity. The commissioning of famous and popular painters as designers attracts viewers and buyers who feel a security in a 'name' creation, a sure investment. The impeccable translations of paintings into tapestries, including the strokes and accidental trickles or the flat tones of Post-Painterly styles arouse great admiration for the craftsman, the consummate technician. On the other hand, overconcentration on the methods reflects a general worship of science and mechanics to the impoverishment of more subjective and human aspects of life. Moreover, yarn is not paint; every medium is autonomous, with

possibilities that are exclusively its own. Designs which deny the inherent qualities of the materials are inferior, no matter how popular or well executed.

While Lurçat's reforms reawakened interest in the neglected art of tapestry, his coarse-weave methods were peculiarly suited to his personal style and not to every artist. Although it is unadvisable to limit all the possibilities of the craft, Lurçat's concepts were maintained in the French tapestry business; they make the weaver a tool of the painter, held to faithful reproduction of the cartoon without freedom of expression.

This historical survey explains the importance of both the tapestry designer and the weaver. In the past, the critical role rested with the designer. His approach to composition expressed the unique qualities of yarns and looms, allowing further interpretation by the weaver, or it indicated a subordination to painting values, giving no interpretive freedom to the weaver. While Lurçat's reform made tapestry technically and economically feasible and improved the quality of tapestry workmanship in France, the compositions continued to reflect avant-garde painting.

Support for further revival and development of tapestry continued with the activities of the CITAM, Le Centre International de la Tapisserie Ancienne et Moderne, partially founded by Lurçat, and discussed at the end of Chapter Three. Originally aimed at reviving tapestry in the traditional French Gothic character, the institution has helped the craft evolve into one of the most creative mediums of the arts today. Essential to this revolution was the autonomy of the artist-weaver and the recognition of the unique characteristics of fibers and their structural possibilities.

FOOTNOTES TO CHAPTER ONE

[1]Two examples are: Ruth Kaufmann, The New American Tapestry (New York: Reinhold Book Corporation, 1968) and Rose Slivka, "The New Tapestry," Craft Horizons, March-April 1963, pp. 10-19, 48-49.

[2]Tadek Beutlich, The Technique of Woven Tapestry (New York: Watson-Guptill Publications, 1967), p. 11.

[3]The term warp refers to "the longitudinal yarns in the loom into which the crosswise weft yarns are woven." Verla Birrell, The Textile Arts (New York: Schoeken Books, 1976), p. 489.

[4]The backstrap loom consists of two parallel wooden rods with the warps stretched between them attached to small cords running parallel to the rods. The warp wraps around these cords in a regular lacing rhythm. The warp tension is obtained by hooking the upper wooden rod by means of a rope either to a post or the branch of a tree, with the belt wrapping around the lower back of the weaver, who can then easily control the tension by moving his body backward or forward as he works. M. Rhodes, Small Woven Tapestries (Newton Centre, Mass.: C. T. Branford Company, 1973), p. 21.

[5]Lili Blumenau, Creative Design in Wall Hangings (New York: Crown Publishers, Inc., 1967), p. 20.

[6]Ibid.

[7]Cis Amaral, "Tapestry: A Living Tradition," Art and Artists, August 1975, p. 16.

[8]Ibid.

[9]Junius B. Bird, "Technology and Art in Peruvian Textiles," p. 65. In Margaret Mead, Junius B. Bird, and Hans Himmilhebor, Technique and Personality in Primitive Art (New York: The Museum of Primitive Art, 1963).

[10]The term rep refers to a heavily corded plain weave. Raoul d'Harcourt, Textiles of Ancient Peru and Their Techniques, ed. by Grace G. Denny and Carolyn Osborne, trans. by Sadie Brown (Seattle: University of Washington Press, 1962), p. 138.

[11]Ibid., p. 137.

[12]Blumenau, Creative Design, p. 19.

[13]André Lejard, ed., French Tapestry (Paris: Les Éditions du Chêne, 1947), p. 32.

[14]W. G. Thompson, A History of Tapestry (London: Hodder and Stoughton, 1930), p. 192.

[15]Ibid., p. 193.

[16]Blumenau, Creative Design, p. 19.

[17]Lejard, French Tapestry, p. 63.

[18]Madeline Jarry, World Tapestry (New York: G. P. Putnum's Sons, 1969), p. 345.

[19]Lejard, French Tapestry, p. 78.

[20]See Chapter One, page 13, and Chapter Two, pages 20-23 and 27-28, for the effect of the Industrial Revolution on weaving.

[21]Blumenau, Creative Design, p. 19.

[22]Amaral, "Tapestry," p. 16.

[23]Beutlich, The Technique of Woven Tapestry, p. 14.

[24]Only Morris's role in the revival of tapestry is treated here. His influential philosophy of design and attitude toward the machine, which resulted in the Arts and Crafts Movement, are discussed in Chapter Two. They are essential to the development of modern aesthetics, affecting tapestry, weaving, and eventually art as a whole.

[25]Jarry, World Tapestry, p. 305.

[26]Blumenau, Creative Design, p. 19.

[27]M. Rhodes, Small Woven Tapestries, p. 29.

[28]Quotation from Albert Chatelet (Conservateur des Musées des France) in Mildred Constantine, An Exhibition of Contemporary French Tapestries (New York: Charles E. Slatkin Galleries, 1965), p. 6.

[29]Jean Lurçat, Designing Tapestry, trans. by Barbara Crocker (London: Rockliff Publishing Corporation, 1950), p. 2.

[30]Beutlich, The Technique of Woven Tapestry, p. 10.

Chapter 2
THE DEVELOPMENT OF MODERN AESTHETICS

The effects of the Industrial Revolution drew attention to the need for new aesthetic criteria and an art education which prepared the artist to design for either industry or the fine arts. This chapter focuses on the historical development of the attitudes of modern aesthetics crucial to the evolution of contemporary fiber forms. The values of the mid-twentieth century fiber artists reflect many of the aims of the Arts and Crafts Movement, the theories of Art Nouveau, the vision of the Modern Movement, and the achievements of the Bauhaus. From these historical roots grew the present interest in design which uses abstract forms, expresses the inherent qualities of a wide variety of materials, manifests structure, expresses function, and integrates the arts. These enthusiasms created a climate favorable for the evolution of fiber statements having an aesthetic rather than utilitarian function.

The iron and glass Crystal Palace was built in London to celebrate the Industrial Age and house the first Great International Exhibition of 1851. The displays revealed an abominable collection of taste, especially in the crude, vulgar and overly-ornamented crafts and industrial art areas. The artist, who during the Middle Ages was a craftsman, withdrew to create art for art's sake, neglecting the challenge of designing for the new industrial age. With the extinction of the hand-craftsman, the design of all products was relegated to the uneducated manufacturer and purchased by an insensitive public. A need had arisen for an art education applicable to industry as well as to the fine arts: a response was slow to evolve.

John Ruskin (1819-1900) wrestled with this problem, considering art an activity applicable to every field of endeavor, and protesting the stultifying effects of mass production. Rather than directing his efforts toward reconciling art and the machine, he looked backward. Supporting the Pre-Raphaelite school in painting and the Gothic Revival in architecture, he envisioned an ideal society attained by a return to the craftsmanship, the methods of production, and the cultural integration of the medieval period.

At the time of Ruskin's theories, the Industrial Revolution had made no contribution to weaving as art, but only to the amount produced and the speed of execution. Critical inventions in the spinning and weaving industries are as follows: in 1733 the fly-shuttle by J. Kay, in 1760 the shuttle drop box by R. Kay, in 1764-7 the spinning jenny by Hargreaves, in 1769-75 the water frame for spinning by Arkwright, in 1774-9 the spinning mule by Crompton, in 1785 the power-loom by Cartwright, and in 1799 the Jacquard loom.[1] Consequently, the role of the craftsman was removed and a century after the invention of the spinning jenny, handweaving in England was a forgotten skill.

The effects of industrialization which had stirred Ruskin also disturbed the British designer, William Morris (1834-1896), who preached against a social system in which man was reduced to the status of a machine part, mechanically producing poorly designed, cheap quality goods. He lectured to initiate the reform of a society responsible for ugly decorative arts, architecture, and cities. Most of all, he demanded a unification of all the arts and crafts to support important reforms in architecture.

Morris was the first to devise a practical, instructional program as Ruskin envisioned, taking steps which were intended to provide new impetus for technical training in art. His solution to the problems of design included

a revival of hand-craftsmanship organized according to those medieval traditions and design principles which the fiber artist values today. The Gothic artist-designer had a knowledge and respect for the nature of the materials, expressed structure in forthright and simple compositions, took pride in quality craftsmanship, and cooperated with other societal members to integrate his artistic expression with the other art forms that complete the total architectural setting.

William Morris tried to live as the personal example of the artist as designer-craftsman. When he could not find a house and home furnishings suitable to his taste, he asked Philip Webb to design Red House at Bexley Heath and then designed the furnishings himself. The straightforward appearance of Red House and its rational relation of plan to exterior had a great impact. Morris experimented with a wide variety of media which helped him acquire a respect for the nature of materials and working processes. He designed wallpaper, ornamental stained glass, printed textiles, tapestries, and woven upholstery materials among other items. His simple, unified compositions blended originality with tradition. Particularly important for the twentieth century was the two-dimensional quality which set his patterns apart from the prevailing obsession with three-dimensional illusionism.

Out of his involvements with the revival of craft skills grew the firm Morris, Marshall & Faulkner, later Morris & Company. Established in 1861, the firm became influential for its return to sound principles of design. Morris designed textiles for hand or machine production[2] which reflected the inherent qualities of the fibers and the potential use of the fabric. He taught his workers weaving skills and planned his designs so craftsmen could interpret rather than imitate his unique pieces. Frequently, the weaving trade produced a limited number of his machine-production designs for the firm.

Morris deplored the use of art for the few, believing that art ought to be "by the people and for the people,"[3] yet he could never resolve the problems that the handwork and limited machine production of his own firm were expensive, and, therefore, not 'for the people.' He would have despised the diffusion of his work on a mass production basis because it would have expelled the 'joy of the maker.' Implicit to his socialist solution was the assertion: "As a condition of life, production by machinery is altogether an evil."[4] Revision of this attitude was required before it was possible to arrive at the twentieth century situation, in which artists and engineers design for mass industrial production and thereby hope to improve the environment and living conditions of the common man. Yet Morris planted the seeds of reform by stating the values of honesty, simplicity, and functionalism for a pan-craft movement, by recognizing the role of the designer-craftsman, and by reviving handweaving and other skills. He helped to strengthen the English textile industry.

Other artists of the period, sharing common ideals, organized themselves into units based on the medieval guilds. Between 1880 and 1890 five such societies were founded in England for the promotion of craftsmanship.[5] One example was the Arts and Crafts Exhibition Society formed in 1888. These artists promoted the fusion of quality craftsmanship with practicality and the expression of materials and construction with forthright simplicity. In contrast to the excessive eclecticism of the nineteenth century, they considered functionalism, but they stopped short of an explicitly functionalist aesthetic. In England, and later on the Continent, they staged exhibitions, lectures, and demonstrations to present their programs to the public. As part of their campaign, followers of the movement sought native craftsmen in areas of continental Europe where the Industrial Revolution had not dominated. In Scandinavia, peasants were still producing handwoven

articles for their daily needs, and these skilled weavers taught their methods to the students from England. The Arts and Crafts Movement fostered a revival of artistic craftsmanship in Europe and the United States and it inspired a reassessment of industrial design although contempt for methods of mass production remained evident.

Charles R. Ashbee became aware of the reality of the machine and, by 1911, he concluded that:

> [m]odern civilization rests on machinery, and no system for the encouragement of the endowment of the teaching of the arts can be sound that does not recognize this.[6]

In pronouncing this axiom, Ashbee abandoned the doctrine of the Arts and Crafts Movement. The movement's protest dissolved, but its craft activity became a foundation for contemporary fiber artists.

Art Nouveau, an independent and transitional international style, developed at the turn of the century in an effort to abandon historicism. The style, with its characteristic flowing sinuous curves, originated among the avant-garde of the applied arts, for example, with Victor Horta (1861-1947) and his 1893 staircase at No. 6 rue Paul-Émile Janson in Brussels.[7]

From the roots of the Gothic Revival, Art Nouveau continued an appreciation of visible structure, good craftsmanship, and honesty in the use of materials. But, one of its most significant contributions was its attempt to re-establish a unity between the fine and applied arts, especially within the context of architecture, a legacy of Morris and his interest in the Middle Ages. Inherent in the ideal of the fusing of the arts was the desire for spatial unity in the handling of an architectural structure and its interior design. Purged and purified elements became part of the whole, utilizing light and space in asymmetrical compositions emphasizing the structure of form. However, the expression of functionalism was never realized because of an emphasis on linear surface

ornament. Or, as Henry-Russell Hitchcock phrased it:

> [t]he renewal of ornament and of the accessories of architecture outran the renewal of the more basic elements of the art of building towards which the technical developments of the nineteenth century had been leading.[8]

Art Nouveau had a short life because its expensive design and reliance on the handmade product failed to reconcile art, industry, and the social needs of the new age. The weaknesses in Morris's theories had not yet been overcome. The twentieth century called for technically inspired and trained artist-designers capable of tackling mass production and the problems posed by new materials.

Several characteristics of Art Nouveau are especially valued today by fiber artists. One is the experimental nature of the style with its search for fresh stylistic sources and qualities. The use of new combinations of unconventional materials such as wrought-iron, copper, and various semi-precious stones is still inspiring. And, the individualistic interpretation of structure and its relationship to decoration is also relevant today.

It was out of the national movements of Art Nouveau (Jugendstil, Wiener Sezession) that many of the precursors of the Modern Movement emerged. Particularly influential was Henry van de Velde (1863-1957), Belgian painter and architect and also pioneer designer, teacher, and theoretician of the new movement. The extraordinary diversity of van de Velde's activities in the arts stems directly from his insistence on an integrated reformation of the whole human environment. Beginning with a unified harmony of the fine and applied arts in his own surroundings, he designed and built his own house during 1895-96 in Uccle, near Brussels. Van de Velde also fashioned the fittings and furnishings for the project, which he called Bleomenwerf.[9] His teachings denounced the successive nineteenth century revivals of historical styles and

called for a new, modern style, using new forms, new materials, and the new industrial techniques. In 1901, he was invited by the Grand Duke of Saxe-Weimar to direct this spirit of synthesis in the Weimar School of Arts and Crafts, out of which, at the close of the First World War, emerged the Bauhaus of Gropius.

Starting with architecture, Walter Gropius (1883-1969) extended his interests into the whole field of the arts. He aimed to improve the standard and status of mass produced goods and to train artists to work with industry. To implement his ideas, he needed to establish an entirely new kind of school of architecture and design. Gropius wanted to combine the Weimar Art Academy with the Weimar Arts and Crafts School to create a consulting art center for industry and trades.

This union was achieved in April 1919. The name Bauhaus was chosen for the school, harking back to the Bauhütte, the Cathedral Workshop of the Middle Ages in which architects, sculptors, and masons combined to build as a team.[10] Gropius declared in the Manifesto:

> Architects, sculptors, painters, we must all turn to the crafts! Art is not a profession. There is no essential difference between the artist and the craftsman. The artist is an exalted craftsman.[11]

Director Gropius enlisted the help of avant-garde artists such as Feininger, Klee, Kandinsky, and Moholy-Nagy to stimulate the creative process and to use all the new resources, technical, scientific, intellectual and aesthetic, to create an environment that would satisfy man's total needs. In the effort to create a reformed art education, Gropius instituted workshops inspired by the medieval guild system. At first each student was trained by two teachers in each subject, by an artist (Formmeister) and a master craftsman (Technischer Meister). Exposed to both theoretical and technical aspects of the arts, the student was encouraged to integrate the two.

This division of instruction was unavoidable at the beginning, for no teachers presently had sufficient mastery of both phases. To develop such 'ambidexterity' was the purpose of the school.

The goal was achieved after the 1925 move from hostile Weimar to Dessau. Several students joined the staff after completing the training enabling them to function as combined creative artists, craftsmen, and industrial designers. New ideas began to flow with abundance as these teachers integrated the spirit of functional design with the fine arts and architecture as well as with city and regional plans. Gropius's 'principle of collaboration' became actual as architects, artists, and craftsmen worked together to apply "a new aesthetic - to lay open a humanistic perspective of technical civilization."[12]

In the workshops, faculty members such as Johannes Itten inspired and encouraged experimentation with forms, materials, and texture leading to a new sensitivity, and allowing a free choice of materials and methods of exploration. This effort to form a creative individual is now a part of many art programs, internationally. The six-month Preliminary Course was also influential. Its teacher, Josef Albers, emphasized the possibilities of construction in a variety of materials, principally wood, paper and metal. By dividing or combining these materials with a minimum of tools, their properties could be explored. Because of pioneers such as Itten and Albers, an art education emphasizing creative exploration is a part of the heritage of contemporary fiber artists.

A specific set of aesthetics cannot be attributed to the Bauhaus; even the functionalist aesthetic had previous promulgators. However, its emphasis of abstract designs which express the nature of materials and reveal their construction with simplicity and economy is still inspiring.

The Bauhaus approach to thread design is important to this thesis. Appropriately, the weaving workshop was the first to become reasonably well-established. Hélène Böner, who had worked with Henry van de Velde, remained at the school and became the weaver's technical instructor, while Georg Muche, a young painter, was appointed 'form master' to provide the artistic inspiration. Under this dual instruction, and with the help of other painter-weavers, such as Hedwig Jungnick, Benita Otte and, above all, Gunta Stölzl, an original and unique style emerged.[13] The first fabrics produced in the Bauhaus weaving workshop had been 'pictorial weavings' created under the influence of the painter Paul Klee. It was not long, however, before the aesthetics of Gropius became persuasive and the emphasis focused on materials and construction.

Anni Albers, a student and wife of Josef Albers, thought it an advantage that those beginning at the new school had no traditional training. "It is no easy task to discard conventions, however useless," she concluded.[14] She agreed with her colleague, Gunta Stölzl, who wrote later that weaving aptitude called for a:

> love of the material, a feeling for the many, varied characteristics of the yarns, anticipatory imagination, a sure sense of color, patience, perseverance, ingenuity, and nimbleness, both spiritual and manual.[15]

Anni Albers described the students' early attempts as amateurish and playful. Yet this experimentation with materials produced amazing results: "textiles striking in their novelty, their fullness of color and texture, and possessing often a quite barbaric beauty."[16] These improvisations provided a fund of ideas from which more carefully considered projects were later derived.

Whether to concentrate on machine or hand production was a controversial subject in the weaving workshop, which continued the dual system of instruction. Georg Muche retained his title of 'form master' and Gunta Stölzl became his 'technical' assistant. Muche attempted to

increase machine production, meeting opposition from Gunta and the students who felt that machine techniques were not flexible enough, at that time, to accommodate the revolutionary advances in handweaving. Freedom for intuitive experimentation was essential for progress; heavy focus on mechanical effects could be stultifying and inhibiting.

Muche relinquished his position in the workshop early in 1926, and Gunta Stölzl took complete charge.[17] Under her leadership the department became a laboratory where new ideas were tried and tested. In spite of her insistence on the necessity for freedom of experimentation and research, her approach was practical. Many of the designs that she and her talented students, including Otti Berger, Anni Albers and Lis Beyer,[18] produced were used by German manufacturers who collaborated with the weavers to develop techniques suitable for reproducing these experimental designs.

As utilitarian considerations increased, more systematic training in the mechanics of weaving was initiated as well as other considerations such as dyeing, calculating, and the introduction of synthetic fibers. Anni Albers recorded that:

> the physical qualities of materials became a subject of interest. Light-reflecting and sound-absorbing materials were developed. The desire to reach a larger group of consumers brought about a transition from handwork to machine-work: work by hand was for the laboratory only; work by machine was for mass production.[19]

With this shift from 'art and handicraft' to 'art and technology' a new weaving style emerged. Visceral and emotional aspects diminished. The formal expression of material and structure increased as weavers considered yarn textures, broken color, and new abstract, vertical-horizontal patterns and their application to industry. While their work demonstrated the new aesthetics, the

teaching and, more importantly, the writings of Anni Albers, Gunta Stölzl and others, had an universal influence.

After the rise of Nazism and the forced closing of the Bauhaus in 1933, many of its progressive faculty and students emigrated to the United States and incalculably influenced American fine arts and crafts. Walter Gropius brought Bauhaus methods to Harvard. Josef Albers taught at Black Mountain College in North Carolina (from where Anni also wrote and lectured) before he was appointed to Yale University in 1950 as head of the Department of Design and influential interpreter of Bauhaus ideas. Laszlo Moholy-Nagy moved to Chicago where he founded the New Bauhaus, later known as The Institute of Design of the Illinois Institute of Technology (I. I. T.). At the same time, Ludwig Mies van der Rohe drew the plans for the I. I. T. campus.

