Fabric and paper: Expressive potentials in fiber

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FABRIC AND PAPER: EXPRESSIVE POTENTIALS IN FIBER

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I would like to give special thanks to my parents for their constant support and infectious curiosity about the world around them.
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INTRODUCTION

In evaluating a direction for my thesis, certain elements were important to consider. These were my own personal belief systems, the desire to have a strong physical connection to the work, and a need to work with materials that would enhance the latter concerns.

Personal beliefs and symbolic imagery were the catalyst for my thesis work. From the outset, I recognized a need to work with ideas that were central to how I view the world and existence within it. A combination of varied religious thought, indigenous respect for the environment, ancient cultural belief systems, and symbolic representation of these systems were the central focus for my imagery. A fascination with other culture's traditional lifestyles and spiritual beliefs centering around respectful existence on earth helped me realize that I would need to have a strong physical connection to my thesis work.

To cultivate a physical relationship with my work was not difficult, but such a relationship needed to be a meaningful one. This meant that I did not want to be the dominating force in the outcome of each piece, I wanted each piece to help guide me physically and
spiritually towards its own conclusion. As Vance Studley wrote in The Art and Craft of Handmade Paper, "The artist must be capable of detecting the spirit of [the medium] to create a new experience from it. The artist should make paper while maintaining a dialogue with it. Rapport with [the materials] with the act of forming them, will bring to [the medium] a harmony and texture that is unobtainable in machine made [fiber]." By choosing and respecting the specific mediums involved in the thesis work I hoped to develop such an understanding. With these aspirations in mind, the choice of utilizing fabric and handmade paper was a natural one.

Both fabric and paper are part of organic processes. They were and are created for various purposes and are eventually subject to decay. Because of the importance of cyclical processes in my work, both mediums were ideal. As materials, I felt that they would work well together and would stimulate me to explore all of the possibilities of their individual identities. To complement the artistic exploration of each medium, I researched historical information that was relevant to my concerns within the thesis; the ancient and spiritual development of both fabric and paper.
PART I
HISTORY
Being familiar with fabric processes such as silkscreen, batik, woodblock printing, and hand painting offered a good basis from which to begin work. Each of these fabric printing processes are traditionally related to certain cultures and it was a matter of researching these cultures through books, exhibitions, and personal contacts to develop a cadre of information useful in my work.

Initially I researched South Asian Indian textile history as I had spent time in India and had learned traditional woodblock printing there. Knowing that textiles has a strong history in that country, I set out to find its origin. This search eventually led me to discover ancient textile uses in Indonesia, China, Peru, Africa, and among nomadic peoples across the world. Beginning with information on practical uses of fabric, I eventually focused my research on religious uses and belief systems surrounding this medium. The information gathered strengthened my conviction about the directions I wished to go in, and gave my work a connection to people and belief systems once prominent in this world.
Because of the finite physical nature of textiles, the earliest records of textiles often are suggestions found in writings such as the Vedas in India, or in carvings like those of ancient Babylonia and Egypt. There are some textiles that have survived. The now famous burial cloths from Guitarnero and Callejon de Huaylas, Peru date from approximately 8500 B.C. These fabrics allude to being spun rather than completely woven fibers and suggest a spiritual significance attached to their existence.²

On the other side of the globe, spinning implements, sewing needles, and madder dyed cotton fragments were found in an Indus Valley civilization at Mohenjodaro dating from approximately 1750 B.C. Excavation there yielded evidence of utilitarian purposes for textiles such as for clothing and shelter. In what was ancient Egypt, thousands of examples of early textiles have been found in burial grounds since the 4 century A.D.

As ancient civilizations began to develop and nomadic people created settled self sufficient communities, uses for textiles expanded. In early Islamic cultures Bedouin textiles were considered
subsistent in that they were practical and aided in every day existence. For settled communities textiles could take on more artistic and social purposes; distinguishing between classes of people and providing income in connection to trade routes. China saw the development of an exclusive silk export market and in India woven and printed cottons became a trademark. Medieval France created large tapestries for utilitarian purposes which later became its artistic hallmark. In Persia, carpets and coverings were developed into elaborately designed and executed artworks. For many of these civilizations, thousands of people became involved in the production and sale of textiles.

Practical uses for textiles throughout history often can be self evident. One need only glance around today to see that textiles are used for clothing, shelter, and income as they were many years ago. For my purposes, the interest was in exploring beyond the practical to the more intangible uses. My thesis work included using textile mediums as communicators of ideas; thus I looked towards ancient civilizations that did the same.

