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# Basketry Sculpture

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# BASKETRY SCULPTURE

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# INTRODUCTION

In weaving, basketry is one of the few techniques that allows the form to be envisioned in its three dimensional state throughout the entire creative process. While the technique of basketry has been performed for centuries, the full potential of this process has been studied only on a limited basis as it applies to the creation of sculptural weavings. The present thesis is designed to explore some of these same basketry techniques as they may be employed in creating sculptural forms.

The chapters following this introduction will define, explain and philosophize on the chronological development that has occurred during the creation of these "basketry sculptures."

The beginning chapters will define basketry and basketry sculpture, explain the techniques involved and illustrate the manipulation of the techniques in creating the forms. The following chapter will trace the experiences involved in the creation of the "Experiments." The experiences are broken down into two areas which evolved simultaneously. The first area entails the manual labor, the problems and actual construction of the forms. The second aspect is the philosophical growth and development that occurred during this creative process.

This study includes a conclusion of influencing experiences and thoughts that will affect the direction of my work.

## CHAPTER ONE

## PRINCIPLE TERMS AND HISTORICAL SOURCES OF BASKETRY SCULPTURE

Definitions

Historical Background

Basketry sculpture is an art form that has been part of many societies since man first started to create objects using natural materials. This is an area in the art world that is now coming into wider recognition and is just starting to be explored by artists who are employing a more contemporary approach  I have admired and respected the classical basketry sculpture, studied the processes and am attempting to apply this knowledge in creating contemporary art forms. In order to fully comprehend the Experiments, that are to be presented in this thesis, it is necessary to define the terms of basketry and sculpture as well as to historically discuss basketry sculpture.

### Definitions

Basketry can be defined in the following manner: "Basketry.- A general term including (1) basket making, the process or art; (2) basket work, the technic or stitches, any textile motive resembling work in baskets; (3) basket ware, a collection of finished products."[1] This definition of basketry allows a great deal of freedom as to the way it can be interpreted. I choose to think of basketry as any art form that has used the prescribed technique found in classical baskets.

There are numerous stitches that have been employed in the creation of baskets but they are divided into two general categories: coiling and twining. "Coil.- An element in basketry ornamentation. The varieties are plain, coil, reversed coil, continuous loop coil."[2] "Twine.- To bend something around another object. In basketry, to make twined ware in any of its varieties, plain, twilled, wrapped, latticed, three-strand, etc."[3] Therefore, any piece employing either coiling or twining methods may be defined as basketry. Their actual processes will be explained in the next chapter.

Many modern weavers have explored the possibilities of twining flat tapestries as well as sculptural hangings or sculptures. However, up to this time only a few weavers have worked in coiling in a contemporary approach.

The definition of sculpture has changed through the ages as new movements in art were discovered. In The Random House Dictionary of the English Language the definition of sculpture is a broad general description covering most periods

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[1]Otis Tufton Mason, Aboriginal Indian Basketry, Annual Report of the Board of Regents of the Smithsonian Institution, H.R. Doc. No. 484, 57th Cong., 2d Sess., 1902, (Glroieta, N.M.: The Rio Grande Press, Inc., 1970), p. 193.

[2]Ibid., p. 194.

[3]Ibid.

of its history. "Sculpture...-n. 1. the art of carving, modeling, welding, or otherwise producing figurative or abstract works of art in three dimensions, as in relief, intaglio, or in the round...."[4] Expanding this definition, sculpture is a dimensional form that has been created, out of some art process, and can be either functional or nonfunctional.

Our entire visual environment is landscaped in dimensional looking sculptural forms; objects in our everyday world appear as forms of sculpture, as do works that are created specifically as art. Buildings appear as sculptural objects on the land as chairs are in a room, and baskets created by man.

Therefore, basketry sculpture creates a dimensional object through the process of coiling and twining.

## Historical Background

Historically, there are more than just Indian baskets which fall under the category of traditional basketry sculpture. Jaba waist ornaments are fine examples of primitive sculpture but are also basketry sculpture. In parts of Africa, for example Nigeria and the western Sudan ranges, tribesmen created basketry hats which are simple sculptures within themselves. Some of the primitive sculptures from the South Sea Islands are masks that have been executed in a basketry technique.