The Bauhaus, symbol of progressive design, succeeded in its aim to end the nineteenth century schism between the artist and the technically expert craftsman by training students equally in both fields. New ways of using industrial materials and technical methods, of expressing the need for simplicity, and of presenting understandable visual images, are all part of the Bauhaus heritage.

Artists working in fiber today have an aesthetic heritage based on sound principles of design. A reinstatement of weaving skills, pride in quality craftsmanship, respect for the nature of materials, and an appreciation of visible structure emerged from the Arts and Crafts Movement. The valuing of experimentation and individuality arose from Art Nouveau thinking. A method of art education developed from Bauhaus theory that merged technical skills with aesthetic sensitivity and provided the foundation for the training of fine arts and industrial designers. An emphasis on the exploration of materials, construction, and formal qualities, and their relation to the expression of

function is also part of the Bauhaus legacy. These are the major artistic developments that profoundly influenced the mid-twentieth century fiber artist.

FOOTNOTES TO CHAPTER TWO

[1]Nikolaus Pevsner, Pioneers of Modern Design (New York: The Museum of Modern Art, 1949), p. 45.

[2]Ray Watkinson, William Morris as Designer (New York: Reinhold Corporation, 1967), p. 52.

[3]Pevsner, Pioneers, p. 23.

[4]Joan Allgrove, British Sources of Art Nouveau (Exhibition of Nineteenth and Twentieth Century British Textiles and Wallpapers at the Whitworth Art Gallery) (Manchester, England: University of Manchester, 1969), p. 4.

[5]Ibid., p. 6.

[6]Pevsner, Pioneers, p. 26. Frank Lloyd Wright made a similar statement in 1901, while addressing an Arts and Crafts group at Hull House in Chicago: "I say the Machine has noble possibilities...Why will the American Artist not see that human thought in our age is stripping off its old form and donning another; why is the Artist unable to see that this is his glorious opportunity to create and reap anew?" Frank Lloyd Wright, "The Art and Craft of the Machine," p. 178. In Lewis Mumford, ed., Roots of Contemporary American Architecture (New York: Reinhold Publishing Corporation, 1952).

[7]Pevsner, Pioneers, pp. 98-99.

[8]Henry-Russell Hitchcock, Architecture: Nineteenth and Twentieth Centuries (Baltimore, Md.: Penguin Books, Inc., 1969), p. 417.

[9]Robert Schmutzler, Art Nouveau (New York: Harry N. Abrams, 1962), p. 137.

[10]Peter W. Guenther, "The Aesthetics of the Bauhaus," Texas Quarterly 16, pt. 1 (Spring 1973): 166.

[11]Echkard Neumann, ed., Bauhaus and Bauhaus People, trans. Eva Richer and Alba Lorman (New York: Van Nostrand Reinhold Company, 1970), p. 9.

[12]B. Ferris, "Bauhaus: Times and Influences," Communication Arts Magazine 15, pt. 2 (1973): 23.

[13]Gillian Naylor, The Bauhaus (London: Studio Vista, 1968), p. 46.

[14]Herbert Bayer, Walter Gropius and Ise Gropius, eds., Bauhaus: 1919-1928 (Boston: Charles T. Branford Company, 1952), p. 141.

[15]Neumann, Bauhaus People, p. 129.

[16]Bayer, Bauhaus, p. 141.

[17]Naylor, Bauhaus, p. 124.

[18]Ibid.

[19]Bayer, Bauhaus, p. 142.

Chapter 3
THE REDISCOVERY OF THE ARTIST-CRAFTSMAN

Through the efforts of the Arts and Crafts Movement, the weaving traditions in countries little affected by the Industrial Revolution were strengthened. In industrialized nations, handloom skills were relearned with the guidance of migrant-craftsmen, who provided instruction and interacted with artists. Frequently, Bauhaus theory also provided a rationale for fusing the skills of the craftsman with the aesthetics of the designer.

This chapter credits the contributions of individuals, institutions such as CITAM, and countries which have supported the emancipation of fiber forms from the limitations of the tapestry tradition. The two triumphant ideals of the fiber artist, as they emerged in the 1960's and 1970's are recognized: the authority of the artist-weaver to create his own designs, and the autonomy of the woven object, unrelated to painting and expressing the qualities of fibrous materials.

The initial exploration of yarn, construction techniques, and formal concerns was especially noticeable in Scandinavian countries such as Sweden and Finland where the development of fiber forms as art was relatively unaffected by the Industrial Revolution. At the beginning of the century, Sweden reassessed the national character of its arts as it moved from the influences of the Morris era and Art Nouveau. Its strong textile tradition continued in the contemporary home craft movement and activities of free-weaving[1] craftsmen. Wall hangings were especially popular. While Sweden has no large school of fine arts, its artist-craftsmen have always been

honored and known in the average household. The contribution of Märta Mass-Fjetterström is especially important for the development of fiber art. Inspired by folk traditions, Persian carpets, and local landscapes, she wove tapestries which were most influential during the twenties and thirties.[2] Using the traditional weaves of tapestry and knotted pile, she brought a lively imagination and superlative color sense to contemporary versions of Swedish folk subjects.

In Finland at the end of the nineteenth century, and especially in Helsinki, a northern Art Nouveau style manifested itself in architecture and a vital arts and crafts movement flourished. A reawakened interest in folk art grew. From these three inspirations, Eliel Saarinen developed his personal architectural style and established his lifelong interest in collaborating with craftsmen to enrich his buildings.

One of these craftsmen was his wife, Loja Saarinen, who became a major force in the weaving field at the beginning of the century. She wove carpets and wall hangings using the long knotted pile of the Finnish rya technique. Then, to complement her husband's architecture, she also created a new tapestry style whose flat and architectonic character emphasized the expression of materials and structure. Her strong, direct expression of technique and threads as well as of opacity and translucency were prophetic of the later work by Lenore Tawney and other fiber artists.

Aside from their creative work, Eliel and Loja Saarinen were vastly influential as teachers and supporters of craftsmen. This was true in Finland and in America after Eliel Saarinen's architectural work brought them to Bloomfield Hills near Detroit. There, in 1926, Saarinen founded the Cranbrook Academy of Art, a most needed and important arts and crafts center. The small institution has had a far-reaching influence supported by the founder's

encouragement of the integration of fine and applied arts within an architectural context. Even as early as 1926, when he designed the Cranbrook Boys Academy, Saarinen commissioned Finnish and Swedish sculptors, potters, and weavers to design the other art forms.

Soon after their arrival in the United States, the Saarinens and their friends found that the existence of handweaving in this country had practically stopped with the advent of the Industrial Revolution. When it revived in the 1920's,[3] it resumed at the point where it had discontinued. Until the 1930's American weavers were mostly concerned with collecting patterns in the colonial overshot weave;[4] experimentation was not yet considered. But, at Cranbrook, even in 1929, Loja Saarinen supervised the weaving classes where unique rugs and art fabrics were created for Saarinen's buildings. Later, in 1937, when Marianne Strengle assumed direction of the workshop, the emphasis shifted to prototypes for production, as had been the case at the Bauhaus. In this fertile atmosphere, many Cranbrook alumni matured and later attained prominent positions in the fields of design and education, among them Ed Rossbach, Tashiko Takaezu, Mary Jane Leland, Walter Nottingham, and Sherri Smith.[5]

The varied artistic currents that emerged from Europe, even before the migration of the continental masters in the 1930's and 1940's, became the core of diverse achievements in American crafts. Developments in the Far West merit attention for their influence on craftsmen.

From 1900-1920, the time of Bernard M. Maybeck and Charles Greene,[6] the West Coast nurtured an organic, humanistic architecture and crafts tradition displaying a love of native materials and fine workmanship. Later, in the 1920's, the Austrian architects Rudolph Schindler and Richard Neutra shared their knowledge of European developments and reinforced the interest in the applied

arts by providing a supportive atmosphere and commissions for craftsmen.

Although the whole West Coast was involved in the craft revolution that began in the 1930's, the San Francisco Bay area, in particular, nurtured the development of fiber art. Pioneer weaver, designer, and colorist, Dorothy Liebes, opened the first handweaving and design studio in San Francisco in 1930. Working independently, she experimented with unusual materials, such as reeds, ribbons, beads, and bamboo, which were not used by her contemporaries. Essentially these weavers continued to produce patterned yardage. Liebes' work was prophetic in its use of brilliant colors and textured yarns in subtly related combinations.

In 1939, the Golden Gate Exposition occurred in San Francisco and acted as an impetus to the handweaving movement. The decorative arts section, headed by Liebes, was the first major exposure of crafts in this country. Impressed by this experience, she became a spokesman for the artist-craftsman, believing that it is not enough to be a creative person, one must be involved in the life of the community and country and champion the causes in which one believes. In 1940, she became a pioneer craftsman working for industry. Her early perception of the design potential offered by the use of color and texture had an international influence in the textile industry.[7] Her success stimulated the market for special hand weaves, and also the serious pursuit of weaving as a profession. To her fellow artist-weavers she challenged: "We must be producers, not reproducers. We must have new ideas and forms to suit the new world, instead of rehashing old cultures."[8]

Another source of fertility in the San Francisco Bay area was the well-established Department of Physical Anthropology at the University of California, Berkeley. Departmental researches of the American Indian and pre-Columbian basketry and fabric inspired the faculty in the

Department of Decorative Art. The weaving director, Lea Van Pembrock Miller, spent years exploring the ramifications of Peruvian gauze weave.[9] Her department at Berkeley, in the 1940's, was the only university offering a Master of Fine Arts degree in weaving. When Ed Rossbach joined the staff in 1952, he found an atmosphere suitable for his own investigation of non-utilitarian fiber forms.

Continuing to augment the fertile San Francisco environment during the 1940's, Trudie Guermonprez traveled from Europe via Black Mountain College to Pond Farm. She taught weaving at the crafts school there and later in the California College of Arts and Crafts, concentrating on the technical and aesthetic considerations of fiber form. Another lone pioneer in San Francisco, Ruth Asawa, used wire in a tubular knitting, often in layers, with one floating inside the other "like a series of carved Chinese ivories."[10] With this procedure she produced some of America's first monumental fiber art, large volumes of shadow-producing filigrees which were both durable and cleanable.

Although the West Coast fostered a cultural climate supportive to the native and newly arrived craftsman, by the 1930's, many parts of the country were receptive to the influx of European masters. Chicago became the perfect host city for the creation of the New Bauhaus, later the Institute of Design, where Lenore Tawney and other fiber artists studied. And at the experimental environment of Black Mountain College, the presence of Anni Albers spirited the revival of handweaving. Since 1933 when she emigrated with her husband Josef to the United States after the close of the Bauhaus, she disseminated her ideas through extensive lectures, workshops, and writings. Although Albers concentrated her energy on developing production methods, she stressed construction and defined

the tactile surface as the result of an interplay between the woven structure and the chosen fibers.[11] Color, while important, was subordinated to techniques and yarn characteristics. She was critical of the emphasis on textural interest which was a trend in the 1950's, noting that an exaggerated texture derived from fancy yarns hides the thread construction.

To substantiate her claims Albers cited the high achievements of earlier cultures, namely Coptic and early Peruvian weaving, for the ingenuity of their woven structure, formal treatment, and use of color. She admired the Peruvian interest in creating things both useful and beautiful, and stressed the need to use fabric as an integral architectural element. She mentioned that Mies van der Rohe was one of the first to adopt this attitude[12] which is actually a mainstay of Bauhaus theory. These teachings, combined with others, later settled in the fertile mind of Sheila Hicks.

The Bauhaus influence on the development of fiber art was of prime importance. However, by the time the Bauhaus doors were closed, weaving was subordinated to design for production. Because of the wide dispersion of Bauhaus doctrine and because of the credence given it, utilitarianism, the doctrine that goodness is based on usefulness, was the prime concern. Only after three decades of emphasis on the utilitarian form, from 1930 to 1960, was a serious consideration given to fabric without function - the fiber as an art form.

Immediately after World War II, inklings of the break from utility were evident, internationally. In eastern and northern Europe, weaving displayed a new emphasis on the quality of the yarn. In Poland, the Ministry of Art and Culture organized programs to restore the native handcrafts, focusing on the weaving in a northern part of the country and its ancient tradition of tapestry-woven rugs produced on the broad horizontal

loom. The important Cracow school of weavers working in kilim[13] and Polish tapestries was also supported. Polish weavers were taught early to respect the inherent quality of materials and structure. This helps to explain their consistent progression from traditional tapestry to free-weaving in this century. Even as early as 1957 Poland's contribution to the Milan Triennale exclusively presented fiber as art. Although utilizing traditional techniques, the weavers expressed a sense of the medium rather than an execution of a painter's concept. Thick surfaces of handspun wool and vegetable-dyed, glowing earth tones invited the touch. The importance of the figurative image declined; expression was bold, free of inhibitions, and vigorous.

Meanwhile, in northern Europe, a fresh approach to the tapestry tradition[14] was also explored. Finnish craftsmen made new fabric statements including the flowing color of simplified art ryas. Dora Jung created free-woven double cloths called Finn weave and also damasks, for which she received three consecutive gold medals in the Milan Triennales.[15] Eva Antilla and Martta Taipale produced works in brilliant clear colors in a broad range of fiber. In Sweden, craftsmen such as Ulla Tulluf broke with the heavy monumentality of the Maas-Fjetterström school to create freely conceived sheer tapestries similar to those woven by Tawney during the same period.

In the United States, dependence on Paris for stimulation in painting and sculpture ceased and the International Style in architecture prevailed. Avant-garde drama, music, and poetry expressed a renewed confidence in innovative native talent thus assuring healthy cross-fertilization among the various art disciplines and media. Industrial production moved from war materials to consumer goods, with the industrial designer beginning a long and important rise to recognition. The economy was booming and the demand for consumer goods, from household items

to works of art, was insatiable. The market for fiber designs emerged.

New York had never previously been very hospitable to the craftsman, being a center for the fine arts. But in 1950 the situation changed when Dorothy Liebes moved from the West Coast to New York. Jack Lenor Larsen opened his studio there the next year. Although their emphasis was on fabric design, both decorative and utilitarian, the stimulation and support they provided contributed to the craft climate. Also, from 1950 to 1955 the Good Design Program, under the direction of Edgar Kaufmann, Jr., sponsored by the Merchandise Mart in Chicago and The Museum of Modern Art in New York, brought to the attention of a still wider audience the work of craftsmen and designers. Works by Sue Fuller, Lenore Tawney, Marta Taipale, Jack Lenor Larsen, and Lyn Alexander were included.[16]

Despite this recognition, the handweaver-designer confronted a major problem. Until the 1950's the handweaver had been essentially supportive to interior, architectural, and apparel design considerations. But by then the expanding technology of the fabric manufacturer had radically altered his role. Now that his product could be produced more efficiently by industry, he faced a dilemma. He was free to continue designing for the textile industry or to experiment with non-traditional and non-utilitarian forms, materials, and techniques. Some, Lili Blumenau, for example, turned to the wall hanging as a personal expression. But, at times, this alternative offered little financial security or recognition.

It was Aileen O. Webb, wealthy patron of the crafts, who, even a decade earlier, sensed this need to provide new professional avenues for those handweavers and craftsmen who chose to remain apart from industry. She opened America House in New York, the first major retail outlet designed to acquaint the public with the richness of the

handmade object and to provide a market for craftsmen. In 1943 Mrs. Webb founded the American Craftsmen's Council to establish contact between the isolated craftsmen across the country and to "stimulate interest in the work of handcraftsmen."[17] The organization developed into an educational institution, maintaining the Museum of Contemporary Crafts, created in 1956, as a national showcase. The official organ of the Council, Craft Horizons magazine, is published bi-monthly to provide an international coverage of the crafts. The Council holds national and regional conferences, and maintains a file of craftsmen's work with photos and slides which is frequently used by those wishing to commission works or to study. In 1964, Mrs. Webb also helped to found the World Crafts Council which became a non-governmental member of UNESCO a year later.[18] Its stated purpose is:

> to provide markets for the work of each country's craftsmen, to educate the people of the world to the value of craftsmanship, and to bring this about through proper leadership and in a spirit not of competition but of cooperation.[19]

In the fifties, concurrent with the innovation in textile manufacturing, increasing numbers of artists and students looked to the crafts media as expressive materials. They wanted to convey their response to the regimentation exerted by mass production by creating humanistic and personal statements. Since the American folk tradition was relatively unknown, the art school or university played a major role in educating these artists and students and in broadening the concept of craft media as art. The student learned design, materials, attitudes, and techniques, while investigating cultures and forms, past and present. He often studied abroad, developing an international rather than a national outlook. Many of these graduates felt a responsibility for developing a meaningful crafts education program so they turned to teaching.

In the 1960's the university bore a major responsibility for bringing public attention to contemporary artist-craftsmen. College museums opened as campus art departments grew in importance and scope, with quality craft objects shown along with painting and sculpture. Eventually, as the craft work matured and was displayed in the campus galleries, along with craft museums and art fairs, other large institutions began to take notice. By the late 1960's, art forms that were expressed in media formerly reserved as 'craft,' were frequently included in exhibitions at art galleries and museums. The contemporary fiber artist had scored a significant achievement.

In Europe, the major institution which has attempted to overcome the bias relegating fiber forms to a minor place in the arts is the CITAM. The Centre International de la Tapisserie Ancienne et Moderne was founded in the French tapestry tradition by Pierre Pauli and Jean Lurçat. It represented not only the largest and most important international exhibition of modern tapestry, but also an organization for research into techniques and the study of ancient as well as modern tapestries. It was a first step taken by Europeans toward recognizing contemporary textile work as an essential contribution to the plastic arts, and presently serves as a center for the encouragement of fiber experimentation and achievement.

In the eight Biennial exhibitions at Lausanne, Switzerland, entries have grown in number, evolved, and become emancipated from the classical tradition which gave them birth. This emancipation and the revolutionary fiber forms of the three artists recognized in the following chapters were the result of a merger of twentieth century attitudes: the effort to revive the quality of tapestry, the shifting aesthetic emphasis to exploration of materials, construction, and formal qualities, and the increasingly supportive climate for the artist using

'craft' media.

The founding exhibition in 1962 paid tribute to the revival of tapestry, begun in the 1920's and spirited by Lurçat. Mural tapestries designed by a contemporary painter and executed on high or low warp looms dominated the exhibit. Quality varied, but included some decadent and decorative entries. Only a handful of the weavers exhibited pieces that forecast the excitement of the present fiber movement. In particular, the presentation of the Polish artists was innovative and strong.[20]

The 3rd Biennial in 1967 was oriented toward examples of research, the whole exhibition emitting the sense of an emerging art form. Poor quality decorative entries were rejected by the international jury. The tapestry category with cartoons designed by a painter and woven by a craftsman continued. A second category, consisting of the artist-weavers who designed and executed their own work, expressed the freedom which increasingly influenced the character of the Biennial.

The concept of tapestry in the second category was considered to embrace various hand techniques that could be used to create areas different in color or texture. It was pictorial in character, but remained at this time limited to the two-dimensional plane. A visible sense of freedom in these weavings reflected the ability of the artists to direct their work while it was in progress. A variety of techniques were explored.

As was true in the previous Biennials, the countries of eastern Europe offered the most impressive work. Joining the already internationally known Polish artists Magdalena Abakanowicz and Wojeciech Sadley were others such as the Yugoslav Jagoda Buic and the Czech Bodan Mrazek.[21] Entries from these countries showed the most extreme diversion from the traditional concept of tapestry. The qualities of the materials were exploited; contrasts of fibers and techniques created strong statements.

Somewhat subdued in comparison were the works of Sheila Hicks, one of only two artists representing the United States.

In the most innovative work at the 4th Biennial in 1969, three-dimensional space was used. Although the jury aimed to expose all tendencies, rather than make a statement, three trends were evident.[22] First, was the presence of three-dimensional and environmental statements. Second, was a freedom to mix techniques. Third, was a growing tendency toward expressionism, a self-projection of raw emotions.

The positive qualities of the show included a sense of vitality and a refreshing variety of techniques, statements, and geographical representation and yet, weaknesses were also evident. Some exploration in mixed techniques was not original or successful and resulted in grotesque forms. In certain entries, the formal considerations were solved neither aesthetically nor technically. Also, some were too fragile to be handled for shipment without difficulties. From a distance, several large, traditional tapestries appeared as flatly painted murals because of the uniform, impersonal technique. Yet the formal design would have been rejected by any painting jury.