"Textiles, almost all of which are made by women, play a
critical role in maintaining harmony and balance between spirits and humanity. They are not capriciously patterned or merely decorative...in their inspiration, realization, and use they are inseparably bound to deeper religious convictions."³ Although in many cultures both men and women shared in the production of textiles, the connection to" religious convictions" quoted above is one which crosses any gender boundary and is found in cultures from Peru to India, Africa to North America. The abundance of these religious convictions in ancient cultures fascinated me and ultimately led to the adaptation of the idea of textile surfaces that communicated ideas.

"In sub-Saharan Africa fabric served many purposes one of which was to help transport the deceased into the spirit world".⁴ In many countries (India, Baluchistan, and Arabian emerits) prayer rugs woven with spiritual "guidance" were utilized by all classes of people. In Peru, dolls and fetishes made from cloth were provided for the deceased as protection. Indigenous peoples of the Americas followed specific guidelines in weaving their rugs, respecting beliefs about human fallibility in comparison to the spirit world.
Individual examples of belief systems regarding textiles are fascinating. Often these examples include the use of symbols to illuminate ideas. In an ancient Egyptian burial field at Achmin, a child's tunic of white linen was found. The Goddess Isis was worshiped as the inventor of linen in Egypt, thus white linen was considered a high form of divine light and purity.\(^5\) In traditional Hebraic law and literature, linen was the symbol of Cain and wool symbolized Abel. The mixture of the two was forbidden and was considered bad luck.\(^6\)

In my research, various types of belief systems such as these became important and encouraged me to develop my own systems of symbolic representation. Ultimately I was challenged to understand my own beliefs in conjunction with the creation of both fabric and paper. By researching the history of fabric I was better able to imbue my pieces with a feeling of spirit not too different from the spirit ancient cultures integrated into their work.
"Long before man made his first rough attempts at plaiting, weaving, and spinning he had discovered how to use animal hides and skins, to interlace hemp, manilla, creeper and other vegetable fibres and to pulp bark in water to form bark or tapa cloth." The process of creating tapa cloth, an indigenous art form in the Polynesian islands, is closely allied with papermaking. This relationship between cloth and paper intrigued me and led to my research into the history of papermaking. As with fabric, I set out to discover the roots of papermaking, eventually focusing upon aspects of paper that would enhance the thesis experience.

As mentioned above, early man used hides and skins among other elements, as cloth. The same materials were used for early civilizations concerns about recording events when paper had not yet been discovered. At first pictographs were documented on bone, hides, leaves, stone, wood, and skin. Chinese oracle bones of the 16 century B.C. contained inquiries posed to the Gods or Divine beings. In ancient India, writing was scratched into leaves and filled with ink to create letter forms. Egypt in the 3-5 centuries B.C. developed the ancestor of
paper-papyrus leaves layered perpendicular with water.\textsuperscript{8}

Books constructed of wood were used before the time of Homer in the 9 century B.C. but it wasn't until 105 B.C. that the direct descendant of paper as we know it was invented in China. Ts'ai Lun, a Chinese court official, changed history by macerating vegetable fiber and forming onto flat, porous molds to create a thin, felted material. This discovery revolutionized the possibility of communication and documentation. As Vance Studley wrote, "The invention of paper made the book possible. It was the surface on which people were to create their images of religious beliefs in which the artist was so instrumental."\textsuperscript{9}

With the invention of the papermaking process came a diversity of experimentation and trade between countries particularly in the Far East. China guarded the secret of how to make paper until 600 A.D. when it reached Korea then Japan. From there, knowledge spread in the 12 century A.D. to Spain, Europe, and in 1690 to the United States.\textsuperscript{10}

Many materials could be used for papermaking, thus different climates yielded a variety of results in experimentation. There was
also variety in the uses of paper. As Studley noted, the book was a major result of the invention of paper, but paper was also used as a communication device without using the written word. It was this form of communication that I saw as a link to my modern day papermaking for thesis work.

Since China held the secret to papermaking from early on, it was the first to develop many purposes for the use of paper. In A.D. 221-420 during the Wei and Chin dynasties, paper was used as a substitute for expensive coins in ancestor worship. Because coins frequently were stolen from tombs, paper was cut into coin shapes, blessed, and then placed in the tombs. Being less materialistically precious but still spiritually valuable, these paper coins were able to perform their duty as communicator to the ancestors and Gods without being stolen.