Basketry is one of the earliest forms of weaving that can be traced back to the Swiss lake dwellings, where remnants

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[4] *The Random House Dictionary of the English Language*, 1966 ed., *s.v.* "sculpture."

were first found.

> Basketry is the mother of all loom work and beadwork. In that elaboration of industries, through which they pass from human power to beast pwer, wind power, water power, steam or fire power, and electric power, the loom is no exception. The first and most versatile shuttles were woman's fingers. Machinery has added speed. But there are many niceties of technic to which the machine device can not yet aspire.[5]

Without early man having explored the possibilities of basketry, weaving with all its industrial innovations would never have come into existance. Man through his technology has lost a great deal of the spirit and essence that was once found in early basketry.

It was the aboriginal woman who used techniques of basketry as a means of producing her daily essentials for carrying food, mats, ceremonial objects and parts of her apparel. The products of her efforts were more than useful objects.

> Chief among the Indian's handicrafts is basketry: the most expressive vehicle of the tribe's individuality, the embodiment of its mythology and folk-lore, tradition, history, poetry, art and spiritual aspiration - in short, it is, to the Indian mind, all the arts in one. Moreover, it is his most useful handicraft, serving him from the cradle to the grave.[6]

This is especially true in all Indian, African, Polynesian and British basket forms.

There are also references in many ancient books of other societies that created baskets which have not been preserved. "In the Arabian Nights, the story of a lady who was

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[5]Mason, _op_. _cit_., p. 188.

[6]_What the Basket Means to the Indian_, quoted in Mary White, _How to Make Baskets_ (New York: Doubleday, Page & Co., 1901), pp. 183-184.

murdered by her husband mentions a very large basket, by its size reminding one of the granary baskets of California but this was evidently in coil work very much in style of the Hopi plaques."[7] In the Bible, when Joseph interprets the Pharaoh's dream, there are references to baskets. El Armah, a site in middle Egypt which dates back from the entire middle period to last prehistoric, has been excavated and found to contain coiled baskets. There are references to baskets in the works of Homer. The Chinese and Japanese were known and still are for their bamboo baskets.

However, from these societies the one that deserves the most tribute in basketry is that of the American Indian. No other culture can surpass the beauty of its baskety, as far as design, incorporation of materials and innovativeness. In my opinion the most beautiful baskets were created by the Pomo Indian from California; employing intricate designs, sometimes adding feathers and even designing them with complete feather outer coverings and adding alabone and bits of silver for adornment.

Some of the Southwest Indians made their baskets so tight that water could be held. The Pai Utes made water jugs in basketry and coated them with gum from the piñon pine. Havasupia Indians coated their baskets with clay to be used as cooking utensils before solid clay pots were ever made. Other Indian basketry incorporated anything found from the vegetable, mineral, and animal worlds. Ingenious use of materials and

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[7]Mason, op. cit., p. 188.

designs were present in their daily world for necessities, religious ceremonies and gifts.

Historical basketry sculpture has incorporated the spirit of the people who made them, as well as their philosphical ideals and aspirations. The people involved employed designs and forms which made their basketry sculptures excellent models for the contemporary artist to follow.

## CHAPTER TWO

## BASKETRY TECHNIQUES

Coiling Techniques

Twining Techniques

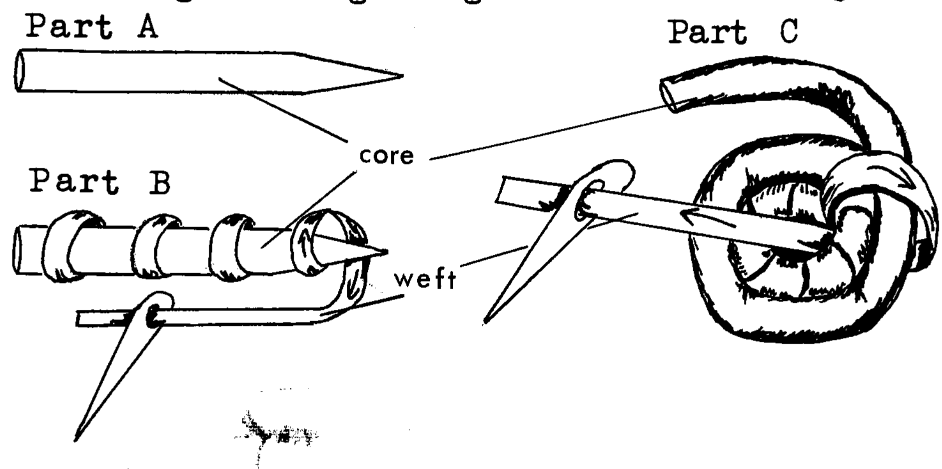
Manipulation of Core Elements and Warp Threads

A description of how some of the basic stitches, used in my samples and pieces, are executed and how various shapes are obtained are to be found in this chapter.