In the 5th Biennial of 1971, the contrast between the French school of tapestry and the expressive-exploratory contingency continued, but the competition between philosophies, countries, and individuals created a certain dynamism. The allowance for coexisting approaches was healthy, as evidenced by the influences they had upon each other. The message of the artist-weavers to the French school was that their protest was not with traditional classicism of quality, but with the cartoon as the creation and the tapestry as a copy, an arrangement showing little sensitivity to the potential of the material. The fiber artists could also learn from the traditionalists

whose monumental wall hangings often performed amazingly well because of their quality craftsmanship and materials.

The trends toward exploration, increased scale, and sculptural qualities continued. Of particular interest to the artist-weavers was the manipulation of fiber and form which exploited the potential of the material selected. Off-loom techniques not before associated with weaving became intermingled, namely macramé, knitting, netting, binding and applique. Non-traditional fibrous materials were common, predominately sisal. Again the eastern Europeans showed the greatest innovation; Abakanowicz's monumental black constructions exerted their presence. Ten Americans were represented. Previously, the Biennial was almost unknown in the United States, partly because of the minimum size limitation. Only two participated in 1967 and four in 1969.[23]

The 6th Biennial in 1973 projected a certain maturity and confidence within the movement and the Biennial organization itself. The medium had established itself as one of the most dynamic visual arts. The international jurors were more than usually sympathetic to the new art form. They selected few works so more could be viewed in isolation. Rather than the polarity between extremes of East European expressionism and French tapestry conventions, a more hospitable gradation related newcomers to established artists. The new international rostrum was underlined by the emergence of two new and strong countries: the United States with thirteen entries and Japan with six entries. The Japanese works were major, free from preconceived ideas, and fresh, but with few common characteristics. The American works broadly divided themselves between monumental, wall-relating rectangles and relatively delicate pieces, often introspective and freely formed. This contrast between bombastic and fragile work, common in the exhibit, made displaying pieces difficult.

The 7th Biennial in 1975 expressed again the principle which distinguished the exhibition from the beginning. In the statement made for the jury, Chairman René Berger made the purpose clear: "Rather, then, than relying on a 'quality,' gradually becoming more and more mythical, we have endeavored to chart the new trends."[24] As assessed by the jury, the trends consisted of interest in what they termed ecology, a renewal of purism (a simplified geometric form), conceptual approaches, transparencies, anthropometric forms, and genetic processes (after the manner of cellular growth). They also noted the phenomenon of fewer environmental tapestries.[25] Although some miniatures were present, there was an impression of strong continued interest in monumentality.

The 8th Biennial in 1977 could not possibly accomplish its aim to display contemporary tapestry in all its techniques, means of expression, and researches. Only a small proportion of the large number of entries could be accepted, too small a sample to accurately analyze actual trends or the range of international approaches. Yet it clearly presented the fiber art form in a healthy state. The countries with the largest representation were the United States and Japan. René Berger suggested that this was because these are the "two countries in which self-questioning is most acute."[26] While sculptural and environmental entries formed a substantial part of the 7th Biennial, the emphasis shifted in the 8th Biennial from 'exhibition pieces' to those which could function in a public or domestic setting. More conservative wall hanging forms appeared, often with a pictorial design. There was some relationship to the recent concerns in painting toward Super-Realism and trompe l'oeil. Generally the interests were less architectural, and more parallel to the concerns of painting and sculpture.

The Biennial has been more than a measure of the growth of the movement and recorder of that evolution.

It instigates interaction by challenging artists to compete, meet, and exchange enthusiasms. It provides continuity in the evaluation of individual or group development. Concepts or techniques revealed at one Biennial often ferment and reappear in a transformed manner in the next exhibition. Even the development of off-loom techniques has enriched the art of the loom with new experiments.

CITAM activities have aroused interest all over the world. Art publishers have opened their presses to the 'new tapestry' and have printed at least three important volumes since 1973.[27] Other exhibitions have been organized, particularly three major Biennials in 1974.[28] The largest modern art museums including the Museums of Modern Art in New York and Paris, and the Stedlijk Museum in Amsterdam, have opened their doors to fiber art. Clearly, CITAM has been successful in its function.

The fiber art movement has grown out of efforts to alter the limitations of the tapestry tradition. It is also a result of the twentieth century's fascination for materials which had been reserved for 'crafts.' The love of yarns and their potential was inherent in the weaving traditions of northern and eastern Europe. The Bauhaus emphasis on the exploration of yarns, the expression of structure, and interest in formal qualities rather than illusionism also critically influenced the weavers, first in Europe and then in the United States during the Second War; it also provided an educational method fusing the skills of the artist and the craftsman. During the 1950's hand-weaving mushroomed and several pioneers used the medium for personal expression. They were inspired by other weavers and craftsmen, the literature of new organizations, and thriving integrated art activity with architectural concepts calling for the skills of craftsmen. Because the United States had no tapestry tradition, the weavers approached the yarns for creative interpretation, free from preconceived ideas. These tendencies merged in

the evolution of fiber from craft to fine art as illustrated in the Biennials of CITAM. Two ideals were attained: the authority of the artist-weaver to create his own design, and the autonomy of the woven object, unrelated to painting and expressing the qualities of the yarns.

FOOTNOTES TO CHAPTER THREE

[1]Free weaving refers to "weaving in which pattern is not controlled by the loom but through manipulation by the weaver, usually with a discontinuous weft." Mildred Constantine and Jack Lenor Larsen, Beyond Craft: The Art Fabric (New York: Van Nostrand Reinhold Company, 1972), p. 292.

[2]Claire Freeman, "Studio Weavers," Craft Horizons, December 1956, p. 21.

[3]Shirley E. Held, Weaving: A Handbook for Fiber Craftsmen (New York: Holt, Rinehart and Winston, Inc., 1973), p. 72.

[4]The colonial patterns with an overshot weave were characterized by weft floats on a plain weave ground. Ibid., p. 364.

[5]Constantine and Larsen, Beyond Craft, p. 27.

[6]Ibid., p. 29.

[7]For examples of her textiles see Nell Znamierowski, "Dorothy Liebes," Craft Horizons, August 1970, p. 41.

[8]Joan Hess Michel, "Dorothy Liebes: Her Approach to Design and Weaving," American Artist, April 1971, p. 79.

[9]Constantine and Larsen, Beyond Craft, p. 31.

[10]Ibid.

[11]For photographs of her Bauhaus weavings, see Herbert Bayer, Walter Gropius, and Ise Gropius, eds., Bauhaus: 1919-1928 (Boston: Charles T. Branford Company, 1952), pp. 141-142.

[12]Anni Albers, On Designing (Middleton, Connecticut: Wesleyan University Press, 1961), p. 23.

[13]Polish kilims represent a forerunner of Western European tapestry. The technique was practiced in the Carapathian foothills during the 17th, 18th, and 19th centuries. Subjects were inspired by tradition and folklore. Compositions expressed the nature of the material and the organic relationship of the techniques, and they were woven on a primitive upright loom. Louise Llwellyn Jarecka, "Improvising on the Loom," Craft Horizons, Summer 1949, p. 9.

[14]The tapestry tradition refers to tapestries emphasizing the pictorial subject (usually related to painting) and weaving skill, rather than the construction or quality of the yarns.

[15]Constantine and Larsen, Beyond Craft, p. 34.

[16]Ibid., p. 38.

[17]Held, Weaving, p. 74.

[18]Rose Slivka, Aileen O. Webb, and Margaret Merwin Patch, The Crafts of the Modern World, ed. Rose Slivka (New York: Horizon Press, 1968), p. 11.

[19]Aileen O. Webb, "American Craftsmen's Council/ 1964: The International Era," Craft Horizons, May-June 1964, p. 9.

[20]Constantine and Larsen, Beyond Craft, p. 44.

[21]Ericka Billeter, "Third International Tapestry Biennial," Craft Horizons, July 1967, p. 14.

[22]Jack Lenor Larsen, "Lausanne: International Tapestry Biennial," Craft Horizons, September-October 1969, p. 16.

[23]Idem, "The Greatest Craft Show on Earth," Craft Horizons, October 1971, p. 62.

[24]Musée Cantonal des Beaux-Arts, Biennale Internationale de la Tapisserie (Lausanne: Musée Cantonal des Beaux-Arts, 1975), p. xx.

[25]Ibid., pp. xx-xxi.

[26]Cis Amaral, "What is Tapestry?," Art and Artists, August 1977, p. 6.

[27]André Kuenzi, La Nouvelle Tapisserie (Geneva: Bonvent, 1973), Mildred Constantine and Jack Lenor Larsen, Beyond Craft: The Art Fabric (New York:

Van Nostrand Reinhold Company, 1973), and Madeleine Jarry, La Tapisserie (Fribourge, Switzerland: Office du Livre, 1974). Musée Cantonal, Biennale of 1975, p. xxxiii.

[28]The major Biennials organized in 1974 were the Biennial of Hungarian Textile Art in Szombathely, the Biennial of Brazilian Textile Art in São Paulo, and the International Biennial of Mini-Textiles in London. Ibid.

Chapter 4

LENORE TAWNEY (1925-): THE AMERICAN PIONEER

Of all the artists who inspired the recent generation of weavers, Lenore Tawney was the presence in whom they recognized a quiet authority. Since the fifties, her deep involvement with non-utilitarian fiber forms has prompted responsive accolades from critics and fellow artists.[1] As her major contribution, she made weaving "viable as an art form"[2] with the expressive open panels of the fifties, the black and white three-dimensional hangings of the sixties, and the small assemblages of the seventies. These objects respectively emit a distinct presence that contrasts with the architectural integration often stressed by Sheila Hicks or with the spatial relationships that dominate the statements of Magdalena Abakanowicz.

Lenore Tawney, an American, was born in 1925 and studied at the University of Illinois and the Institute of Design (now the Illinois Institute of Technology) in Chicago, where her major interest was sculpture. Her work was so promising that, one summer during her 1946-47 years at the Institute of Design, she was chosen to study with the well-known sculptor, Archipenko, in his studio at Woodstock, N. Y.[3]

While experimenting with three-dimensional forms, she also wove, a practice she began in 1949. She had studied at the Institute with Marli Ehrmann, thinking the experience was 'side-tracking,' but her interest in tapestry continued. In 1955, she studied for seven weeks with Martta Taipale, Finnish designer and weaver, at the Penland School of Handicrafts in North Carolina.[4] The method of instruction

was traditional, with Tawney weaving two tapestries of Taipale's design under her instruction. Yet, there was much to learn from the older artist's inventive use of a broad range of materials and colorful expressionistic techniques in the creation of work with an earthy and primitive appearance.

Tawney constantly experimented with new methods, materials, and colors, accepting old rules when they proved right for her, and discarding them when they limited a possibility. In the 1950's she initiated a form with a black and white sketch used only as a guide or memory aid. She spontaneously developed the concept with color and structure as the project progressed and soon found herself immersed in full-time weaving.

With her creations, Tawney explored the possibilities of solid weaves against open spaces, introducing sheer areas of pattern. Warps were no longer single linen yarns to be covered but, rather, mixed combinations of soft, colored wools, left exposed, so that the silhouette of suspended yarns became a strong compositional element. A broad palette of yarn colors and types characterizes these early transparent wall hangings.

From the middle 1950's a tender, tenuous quality appeared as Tawney's hues softened and lightened. She created a series of shore and woodland birds, often incorporating feathers into the fragile webs. These evoke a mystical luminosity with subtle simplicity, echoing oriental aesthetics.

In addition to nature subjects, Tawney frequently expressed religious themes. In an early example from this period, Bound Man, 1956, the play of opaque and transparent passages recalls the emotions of the crucifix (Figure 1). Heavy, dark horizontals above and below the panel give stability to the sheer vertical composition. The thick roving, embroidered through the entire cloth, binds the somber, solitary figure, and lends a sense of depth to the

image. Through structure, Tawney called attention particularly to the head, hand, and foot. Stressing construction, instead of color or surface texture, allowed the artist to state the contemporary philosophy of weaving which holds that the structure of the work should be expressed.

Several basic characteristics of Tawney's style of this period are exemplified by the 1958 room divider, Thaw: sparse, striped warp, textural emphasis on the weft yarns, translucence, and knotted warp ends (Figure 2). But, the exaggerated variations of the prominent weft and the negative space that forms the center of interest are as rare in Tawney's work as in fiber art as a whole. The jagged open shape suggests the breaking up of form, a tearing or disintegrating, as the title insinuates. Although the form remains two-dimensional, it abandons the tapestry tradition; it exists apart from the wall and allows viewing from either side. This abstract work, with its intense expressivity and emphatic formal elements, is similar in its impact to some Abstract Expressionist painting from the same decade.

Works such as Thaw could be described as paintings in yarn. It was this very quality which often created difficulty for the artist when she entered shows. Her departures from traditional approaches caused her to be accused by a few weavers of not being a weaver but rather a painter. In Tawney's words: "Weavers on juries tended to reject my work - painters on juries have tended to like it."[5]

As her confidence increased, so did the size of her work. Of the monumental tapestries which resulted, Triune, 1961, is the last and most successful in its handling of simple, powerful forms (Figure 3). The abstract symbolism is direct, possessing a universal quality reflecting her interest in stability and permanence. The symmetrical composition, overlaid with edge-blurring floats creates

a timeless, spaceless image, perhaps alluding to the eternal Trinity of Father, Son and Holy Spirit in the symbolic concentric circles with a central cross.

Her personal tapestry method of blending color masses by hatching long, weft floats is visible in the detail (Figure 3).[6] Free-flowing gradations of sumptuous blues and purples contrast sharply with the white silk cross form. The heavily built-up areas have substance and weight consistent with the large 9' square format. To achieve this scale, unusual for American weaving at this time, Tawney joined two 54" wide by 108" long panels woven on her standard flat warp handloom.[7] The enormous size and powerful impact compared readily with Abstract Expressionist and color field painting of the same decade. In both media, the enlarged color areas projected into the spectator's environment.

In the fall of 1961 Tawney studied Peruvian techniques for three months with Lili Blumenau.[8] Black and white explorations and interpretations in leno and gauze weaves followed, along with twining, knotting, and braiding research. These were not incorporated into her major projects until after her one-woman show at the Staten Island Museum in 1962, the first major exhibition of the American art fabric.[9]

Preparation for the exhibition strengthened her productivity, but left her restless and searching. Success and recognition did not appease her inner drive but stimulated it; a change was emerging. Desiring a fresh start, she soon turned from the interests of the last ten years, the infatuation with color, yarn surfaces, and subject matter. According to her specifications, Tawney ordered five strands of linen specially cable-plied and polished satin-smooth into a yarn that was round in section. She knew this dense, hard material could be tightly packed into the weft without losing its shape and she discovered its smoothness allowed her to beat the warp closely with

her reed to produce a substantial, horizontally ribbed surface.

Because of her intensifying emphasis on structure, she ordered the linen in black and white. The focus on construction and the density of the woven fabric lent convincing substance to the new formations. Her study of Peruvian weaving challenged her to transform these ancient techniques into contemporary forms. While experimenting, if she produced a technique suited to her new approach, Tawney added it to her repertoire. Meanwhile, as her narrow pieces grew taller, to twelve, fourteen, eighteen, and even twenty-seven feet high, she began to hang them from the ceiling for spatial viewing.

Although relatively early, The River, 1961, is the major example of Tawney's black-and-white period (Figures 4 and 5). Both proportion and the relation of weight and material to technique and color are flawless. Basically the form derived from the combination of three techniques. The first, slit tapestry, was undeveloped when Tawney adapted it, although used by ancient and contemporary weavers. The second technique, double wefting or inserting a weft from each selvage, when used with the smooth, heavy linen, insured the immaculate selvage and prominent horizontal rib so essential to her new structural style. With the third technique, shaped weaving, Tawney used the reed she invented to execute a perfectly controlled form by spreading or constricting the warp. The River both contracts and expands. Tawney split the width into nine, then ten, twenty, and forty sections. Stays stabilize the various widths. At the top each warp end counted as a section, while above the wooden collar, the warp ends hung neatly braided and tied. The final wefts were a floss of several yarns twisted and twined in pairs. The forms express organic upward growth with resolute tranquility. The artist explained:

> When I looked at my 'River,' it looked to me like the river. The changing ways, the current, the surface. I knew what it was going to be, and I think I knew it was the river. I had it inside, and I think that when it is there on the inside it seeps through to your mind. It is an inner landscape that I am doing.[10]

The River was included in the 1963 five-woman show, "Woven Forms," at The Museum of Contemporary Crafts. It, like her other pieces, used boundweaving, twining, knotting, braiding, and twisting, in forms which seemed to move in space. Tawney explained how each structure expressed life: "It is like breathing; it expands and contracts...This is what gives it form."[11]

The Museum intended to direct attention to the two year old transition, among innovative Americans, toward sculpturally conceived weaving. The 'new tapestry' weavers had extended the power of yarn construction for purely aesthetic expression. They combined materials and techniques, incorporated actual objects, and worked both on and off-loom, to achieve a new tactile-visual synthesis of form and concept. All five weavers represented had studied and adapted Peruvian techniques. This was particularly true for Tawney's work but also for the wrapped warp pieces of Sheila Hicks. Tawney's incorporation of feathers, as a provocative contrast of materials and texture, was a device originally developed by the ancient Peruvian weavers.

These new American fiber artists joined the painters and sculptors in a milieu of artistic experimentation during the 1960's, in which all materials and techniques were challenged and reinvestigated. Artists increased scale as they searched for architectonic relationships and ways to extend the physical presence of their art work into the observer's environment. An anti-expressionist reaction, seen in the Post-Painterly works of Kenneth Noland and the Minimalist sculptures of Don Judd, demanded a new formal order and an impersonal surface. The immaculate technique and yarn Tawney used in The River reveals a

similar restraint and reflects the influence of those friends whose work she collected: hard-edged abstractions by Youngerman, Voulkos, and Egert, and geometric compositions by Agnes Martin. The increasingly wholistic, stark quality of Tawney's other work also reveals her exposure to Minimalist thought. The same spirit that caused paintings, such as Frank Stella's shaped canvases and Robert Rauschenberg's 'combines' to leave the flat rectangular canvas and sculptures, such as David Smith's Cubi series, to leave the base also encouraged weavers to abandon the wall by extending their forms into space. No longer in a proscribed position, apart from reality, the works of art enter the viewer's space, not as an illusion, but as a 'reality,' an object, a physical presence. Many artists, like the sculptor, Robert Morris, and Tawney herself found monochromatic schemes helped to emphasize surface structure, accentuate the 'object' quality, and sometimes to call attention to an important issue of the decade, the nature of the process of making itself. This issue inspired fiber artists, painters, and sculptors to experiment with diverse flexible materials; Claes Oldenburg manipulated soft, frequently cloth, forms, while Robert Morris and Lucas Samaras combined fibers with other media. With the increasing exploration of materials and disciplines, a breakdown of the traditional distinctions among art forms occurred.

After the 1963 "Woven Forms" show, Tawney's next series was similar in technique to The River, but in finer linen fibers. The color remained natural, but a honey-tan rather than pewter white. The profile of the new and finer single-ply yarn was irregular, smaller, and less dense, therefore, more delicate pieces resulted. Grill-like filigrees changed to veils, often triangular in form, as in The Egyptian, 1964, made of very fine wet-spun linen (Figures 6 and 7).

The warp sections branch from a central, vertical band of dense plain weave forming an elongated, sheer

triangle, held at the widest part by a slightly curved bronze bar. To secure the regrouped yarns at the top, Tawney employed the twisted warp technique of Peruvian gauze weave. The bottom rod is straight; below it, and at the top, the warp ends were finished by tying on additional lengths of a darker linen. At the top regrouping, Tawney again employed the twisted warp technique to secure the fine sand-colored yarns. In the detail, the final progressions of the shaped weaving can be traced as they pass through the ancient Egyptian wooden collar - hence, the name of the piece. A primitive quality is suggested by the carved wood, the sand-colored linen threads, and the rough, lose warp ends. While Tawney's work had become increasingly abstract, she never worked in a non-objective manner. The messages in her work are associative, though subtle.

Because of the fugitive interplay within the design itself, its fragility, and the taut relationships between dense and evanescent areas, The Egyptian seems about to move in space. The yarns freely hanging from the top emphasize the actual weight of the piece as an object. Both this tactile sense of the medium and the pull of gravity creates a strong sense of physical presence. Suspended from the ceiling, The Egyptian, and other pieces of this phase, have an architectural character. They maintain their own integrity in even the most powerful public interiors. Tawney had an opportunity to prove this in 1969.