"Spirit money", as it came to be called, became widely used in many rites. Woodblocked paper with religious messages was burned at many ancient Chinese funerals transporting the bearers prayers for the deceased to the Heavens. Even today, paper "effigies" of material goods
are burned at funerals so that the spirit of the deceased will have an abundance of those goods represented by the paper pieces.\textsuperscript{11}

"The fibrous substance called paper is regarded in a vastly different light in the Orient from what it is in the Occident, for in the Far East it has a spiritual significance that overshadows its practical uses, while in the Western world the purposes for which paper is intended are purely practical and utilitarian...it is essential to realize the respect and reverence that this substance commands in the Celestial Empire..."\textsuperscript{12} This quote best explains my interest in studying the development of papermaking in the Orient with regards to my work. In probing the history of the desire for and invention of paper, I found links to the spirit of my thesis. To connect these discoveries with my present papermaking was the challenge.

In both papermaking and fabric printing I was able to research historical information that not only enhanced the direction of my thesis, but also linked these two mediums to each other. The next step was to use this information to develop processes and techniques that would enable me to successfully execute the thesis work while
respecting the origins of each medium.
PART II

PROCESSES AND TECHNIQUES
CHAPTER III
Processes and Techniques used in Thesis

In keeping with the whole concept of the thesis, I realized that previous exploration and experimentation in both mediums was going to affect the way I approached my pieces. Having completed an inquiry into the history of each medium, I paused to reflect on my experiences with both fiber and paper. After recognizing how experiences had shaped my view of these mediums I was able to work on new techniques and develop design ideas. Synthesizing these designs with my thesis theme resulted in the thesis pieces described in the last chapter.

The evolution of this thesis was a progressive one. I came to graduate school with knowledge of fiber processes as applied to commercial fabric design; woodblock printing, silkscreening, and handpainting. Fabric was viewed as an expressive element only in the sense that the process of creating fabric involved experimentation and intuition about color, design, and composition. The final product of these processes always resulted in a sellable object for utilitarian purposes. I knew when I arrived at school that the thesis work wanted to be more than this.

The purpose of initial experimentation with fabric design and
printing was to become familiar with the range of dyes, fabrics, and techniques available. Among the dyes experimented with were Cushing, french, Benzyl, and Procion dye. Natural dyes were not considered for use in the thesis due to their potentially limited color range, labor intensity, and availability. Pigments were used only occasionally as they tend to sit on top of the surface of the fabric and thus can affect its appearance. For my needs, integration of color with fibers was important to give the impression that the fabric was not forceably manipulated.

Experimentation with dyes was a crucial part of the thesis. Once familiar with application of various dyes to different fabrics, the decision had to be made as to which dyes would best suit the purposes of the thesis work.

Dye technology has developed to the point where many dyes have specific uses. French dyes work on silk, Benzyl dyes give vibrant color to wool, and Procion fiber reactive dyes are used on silk, cotton, and rayon. All purpose dyes like Cushing and Rit can be used for many fabrics, but do not have the color intensity of fabric specific dyes.
Since I was working primarily in earth tones, a combination of dyes were utilized. In general, a background color was obtained by using a dyebath of Cushing or by hand painting with Procions. The difference between the two is that Cushing produced uniform color, whereas hand painting with procions could produce mottled color and value changes. Stock solutions of the Procions were kept to provide consistency in the color palette.

After establishing a background color, liquid Procions were silkscreened, blockprinted, or handpainted onto the fabric (see page 44). These Procions were of deeper value than the stock solutions and were made according to need. An alginate mixture was used to thicken the dye for printing and a chemical water solution was used for handpainting. Initial experimentation with Procions was done the summer before starting the thesis. At that time the application of the dye was done mainly on rayon. Troubleshooting was needed mainly in the areas of dye value, intensity, and viscosity.

Resists such as gutta serti, bees wax, and tying techniques were occasionally used in the dyeing process. These resists enabled
achievement of visual textures as well as spontaneous design decisions. In some cases, figures were drawn onto fabric with resist, dyed, and then cut out for application onto the shields. Experimentation in the use of resists continued as needed in the thesis process. The appeal of resists was that they were an early form of dyeing technique in many cultures thus linking my physical work with the thesis concept.