### Coiling Techniques

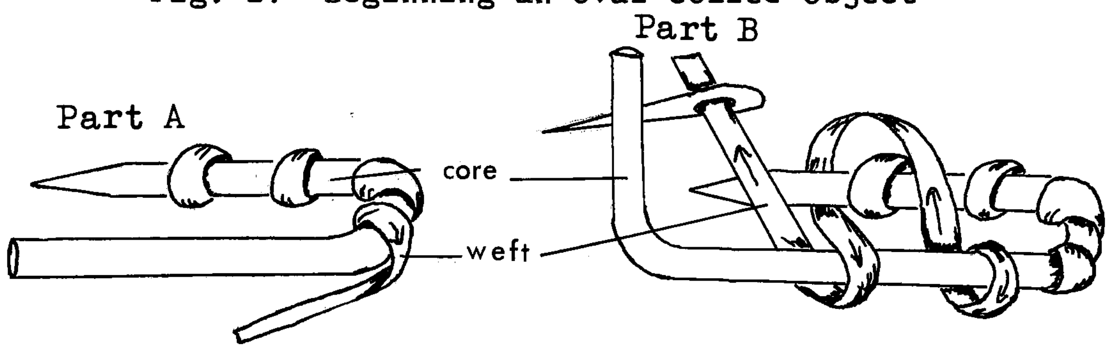
There is a basic way of beginning a round coiled object. In order to coil a basic material is needed which is called the core or the core element. This element can be any material such as rope, rod, plastic tubing or bunches of raffia or yarn. The core element should be tapered at one end (see figure 1, part A). The weft should be wrapped around the core for one to two inches working toward the point (see figure 1, part B). Wrap the distance needed for the core to be covered when it is turned back and stitch the outside core to the center (see figure 1, part C). Follow this process for a few rows; any coiled stitch may be employed. The weft can be brought through with either a tapestry needle or crochet hook.

Fig. 1. Beginning a round coiled object




If one wanted to start with an oval-shaped object one would wrap the core element for at least two inches or longer (see figure 2, part A). The core is turned and the weft wrapped around the two cores in a figure eight stitch (see figure 2, part B). The following row is continued with any coiling stitch.

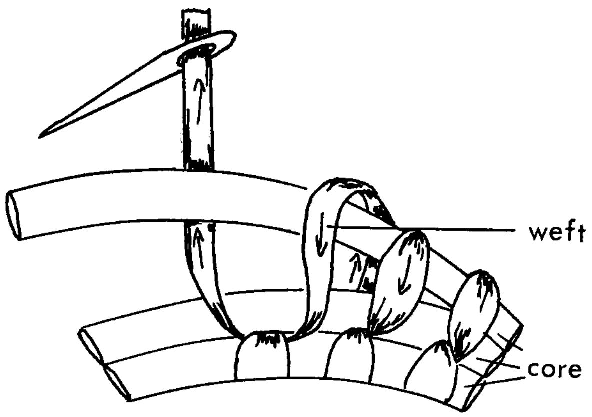
Fig. 2. Beginning an oval coiled object



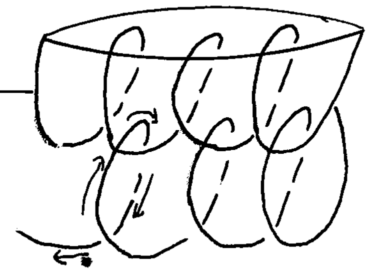

A simple interlocking coil is done by bringing the weft around the outside core and merely interlocking through the stitch of the previous row (see figure 3, part A). If this is done without a core element and the first row is suspended from a circular bar, it would form a netted container (see figure 3, part B).