During that year, she submitted work to "Wall Hangings," the first exhibition of contemporary weaving at The Museum of Modern Art, New York. It included forty experimental works from eight countries[12] and its catalog exhorted the viewers to revise their preconceived ideas regarding 'craft' and to consider the entries in the context of contemporary art.[13] The Egyptian, and the wrapped and braided pile of Prayer Rug by Sheila Hicks, reminded museum-goers of the interest, shared by many weavers, in the virtuoso techniques

of pre-Columbian Peru. Generally, Tawney's work and the other American pieces seemed tentative and sketchy, utilizing new and relatively unexplored materials and forms in contrast to the European work which, having grown out of a virile folk art and tapestry tradition, tended to be "weighty, finished, and permanent."[14]

During the same period, Tawney also developed a series of small convex 'shields,' composed of heavy cabled linen and lavishly embellished with goose quills. In a 1967 example, Shield III, unusual in its asymmetry, dense fringes of feathers on both sides are tied to warp ends (Figure 8). The slits through the body of the piece almost disappear in the dense warp.

Characteristic of many fiber artists, Tawney frequently travels to remote parts of the west, and to South America, India, and Japan. These trips away from her New York studio are important to her as a source of inspiration, fresh insight, and data for enriched expressions. When she is in transit, her scale is reduced to miniscule collages - symbolic, personal, and filled with recently discovered small pebbles, shells, or feathers. Divorced from their usual habitats and incorporated into an artistic form, these objects no longer remain feathers or shells but assume new associations. Rare papers and antique manuscripts, whose messages remain mysterious, fascinate her. Her large collages and boxes, exhibited at the Willard Galleries in New York in 1975, are the creative results of these journeys.

Tawney's keen interest in other artistic fields, theater, music, dance, painting, sculpture, and architecture, is revealed in her weavings and collage objects. Some box constructions suggest the intimate and personal forms of Joseph Cornell; a devotional quality permeates, evoking mystery and surrealistic images, as well as an authentic sense of the past.[15] These small-scaled, cryptic works are literary expressions which value the theme 'text,' yet are difficult to 'read.' The integration of a myriad of

of natural objects, mathematical drawings, calligraphy, woven threads, and tied on objets trouvés inspires a poetic quality. There are suggestions of rippling water, floating clouds, or moving leaves but a linear quality remains to remind us these are woven works, sculpturally conceived. Now it is appearant that the artist who originally studied to become a sculptor had not really digressed.

Tawney is not represented in many major shows today. Her work no longer has an inseminating influence,[16] but her pioneer role in developing weaving as an art form inspired the recent generation of fiber artists to make strong personal statements by continuing an investigation of materials, construction, and formal properties.

FOOTNOTES TO CHAPTER FOUR

[1]"Lenore Tawney is considered, it is safe to say, America's most distinguished weaver." Katherine Kuh, "Sculpture: Woven and Knotted," Saturday Review, 27 July 1968, p. 36.

[2]"Lenore Tawney's major contribution has been in making weaving viable as an art form." Susan Heinemann, "Lenore Tawney: Willard Gallery," Artforum 13, no. 4 (December 1974): 77.

[3]"Lenore Tawney," Handweaver and Craftsman, Spring 1962, p. 8.

[4]Ibid., p. 6.

[5]Margo Huff, "Lenore Tawney: The Warp is Her Canvas," Craft Horizons, November-December 1957, p. 15.

[6]One of Tawney's 'weaverly' techniques for color effects was to mix several shades in a butterfly. Some handspun and hand-dyed yarns by fellow artist Alice Parrott of New Mexico were included in Triune. "Lenore Tawney," p. 7.

[7]Mildred Constantine and Jack Lenor Larsen, Beyond Craft: The Art Fabric (New York: Van Nostrand Reinhold Company, 1972), p. 270.

[8]"Lenore Tawney," p. 7.

[9]Constantine and Larsen, Beyond Craft, p. 45.

[10]Rose Slivka, "The New Tapestry," Craft Horizons, March-April 1963, p. 18.

[11]"Lenore Tawney: Exhibition at the Art Institute of Chicago," Craft Horizons, November-December 1962, p. 44.

[12]Louise Bourgeouis, "Fabric of Construction at the Museum of Modern art, New York," Craft Horizons, March-April 1969, p. 31.

[13]Mildred Constantine and Jack Lenore Larsen, intro., Wall Hangings (New York: Museum of Modern Art, 1969), pp. 1-2.

[14]Ibid., p. 3.

[15]For an illustration of a non-fibrous Tawney box, see James Schuyler, "Lenore Tawney," Craft Horizons, November-December 1967, pp. 20-25.

[16]"All the work is precious and poetic, but I've seen it someplace before." Willis Domingo, Arts Magazine, April 1970, p. 63.

Chapter 5
SHEILA HICKS (1935-): THE INTERNATIONAL COLLABORATOR

The name of Sheila Hicks has become internationally known and equated with the articulation of theoretical knowledge, technical proficiency, and intellectual, creative production with fibers. The character of her work spans the ages. It is inspired by the prominent structure of ancient Mexican and Peruvian weaving and by Bauhaus design theory. These sources explain her interest in exploring and relating materials, construction, and formal qualities in an architectural context and they also provide the basis for the artist's sensitive efforts to reconcile art and industry. Her fiber designs function as personal expressions, whether utilitarian or purely aesthetic.

Hicks was born in 1934 in Nebraska,[1] although she presently resides in Paris, where she directs her workshop. Her early training included two years at Syracuse University, and then study at Yale University where Josef Albers was the director of the Department of Design between 1950 and 1960. Alber's classes required extensive research on materials, with an emphasis on construction rather than drawing, an extension of Bauhaus philosophy. Under his direction, Hicks explored each required material for its inherent qualities, worked directly with her hands rather than with tools, and considered his allegation that "innovators are non-professionals."[2] She also benefited from color research and exploration of visual illusionism. His perceptual approach to painting inspired her; it

transformed Bauhaus constructivism into a geometric abstraction based on individual psychology and the emotive content of complex visual experiences. Alber's approach remained a part of Hick's outlook; later, she would recall his repeated color square and modular format while teaching design and color composition at the Catholic University in Santiago during 1958 and at the University of Mexico during the early 1960's.[3]

During her undergraduate years, in addition to studying with Albers, Hicks became acquainted with Dr. George Kubler, then professor of the history of Spanish-American art. He called her attention to pre-Columbian weaving in 1955[4] and inspired her to make a backstrap loom. Her first work is in the collection of the Art Institute of Chicago.

After graduation in 1957, Hicks received a one year Fulbright grant to research pre-Incaic cultures in Chili. While traveling in South America and continuing to work in photography and painting, she began carrying a portable loom made by stretching warp threads around nails pounded into a wooden frame. It is a constant companion even today. On it she wove what she called 'miniatures' in the pre-Columbian tradition. Her work resembled darning because of the use of a needle to pass the threads back and forth. She also started to keep a diary and to collect iconographic data that caught her attention. She found sources of inspiration everywhere, in textile-wrapped mummy bundles viewed in the Natural History Museum in Santiago, in quotations gathered from great minds, in visual patterns recorded on postcards, in braided, tassled, or ribboned hairstyles from any culture in the world, as well as in inscriptions on Jewish tombstones or Babylonian tablets. She absorbed and selected from each discovery or experience for future use.

In the autumn of 1958 she returned to Yale and began her M.F.A. work in the field of pre-Columbian weaving.

Dr. Kubler recommended Dr. Junius Bird, of the Department of South American Archaeology, Museum of Natural History, New York, as her thesis advisor. Dr. Bird's observation that: "Inca weavers never utilized the full artistic possibilities of their techniques,"[5] was her beginning point.

Hicks also studied weaving privately with Anni Albers, who concerned herself with the origins of weaving and attempted to develop an intuitive ingenuity in her weaving students. Albers explained the purpose for her approach: "Beginning means exploration, selection, development, a potent vitality not yet limited, not circumscribed by the tried and traditional."[6] Hicks found, along with Albers, that each step in the mechanical development of the loom reduced the freedom of the weaver to manipulate his ideas as his work progressed. Both women appreciated the importance of the primitive backstrap loom used to weave ancient Peruvian masterpieces. The critical elements in these pieces were the structure formed by the yarns, the character of the fiber itself, and then, of much less importance, the color. These were qualities that Anni Albers stressed in her work and teaching, and they were essential to Hicks and the fiber art movement.

Hicks also continued her study of painting at Yale during the autumn of 1958, but because Josef Albers was about to retire from the School of Design, Rico Lebrun, an expressionistic, action painter of the New York school taught the class. While she was Lebrun's student, Hicks found herself exploring and discovering in the Bauhaus manner, rather than 'expressing' in the Abstract Expressionist fashion. An antagonistic atmosphere developed because Albers showed hostility toward Lebrun, who soon left. Hicks remained apart from the conflict, and in the process learned the necessity of evaluating work and personalities independently. The early influence of the two painters, Albers and Lebrun, the weaver, Anni Albers, the historian,

Dr. Kubler, and the archeologist, Dr. Bird, would remain with Sheila Hicks in her life's work. She resolved to live within the context of all civilizations and "to aim at taming the thread, to becoming a part of its nature."[7]

Hicks's studies at Yale exemplify the education of the American artist-craftsman of that period. Lacking a recognized native craft heritage, any student interested in creative work became the product of a university fine arts program stressing design through painting and sculpture. Lenore Tawney's training was the same. Yet these two fiber artists, at Yale and the Institute of Design, Chicago, respectively grasped the Bauhaus philosophy.

Finding the artists' communities in the United States confining, Hicks looked for a suitable 'growing place' outside the country. Henri Peyre, French director of the Department of Romance Languages at Yale, assisted her in obtaining a Fribourg scholarship to study painting and weaving in France.[8] After a summer of photography in Taxco el Viejo, Mexico, she departed for Paris in the fall of 1959. This was the first time the grant had been given to a woman; Henri Peyre asked her to make the most of it. Her opportunity to study French classical tapestry made her aware that it had no appeal to her. Instead, she was influenced and stimulated by artists of other media. One was the Chilean painter Enrique Zañartu, who exposed her to surrealism, revealing that a work of art does not exist solely as design, for it must, above all, convey an idea.[9] Meanwhile, she continued to weave her miniatures in the pre-Columbian spirit.

Poor health cut her studies short. In the beginning of 1960, she returned to Mexico, weaving in her own home on a bee keeper's ranch in Taxco el Viejo (Figure 9). During the same year, after months of recovery, she worked with Luis Barragan, Mexican architect and urbanist. From him she learned "to choose with rigor and passion all the items that surround me."[10] Hicks shared "his joy of discovering and examining, in their smallest details, all

aspects of the environment."[11]

In 1961 a one-woman show of a five year collection of her miniatures was shown in Mexico City. They consisted of some studies on her heddleless[12] weaving frame. Through this slow process she was able to compose patterns freely without the restraints imposed by a more complex loom. She manipulated the order of the interlacing and improvised as the piece progressed. From this she developed a series of 'hieroglyphs': small monochrome double-sided texture studies in wool, inspired by inscriptions from Jewish cemetery stones, Babylonian tablets, and other 'messages.' The finished forms had a four-sided selvage, showing no visible distinction between warp and weft, a pre-Columbian trait. An example of this type is White Letter, 1962, executed with one fiber and color (Figure 10, top). Though the techniques are ancient, and the loom is primitive, the 'message' is totally contemporary in its abstract spirit. The Rochester Wall, 1967, employed essentially the same imagery but the technique differed, utilizing embroidery and the electric machine-gun (Figure 10, bottom).

Beginning in 1962, Hicks conducted an experimental workshop in Taxco where she and her co-workers, Mexican weavers, investigated pre-Incan weaving techniques on backstrap looms which she continued to use along with her frame loom. The ancient techniques were points of reference for new departures and ideas. For example, at Tenancingo, the ikat (tie and dye) technique caught her attention. Warp threads of thirty and fifty yards, partially wrapped before being dyed, were spread out along the roads awaiting treatment.[13] This image along with the Peruvian quipas in llama wool, inspired Hicks' later explorations with brightly colored threads wrapped around cords of natural linen to create bulges in between. She re-interpreted other techniques such as knotting showing the influence of the macramé of Mitla,[14] double-weaving, twining, passementerie, and applied tassels, and she dyed handspun wool yarns to

create shades of blue, green, orange, and earthen colors. While Hicks's small works of this period were actually studies, each reflected one of her favorite quotations from Apollinaire:

> The work of artists must simultaneously present pure aesthetic pleasure, a self-evident construction, and a sublime significance, that is, a subject.[15]

In 1964, Hicks again left Mexico for Paris. There a totally different kind of exposure brought her to another, more expansive phase of her development. Her collected experiences and observations, including the iconographical references relating to the painting, sculpture, and architecture of Europe as well as the archaic and primitive sources melded in her mind. She immersed herself in fabrics of all kinds. During the same year at the Gewebte Formen exhibition, held at the Kunstgewerbemuseum in Zurich, she displayed her series of hieroglyphs, other polychrome miniatures, and some woven volumetric forms. Two other American weavers, Claire Zeisler and Lenore Tawney also contributed. Although all three women were involved in three-dimensional explorations, Hicks's compact, sturdy work contrasted with the open hangings of Tawney and the more sculpturally conceived surrealistic, stuffed double-weave hangings of Zeisler.

While Hicks was in Zurich for the exhibition, she was contacted by a German manufacturer, Arterior Textile GmbH, and invited to produce a series for his company.[16] She accepted the challenge and organized a pilot workshop in Wuppertal which was furnished with an electric machine-gun to make rugs that would have the appearance and texture of handmade work. At high speed, the gun injected thick wool according to the design onto a cotton fretwork canvas. A layer of latex was spread on the back to bind the elements together. Hicks explored the potential and limitations of the new tool, becoming familiar with the constructional possibilities. She appreciated the fact

that technology saves time and therefore cost. She, like William Morris and others after him, wanted quality design available and affordable for the common man. She adapted the tool to serve the purpose of art. The process eliminated long hours of labor, but the lack of finished detail was dissatisfying, since she attached a great deal of importance to the careful termination of the selvages and borders. Frequently she took the rugs back to Paris where she would complete the edges by hand. Some pieces were also lined with fabric to cover the uncraftsmanlike latex.

In Medieval Cloak, constructed in 1965 with the electric machine-gun, the long unruly loops were usually uncut, showing an unusual degree of conscious abandon (Figure 11). The fibers are enjoyed for their own sake as they gush forth, freely springing from the wall. In addition, heavy roving was knitted with oversized needles, the effect inspired by a contemporary hairstyle. The loops and braids were also suggested by medieval costumes: "I saw a group of coats of mail and other battle costumes in the castle at Wuppertal," said Hicks. "And I did this 'cloak' in the same sort of spirit and mood."[17] The lush and opulent palette of mossy greens with touches of emerging red and violet creates an illusion of age and mystery. This expressive quality seems to indicate Lebrun's influence on Hicks.

Unafraid of machine techniques, and wanting to channel them toward quality design, Hicks fulfilled her own definition of what classifies contemporary artists: "those who have the courage to explore modern materials and techniques."[18] Later, as a parting gesture to Wuppertal in 1967, she executed the large hieroglyphic Wall for the Lounge of the Alumni Union at the Rochester Institute of Technology in New York using both the machine-gun and hand embroidery (Figure 10, bottom). The activities in Germany made Hicks realize that she could create

architectural projects on a large scale. Her early 'prayer rugs' evolved from this experience.

In 1966, while she was trying to reconcile the needs of her individual art work and those of industrial production, a traveling salesman from the largest and oldest handweaving factory of India was touring Europe in search of clients. Wherever he went his merchandise met with the same comments; his handwoven fabrics were of fine quality but were not compatible with contemporary furniture. He began to look for an artist to design a new collection oriented to the taste of a European clientele. Sheila Hicks was frequently recommended to him, so he contacted her at her studio in Paris.

She accepted the invitation and went to Calicut, Kerala, in southern India, to merge contemporary design with a deep respect for traditional handcraft,[19] revealing the Bauhaus theoretical influence once again. She worked closely with the Malabar weavers, selecting silks, flax, and jute, but predominately commercial counts of cotton with which they were accustomed. She saturated herself in the local, cultural colors, and quickly became familiar with the looms, not rejecting any of the established equipment. When the looms were set up with warp threads, she sat down and began to improvise with the weft. When a theme had been sketched to her satisfaction, a local weaver continued the process. Within three weeks all the looms produced varied combinations of thread and colors for upholstery, curtains, houselinen, and wall coverings. Hicks advised the Indians to stop trying to compete with the Europeans by imitating their machine-made goods, and instead to cultivate their hand-made textiles solely for sale to a sensitive public. Since the 1960's she has continued to send new ideas to the Calicut weavers for execution.

Many parallels exist between Hicks' relationship with the Malabar weavers and William Morris's involvement

with his contemporaries. Hicks and Morris wanted to revive business with appropriate design, and both expressed concern for the 'joy of the maker.' They wanted textiles to express their function, to seem modern, and to integrate with architectural settings. There is, however, one crucial distinction in their approach to design. At Calicut, Hicks sat at the loom and improvised until she reached a satisfactory theme which was freely continued by the native weaver. Morris did learn to weave and made an effort to familiarize himself with the qualities of yarns, but he drew the designs on paper and allowed the weaver to interpret. Today, knowledge of the Bauhaus and European craft traditions enable the designer to approach his composition as a weaver and to create spontaneous works unrelated to a painting or pattern.

The successful stimulation of local production, where a handicraft tradition still exists, has been a continuing passion for Hicks. In one case during 1968-69, she was responsible for the instigation of a new venture. The recently built Pan-American highway passed through the village of Hauquen on the coast of central Chile. To take advantage of commercial possibilities, Hicks's family joined with twenty-four Chilean families in a cooperative program sponsored by the Fundación Artur Matte.[20] In this mountainous region, where wool and hides are natural resources, Hicks directed the artisan workshop in the production of rugs and hangings utilizing alpaca and wet-spun linen. These contemporary textiles are still sold successfully in international design shops.

While developing her individual style and working cooperatively with provincial workshops, Hicks also began a long association with the American architect, Warren Platner. In 1966, she accepted a commission to design and to produce two major thread bas-relief walls for the Ford Foundation Building in New York. Platner informed her that:

> Thread is not to be used as ornament, but as a construction material, complementary to the others and, in a certain sense, superior to the others, because of being more visible. The combination of thread and surrounding elements must give rise to a harmonious dialogue.[21]

A rare collaboration developed and matured. One mutual project was the 1967 huge, hieroglyphic Wall realized for the Rochester Institute of Technology (Figure 10, bottom).

When planning architectural fiber works, Hicks and Platner considered the social function and environment of the building. Hicks's choices of material, color, texture, and design were the result of an intensive exchange of ideas with the architect. This sensitive cooperation in planning for an harmonious setting reflects their mutual Bauhaus heritage. Their successful integration of modern architecture and fiber art expresses a major premise of modern aesthetics. William Morris first considered textile design "an architectural art." He taught that: "A pattern is but part of any scheme of decoration, and its value will be derived in great part from its surroundings."[22] He spoke of integrating all elements within the environment. Art Nouveau aimed to harmonize architecture with its interior design, and the Bauhaus bias toward architecture perpetuated the idea, achieving methods for a more integrated visual environment through the collaboration of artists, architects, and industry. Anni Albers called for a more purposeful design of textiles functioning as an integral architectural element. In 1957 Hicks's weaving teacher wrote that:

> The essentially structural principles that relate the work of building and weaving could form the basis of a new understanding between the architect and the inventive weaver. New uses of fabrics and new fabrics could result from a collaboration; and textiles, too often no more than an afterthought in planning, might take a place again as a contributing thought.[23]

In the same book Albers urged a "strong subordination

of details to the overall conception of an architectural plan. When we decorate we detract and distract."[24] Sheila Hicks applied these standards in collaboration with Warren Platner and others.

Her attitude and effort to exchange ideas when fulfilling a commission contrasts with the philosophy of Lenore Tawney, who asked for reciprocal trust between the weaver and the client, allowing the artist to retain absolute freedom of the design development. Hicks's approach also contrasts with the methods of Magdalena Abakanowicz, who places her own creativity above considerations of architectural integration.[25]

The characteristics of contemporary buildings call for qualities which can be met by textiles, just as the medieval structures did. The cold, hard concrete, steel, and glass can be off-set by the warm, soft and textured fiber works. The impersonal, neutral, geometric architectural forms can be humanized by unique, colorful, and expressionistic fiber art. A renaissance in both French classical tapestries and contemporary wall hangings occurred during the 1960's, the art fabrics competing with paintings for wall space. The decorative potentialities of abstract painting had been cultivated since the Second World War; the Post-Painterly works with their immaculate edges and flat color merged with the architectural severity. Textiles on a large scale provided a welcome contrast. Painting and sculpture (by Ellsworth Kelly and Robert Morris, for example) as well as fiber work (Hicks's Wall for the Ford Foundation) increased in scale and assumed an architectonic presence.