Fabrics experimented with ranged from various cottons, silks, and wools to rayon, synthetic, and nylon. Generally work was done on cottons as a variety of textures could be obtained and the dye range stayed fairly consistent. For the intent of the thesis, I was looking for fabrics that had texture and surfaces that would provide an organic feeling. Synthetics did not appeal for this reason, and only occasionally did a raw silk noil or felted wool seem appropriate. Incorporation of these fabrics were judged on an individual basis respecting the needs of each piece.

Manipulation of fabric was an important freedom that I wanted in my thesis work. For the fabric to have drape, sturdiness, and flexibility was necessary. For various reasons within these categories,
rayon, plongi silk, and silk noil were not considered for the thesis work.

The most surprising discovery in the choice of fabrics was terri cloth. A spontaneous decision to paint on terri led to its incorporation as a major element in a few pieces. Although design detail does not show up well on terri cloth, the terris surface texture picked up dye and created very interesting gestural marks. Often these marks suggested hide or skin-like qualities which enhanced some shield identities and made for visual interest. The dyeing and printing process was very similar to plain cotton fabric with minor changes in the viscosity of the Procion dye. Occasionally, pigments were utilized to create a layered affect on the terris surface.

Investigation into fabric processes paralleled experimentation with pulps, dyes, and paper making processes. It was exciting to discover the relationship between these two mediums and to work with their individual personalities. With paper, I felt a new world had been opened up within the context of fiber art.

Experimentation with paper blossomed during a course at
Penland School in North Carolina. It was there that I conducted pre-thesis inquiries as to the nature of paper and whether it would apply to the thesis concept. Initial experimentation dealt with the paper fibers themselves.

My familiarity with paper fibers was limited to cotton and abaca linters before Penland. At Penland, softwood and hardwood linters were investigated as well as raw plant fibers like Japanese kozo, wild iris, and yucca plants. In working with several different fibers a better understanding of the science of papermaking was developed.

Briefly, there are five different categories of cellulose containing fibers for papermaking-bast, grass, seed, wood, and leaf. Each of these categories include plants which have various length fibers; the longest fibers yield strong, interwoven fibered paper, and the shortest yield softer, weaker structured paper. The process of making paper can alter these fiber lengths depending upon the beating technique used.

Plant fibers need to be cooked and separated to prepare pulp.
Fibers derived directly from plants will be cooked in a caustic solution until impurities are cooked out and the fiber structure softened. When linters are utilized, they have already undergone the above process and have been bleached. Linters need only be pulled apart and submerged in water.

The next step is to ready the fibers for the actual paper making process by separating the fibers with a beating motion. Traditional papermakers in China and Japan hand beat the plant fibers on a wooden board with a small wooden hand mallet. In approximately 1710 the Hollander beater was invented\(^\text{13}\), providing a mechanical means to beat and separate fibers and to increase production. Today, people can use either method or simply use a kitchen blender to beat the wet fibers. In any case, each process yields different results and should be researched before applying them to specific fibers. This is due to the fact that the final paper structure is directly connected to the beating process.

After beating the fiber, the submerged substance now called pulp can be stored or utilized immediately. Storage is usually in a cool
environment with some moisture present in the pulp. Stored pulp will stay fresh according to environment, treatment, and fiber type. I usually stored pulped cotton, abaca, hard and softwoods in a refrigerator for up to four weeks with no problem. Pulped straw, iris, and kozo became rotten a bit earlier so I prepared them as needed. If the pulp had been treated with a sizing agent called Hercon 40 (to prevent moisture absorption in the paper), I generally used the pulp within two weeks as it seemed not to last as well.

Experimentation was done with the papermaking process as well as with pulps. Two types of sheet making processes were learned both with the mold and deckel which form the sheet of paper. The first is a technique whereby the mold and deckel are dipped into a stirred pulp bath and lifted to drain and form the paper. The second is a pouring method that lays pulp into a submerged mold and deckel which gets lifted from the water to drain. For my purposes and the facilities available, I used the latter process more regularly. The newly formed paper gets layed or "couched" onto a surface; I used felt cloth. A slow drying method is recommended as the paper fibers will dry evenly and
the paper will not buckle (see pages 45-7).

There are many variations on this basic papermaking format that were tried regarding the thesis. The pulping process stayed constant, but the forming of the pulp into paper varied greatly. At Penland, pulps were colored with all purpose fabric dyes and separated to form palettes of color. These were then used like paint-squeezed with droppers onto formed sheets of paper or layered together to make whole sheets of varied colors.