Fig. 3. Simple interlocking coil

Part A

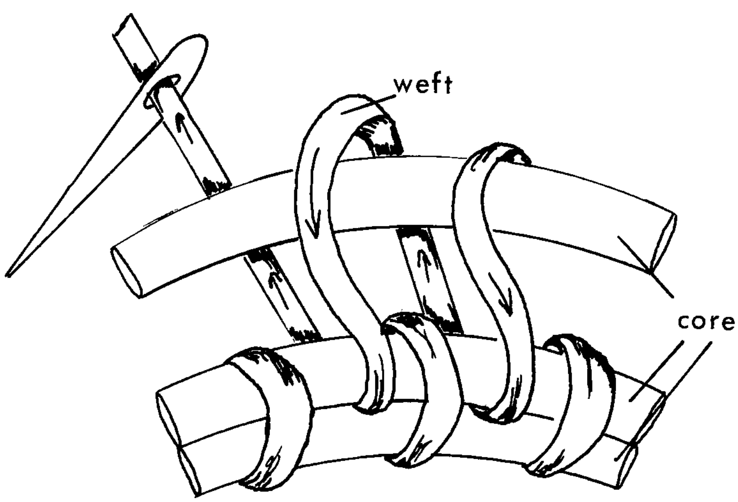



Part B



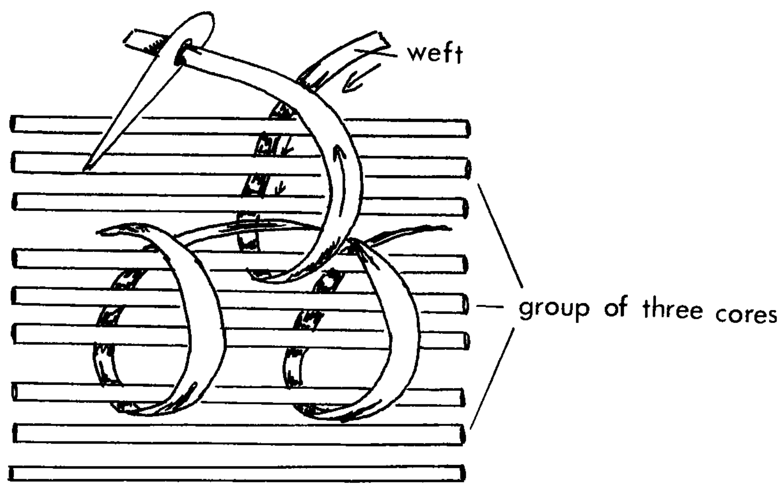
A single-rod foundation has the weft going around the outside core and catching the preceding coil between stitches (see figure 4).

Fig. 4. Single-rod foundation



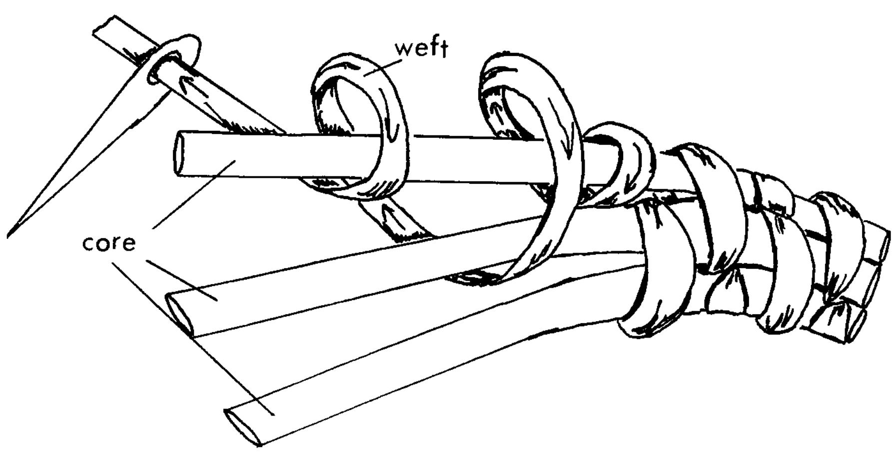

There are several varieties of the single-rod foundation; all done in basically the same manner. The difference is the number of elements used as the core element. In order to do the three-rod foundation, three core elements are used at the same time. These rods or cores are held one on top of another while the weft is stitched around the three rods simultaneously and passes between two stitches of the previous row. Only stitch around the top rod of the three in the previous group (see figure 5).