Sheila Hicks's walls, or wall coverings, were composed of multiplied single elements, components that were repeated and assembled. The approach grew out of an experience in Paris. During a stroll in the Luxembourg Gardens, she was struck by the drama of a single brick transformed, through structural multiplication, into a wall. Her fertile mind

translated the unit of a simple brick into a single pliable thread form. The modular units inspired a new approach to the organization of fibers; several kinds of forms were realized.

In Banisteriopsis, 1968, the modular units which she described as 'pony tails' were tassels which had evolved into wrapped elements of wiry wet-spun yellow linen, looped at one end and cut at the other (Figure 12). The modular forms were then sewn together in layers which could be piled up or arranged in many ways when assembled on the floor at the museum site. In Banisteriopsis, named after a hallucinagenic plant used by the Jivarno Indians,[26] vertical rows of wrapping dominated, creating a flexible sculptural thread-object that could be deciphered like "the bas-reliefs of Mayan temples."[27] As the engaged viewer moved around the free-standing mass of sheafs, the changes in composition and character were revealed. The use of modular elements composed in situ was a trend in sculpture at the time. Some who worked in this manner were Carl Andre, Robert Morris, and Dan Flavin.

In another piece using the same principle of assembling single, repeated elements, Hicks wrapped, spliced, and grafted ten elements, each 189' long, forming The Principal Wife, 1969 (Figure 13). Previously, no one had taken the simple wrapping technique of primitive craftsmen and exploded it to twice the size of man. The long cords of natural linen, spot wrapped with brightly colored threads of wool and silk, hung from a bar and spread out on the floor below. The huge, flowing and curving forms suggested a female presence. The quality was reinforced by the selection of smooth threads in warm colors.

In January, 1969, the Stedelijk Museum of Amsterdam organized an international exhibition called Perspectief in Textiel for the purpose of displaying the work of ten contemporary artists.[28] Of Hicks's four entries, three were made up of assembled elements: The Principal Wife (Figure 13), Banisteriopsis (Figure 12), and Evolving

Tapestry, a piece also displaying 'pony tails' massed to create a volume. Almost simultaneously in New York at The Museum of Modern Art's "Wall Hangings," she showed White Letter (Figure 10, top), Prayer Rug (a conservative tasseled wall relief), and another version of both The Principal Wife and Evolving Tapestry. Sheila Hicks's work was chosen to symbolize the shows and displayed on both catalog covers, yet the press took no notice of the exhibitions. What had become a widespread art form among the fiber artists was still minor art, a 'craftsy' and unimportant phenomenon among the fine art critics and several major museums. Sheila Hicks's work was commended in the catalogs for her transference of ancient forms into personal and contemporary statements, for her logical attitude toward assignments with architects, and for her original use of advanced methods of technology. Yet in group shows, such as the two previously mentioned, and the 1969 Tapestry Biennial at Lausanne, her modular constructions were overpowered by the aggressive entries of Magdalena Abakanowicz. The Polish fiber artist's dominating and monumental style is discussed in Chapter Six. Her pieces filled the space and conquered it while Hicks's did not fill, but engaged it, with an innocent, ingenious quality, inviting children to touch and pet the objects.

Though nomenclature was lacking, some distinct characteristics within the fiber art movement were evident in this critical year of exposure, 1969. The flat rectangular format of a conservative size had disappeared. Fibers were used in a manner stressing their inherent qualities. Three-dimensional concepts increased. Forms were no longer figurative, but rather an abstract expression of the material and structure. Complete freedom prevailed in the creative invention of applying and combining a wide variety of techniques. The newest development was the shift toward architectonic forms which participated directly in the environment. The leading fiber artists'

basic concern for an exploration of materials, the expression of the natural properties of yarns, increased scale, spatial extension and environmental concepts ran parallel to the current progressive ideas in painting, sculpture, and architecture.

While group shows expose the public and the artists to trends and accomplishments, the competition creates problems also. Aggressive work detracts from subtle, sensitive ideas. Nor is innovation the only virtue. In one-man shows work does not have to compete and the evolution of a direction or idea can be traced. When an exhibition serves a purpose as a kind of workshop and forum, as was the case with "Deliberate Entanglements,"[29] everyone benefits. One of the reasons for participation in biennials and other collective exhibitions is the desire of artists to be recognized and to influence others, yet the efforts and time spent are disproportionate to the small result. Sheila Hicks felt this strongly after the critics neglected the major fiber exhibitions of 1969. She spent time creating 'homeless orphans' which were provocative works of art but rarely purchased by private collectors and only sometimes bought by museums. These facts turned her again to architectural projects where she would be no longer free to determine every element, but responsive to the conditions of the designer and site. However, she would be assured that her creations were functioning in the everyday life of a particular location.

Using the wrapped warp first seen in her Mexican period, and later reappearing in The Principal Wife, she conceived of the elements in a controlled cadence, with a sophisticated surface interest, for the Wall of the Paris Banque de Rothchild in 1970 (Figures 13 and 14). The luxurious surface and color of the cylindrical verticals are relieved by the bulbous twisted linen forms. Like a cascading stream of water leaping over large stones, the forms create a counterpoint to the smooth luster of

the precisely handled verticals. The blues and greens emphasize the cool, fluid and baroque cascade which is contained by unwrapped linen at the top and bottom in order to isolate the composition from the ceiling, floor, and furnishings in the room. Rather than decorating a wall then, Hicks's threads become the wall itself, as an architectural component, integrated in form, but with a conceptual life of their own. This interrelation of fine and applied arts is beyond the visions of William Morris.

In 1970 Sheila Hicks was called by the Moroccan Government to help revitalize the country's traditional rug industry by expanding its markets to include an increasingly sophisticated European and North American clientele.[30] Hicks synthesized a modern outlook with respect for local craft traditions. She designed contemporary Moroccan carpets in accordance with their religious and social significance and with the handweaving methods of native artisans. Mechanically made versions were prohibited by law.[31]

Twenty of these Moroccan prayer rugs were exhibited in 1971 at the National Museum Bab Rouah (Gate of the Wind) in Rabat (Figure 15).[32] It was a stunning presentation of harmonious conception and execution in the twelfth-century architectural structure whose grandeur enhanced their beauty. The fiber forms, inspired by Moslem architectural details such as doorways, portals, and rounded household or pointed Moslem arches, were majestically and unmistakably Moroccan. Hicks designed using native techniques and the familiar wool. But, in contrast to the flat surfaced Moroccan carpets, she built her extremely dense motifs in overall fringe or tassels, or scissor-cut the pile in varying levels to emphasize the theme in relief. By limiting the range of colors to three or four, she enhanced the extremely subtle simplicity. These rugs, conceived for the wall, floor, or ceiling, were sometimes composed as a diptych or triptych. Their meditative

quality and their simple, large, rich color areas echo the magnificence of Mark Rothko's paintings of the fifties.

Hicks explored the controlled Moroccan format in notebooks with words, sketches, or swatches; she seldom used a cartoon. "That would be heresy!"[33] For this large commission, and for others, she executed an initial model and then, her studio team executed her design. Lenore Tawney would not favor such an approach; she always fulfilled every detail of her work from the concept to the finishing touches.

During the 1970's Sheila Hicks continued to create expressive forms including miniatures, architecturally scaled works, and projects investigating new materials and technological processes. In 1975, she submitted some miniatures to the first International Exhibition of Miniature Textiles at the British Crafts Center in London which restricted the entries to eight inches.[34] The exhibition was planned to express the growing feeling that size may often replace quality and that more personal studies, often embryonic sketches, are equally important. Hicks was represented with submissions covering a seventeen year period and with one example created en route on the plane. Regarding the nature of miniatures, she felt that they should be "intimate, personal possessions...free exploration - extensions of the sketchbook which may or may not achieve art."[35] To support her attitude toward models and sketches, she quoted Délacroix: "Make mistakes if you must, but execute (perform) them freely."[36]

In spite of its miniature size, Mhamid, 1970, displays a monumentality and wholistic quality derived from its varied materials and techniques (Figure 16). At its top, continuous wefts of natural silks are striped with a magenta floss. At the bottom, slit tapestry combines the several tonalities and textures of silk and vicuña and the shaped selvages reinforce the solid, strong

shell that separates the two areas. "Thread is marvellous [sic] ," Hicks says, "because it's intimate as well as magnificent."[37] For other experiments in miniature, Hicks bound materials, such as linen, bones, paper, and mohair, tightly together in packages and boxes or mounted them between sheets of Plexiglass, in celebration of salvaged waste bits.

In a purely aesthetic fiber assemblage, L'Épouse préferée occupe ses nuits, 1972, the cotton core was wrapped in nylon, silk, gold, and linen threads and stitched on a linen canvas base composed of two half-circles joined together (Figure 17). The wrapped gimp, twisting and winding actual threads together, creates a contrapuntal balance within the sphere.

At the same time that Hicks created personal, non-utilitarian expressions, she continued to accept commissions requiring pieces scaled to define space architecturally. Her reputation as a designer of fiber forms in an architectural context caused a demand for her as a speaker. She was invited to discuss "Thread Forms in Architecture" during the 1971 events in California relating to the "Deliberate Entanglements" exhibit.[38]

In the CB 12 Tower at La Défense, Paris, one of Hicks's architectural commissions during the 1970's, she designed a panel for IBM called La Mémoire, 1972, which recalls the intricate wires within a computer (Figure 18). Rigid cords, one and a half inches in diameter, were gimped with orange and yellow silk and nylon thread. A gigantic tabby was formed, stabilized against a natural linen background. At the intersections, she added small rings of wool wrapped with chartreuse, periwinkle, and celadon fibers, similar to those used in electronic circuits.

One example of her continued investigation of new materials in a modern context was inspired by a visit to a show called "Art and Light" in Eindhoven, Holland, in 1966. Hicks was struck by the analogy between neon tubes

and her cords. The tubes were not hot to the touch; she could act upon her instinct to mix the electrical elements with her threads without risking fire. In her typical approach to new possibilities, she first identified the inherent properties of the neon lights before proceeding. In 1971 she constructed a cascade of linen threads and cotton cords wrapped in linen and lacquered silver threads for a penthouse in Montmartre in collaboration with R. Ferri.[39] Among the fibers hung bent neon tubes that dispensed pale blue, manganese, and rose light.

The flow of Sheila Hicks's work is intermingled with her rich travel experiences and extensive exposure to many cultures. In each of the communities where she has worked, she has absorbed its aesthetic qualities, respected its tradition, and responded to its potentials. Her research in the Bauhaus spirit takes her into new areas not only geographically, but technically. "I want to continue what I can do well, but I must keep on researching, exploring, finding new directions."[40] Sheila Hicks is a consummate artist possessing the power to transmit her concepts into tactile form. Her contribution to the fiber art movement has been the application of ancient techniques along with technological considerations to thread forms functioning as practical object or as personal expression. Her role as a collaborator with craftsmen and architects articulates the Bauhaus ideal.

FOOTNOTES TO CHAPTER FIVE

[1]Monique Levi-Strauss, Sheila Hicks (London: Studio Vista, 1973), p. 11.

[2]Ibid., p. 12.

[3]Ibid., p. 15.

[4]Ibid., p. 12.

[5]Junius Bird, "Technology and Art in Peruvian Textiles," p. 68. In Margaret Mead, Junius B. Bird, and Hans Himmilhebor, Technique and Personality in Primitive Art (New York: The Museum of Primitive Art, 1963).

[6]Anni Albers, "Anni Albers on the Beginnings of Weaving," American Fabrics, Fall 1965, p. 89.

[7]Mildred Constantine and Jack Lenor Larsen, Beyond Craft: The Art Fabric (New York: Van Nostrand Reinhold Company, 1972), p. 173.

[8]Levi-Strauss, Sheila Hicks, p. 16.

[9]Ibid., p. 17.

[10]Ibid., p. 18.

[11]Ibid.

[12]Heddles contain eyelets through which the warp threads are strung. A harness holds the heddles. Sheds are formed when the harnesses are raised or lowered. A heddleless loom, therefore, requires hand manipulation of the weft. Verla Birrel, The Textile Arts (New York: Schocken Books, 1976), p. 478.

[13]Levi-Strauss, Sheila Hicks, p. 23.

[14]Constantine and Larsen, Beyond Craft, p. 175.

[15]Rose Slivka, "The New Tapestry," Craft Horizons, March-April 1963, p. 17.

[16]Levi-Strauss, Sheila Hicks, p. 24.

[17]Mary Prior, "Unravelling the Magic Carpet of Sheila Hicks," Réalités, March 1971, p. 63.

[18]Levi-Strauss, Sheila Hicks, p. 38.

[19]Ibid., p. 30.

[20]Constantine and Larsen, Beyond Craft, p. 179.

[21]Levi-Strauss, Sheila Hicks, p. 26.

[22]Ray Watkinson, William Morris as Designer (New York: Reinhold Corporation, 1967), p. 53.

[23]Anni Albers, On Designing (Middleton, Connecticut: Wesleyan University Press, 1961), p. 31.

[24]Ibid.

[25]See Chapter Six, p. 94.

[26]Levi-Strauss, Sheila Hicks, p. 30.

[27]Ibid.

[28]Ibid., p. 40.

[29]"Deliberate Entanglements" is discussed in Chapter Six, pp. 92-94.

[30]Betty Werther, "Radical Rugs from Rabat," Design, June 1971, p. 48.

[31]Ibid.

[32]Levi-Strauss, Sheila Hicks, p. 66.

[33]Prior, "Unravelling," p. 63.

[34]Jack Lenor Larsen, "Fiber Works in Miniature," Craft Horizons, February 1975, p. 48.

[35]Ibid., p. 51.

[36]Ibid.

[37]Prior, "Unravelling," p. 63.

[38]See Chapter Six, pp. 92-94.

[39]Levi-Strauss, Sheila Hicks, p. 51.

[40]Prior, "Unravelling," p. 63.

Chapter 6
MAGDALENA ABAKANOWICZ (1930-): THE REBELLIOUS FIBER FORMER

Magdalena Abakanowicz represents the most aggressive of the contemporary fiber artists. Her aesthetic statements express powerful social protests; their content places them among the highest level of fiber art and qualifies them for consideration among progressive sculpture. In the 1960's she concentrated on monochromatic and monumental erotic forms suspended in space, stressing their presence and their pliable, fibrous quality. Currently, she rebels against the systematization of life and art through her environmental rope paths and cycles of figurative objects.

She was born in Warsaw, Poland, in 1930, studied at the Academy of Fine Arts during 1950-55, and has taught at the Fine Arts Academy at Poznan since 1965.[1] In light of the rebellious spirit evident in her later art, it is not surprising that during the early 1950's she belonged to a fermenting artistic and intellectual community of students and faculty. In 1955, the year of her graduation, the World Youth Festival was held in Warsaw, the first break in the official social-realist line imposed on the East European countries since the end of World War II. During the celebration, Abakanowicz's artistic-intellectual peers exhibited canvases expressing social and political values in brilliantly colored, turbulent, and thickly textured paint - works of powerful tactile quality. Undoubtedly this experience was an influence on the young artist.

She studied painting and weaving at the Academy but concentrated on sculpture. Looking back, she describes her attitude toward her work:

> I felt my metal sculptures were too rigid and when I had finished them nothing could be changed. But woven material can move. It can react to people and they react when they touch it. It can move too in the wind when I put it outside. It has a life which no other material has.[2]

When she turned to fibers in the late 1950's, Abakanowicz rebelled against the fine, equal surfaces of French and Belgian tapestries and handled the yarns in a manner characteristic of the progressive Polish weavers of the time, retaining a rough surface irregularity expressing the qualities of the yarns. She focused on research involving structure and materials themselves, rather than on an illustrative role of a woven picture, reflecting the approach of local artisans. Warsaw institutions and weaving studios were renowned from the beginning of the 1930's for their attempt at tapestry reform through studies of the loom, dyes, and raw materials.[3] The traditional kilim technique was a major influence with its use of the primitive upright loom. The composition of these tapestries expressed the nature of the woolen yarns from which they were made and was subject to the disciplines imposed by that medium. Polish weavers were taught to improvise, to develop their patterns directly on the loom, and never to sketch them first. Only when the student was able to freely operate and to control the composition was he permitted to record his design on paper. These attitudes were a part of Abakanowicz's heritage.

Weaving itself, its techniques or processes, never interested her as they had Tawney and Hicks. She was looking, rather, for the manipulation of soft materials. She remembers that:

> The way I saw weaving was as a soft and powerful material and I wanted to work with this sort of material against traditions however long it took

> to resist it. People didn't want to accept new things and I wanted to try and show that to resist new things is sterile.[4]

Abakanowicz developed her personal style on a vertical warp without an open shed, the type of loom on which Polish weavers create kilims. Instead of using a shuttle or butterfly, she preferred to interlace a grouped weft of yarns, using her hands as the only tools, enjoying the direct and primitive involvement with the materials. Rather than beating with a reed, she combed the threads down into the web with her fingers. By 1960 her artistic individuality was emerging and she was already an eminent representative of her generation with a national reputation.[5]

The acceptance of her work in the important first Tapestry Biennial in Lausanne in 1962 exposed her work internationally. Her conventional rectangular tapestry with several joinings was a painterly, abstract composition, developed with a variety of materials over an exposed warp, but demonstrated her early bravura approach to technique. Her participation in the most influential exhibitions of world weaving, including the Lausanne and São Paulo Biennials and numerous individual shows, brought her the attention of an extensive and receptive audience. She won a Gold Medal at the VIII São Paulo Biennial of Arts in 1965 (the first of many prizes), not as a weaver, but as an artist.[6]

A work of the same year, Blanche, presented major innovations even with the classical tapestry joinings and rectangular format (Figure 19). Abakanowicz broke with the tapestry tradition of juxtaposing color or texture areas. Rather, fine cords are interlaced singly, in pairs, and in groups. Coarse cords are eccentrically woven with sufficient density to anchor the coils of braid. Some are bound with shiny nylon cord so as to vibrate with reflected light. A mysterious black sisal form emerges provocatively from a long slit while a great contrast in weft sizes creates a pronounced sculptural relief. The

emphasis on structure and surface is further enlivened by suspended wisps of sexually suggestive horsehair and coiled braid that intermittently pierce the plane. The central apple shape with overt references to female genitalia became a theme for the artist which emerges again and again with titles, such as Abakan Jaune and Abakan Rouge, expressing the warm color and using part of the artist's name, suggesting that these forms are an extension of herself.

Abakan 27, 1967, contains the development of two themes: the erotic split circle defined by a dark, weft fringe, and the vertical slit embellished by two flesh-colored lips woven separately and applied (Figure 20). Several of the sensual weft fringes are twisted into single strands which are grouped and wrapped to form spikes. The sexually explicit and yielding feminine elements appear to be Abakanowicz' response to the spontaneous manipulation of the soft but coarse threads. The natural color and coarseness of sisal appeal to the artist, and stress the tactile quality most important to her.

In the organic, three-dimensional piece, Abakan Jaune, 1967-68, Abakanowicz broke with tradition again by abandoning the flat rectangular plane (Figure 21). The darning of the warp ends back into the fabric allows for continuous selvages. The elephantine elements, woven in parts, are sewn together and supported on an armature. The uniform material, color, and power of the large, womb-like form integrates various surface treatments, such as changes in the scale of the fibers, protruding clipped and unclipped weft fringes, and crocheted and applied rondels. The giant, fleshy enclosure with its pierced secret places beckons the viewer to climb inside. Its size parallels the increased scale characteristic of international art during the 1960's.

In Abakan Rouge, 1969, the right and left apertures

and the supplementary entrails are new elements which foretell later developments (Figure 22). Freedom from the rectangle, the introduction of gargantuan forms, and the use of full-blooded primary color mark the work as a milestone in the fiber artist's work. The image of a huge, passionate red, vaginal opening aggressively moves toward the viewer who is overpowered by its overt sexuality.

Abakanowicz's entries in the three pace-setting fiber exhibitions of 1969, "Wall Hangings" at the Museum of Modern Art in New York, Perspectief in Textiel at the Stedelijk in Amsterdam, and the 4th Biennial at Lausanne, were particularly impressive because of their aggressive monolithic power, monumental scale, effusive dynamism, and articulated structure and surfaces. Within the exhibitions' interior spaces, her erotic objects extended their extremities toward the spectator, imposing their commanding presence. The organic 'bodies' seemed to swell and breathe. The same year, in an exhibition on the Leba Dunes in Poland, Abakanowicz experienced and observed the action of these flexible forms outdoors with the 'fins' and loose fibers shifting in the breezes, affirming her choice of a material with "a life which no other material has" (Figure 23).[7] This show was the environmental setting for the film "Abakany."