The dyes I used in papermaking were predominantly vat dyes. The newly beaten pulp was submerged in a hot dye bath and left until cool. This allowed the fibers to absorb the maximum amount of dye possible. These colored pulps were then used like a paint palette or stored for future use. Value changes could be obtained by mixing bleached pulp with colored pulp. For pulps derived from natural sources as the straw was, bleaching was the predominant means of changing color.

Coloring techniques opened up many possibilities for surface design and made me realize that the papermaking process was
intrinsically spontaneous and flexible. Other techniques used were forming odd shaped papers by building unique molds, trapping elements between two layers of paper to create textures, and "sculpting" with the wet pulp to make forms.

As experimentation continued, papermaking became more fascinating. Limitless possibilities had been discovered in approaching pulps and paper formation. Three dimensional pieces in paper became of central interest. I became involved in vessel making where surfaces were built up to create forms. Casting with paper was also tried, but the building technique was more stimulating because of the freedom it gave to make unique shapes instead of mimicking existing ones.

As written in my thesis journal, "I am creating forms that speak of spontaneous energy and movement. I want these pieces to be well planned but not look it. I want the process to be part of the joy of each piece." In creating forms, the process was crucial as it effected the structure of each piece. Light, texture, and mood all varied in these pieces and surface design was just one element of the whole.

Knowledge of various papermaking processes such as the above
grew with constant experimentation. Reading books, speaking with paper artists, and attending workshops increased my basic knowledge of this art form. As with fabric, the process of working with the medium was of utmost importance. That the thesis was a journey in itself meant that the mediums used in it needed to be open to new avenues of discovery.

With both fabric and paper there was connection to natural elements, ancient roots, and new approaches. Although both have different characteristics they complemented each other's individuality well. The ultimate challenge was to apply growing knowledge of both mediums to the thesis concept and to develop techniques and designs that supported this concept.
Designing for fabric and paper surfaces generally focused on elements evident in nature because of their connection with aspects of the thesis theme—physical existence on earth and its relationship to ancient civilizations and belief systems. In designing for the thesis, I was not interested in copying designs found in nature, but I wished to emulate the impressions they create. This was done by experimenting with designs for fabric and controlling color and texture in paper. The results of these experiments were eventually united with dimensional structures to form the basis of each thesis piece.

Designs for fabric came from many sources. Some designs were directly xeroxed from textured objects such as burlap, torn fabric, pine needles, and sand. Others were created on acetate using latex based ink with brushes, erasers, rubber cement, xacto knives, and sponges. The photosilkscreen process was mostly used in these cases as direct transfer of textured images could occur.

Many discoveries were made in the designing process. Initially I gathered natural objects such as reeds, feathers, gravel, birds nests, and leaves to have examples of the natural and rough hewn appearances
sought after. The challenge was to capture the energy I felt in each object without depicting it literally or destroying this energy when translating it into a design. I discovered that developing several designs at the same time would keep each one fresh and provide for unexpected results. It was also important that design techniques were chosen on an individual basis according to the feeling desired in each thesis work.

Another discovery was the technique of painting on objects such as folded fabric and placing them onto rough surfaces that were later xeroxed onto acetates for silkscreening. The rough surface in combination with the objects "ghost image" provided interesting juxtapositions of recognizable and nonrecognizable imagery.

Layering many different designs on the same fabric was a crucial discovery. Initially a few simple designs were printed one on top of another for visual interest. This idea expanded to include handpainted imagery, blockprints, and silkscreened patterns. The combination of these various elements caused active and seemingly random imagery to appear which related well to the thesis idea.
In ways, the design process on fabric went from analytical to experiential. Some designs such as figures inspired by ancient cave paintings stayed recognizable, but most evolved into spontaneous, textured, earthy patterns. In papermaking, these appearances were suggested by variations of color within individual sheets and by added textures such as coffee grounds, sand, and cut yarn.

Other papermaking techniques included brushing newly formed paper with wire or scrub brushes for texture, coating paper with acrylic polymer medium, and developing papers that had varied densities. Hand beaten straw paper was discovered to be very attractive for the thesis because of the split edges and energetic appearance of the fibers.

Eventually, both fabric and paper would be cut, folded, stitched, and torn into small elements for incorporation into the thesis pieces. At this stage the designs would not be recognizable but the knowledge that both mediums had been carefully developed and designed established a link between the mediums and the structures they were finally joined with. The original purpose of developing fabric
and paper techniques was to establish a series of unusual surfaces that could be united with dimensional forms.