Fig. 5. Three-rod foundation



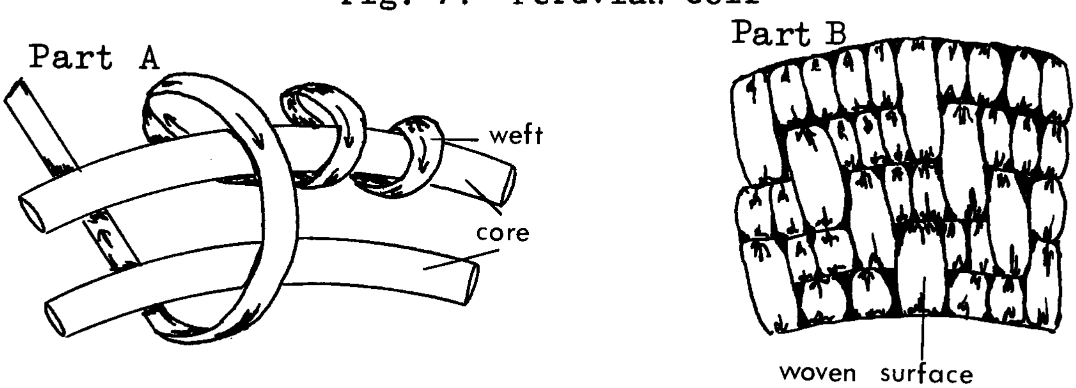

The lazy squaw stitch consists of one short and one long stitch. The weft completely wraps around the core forming a short stitch. It is then brought in front of the core element and is stitched through the row before it; thus forming the long stitch (see figure 6).

Fig. 6. Lazy squaw stitch



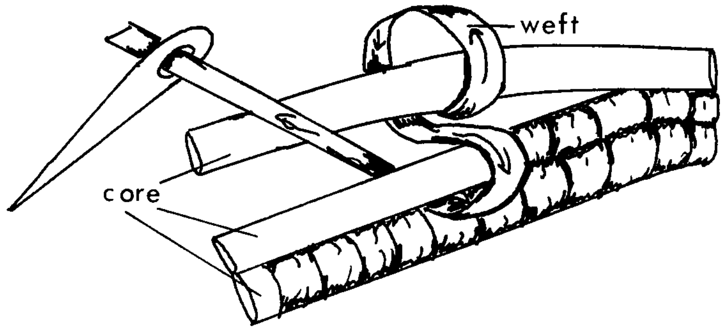
The Peruvian coil stitch is done so that the long stitch becomes a twill design. The weft element wraps around the core element twice and as it comes around the third time it is stitched over the stitch of the previous row (see figure 7, part A). This is done only when the long stitch comes next to the long stitch of the previous row. As the form builds out it becomes necessary to increase the number of short stitches before doing the long stitch. The long stitch should always fall to the same side of the one in the previous row (see figure 7, part B).

Fig. 7. Peruvian coil



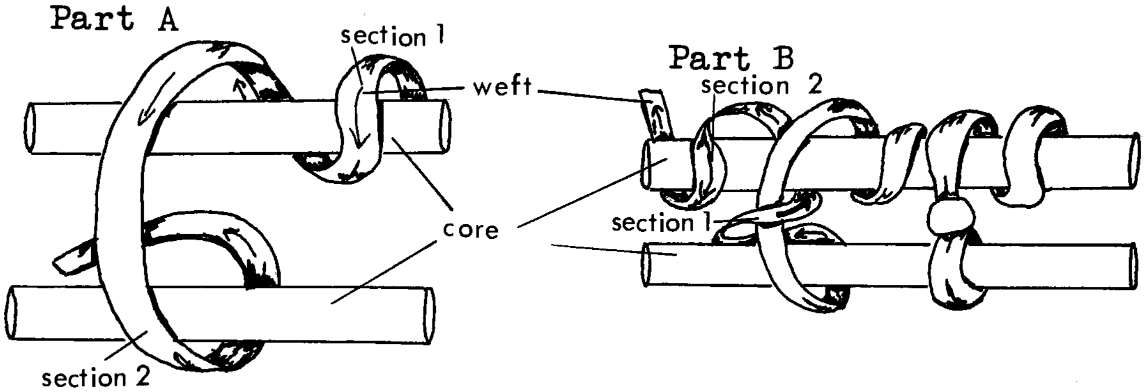

The figure eight or Navajo stitch is used most often in coiled basketry because it produces a very firm object. It is done by wrapping the weft around the core from front to back. Then the weft is brought forward and is stitched through the front of the previous row (see figure 8).