Abakanowicz's growing interest in soft forms in space was not an isolated phenomenon; an international movement had evolved using fibers in three-dimensional constructions. One early event signaling this new direction occurred in 1963, the exhibition of "Woven Forms" at the Museum of Contemporary Crafts in New York.[8] Weavings by Lenore Tawney, Sheila Hicks, and Claire Zeisler also moved from rectangles and two-dimensionality, to reliefs, and then to three-dimensional forms. While weavers removed their constructions from the wall and placed them in open space, other sculptors began to create soft, stuffed fabric forms. An innovator was Claes Oldenburg who began

his new medium of soft object-making in the early 1960's.[9] Soon his sewn and stuffed forms were commanding attention as pop commentaries. Yet the name itself, soft sculpture, did not appear regularly in art literature until sometime during 1968-69.[10] Until then objects made of any soft media were not given serious consideration by critics who favored rigid sculpture of wood, stone, or metal. Only when the phenomenon demanded recognition by its prevalence was the term soft sculpture applied.

Also during the 1960's when environment entered the vocabulary of ecology and architecture, an international awareness of the possibilities of large-scale environmental art developed. Although the concept has several meanings, it promotes heightened emotional involvement by the participant, who no longer simply observes but enters and experiences the art.

At the same time, artists were no longer interested in creating an illusion of what was real. They wanted to create reality itself. This transition from illusionism to environmental art was a natural result of a progression of ideas which began at the beginning of the twentieth century. Cubist artists took the first step by rejecting perspective and photographic illusionism in favor of the reality of the picture itself, sometimes with a collage technique including actual scraps from the real world. Futurism presented energized forms to draw the spectator into the work, compelling him to sense the extended space suggested by simultaneously successive movements. Dada introduced the ready-made and the validity of discarded or mutilated scraps as medium. It legitimized the techniques of spontaneity and chance. Surrealism supported dream symbolism and sexual fantasies conveyed through chance, double or multiple imagery, and the metamorphosis of the object. Changing attitudes towards objects, methods, and spatial relationships provide the basis for the large-scaled assemblages and the environments

of the 1960's.

Never behind the times in her concepts, Abakanowicz no longer thought of her soft creations as isolated objects. Her aim was to conceive situations involving the viewer in an experience. Her exhibition in Sweden at the Södertälje in 1970 was the beginning of a series of shows that traveled to several centers of Europe. In a statement of purpose, Abakanowicz said:

> I feel that although we perceive objects, we often lack the ability to see them as they truly are. Our previous knowledge of objects prevents our seeing them as they are. Our responses are preconditioned, our feelings are associative and guarded. I would like to participate in the elimination of these habits...According to generally accepted rules, the meaning of textiles is classified as - and limited to - applied or decorative art. My exhibition tends to protest against such a rigid view.[11]

In order to achieve this goal she eliminated the single object, increased the scale, continued the associative abstraction, and ordered the erotic environment in situations as follows: Situation 1: inside the object; Situation 2: facing the object; Situation 3: facing the divided space; Situation 4: under the object.[12]

In the first situation, Abakanowicz environmentally composed sixteen spatially woven works which were previously conceived and constructed in her studio (Figure 24). The installation involved decisions relating the forms in space within the exhibition hall, a concept which was new to European weaving. While each element had an individual plastic importance, the system gave the enveloped participant a collective impression of the total ensemble. As the spectator moved the relationships changed and he experienced a dynamic spatial tension between the forms.

From the protective forest of warm, blanket-like presences, the viewer was drawn to face the high-lighted object in the second situation (Figure 25). The distant linear rope snarl, placed in relief by the concentration

of light, contrasted with the forest of woven materials. The situation gave the object meaning, but what was more important than the hanging, tangled rope was the tension produced when the participant approached it, walked around it, touched it, and sensed the spatial relationships (Figure 26).

In the third situation the viewer faced the divided space (Figure 27). The artist explained:

> In a hall, the empty room is divided by ropes running on the floor and under the ceiling in several predetermined directions. Each rope, after a certain period of free run, is transformed into a knot. The spectator observes this phenomenon in its static state - no transformation is in process. However, the movement can be started again and be stopped only after the free run of the rope in completely enmeshed. The division of the room is thus eliminated and in its place there is a single new object - the environment - formed by all the ropes interlaced.[13]

The change from the intimate, implied volumes, to the harsh, aggressive linear thrust created an emotional tension.

In the fourth situation an object, Abakan Rouge II, was installed horizontally over the head of the viewer (Figure 28). It was not clear whether the dangling rope suggested secretions oozing from the female genitalia or if the rope was being consumed in sexual passion by the organic presence. This ambiguity created a sense of instability; the hovering position of the huge forms seemed precarious and temporary.

The temporal feeling expressed by the fourth situation related to the impermanent nature of art environments. When the exhibition ended the entity no longer existed. This is of no concern to Abakanowicz. For her the Södertälje Environment existed only for the impression it made upon the participant, to give them a new associative response to textiles, and a fresh contact with spatial tensions - and nothing more. The same attitude relates to her choice

of materials. While she likes the age-old qualities of rope, sisal, and jute, they are not durable fibers preferred by art curators, restorers, and collectors. They cannot stand the test of time.[14] To Abakanowicz it does not matter. The momentary contacts were more important than the continuing life of the material.[15] The prospect of using her forms in new situations stimulates her, but when a project is finished and unalterable, she loses interest. Her excitement is in the process of making, in the possibility of what the piece or ensemble may become. These enthusiasms are shared by American process artists such as Robert Morris who, by the late 1960's, freed himself from the limitations of the studio and created in and for actual situations.

In 1971 at the University of California, Los Angeles, art galleries, a major international exhibit of contemporary fiber forms, "Deliberate Entanglements," was assembled to assess the recent conceptual, formal, and structural developments in fiber as art. In an unprecedented cooperative gesture of the major museums and educational institutions in the Los Angeles area, thematically related programs, exhibits, and events celebrated "Fiber as Medium" for a week. Thirteen international artists, including Abakanowicz and Hicks, were invited to participate, selected for their vanguard position and current creative distinctions in the field. The physical presence and vocal contributions of these major artists provided an opportunity for participants to relate their words to their works. The seminar was a forum for the exchange of attitudes and practices relating to fiber manipulation. Continued interest among fiber artists in pre-Incan weaving prompted a speaking invitation to Dr. Junius Bird, curator of South American Archaeology at the American Museum of Natural History, New York, whose enthusiasm had previously stimulated Sheila Hicks.

Abakanowicz and Hicks, who had one-woman shows

in town, were program participants. Hicks's slide presentation, "Thread Forms in Architecture," concentrated on her interest in environmental considerations.[16] Her Moroccan prayer rugs displayed at California State College in Long Beach attested to the aesthetic success of her sociological outreach.

The Abakanowicz film produced by the Polish government reflected the scale, depth, and magnitude of her involvement with three-dimensional, pliable forms. Arriving ten days before the opening, she assembled her one-woman show throughout one wing of the new Pasadena Art Museum. In hanging ten major works, she restructured the forms within the context of the gallery interior. In one room a heavy single rope cut a swath across the empty space to the well-lit brass bed heaped high with a mass of tangled ropes which climaxed the environmental drama (Figure 29). Beyond was a dim, near-empty space with a dreamlike quality of infinity. The introduction of the bed, as a symbol of sexual climax, rest, and sleep, also articulated formal and conceptual contrasts. The shiny, light valued, delicate and open forms of the brass bed frame stood in relief against the large, black, square void framing the bed-object. The tension between forms results from Abakanowicz's use of three-dimensional objects as a point of repose; the bed is a rhythmical rest at the end of the dynamic, flowing rope line. The rope appears to be snarled and tense in the knot across the room from the bed; it glides in an uninterrupted fashion to the bed where it forms a relaxed heap, enframed by darkness. Perhaps this is the artist's personal testimony regarding the therapy of sexual activity before deep slumber. Interestingly, this environmental approach contrasted with the more finite quality of her two pieces in the "Deliberate Entanglements" show at U.C.L.A.

The high quality and international scope of the conference and exhibitions related to "Deliberate

Entanglements" was especially exhilerating to those unable to go to the CITAM Biennials at Lausanne. As a result of these activities in the Los Angeles area, the importance of fiber work as sculpture was confronted and presented to the public in the traveling "Deliberate Entanglements" show. The aesthetic quality of the forms was so outstanding that the public began to consider fiber art as a serious medium. Increased enthusiasm promoted follow-up shows of fiber sculpture.[17] Another outcome of the week-long convention was the aroused interest in exploring the expressive possibilities of media traditionally related to utilitarian objects. In response to specifically voiced needs, awareness emerged that the innovators in textile ideas did not have access to the new man-made raw fiber materials. A textile firm promised to explore possibilities of developing channels through which these materials might be made available to interested individuals.

Meanwhile, along with her interest in space-controlling rope lines, Abakanowicz continued her work using hand-woven material in environmental proportions. In a rare commission to create Environmental Wall, 1970-71, for the reception room of a new State Building in North Brabant, s'Hertogenbosch, the Netherlands, her solution represented not a sensitive consideration of the commission programs, but instead the cause of her own creativity (Figure 30). The panels violated the existence of the wall itself, exaggerating the organic forms and sensual, coarse materials. The giant scale and spatial tensions dominated the interior, rather than integrate with the architectural elements. Magdalena Abakanowicz's rebelliousness and assertiveness commanded a confrontation with the viewer; the projecting gargantuan elements demanded a response. Black fibers and shadowed openings emitted a powerful, beckoning mystery. The expressive project was woven in situ on warps suspended directly from the ceiling to the floor, the weft manipulated by hand with the help of three Polish assistants and four

from Holland.[18] Scaffolding enabled the workers to cover the mammoth warp which became an art wall, expressing power and vitality.

Abakanowicz's interest in the run of the rope continued. To her, rope is "the condensation of the problem of thread, the thread composed of many fibers, the number of which nobody tried to establish."[19] During the Edinburgh Festival of Art, 1972, she ran a dividing, penetrating, resting, climbing, and gathering line to make a situation out of an entire community. The rope was a social comment; the artist felt "it became an echo of the banished organic world. It enabled one to see architecture with all its artificiality of hard decorative shell."[20] When her proposal to wrap the Cantonal Museum with a giant rope for the 1973 Biennial at Lausanne was rejected, she improvised with a leg-thick rope running a quarter of a mile through five galleries and the museum garden like an ancient path meandering from one diversion to another. The controlled rhythms of the rope were choreographic in their pauses and crescendos, transcending the conventional associations of that material.

Abakanowicz's work changed substantially by the mid-1970's, concentrating on sets of life-sized figural forms and giant human elements. The world became conscious of this shift at the 1975 Tapestry Biennial at Lausanne. From a cycle called Alterations, 1974-75, she composed a row of fourteen disturbing, headless, seated figures molded of burlap, glue, and sisal (Figure 31). The fabric followed the outer contour of the form's front, implying volume and suggesting a covering of the human body, rather than the body itself. Alterations is a part of a larger series of woven forms Abakanowicz calls Towards Man, which also includes a cycle of depersonalized torsos, each almost identical to its neighbor, seated on the floor. Their powerful, slightly inclined backs are articulated by subtle differentiations of texture and modeling. These

silent conformists created a compliant semi-circle in the 1977 Lausanne Biennial. In an interview Abakanowicz explained some of her thinking at the time she changed her focus to the human form:

> I began making these figures because I needed to change the scale of my work. I had always worked on a scale larger than life. And I simply wanted to experience what happened when I worked on life-sized objects, on a person my own height...I wanted to see what happens in space in relation to my normal large-scale work...And I also wanted to know just how complicated the human model was.[21]

Abakanowicz's figural groups evoke strong but varied responses from viewers. The mute presences in Alterations are interpreted by museum-goers and critics as judges of the judges, as witnesses, or as effigies from the theater of cruelty. Describing them as part of her Towards Man series, Abakanowicz explained:

> They are about my opposition to the systematisation [sic] of life and art. My woven forms grow with a leisurely rhythm like creatures of nature, and like them they are organic. Like other forms of nature they are also something to contemplate.[22]

These are socially acceptable, humanitarian terms which provide one level of interpretation. Specifically, a closer look at a single figure from Alterations reveals that it is not a sexless symbol for mankind; it is an 'altered' male. His form suggests masculine bone structure and musculature, but castration renders him sterile and impotent. Decapitation elminates his capacity to think and feel as an individual. The lack of hands makes manipulation impossible. The shell-like covering evokes the crust of tradition which renders his form stiff and unable to function. Abakanowicz expresses explicit hostility toward the traditional role of the male as the dominating force in societal institutions. She protests by stripping him of his means to power and by presenting him to the world as an ineffectual, hollow shell. His

authority is now a remnant of the past; 'alterations' have occurred in contemporary sexual roles.

Objects Abakanowicz calls "heads" or "schizoid heads" compose another set of three-dimensional woven forms currently occupying her. She explains her purpose in the series called About Man which also contains other large human elements, such as hands:

> They relate to my fear that to exceed the rate of one's biological rhythms leads to a loss of ability to meditate. I am apprehensive about the consequences suffered through the effects of artificial environments and unlimited stress.[23]

Again her public statements express altruistic and humanitarian concerns. It is true that her head forms, sprouting from the floor, protest the prevalent unthinking, unnatural political, social, and religious rules. Crudely stitched burlap pieces cover each head, filled with a fiber mass, some with tears and openings, others with bulges unable to emerge. They suggest minds unable to express themselves and to reach their potential. The covering (environmental pressure) restricts, masks, and smoothers any sensitive response to reality. However, Abakanowicz's heads can be interpreted on another level. The sprouting forms are overtly phallic. Their upward thrust is child-like in its impotence and powerless to inseminate new life. Consistant with this thematic form, Black Garment, 1977, presents a dark, bomb-shaped, monumental erection, shrouded with black mourning cloths, implying the death of male domination. It is interesting that the inoperable phallic forms rise up from the floor while her earlier female genitals hung from above with an overpowering vitality.

The life-sized figural forms and giant human elements, along with her sets of hanging, monumental garments and figural burlap reliefs, exemplify Abakanowicz's characteristic color, fiber, and spatial choices. They are monochromatic to reduce complications and to emphasize surface,

structure, and content. They are formed of organic materials to stress that all things that exist in nature are ultimately created from the same components. This is illustrated in the vegetative fibers which formed a root or vein-like surface pattern on the bodies in Alterations, suggesting the organic rhythms of natural growth. Abakanowicz chooses materials which are soft, pliable, and which embody age, as in hand-woven fabrics. She explains her selection:

> The material I use is imbued with the past. It is not something done today for today. The material already has a long story and the work itself has a long story in the complications of its its form. For the same reason I like old sacks. Sacks which have already been used are not like new ones straight from the shop. New clean material doesn't interest me.[24]

In contrast to Sheila Hicks's acceptance and involvement with the products and processes of technology, Abakanowicz rejects the impersonal implications of the machine:

> The history attached to this material is so old that our attitude to it is different. We can't have anything like the same relationship with machine-made materials.[25]

Abakanowicz also prefers to conceive forms as sets which can be rearranged and recreated, a common practice among contemporary sculptors, especially process artists. The spatial tension between the forms is crucial, creating a specific rhythm in a given space. It can be influenced by the directions they face, the distance between forms, the lighting, and the exhibition space. These considerations become totally integrated elements of the whole perceptual experience. The pliability of the works and the possibilities for transformation are in accordance with Abakanowicz's awareness of the evolutionary potential of all living structures.

In considering the artist's development, three aspects are important: her shifting emphasis from abstraction to figural representation, from female to

male preoccupation, and from clothing to skin-like coverings. She began with flat tapestries hung on the wall, and then created pliable, abstracted female genitalia suspended freely in space. The latter gradually encompassed space, becoming hollow and large. During the early 1970's, titles, such as Clothing, Coat, Dress, and Garment, immediately suggested the original function of weaving, that of clothing and shelter as coverings for the human, but Abakanowicz transformed the context by expressing non-utilitarian statements. Then, in 1973-74, she became concerned with the human himself, and the forms which originally constituted covering turned into the skin of the male's torso or of his sexual organ. One could ask why Abakanowicz abandoned the glorified female erogenous zones for a concentration on normal-sized impotent male shells and large phallic heads. Equal rights for women is a contemporary issue; perhaps, after advocating 'woman power' in her earlier work, she is symbolically participating in the reduction of the male's power to dominate. Her progression from abstract ideas to concentration on human forms is unusual in twentieth century art, where the figure is frequently the starting point from which the artist proceeds to abstraction. Abakanowicz's fibrous presences are unique in the history of the re-emergence of the human figure in art. Only she and George Segal, since Giacometti, have presented three-dimensional human groups in terms both "so still and so moving."[26]

Abakanowicz's organic sculptures of the 1970's have a monumental and timeless quality, evoking the "inner images of an old, violent and ruminating world.[27] Her structures encompass issues, such as preconditioned associations toward sexual roles or art criteria, which are both personal and universal. They bear witness to the goals which she has articulated: "My art has always been a protest against what I have met with in weaving."[28]

Speaking of her woven forms in space she says:

> In creating them I do not want to relate them to either tapestry or sculpture. At the most it is the total obliteration of the utilitarian function of tapestry which enraptures me.[29]

She continues to extend the conceptual, formal, and spatial "possibilities of the woven fabric,"[30] deliberately challenging the preconceived attitudes of the public and the art critics who accept tapestry or sculpture but rigidly reject her interdisciplinary and unconventional approach. Although she functions as a sculptor, she wilfully chooses the edge between sculpture and tapestry, demanding recognition as a fiber artist.

It is instructional to compare Abakanowicz to Eva Hesse (1933-1970), an American sculptor who often used soft, pliable materials in space.[31] Her work exemplifies the late 1960's avant-garde dissatisfaction with the formalist approach to painting and sculpture, and new interest in the process of making. Her intention was to investigate fresh ways of exploring and understanding the order or disorder inherent in reality itself. In contrast to Abakanowicz, who limits herself to fibrous materials and to solo or fiber exhibitions, Hesse tackled sculptural problems in various media while mingling and exhibiting with sculptors. Consequently, her substantial contributions to art received supportive critiques by New York critics who still considered fiber a 'minor' media.

Abakanowicz continues to explore the possibilities of fibrous materials, to protest the conventional decorative or functional associations of weaving, to lead fiber artists in a conceptual emphasis, and to challenge the world to recognize quality aesthetic statements in fiber as art.

FOOTNOTES TO CHAPTER SIX

[1]Malmö Konsthall, Abakanowicz: Organic Structures (Malmö, Sweden: Malmö Konsthall, 1977), p. 32.

[2]Judith Bumpus, "Rope Environments: Magdalena Abakanowicz Discusses Her Work With Judith Bumpus," Art and Artists, October 1974, p. 37.

[3]Danuta Wroblewska, "Magdalena Abakanowicz: She Confronts the Viewer with Textile as Object and Environment," Craft Horizons, October 1970, p. 18.

[4]Bumpus, "Rope Environments," p. 37.

[5]Wroblewska, "Magdalena Abakanowicz," p. 18.

[6]Malmö Konsthall, Abakanowicz, p. 32.

[7]Bumpus, "Rope Environments," p. 37.

[8]"Woven Forms" is discussed in Chapter 4, p. 57.

[9]Dona Z. Meilach, Soft Sculpture and Other Soft Art (New York: Crown Publishers, Inc., 1974), p. 5.

[10]Ibid., p. 3.

[11]Sylvia Bushell, "Fiber Sculpture" (M. A. thesis, California State University, 1973), p. 4.

[12]Wroblewska, "Magdalena Abakanowicz," p. 23.

[13]Mildred Constantine and Jack Lenor Larsen, Beyond Craft: The Art Fabric (New York: Van Nostrand Reinhold Company, 1972), p. 92.

[14]Increasing numbers of craftspeople are using jute fiber in their work, enjoying its rough texture, subtle natural color, facile workability, and particularly, its low cost. However, because of its lignin content, it begins to deteriorate within five years and within fifty years goes to shreds. The nature of these art works is experimental and transitory. The lack of quality materials with which people are working, then, is a problem in the fiber arts. Nobuko Kajitani, "A Warning About Jute Fibers," Craft Horizons, June 1976, p. 6.

[15]Bumpus, "Rope Environments," p. 41.

[16]Mary Jane Leland, "Entanglements," Craft Horizons, February 1972, p. 17.

[17]Meilach, Soft Sculpture, p. 7.

[18]Constantine and Larsen, Beyond Craft, p. 97.

[19]Malmö Konsthall, Abakanowicz, p. 37.

[20]Ibid.