The idea of creating dimensional structures was based on the thesis concept and a desire to create visual stimulation in the work. Construction of these forms was completed with cut foam core, sewing, glueing, and mounting. Foam core was chosen because of its light weight, durability, and ease in manipulation.

For each thesis work, layers of foam core were cut out and established. These layers were worked on individually regarding their surface content and relationship to the piece as a whole. As the layers were built upon they were constantly placed with one another to sense the complete environment of the work. In some pieces there was alot of structural depth, in others treatment of the surfaces was the primary focus. When the layers were eventually stitched and glued together, work began to establish the piece as a unit of communication within the thesis concept.
"I want these thesis projects to invoke a spirit of reverence for the power, beauty, mystery, and lessons given within universal existence as evidenced by our presence on earth. I want to give thanks and invoke curiosity about beauty and secrets within our existence here. I really want to have these pieces be almost ritualistic; that they thank for what has been given and secure the future of these gifts. Also that they are shrine-like and natural and because of the combination of fabric and paper in circular forms, that they ultimately symbolize cycles of birth/death/rebirth."

"I feel that the circle and its relation to cycles, women, the moon, and life processes is essential to my beliefs which I want to incorporate into my artwork. The symbol of the circle is beautiful to me."

Humankind’s interest in religious thought has always fascinated me. Throughout time the need to create order and belief systems in the face of life’s mysteries has resulted in many different approaches to the idea of Gods, rituals, and correct living patterns. Having studied religions such as Taoism, Buddhism, Islam, Catholicism,
Judaism, Hinduism, and Native American beliefs, I see a connection between all of these in their purest form. This connection involves cycles of creation and destruction, life and death, and harmony and disunity.

Cycles have been represented in many cultures by symbols such as the mandala, sun symbols, wheels, and shield forms. Among ancient peoples in India, Egypt, Africa, and South America reverence for cyclical processes was incorporated into statuary, pictographs, divination boards, and orientation of sacred structures.

Some ancient cultural beliefs systems include circular forms representing cycles in their artwork and everyday utensils. In Egypt, the god Ra pictured on jewelry held in its talons the circular sign for infinity. In Africa, eternity was symbolized by a snake swallowing its tail. This symbol was painted on walls, woven into cloth, and worked in metal and wood. In India, the God representing cycles of creation and destruction dances inside a circular form representing the cosmos. To the ancient Hopi people the circular underground kiva represented humanity's continuous journeys through many worlds.
In North America "the Plains people considered the circle an ideal form. Having neither beginning nor end, it reflected the eternal continuity of life. Further, like the reassuring bonds of family or tribal affiliation, the circle was all-encompassing. The Plains people drew upon the circle form in many ways. They lived in conical homes with circular bases which they arranged into camps in a ring formation. Circles also appear in the design of ritual properties like the magic hoops..."17

This connection of circles to magic or sacredness is a major part in why I chose circular shield forms for my thesis work. I call them shields out of respect for Native American religious thought regarding their shields. Contrary to popular belief, shields in this culture were not for physical protection as such, but were imbued with sacred power and spiritual energy that were thought to help repel danger and encourage relationship to the spirits when properly initiated and respected. For me, shields represented belief in such powers as well as respect for the cyclical nature of existence.

Symbolic representation of religious thought and concerns
about cycles in ancient cultures helped me to form my own "language" in approaching the thesis work. Because I was interested in religious thought, symbolism, and ancient cultural beliefs, I researched a variety of cultures and their relationship to their existence on earth.

For people such as the Native Americans, spiritual and physical existence were in close relationship to one another. For my thesis work I saw this relationship and their respect for the environment as part of the whole concept of cycles and sacred symbols. I felt that my pieces needed to reflect an earth-like quality to embrace environmental imagery and beliefs in connections between earth and the spirit world. I attempted to project this presence by using materials such as fabric and paper in a unique way. In combination with dimensional shield forms, I hoped to create my own environment containing personal thoughts, beliefs, and experiences.
PART III

THESIS WORK
CHAPTER VI
Description of Pieces

The first piece to break into dimensional format using the shield forms is pictured in figure 1. This was a three layered form combining cotton paper, straw, and dyed rayon. Cave like-drawings and various surfaces were experimented with. It was from this piece that I recognized that I wanted to do a series of these shield forms; I wanted them to have dimension, and needed to concentrate on the integration of various elements.