Fig. 8. Navajo or figure eight stitch



The last coiling stitch called the Mariposa or lace stitch is a decorative one and produces negative openings. The outside core is wrapped once from the outside to the inside (see figure 9, part A, section 1). As the weft is brought forward the second time, a negative space is held between the previously wrapped core and the weft passes down through this opening (see figure 9, part A, section 2) and then the weft is wrapped around the stitch (see figure 9, part B, section 1). The weft is brought up and behind and wrapped around the outside core element (see figure 9, part B, section 2).

Fig. 9. Lace or Mariposa stitch



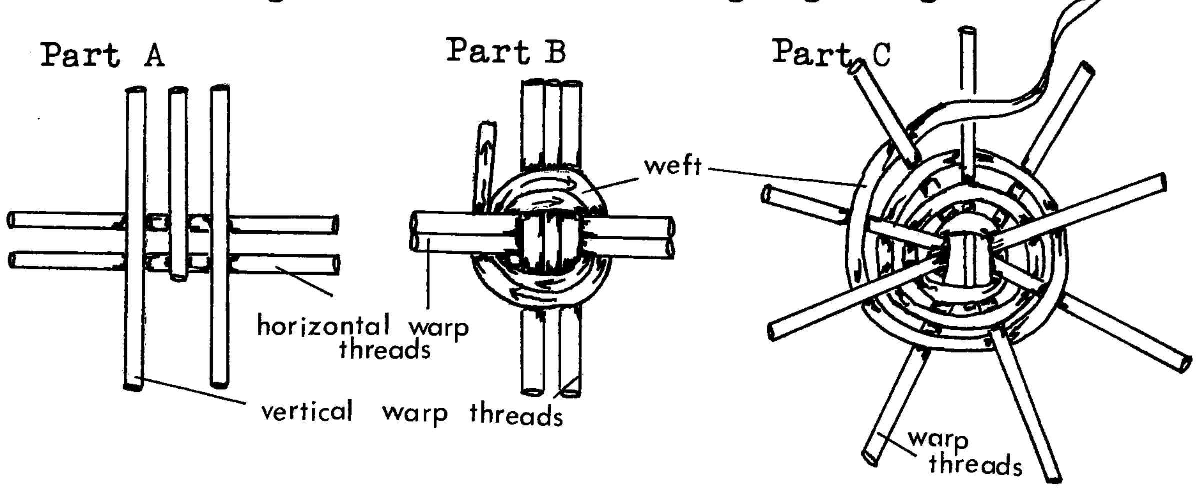

In all coiling stitches, beginnings and endings of a weft thread are done in the same manner. At least four or five stitches before a weft thread is ended, a new weft thread is held along the inside of the core and the old weft stitches around it as well as the core. When the new weft is used the old weft is held along the side of the core for a few stitches.

## Twining Techniques

Twining is the other category of basketry stitches. There are, again, numerous variations but it is the basic ones that are to be explained. In twining, warp threads are used as the foundation as compared to the core in coiling. Any flexible material may be used for a warp thread: rod, rope, wire, etc. In basketry texts the warp threads have been referred to as warp ends, warp stems, spokes and bams.