[21]Bumpus, "Rope Environments," p. 40.

[22]Malmö Konsthall, Abakanowicz, p. 35.

[23]Ibid.

[24]Bumpus, Rope Environments," p. 38.

[25]Ibid., p. 37.

[26]Malmö Konsthall, Abakanowicz, p. 31.

[27]Ibid.

[28]Ibid., p. 36.

[29]Ibid.

[30]Bumpus, "Rope Environments," p. 37.

[31]Reproductions of Eva Hesse's work are found in Cindy Nesmer, Art Talk (New York: Charles Scribner's Sons, 1975), pp. 225-229.

CONCLUSION

The fiber art revolution, exemplified by the work of Lenore Tawney, Sheila Hicks, and Magdalena Abakanowicz, evolved from a merger of the revival of tapestry, the development of twentieth century aesthetics, and the rediscovery of the artist-craftsman.

The revival of tapestry retained its historical equipment, techniques, and vocabulary and valued the design approaches of three periods in tapestry development: the forms in Peruvian tapestry were an outgrowth of thread construction; the simple compositions of Gothic tapestry were created by designers whose knowledge of materials and equipment made a collaboration with interpreting weavers possible; the late nineteenth century patterns by William Morris required the same collaboration and called for a revival of handweaving skills. While Lurcat's efforts revived and updated French tapestry, two of his tenets were rejected by fiber artists: the subordination of tapestry to painting, and the role of the weaver as a tool of the designer.

The development of modern aesthetics began at the end of the nineteenth century when the effects of the Industrial Revolution indicated a need for new aesthetic criteria and an art education reconciling art and industry. The Arts and Crafts Movement reinstated handweaving skills and sound principles of design, while calling for the integration of the arts. Art Nouveau also encouraged the fusion of the fine and applied arts and its enthusiasm for experimentation and individualism influenced recent fiber artists. The Bauhaus philosophy reformed art education by directly confronting the need to reconcile

art and the demands of mass production. The role of the artist and the craftsman were combined in the designer, trained according to Bauhaus theory to create for fine art or industrial purposes. Design which was characteristic of the Bauhaus used abstract forms, exploited inherent qualities of materials, manifested structure, expressed function, and integrated the arts. These sound principles of design encouraged the fiber artists to create thread forms interpreting the aesthetics and challenges of their contemporary society.

The rediscovery of the artist-craftsman in the twentieth century served the fiber evolution. Handweaving in northern and eastern Europe early in the century respected the nature of the yarns. The emphasis increased after World War II, especially in Poland. A few European weavers who migrated to the United States before the war, along with those from the Bauhaus in the 1930's, had a profound effect on American weaving, reflected in a handweaving revival in the 1940's. Several lone forerunners used fibers as an art form along with their functional work. The 1950's saw an intense renewal of handweaving skills and the emergence of several fiber art pioneers, educated in university art departments and approaching materials with the same concerns as contemporary painters and sculptors.

These technical and aesthetic developments provided the point of departure for Lenore Tawney, Sheila Hicks, and Magdalena Abakanowicz. Tawney expressed yarn characteristics, construction, and formal concerns to make weaving viable as an art form. Her public exposure inspired other weaving enthusiasts. Hicks's combination of ancient or modern weaving materials and techniques, with Bauhaus principles of design, yielded personal or utilitarian expressions. Her successful efforts to interact with architects and staffs of provincial workshops or industries quality her as an artist operating in the spirit

of collaboration sought by Walter Gropius. The erotic, sculptural presences of Abakanowicz stress the tactile quality of flexible materials on an environmental scale. Her aggressive statements impose a strong emotional impact on the viewer, protesting impersonal, societal systems which precondition human attitudes and sexual roles. Their content qualifies them for inclusion in the arena of the international arts.

The CITAM has recorded the emancipation of tapestry in its exhibitions since 1962, with Abakanowicz's entries commanding authority. While traditional tapestry still is represented, the dominant category encompasses fiber art designed and woven by the artist, expressing an interest in the exploration of fibers and techniques, spatial considerations, and large scale. Specific concerns parallel to avant-garde painting and sculpture are the use of non-precious materials and mixed media to form objects, assemblages, or environments which may be permanent or temporary sets. The content may be communicated through a variety of approaches ranging from non-objective to Super-Realistic.

Art is no longer stratified by divisions between the fine and applied fields, or confined to restrictions within the creative disciplines. Art is the expression of concepts; techniques, materials, and procedures are subordinate. Fiber artists are evaluating their discoveries in fibers, in methods, and in space. Their current work emphasizes content, using fiber as the means, which qualifies it for integration with the arts of painting, sculpture and architecture.

To implement a balanced historical and critical record of the visual arts, accounts of the recently matured fiber art phenomenon must be incorporated. Presently a lack of substantive literature prevents comprehension of the development or the current status of the movement.

Research is needed to document the evolution of the fiber medium from craft to fine art. The sole record with any continuity is Craft Horizons, but from a scholarly point of view its accounts are shallow, spotty, and sometimes unreliable in details. Credit must be given to the editor, Rose Slivka, and to the reviewer-weaver Jack Lenore Larsen for their descriptive articles which unfortunately lack a substantial national and international audience. There is a need for serious, influential critics to review the work of fiber artists. Given the attention of reputable commentators, standards could be applied to the fiber forms, their merits assessed, and their weaknesses challenged. At the same time, the public as well as the art world would be informed of the vital activity which continues among fiber enthusiasts who have witnessed their medium evolve from craft to fine art within the last quarter of the century.

SELECTED BIBLIOGRAPHY

SELECTED BIBLIOGRAPHY

PRIMARY SOURCES:

Abakanowicz, Magdalena. Warsaw, Poland. Correspondence, October 1977.

Hicks, Sheila. Paris, France. Correspondence, October 1977.

SECONDARY SOURCES:

Books:

Albers, Anni. On Designing. Middleton, Connecticut: Wesleyan University Press, 1961.

_____. On Weaving. Middleton, Connecticut: Wesleyan University Press, 1965.

Anderson, Wayne. American Sculpture in Process: 1930/1970. Boston, Massachusetts: New York Graphic Society, 1975.

Atwater, Mary Meigs. The Shuttle-Craft Book of American Hand-Weaving. New York: The Macmillan Company, 1951.

Bayer, Herbert; Gropius, Walter and Gropius, Ise, eds. Bauhaus: 1919-1928. Boston: Charles T. Branford Company, 1952.

Benton, Tim; Benton, Charlotte; and Scharp, Dennis, eds. Architecture and Design: 1890-1939. New York: The Whitney Library of Design, 1975.

Beutlich, Tadek. The Technique of Woven Tapestry. New York: Watson-Guptill Publications, 1967.

Bird, Junius B. "Technology and Art in Peruvian Textiles," pp. 45-77. In Mead, Margaret; Bird, Junius B.; and Himmilhebor, Hans. Technique and Personality in Primitive Art. New York: The Museum of Primitive Art, 1963.

Birrell, Verla. The Textile Arts. New York: Schocken Books, 1976.

Black, Mary. New Key to Weaving. Milwaukee: Bruce, 1957.

Blumenau, Lili. Creative Design in Wall Hangings. New York: Crown Publishers, Inc., 1967.

Cassou, Jean; Langui, Emil; and Pevsner, Nicolaus. Gateway to the Twentieth Century. New York: McGraw-Hill, 1962.

Chamberlain, Marcia, and Crockett, Candace. Beyond Weaving. New York: Watson-Guptill Publications, 1974.

Christensen, Erwin Ottomar. American Crafts and Folk Arts. Washington, D. C.: Robert B. Luce, Inc., 1964.

Constantine, Mildred, and Larsen, Jack Lenor. Beyond Craft: The Art Fabric. New York: Van Nostrand Reinhold Company, A Division of Litton Educational Publishing, Inc., 1972.

Harcourt, Raoul d'. Textiles of Ancient Peru and Their Techniques. Edited by Grace G. Denny and Carolyn Osborne. Translated by Sadie Brown. Seattle: University of Washington Press, 1962.

Held, Shirley E. Weaving: A Handbook for Fiber Craftsmen. New York: Holt, Rinehart and Winston, Inc., 1973.

Hooper, Luther. Hand-Loom Weaving, Plain and Ornamental. New York: Pitman Publishing Corp., 1920.

Hunter, Sam and Jacobus, John. American Art of the Twentieth Century. New York: Harry N. Abrams, Inc., 1973.

Jarry, Madeleine. La Tapisserie. Fribourg, Switzerland: Office du Livre, 1974.

_____. World Tapestry. New York: G. P. Putman's Sons, 1969.

Kaufmann, Ruth. The New American Tapestry. New York: Reinhold Book Corporation, 1968.

Kuenzi, André. La Nouvelle Tapisserie. 2nd ed. Geneva: Les Editions de Bonvent, 1974.

Lejard, André, ed. French Tapestry. Paris: Les Éditions du Chêne, 1947.

Levi-Strauss, Monique. Sheila Hicks. London: Studio Vista, 1973.

Lurçat, Jean. Designing Tapestry. Translated by Barbara Crocker. London: Rockliff Publishing Corporation, 1950.

Madsen, S. Tschudi. Art Nouveau. Translated by R. I. Christopherson. New York: McGraw-Hill Book Company, 1967.

Meilach, Dona Z. Making Contemporary Rugs and Wall Hangings. New York: Abelard-Schuman, 1970.

_____. Soft Sculpture and Other Soft Art. New York: Crown Publishers, Inc., 1974.

_____. Weaving Off-Loom. Chicago: Henry Regnery Company, 1972.

Naylor, Gillian. The Bauhaus. London: Studio Vista, 1968.

Nemser, Cindy. Art Talk. New York: Charles Scribner's Sons, 1975.

Neumann, Eckard, ed. Bauhaus and Bauhaus People. Translated by Eva Richer and Alba Lorman. New York: Van Nostrand Reinhold Company, 1970.

Nordness, Lee. Objects: USA. New York: Viking Press, 1970.

Pevsner, Nikolaus. Pioneers of Modern Design. New York: The Museum of Modern Art, 1949.

Regensteiner, Else. Weaver's Study Course. New York: Van Nostrand Company, 1975.

Rhodes, M. Small Woven Tapestries. Newton Centre, Mass.: C. T. Branford Company, 1973.

Scheidig, Walter. Weimar: Crafts of the Bauhaus. London: Studio Vista, 1966.

Sherman, Vera. Wall Hangings of Today. Newton Centre, Mass.: C. T. Branford, 1972.

Slivka, Rose; Webb, Aileen O.; and Patch, Margaret Merwin. Edited by Rose Slivka. The Crafts of the Modern World. New York: Horizon Press, 1968.

Thompson, W. G. A History of Tapestry. London: Hodder and Stoughton, 1930.

Tidball, Harriet. The Weaver's Book. New York: Macmillan, 1961.

Tovey, John. The Technique of Weaving. New York: Van Nostrand Reinhold, 1965.

Waller, Irene. Designing with Thread: From Fibre to Fabric. New York: Viking Press, 1973.

_____. Thread: An Art Form. London: Studio Vista, 1973.

Watkinson, Ray. William Morris as Designer. New York: Reinhold Corporation, 1967.

Weibel, Adele Coulin. Two Thousand Years of Textiles. New York: Pantheon Books, 1952.

Wingler, Hans M. The Bauhaus. Cambridge, Mass.: MIT Press, 1969.

Wright, Frank Lloyd. "The Art and Craft of the Machine," pp. 169-185. In Mumford, Lewis, ed. Roots of Contemporary American Architecture. New York: Reinhold Publishing Corporation, 1952.

Catalogs:

Allgrove, Joan. British Sources of Art Nouveau (Exhibition of Nineteenth and Twentieth Century British Textiles and Wallpapers at the Whitworth Art Gallery). Manchester, England: University of Manchester, 1969.

Constantine, Mildred. An Exhibition of Contemporary French Tapestries. New York: Charles E. Slatkin Galleries, 1965.

_____, intro. American Tapestries. Notes by Irma B. Jaffe. New York: Charles E. Slatkin Galleries, 1968.

Constantine, Mildred, and Drexler, Arthur, intro. The Object Transformed. New York: The Museum of Modern Art, 1966.

Constantine, Mildred, and Larsen, Jack Lenor , intro. Wall Hangings. New York: The Museum of Modern Art, 1969.

Domjan, Evelyn Alexandra. Tapestries of Joseph Domjam. Cincinnati Art Museum, 1973.

Dresler, Arthur, intro. "Textiles: U. S. A. - Sponsored by the Museum of Modern Art and the American Fabrics Magazine." Catalog reprinted in American Fabrics Magazine, Fall 1956, pp. 1-68.

Kester, Bernard, intro. Deliberate Entanglements. Los Angeles: University of California, 1971.

Malmö Konsthall. Abakanowicz: Organic Structures. Malmö, Sweden: Malmö Konsthall, 1977.

Musée Cantonal des Beaux-Arts. Biennale Internationale de la Tapisserie. Lausanne: Musée Cantonal des Beaux-Arts, 1962, 1969, and 1975.

Museum of Contemporary Crafts and the Philadelphia Museum College of Art. Fabrics International. Directed by Jack Lenore Larsen. Catalog reprinted in Craft Horizons, September-October 1961, pp. 1-50.

Pope-Hennessy, John, foreward. Collingwood/Coper Exhibition. London: Victoria and Albert Museum, 1969.

Stedelijk Museum. Perspectief in Textiel. Amsterdam: Stedelijk Museum, 1969.

Periodicals:

Adams, Alice. "Lenore Tawney: Hangings at the Staten Island Museum." Craft Horizons, January-February 1962, p. 39.

_____. "The Wonders of Thread, Cooper Union Museum." Craft Horizons, March-April 1965, p. 47.

Albers, Anni. "Anni Albers on the Beginnings of Weaving." American Fabrics, Fall 1965, pp. 89-92.

_____. "Fabric, the Pliable Plane." Craft Horizons, July-August 1958, pp. 15-17.

Amaral, Cis. "Tapestry: A Living Tradition." Art and Artists, August 1975, pp. 16-23.

_____. "What is Tapestry?" Art and Artists, August 1977, pp. 4-7.

Amos, M. A. "Textiles by Sheila Hicks." Handweaver and Craftsman, Fall 1963, p. 28.

Beaumont-Nesbitt, Brian. "The Tapestries of Archie Brennan." Connoisseur 186, no. 749 (July 1974): 196-199.

Beittel, Kenneth, and Burkhart, Robert. "Crafts in Education: Continuity and Reality in the Crafts." Craft Horizons, September-October 1963, pp. 8-9.

Billeter, Erika. "Third International Tapestry Biennial." Craft Horizons, July 1967, pp. 8-15.

Block, Jean Libman. "Benson Gallery, Bridgehampton, New York, Exhibition." Craft Horizons, October 1975, p. 42.

Blumenau, Lili. "Young Americans 1962: Weaving." Craft Horizons, July-August 1962, pp. 10-11.

Bourgeouis, Louise. "Fabric of Construction at the Museum of Modern Art, New York." Craft Horizons, March-April 1969, pp. 31-35.

Broderson, Jan. "Dirk Holger and Grau-Garriga: The Legacy of Lurçat." Handweaver and Craftsman, Summer 1971, pp. 10-11.

Bumpus, Judith. "Rope Environments: Magdalena Abakanowicz Discusses Her Work With Judith Bumpus." Art and Artists, October 1974, pp. 36-41.

Campbell, Lawrence. "Exhibition at the Willard Gallery." Art News, November 1967, p. 65.

"Change and Continuity." Craft Horizons, June 1975, pp. 46-52.

Dale, Gloria. "Exhibition at the Whitechapel Art Gallery in London." Craft Horizons, October 1975, pp. 40-41.

Dauriac, Jacques Paul. "Tapisseries nouvelle, Musée des arts décoratifs, Paris." Pantheon 33 (July-August-September 1975): 272.

"The Decade: Changes in Crafts in the Last Ten Years." Craft Horizons, June 1975, pp. 37-45.

Dodge, Dorothy. "Bauhaus Weaving." Handweaver and Craftsman, Fall 1971, pp. 17, 30-31, 43.

Domingo, Willis. "Tawney at the Willard Gallery." Arts Magazine, April 1970, p. 63.

"Dorothy Liebes Retrospective at New York's Museum of Contemporary Crafts." Interiors, April 1970, p. 6.

Drew, Ray. "Dimensions 1960: Exhibition at the New Mexico Highland University Art Gallery, Las Vegas." Craft Horizons, November-December 1960, p. 44.

Duchal, Joe. "Contemporary Weaving at Manhattanville College, Purchase, N. Y." Craft Horizons, November-December 1965, p. 50.

"Exhibitions: A Knoll Extra." Interiors, June 1963, p. 14.

"Exhibitions: Lenore Tawney at the Art Institute of Chicago." Craft Horizons, November-December 1962, p. 44.

"Experimental Textiles by Sheila Hicks and Seven of Her Students Exhibited in London." Handweaver and Craftsman, Spring 1965, pp. 26-27.

Ferris, B. "Bauhaus: Times and Influences." Communication Arts Magazine 15, pt. 2 (1973): 23-24.

"First World Congress of Craftsmen." Craft Horizons, September-October 1964, pp. 8-15, 55.

Flanagan, Ann. "Live-in Art at Fiberworks Gallery." Craft Horizons, June 1975, p. 9.

Font, Lina. "Tapestry: Evolution and the Present State of the Art." Goya, no. 113 (March-April 1973): 292-297.

Freeman, Claire. "Studio Weavers." Craft Horizons, December 1956, pp. 20-22.

Frey, Berta. "American Handweaving 1960." Handweaver and Craftsman, Spring 1960, pp. 5-17, 46-52.

_____. "Handweaving 1965: Important Developments in the Past Five Years." Handweaver and Craftsman, Spring, 1965, pp. 6, 42.

Giambruni, Helen. "Dominic DiMare." Craft Horizons, November-December 1965, pp. 18-21.

Gilles, Xavier. "La nouvelles tapisseries." Oeil, no. 220 (November 1973): 12-15.

Guenther, Peter W. "The Aesthetics of the Bauhaus." Texas Quarterly 16, pt. 1 (Spring 1973): 152-173.

Guermonprez, Trude; Kester, Bernard; Westphal, Katherine; and Rossbach, Ed. "Textiles." Craft Horizons, June 1966, pp. 32-34.

Hagberg, Marilyn. "Dimension of Fiber, California College of Arts and Crafts Gallery, Oakland." Craft Horizons, August 1971, pp. 55-57.

Halstead, Whitney. "Claire Zeisler and the Sculptured Knot." Craft Horizons, September-October 1968, pp. 10-15.

"Handweaving for Modern Interiors." Craft Horizons, Winter 1949, pp. 23-25.

Hardingham, Martin. "Sculptress in Sisal." Design, July 1971, pp. 78-83.

Heinemann, S. "Lenore Tawney: Willard Gallery." Artforum 13, no. 4 (December 1974): 77.

Helfman, Muriel Nezhnie. "Sheila Hicks at the Craft Alliance Gallery, St. Louis, Missouri." Craft Horizons, January-February 1970, p. 42.

Hill, Pat. "Peruvian Tapestry Warp." Craft Horizons, July-August 1963, pp. 22-26, 45.

Hoff, Margo. "Lenore Tawney: The Warp is Her Canvas." Craft Horizons, November-December 1957, pp. 14-19.

Howard, Richard. "Olga de Amaral: The Fiber Formalist Constructs a New Space." Craft Horizons, January-February 1974, pp. 40-43, 67-68.

_____. "Tawney." Craft Horizons, January-February 1975, pp. 46-47, 71-72.

Jarecka, Louise Llwellyn. "Improvising on the Loom." Craft Horizons, Summer 1949, pp. 8-9.

_____. "The Tapestries of Krystyna Sadowski." Craft Horizons, Spring 1951, pp. 36-37.

Joppe, Ben. "The Tapestries of Wilhelmina Bruytier." Craft Horizons, June 1975, pp. 26-27, 51-52.

Kafka, Barbara. "The Woven Structures of Alice Adams." Craft Horizons, March-April, pp. 14-17.

Kajitani, Nobuko. "A Warning About Jute Fibers." Craft Horizons, June 1976, p. 6.

Kanaginis, Niki. "The Difference of Tapestry." Art and Artists, April 1969, p. 68.

Kay, Jane Holtz. "Weaving Invitational at the Arts and Science Center, Nashua, New Hampshire." Craft Horizons, March-April 1969, p. 47.

Kester, Bernard. "Grau-Garriga." Craft Horizons, April 1974, pp. 22-23, 62.

_____. "International Contemporary Tapestries, Lang Galleries, Scripps College, Claremont, California." Craft Horizons, March-April 1969, p. 45.