The second piece (figure II) later evolved into a more complex image but it is important at this stage because it was the first to really challenge space. It was the first time that I used acrylic polymer medium on paper to create a shiny stone-like appearance. The 4 inch depth of this shield, the treatment of edges, and the use of aluminum leaf in the arch form provided important lessons. For me this piece contained meaning in its atmosphere of reverence and its antiquitous "cave wall" impression. Inspiration came from looking at cave paintings from Altamira and Lascaux and pottery of the Mimbres civilization.

The first attempt at apparent multi layered structure is seen in figure III. Four layers of core were covered with fabric, paper,
acrylic polymer, pine needles, stitching, and straw paper. Again, I used aluminum leaf in the small doorway shape, but this time it was more successful than in figure II because of the small amount used.

The theme for the shield in figure III was Anasazi ruins in the Southwestern United States. These ancient people were cave dwellers and I was fascinated with the dry, rocky terrain they inhabited and the vision of their doorways perched high up on the cliffs. I felt that this shield was the first one to connect my work with its inspiration. I enjoyed the visual simplicity of this image but desired to embellish surfaces more and create deeper interest in them in future pieces.
Prasad (figure IV) was an adventure back into an earlier piece. Recognizing that the first attempt seemed too straightforward, I focused on my concept and developed the shield into a highly dimensional and movement oriented image. Changes included drawing on the outer paper surfaces, increasing dimension, and adding paper bits to the outside edges. The creation of deeper interest in the whole shield after revision appealed to me. The use of burlap and recession of space within the arch had the connection with concept that I was looking for.

In India the word "prasad" describes an offering usually made to spiritual beings or God. This shield is in memory of an Indian friend who died last summer with whom I visited temples and shrines when in India. I wanted to create a feeling of sacredness, quiet, and mystery in this piece relating to my feelings when visiting these places with him. I also wished to create a space that was private and hidden as seen under the archway. I hoped that the embodiment of this spirit in a shield would reflect the existence of memories of him within me.
The Wheel (figure V) was the first overall success in this series. It contained four layers of alternating paper and fabric surfaces and utilized terri cloth for the first time. It also broke out of a symmetrical format via the use of two planes which jutted out from the form. Drawing with oil pastels and pencils on polymered paper surfaces created exciting sandy and charred textures. I incorporated painted grape vines and pine needles to complete spacial inquiries on the shield surfaces (see page 48).

The idea for this shield was derived from South Asian cosmological symbols where the universe is depicted as a wheel. The charred, earthen surfaces of this piece reflect the earths ability to renew itself. Visions of new trees growing out from burned forests inspired the central imagery. The bowl form represents ancient offerings and superstitions about occurences such as fire. The overall design was in keeping with traditional Native American shield designs.
FIGURE V
THE WHEEL
Two versions of **Hunting Ground** (figures VI and VII) are included here to show the transitions made in this piece. The focus of this shield was the embellishment of surface areas and predominant use of terri cloth. The upper left hand corner has a depth of 3 inches which was filled with fabric covered foam core, yucca stems, and paper pieces. Stitching of gold thread occurred in this space as well.

Initially I found the simplified terri surface very interesting but the more that I stitched, painted, and folded the surface the more it became "alive" (see page 48). The final result was a lively, moving surface filled with pottery shards, stones, wound hair, and raffia.

The concept for **Hunting Ground** came from the earth around my house in Scottsville which used to be Iroquois land over a century ago. I wanted to depict the sensation of finding arrowheads and hidden treasures in the soil by our creek. I also wanted to create symbols of the creek which "flows" from the top left to bottom right of this piece. A deer leaping from the hunt is depicted by the brown fabric figure with it's head in the top center and body extended on the shield. I enjoyed creating these symbols then tucking them under fresh layers of
fabric, thread, and paint only to resurface again.
FIGURE VI
EARLY VERSION OF HUNTING GROUND

FIGURE VII
HUNTING GROUND
**Sabermati Sighing** (figure VIII and page 49) broke into space and challenged surface texture through the use of handmade paper, pine needles, ceramics, painting, and stitching. This was an important piece because it created a lot of depth and movement, and challenged me to explore layering and edges more. Edges became more interesting when charged with elements like the yucca stems. Surface textures in paper and value changes within the layers where complemented by shiny lumiere paints and cut out figures.