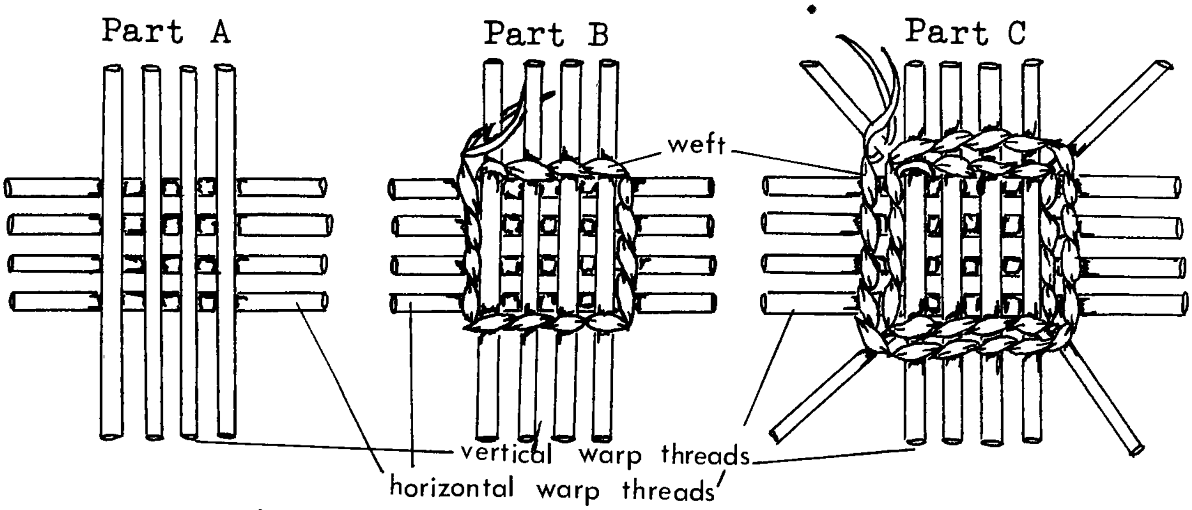
There are several different techniques used in starting a twined piece. The first is to lay two warp threads in a horizontal position and to cross them at their middles with two vertical warp threads. A warp thread is then added in between the vertical threads which stops in the middle (see figure 10, part A). The weft is begun by placing it beneath the pair of horizontal warp threads and then passes over the last vertical ones. This is repeated a second time pulling the weft as tightly as possible (see figure 10, part B). As the third row begins the warp threads should be spread out evenly by the fingers and then the weft is brought over and under the warp thread singly (see figure 10, part C). If there seems to be too much space between the warp threads, more warp threads can be added in a symmetrical manner.

Fig. 10. The first twining beginning



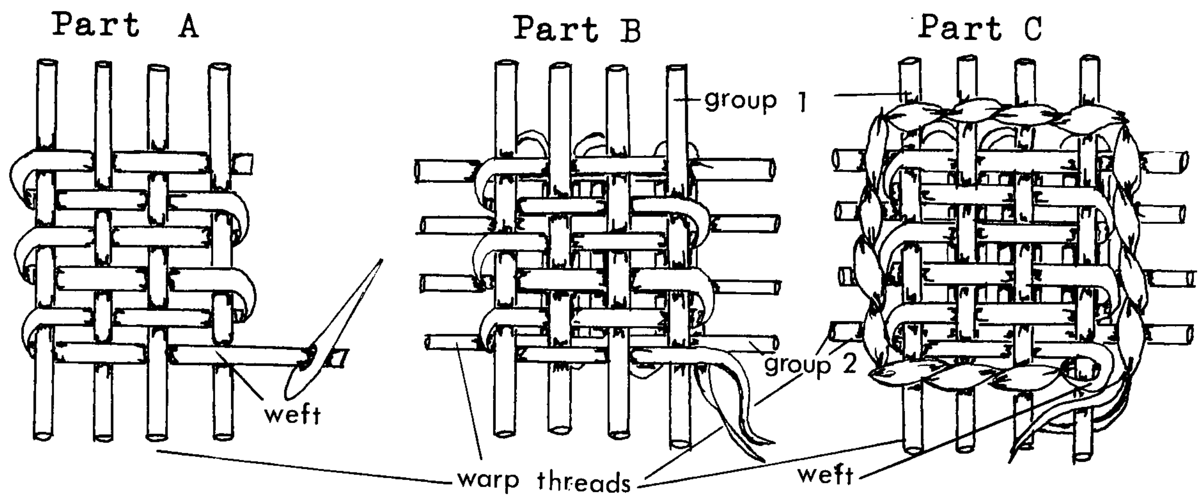
A second beginning is to place four vertical warp threads on top of four horizontal warp threads. Their intersection is at the middle and a little space is left between each warp (see figure 11, part A). A weft thread is twined around each warp thread in a clockwise direction (see figure 11, part B). This is done until the warp threads are held in place. Then warp threads are added at the four corners and the twining is continued (see figure 11, part C).