_____. "Lenore Tawney at the Art Gallery, California State University, Fullerton Exhibition." Craft Horizons, February 1976, p. 19.

Kgositsile, Keorapetse. "Wall Works." Craft Horizons, January-February 1968, pp. 30-37.

Kuh, Katherine. "Sculpture: Woven and Knotted." Saturday Review, 27 July 1968, pp. 36-37.

Lamarova, Milena. "Tapestry's Other Dimension." Design, September 1969, pp. 36-41.

Larsen, Jack Lenor . "The Colossal Sixth Tapestry Biennial." Craft Horizons, October 1973, pp. 20-29, 65.

_____. "Fiber Works in Miniature." Craft Horizons, February 1975, pp. 48-51.

_____. "The Greatest Craft Show on Earth." Craft Horizons, October 1971, pp. 23, 62.

_____. "Lausanne: International Tapestry Biennial." Craft Horizons, September-October 1969, pp. 14-19.

_____. "The New Weaving at Stedelijk Museum, Amsterdam, Holland." Craft Horizons, March-April 1969, pp. 22-29, 50-51.

_____. "Olga de Amaral's Woven Walls." Art and Artists, January 1971, pp. 46-47.

_____. "The Weaver as Artist." Craft Horizons, November-December 1955, pp. 30-34.

_____. "Woven Forms." American Fabrics, Summer 1963, p. 93.

Lassigne, Jacque. "Yougoslavie: Jagoda Buic." Oeil, no. 240-241 (July-August 1975): 36-39.

Laurer, Robert. "Aubusson's Tapestries in the U. S.: Varied Reactions to the French Style." Craft Horizons, May-June 1959, pp. 30-35.

Leland, Mary Jane. "Entanglements." Craft Horizons, February 1972, pp. 14-21.

"Lenore Tawney." Handweaver and Craftsman, Spring 1962, pp. 6-9.

"Lenore Tawney: Exhibition at the Art Institute of Chicago." Craft Horizons, November-December 1962, p. 44.

Liebes, Dorothy. "Tapestries by Martta Taipale." Craft Horizons, September-October 1952, pp. 18-19.

Loercher, Diana. "Textile Renaissance Intrigues Art World." The Christian Science Monitor, 27 October 1969, p. 13.

Marein, Shirley. "Modern Master Tapestries, New York Exhibition." Craft Horizons, October 1974, p. 55.

Martland, T. R. "Art and Craft: the Distinction." British Journal of Aesthetics 14, pt. 3 (Summer 1974): 231-238.

Meisel, Alan. "The Eighth Exhibit of the Contemporary Hand Weavers of California," Craft Horizons, May-June 1965, p. 44.

Michel, Joan Hess. "Dorothy Liebes: Her Approach to Design and Weaving." American Artist, April 1971, pp. 44-49, 77-79.

Miller, Carol. "Constructions in Wool Exhibited at the Antonio Souza Gallery in Mexico City." Craft Horizons, November-December 1961, p. 40.

Morris, B. J. "William Morris, a Twentieth Century View of His Woven Textiles." Handweaver and Craftsman, Spring 1961, pp. 6-11, 54-55.

Nagle, Virginia, ed. "American Weaving: Lenore Tawney." Design Quarterly, no. 48-49 (1960): 49.

Neeve, Bernardine de. "The Two Scholtens: Two Artist-Weavers From the Netherlands." Craft Horizons, January-February 1970, pp. 24-29.

"New Life for an Ancient Art: The Renaissance of Tapestries as a Decorative Art Form." Interior Design, November 1969, pp. 184-189.

"New Talent 1959: Crafts." Art in America, Spring 1959, p. 70.

Peillex, George. "4e Biennale Internationale de la tapisserie." Werk 56, no. 9 (September 1969): 651.

_____. "Magdalena Abakanowicz, tapisseries-assemblages a Lausanne." Werk 54, no. 10 (October 1967): 675.

Pincus-Witten, Robert. "Eva Hesse: Post-Minimal into Sublime." Artforum 10 (November 1971): 32-44.

Prior, Mary. "Unravelling the Magic Carpet of Sheila Hicks." Réalités, March 1971, pp. 60-63.

Rapoport, Debra. "Tapisserie Vivant." Craft Horizons, October 1971, pp. 24-25, 62-63.

Ratcliff, Carter. "Tawney: Exhibition at the Willard Gallery." Art News, May 1970, p. 74.

Reed, Gervais. "Exhibitions: World's Fair 'Adventures with Art.'" Craft Horizons. November-December 1962, p. 40.

Regensteiner, Else. "Handweaving 1969, Present Standing and Future Outlook." Handweaver and Craftsman, Spring 1969, pp. 4-5.

Reichardt, Jasia. "Individuality and Imagination." Architectural Design 45 (August 1975): 507-508.

Resnikoff, Florence. "Northern California: Trude Guermonprez." Craft Horizons, September-October 1956, p. 35.

Riley, Robert. "Miniature Tapestry in New York's Museum of Contemporary Crafts." Craft Horizons, March-April 1966, pp. 10-15.

Rose, Barbara. "The Triumph of Photography, or: Farewell to Status in the Arts." New York Magazine, March, 1972, pp. 68-69.

Rosenberg, Harold. "Art and Work." Craft Horizons, May-June 1965, pp. 26, 54-55.

Rossbach, Ed. "Objects: USA Revisited." Craft Horizons, August 1972, pp. 38-39.

Sanders, Annie. "American Tapestry." Craft Horizons, July-August 1962, p. 45.

Sawyer, Charles. "Education of the Craftsman: Its Changing Role." Craft Horizons, May-June 1963, pp. 10-13, 52.

Shapiro, David. "Eva Hesse." Craft Horizons, February 1973, pp. 40-45, 71-72.

Scheinman, Pamela. "Adela Akers: The Loomed Plane." Craft Horizons, February 1977, pp. 24-25, 61-62.

Schlumberger, E. "Sheila Hicks: Ce que je lis dans les tissage pré-incaiques c'est l'écriture de la main." Connaissance des Arts, no. 295 (September 1976): 58-59.

Schuyler, James. "Lenore Tawney." Craft Horizons, November-December 1967, pp. 20-25.

Schwartz, Fred. "Wall Hangings, Flint Institute of Arts, Flint, Michigan." Craft Horizons, May 1968, p. 63.

"Sculpture in Fiber." Handweaver and Craftsman, March-April 1972, pp. 10-12.

Shawcroft, Barbara. "Conversations with Barbara Shawcroft." Handweaver and Craftsman, Summer 1971, pp. 21-22.

"Sheila Hicks's New Work at Modern Master Tapestries." Interiors, May 1974, p. 10.

Shore, Mimi. "A Survey of Crafts Today." American Artist, April 1972, pp. 20-25, 78-80.

Simmons, Robert Hilton. "Objects: USA - The Johnson Collection of Contemporary Crafts." Craft Horizons, November-December 1969, pp. 24-27, 66.

Slivka, Rose. "Affirmation: The American Craftsman 1971." Craft Horizons, December 1970, pp. 10-11.

_____. "The American Craftsman/1964." Craft Horizons, May-June 1964, pp. 10-11, 32-33, 112-113, 126.

_____. "Hard String." Craft Horizons, April 1972, pp. 16-21.

_____. "The New Tapestry." Craft Horizons, March-April 1963, pp. 10-19, 48-49.

_____. "The Object as Poet." Craft Horizons, February 1977, pp. 26-39, 62-63.

_____. "U. S. Crafts in This Industrial Society." Craft Horizons, March-April 1959, pp. 8-21.

_____. "Wall Hangings and Rugs: Museum of Contemporary Crafts Exhibition." Craft Horizons, May-June 1957, pp. 18-25.

Smith, Dido. "Lenore Tawney: Willard Gallery in New York." Craft Horizons, August 1970, p. 54.

"In the Studio of Lenore Tawney." Handweaver and Craftsman, Spring 1965, p. 35.

Schwartz, Ellen. "New York Reviews: Eva Hesse." Art News, September 1977, p. 142.

"Tapestry Art." Interiors, April 1971, p. 52.

"A Thread of Conversation." Industrial Design, July 1974, pp. 10-12.

Vincente, Harriet. "Exhibition at Benson Gallery, Bridgehampton, New York." Craft Horizons, November-December 1969, p. 55.

"Weavings of Sheila Hicks." American Fabrics, Summer 1961, p. 52.

Webb, Aileen O. "American Craftsmen's Council/1964: The International Era." Craft Horizons, May-June 1964, p. 9.

Webb, Aileen O., and Campbell, David. "The American Craftmen's Council: A Look at the Future." Craft Horizons, March-April 1956, pp. 12-13.

Wedewer, Rolf. "Environments and Rooms." Translated by Michael Werner. Art and Artists, July 1970, pp. 16-19.

Welliver, Neil. "A Conversation with Anni Albers." Craft Horizons, July-August 1965, pp. 17-21, 40-45.

Welsh, Robert. "Abstraction and the Bauhaus." Artforum 8, pt. 2 (March 1970): 46-51.

Werther, Betty. "Radical Rugs from Rabat." Design, no. 270 (June 1971), pp. 48-53.

_____. "Sheila Hicks at Rabat." Craft Horizons, June 1971, pp. 30-33.

West, Virginia. "Danish Expression in Textiles." Craft Horizons, December 1975, pp. 24-27, 65.

_____. "The Tapestry Biennial at Lausanne." Craft Horizons, October 1975, pp. 16-19.

Wick, Susan. "Fifth International Tapestry Exhibition." Handweaver and Craftsman, Fall 1971, pp. 16, 28-29.

"Woven Forms at the Museum of Contemporary Crafts." Handweaver and Craftsman, Spring 1963, p. 23.

"Woven Forms by Sheila Hicks, a Knoll Extra." Interiors, June 1963, p. 14.

Wroblewska, Danuta. "Magdalena Abakanowicz: She Confronts the Viewer with Textile as Object and Environment." Craft Horizons, October 1970, pp. 18-23.

Znamierowski, Nell. "Ancient Peruvian Textiles at the Museum of Primitive Art, New York." Craft Horizons, November-December 1965, p. 38.

_____. "Contemporary Polish Tapestries, Cepelia Gallery, New York." Craft Horizons, November-December 1968, pp. 46-47.

_____. "Dorothy Liebes." Craft Horizons, August 1970, pp. 34-41, 68-69.

_____. "Olga de Amaral." Craft Horizons, May-June 1967, pp. 28-31, 71.

Theses:

Bushell, Sylvia. "Fiber Sculpture." M. A. thesis, California State University, 1973.

Clausen, Muriel Kipps. "Woven Textiles as an Architectural Element in Contemporary Interiors." M. A. thesis, University of California at Berkeley, 1962.

Cook, Myung Sook Kim. "Textile Sculpture." M. F. A. thesis, University of Oregon, 1968.

DeLong, Susan Morrison. "Ancient Peruvian Motifs Applied to Contemporary Textiles." M. S. thesis, University of Tennessee, 1973.

Ferguson, Mary Goeller. "Woven Environmental Structures: Historical Background...Personal Interpretation." M. S. thesis, University of Tennessee, 1972.

Ganley, Mary E. "Weaving as a Fine Art Form." M. F. A. thesis, Ohio University, 1967.

Johnson, Lyndon Keith. "A Designer-Craftman's Approach to Fiber Sculpture." M. A. thesis, San Jose State University, 1968.

Stryker, Pat L. "Weaving as an Art Form." M. F. A. thesis, Cranbrook Academy of Art, 1961.

Taylor, Susan Aaron. "Fiber as Environment." M. F. A. thesis, Cranbrook Academy of Art, 1973.

ILLUSTRATIONS

Figure 1. Lenore Tawney. Bound Man, 1956.

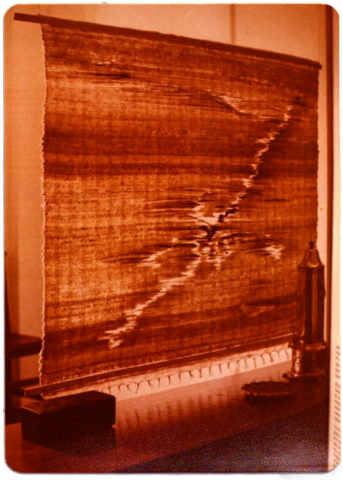

Figure 2. Lenore Tawney. Thaw, 1958.

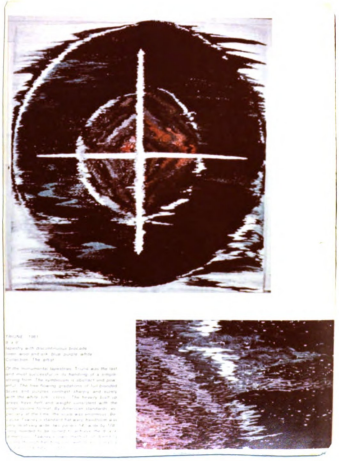

Figure 3. Lenore Tawney. Triune, 1961.

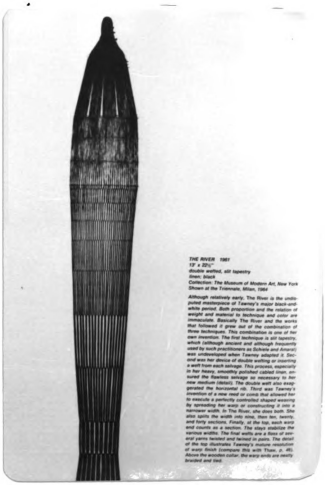

Figure 4. Lenore Tawney. The River, 1961.

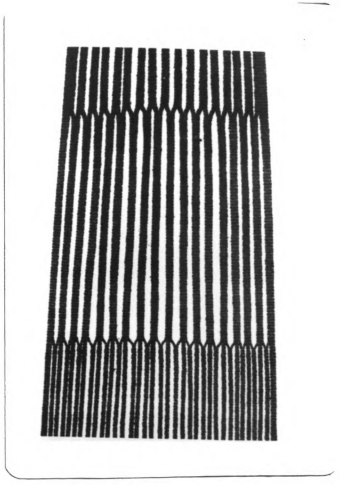

Figure 5. Lenore Tawney. The River (detail), 1961.

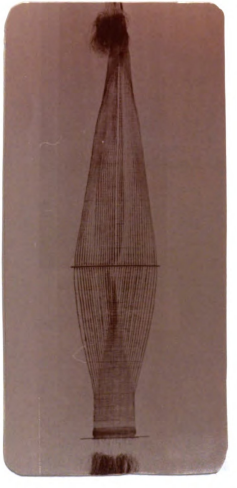

Figure 6. Lenore Tawney. The Egyptian, 1964.

Figure 7. Lenore Tawney. The Egyptian (detail), 1964.

Figure 8. Lenore Tawney. Shield III, 1967.

Figure 9. Sheila Hicks in Mexico in 1960 working on the backstrap loom.

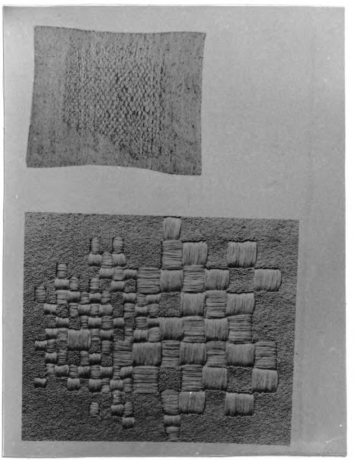

Figure 10. Top: Sheila Hicks. White Letter, 1962. Bottom: Sheila Hicks, Wall (detail), 1967.

Figure 11. Sheila Hicks. Medieval Cloak, 1965.

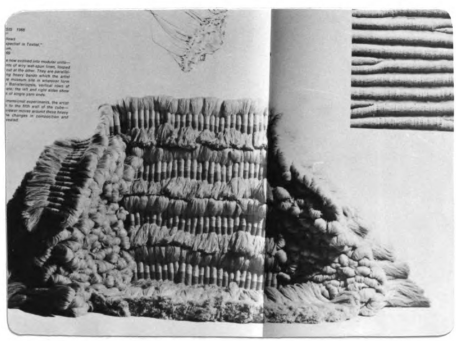

Figure 12. Sheila Hicks. Banisteriopsis, 1968.

Figure 13. Sheila Hicks. The Principal Wife (detail), 1969.

Figure 14. Sheila Hicks. Wall, 1970.

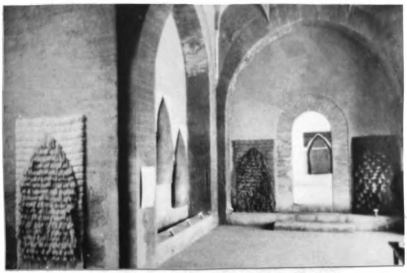

Figure 15. Sheila Hicks. View of prayer rugs at the Galerie Bab Rouah Show, Rabat, Morocco, 1971.

Figure 16. Sheila Hicks. Mhamid, 1970.

Figure 17. Sheila Hicks. L'Épouse préferée occupe ses nuits, 1972.

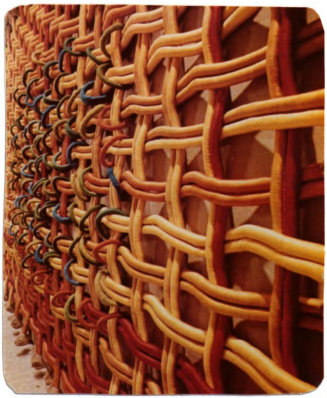

Figure 18. Sheila Hicks. La Mémoire, 1972.

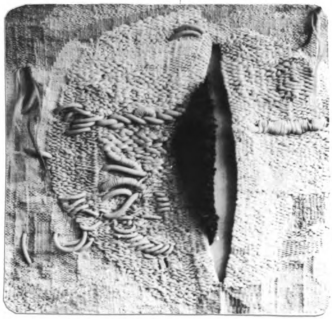

Figure 19. Magdalena Abakanowicz. Blanche, 1965.

Figure 20. Magdalena Abakanowicz. Abakan 27, 1967.

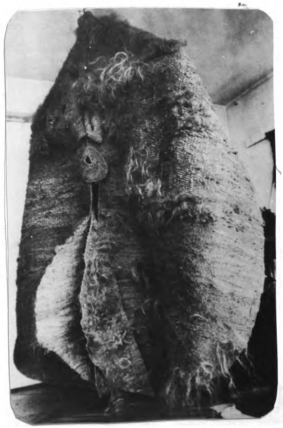

Figure 21. Magdalena Abakanowicz. Abakan Jaune, 1967-68.

Figure 22. Magdalena Abakanowicz. Abakan Rouge, 1969.

Figure 23. Magdalena Abakanowicz. Exhibition on the Leba Dunes in Poland, 1969.

Figure 24. Magdalena Abakanowicz. Situation 1 (detail), 1970.

Figure 25. Magdalena Abakanowicz. Situation 2 (detail), 1970.

Figure 26. Magdalena Abakanowicz. Situation 2 (detail: Construction with Rope), 1970.

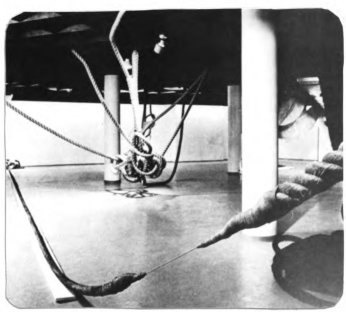

Figure 27. Magdalena Abakanowicz. Situation 3 (detail), 1970.

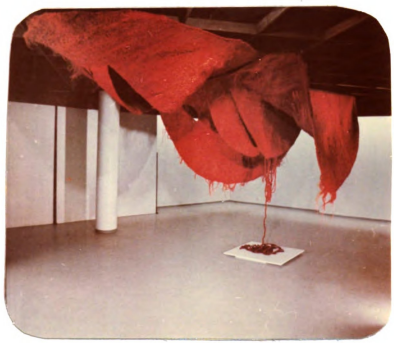

Figure 28. Magdalena Abakanowicz. Situation 4 (detail: Abakan Rouge II), 1970.

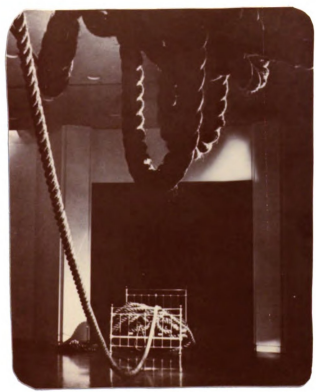

Figure 29. Magdalena Abakanowicz. Installation at Pasadena Art Museum (detail), California, 1971.

Figure 30. Magdalena Abakanowicz. Environmental Wall, 1970-71.

Figure 31. Magdalena Abakanowicz. Alterations, 1974-1975.