In this piece lighting plays a crucial role as the deepest areas of the shield seem to recede in their own shadows. Created with lighting in mind, the small doorway painted in lumiere inks becomes a reflective element in a dark hollow.

The Sabermati river flows in Northern India and often sees drought. In dry periods animal skeletons, empty water vessels, and arid brown earth line the riverbed. My idea for this shield was to depict this dryness and create a sense of frozen time. The use of torn straw paper and layering in this piece spoke to me of drought and the sensation of absence. Shiny gold elements on the highest surface suggested hope.
FIGURE VIII
SABERMA TI SIGHING
Naga_Agni (figure IX and page 48) presented new ideas about space. Two sunken ladders and a vertical jutting piece challenged the horizontal layering previously used. By confining dramatic spatial changes to one area of the shields, balance and rhythm were altered. Embellishment of the terrri surface and manipulation of straw pieces kept this rhythm in check.

Values changed dramatically in this piece as well. Light straw was juxtaposed against dark terrri cloth on a flat area and a light area filled with paper, straw, and fabric burst through the upper quarter of this shield. Painting around the piece (inspired by works of Anselm Kiefer) was a new way of working edges and creating movement. The rawness of the paint and value changes spoke of the concept behind this shield.

"A piece that I would like to work on is one about Hopi kiva beliefs. The idea is that in the last stages of every world when humankind has reached its peak, during or before the destruction of that world, select humans climb trees or ladders through the sky to the next world. So, like the kiva with its ladder out of the enclosed ground
shelter, humans reach another world."18
FIGURE IX
NAGA/AGNI
The development of Anasazi Doorways included expanded elements from many of the other shields (see figure X and pages 50-1). For the first time in this series the circular form was radically broken, layers seemed to fall out from one another, and basketry techniques were introduced. Extension of elements in lower areas created a sense of growing outward. Most fabric and paper techniques mentioned were utilized with the addition of surface mohair and raised areas. In all, this piece became a spontaneous, movement oriented, textured piece which was a natural extension of the shields that had gone before it.

The concept of Anasazi Doorways harkened back to one of the first shields that related to the Anasazi people (figure III). Fascination with this ancient culture led me to attempt this piece about them with aspects of their lifestyles included such as basketry and ceramics. The existence of sheltered areas in this shield alludes to memories of dark, mysterious caverns prevalent in the ruins. Scattered basketry pieces and active surfaces of light symbolize the way this civilization abruptly left their homeland.
FIGURE X
ANASAZI DOORWAYS
CONCLUSION

After completing the shield series a personal journey had come to an end. I had succeeded in connecting the thesis concept with the physical properties of both fabric and paper to develop pieces which represented various belief systems, symbols, and personal inquiries. Research into the histories of many ancient cultures and the history of the mediums used in the thesis work enhanced both the strength of the work and the concept itself.

The knowledge acquired from the thesis will be a lasting one. Processes, techniques, and design ideas can all be utilized again. Most importantly, the experience of developing a major body of work from concept to actuality will be remembered and drawn upon in future works. I feel that the shield series has opened up new avenues in my relationship to fabric and paper as well as in my relationship to myself as an artist.
FOOTNOTES

4. *Apparel for Man and Gods; Fiberarts Magazine,* Winter 1989-90, p. 56
6. Ibid., p.14
7. Ibid., p. 7
8. D. Hunter, *Papermaking-The History and Technique of an Ancient Craft* (Dover Books; 1947), pp. 3-6
10. Ibid., p. 2
12. Ibid., p. 12
13. Ibid., p. 163
14. B. Cunningham, Thesis Journal entry 5/18/89
18. B. Cunningham, Thesis Journal entry 3/9/90
silkscreen supplies—clockwise from left: screen & squeegee, brushes, fabric, gloves, respirator, and Procion powder dyes

silkscreening fabric
papermaking supplies-clockwise from left; white linters, felts, dyed pulps, mold & deckel, kozo fiber, books, and finished papers

pouring pulp into submerged mold & deckel
lifting mold and deckel from water to form paper sheet

preparing to lay paper onto felt
lifting deckel from felt after laying paper onto felt

dpaper drying
working on The Wheel

working on Hunting Ground

working on Naga/Agni
sewing layers for Sabermati Sighing

early stages of Sabermati Sighing
Paper and Fabric layered onto foam core for Anasazi Doorways. Journal & papers in background

Layering Anasazi Doorways
Final layers before manipulating surface of Anasazi Doorways

Working on surface of Anasazi Doorways
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