Fig. 11. The second twining beginning



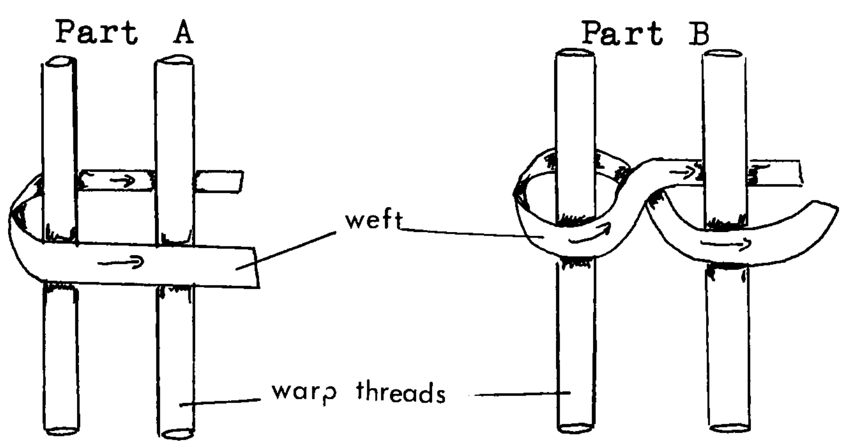

The third method to be shown as a beginning technique was used by the Pomo Indians. Eight warp threads are needed; the first four are positioned so that a weft thread is woven in plain weave for about six rows, starting in the middle of the warp. This same process is done to the remaining warp threads (see figure 12, part A). The first group of woven warp threads is placed in a vertical position and the second group is placed on top of the first in a horizontal fashion. The two weft threads should meet (see figure 12, part B) and are twined clockwise around the radiating warp (see figure 12, part C).

Fig. 12. The third twining beginning



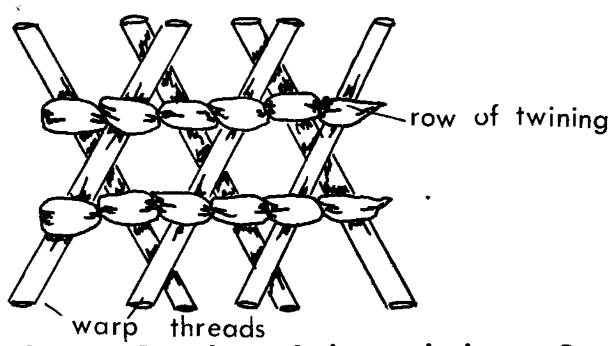

A close twined weave or plain twined weave is started by folding the weft thread in half and by placing the middle of the thread around a warp thread so that half of the weft is in front of the warp and the other half is behind it (see figure 13, part A). In the space between the first and second warp threads the weft that is forward is taken behind the second warp thread and the remaining weft is brought forward and over the second warp thread, thus completing the stitch (see figure 13, part B).

Fig. 13. Plain twined weave




Negative opening effects can be obtained in the crossed warp twined weaving of the Makah Indians. This is done by bringing every other warp thread up and crossing the warp thread to its left. It is held in place by a row of twining (see figure 14).

Fig. 14. The crossed warp twined weaving of the Makah Indians




In order to end a weft thread in twining after its last stitch, the weft is twisted and laid parallel to the warp thread as if they were a single unit. The next weft is started above the last stitch making sure there is no space between the warp threads.

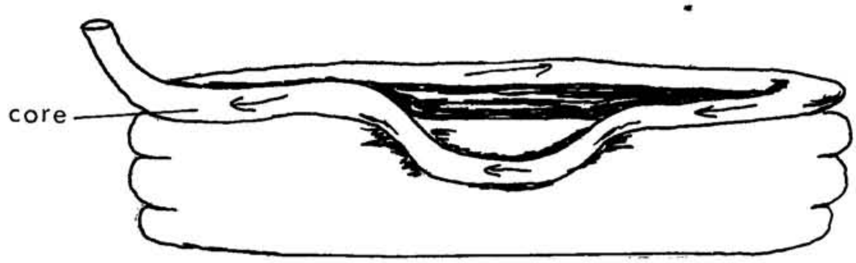
## Manipulation of Core Elements and Warp Threads

The basic techniques in the manipulation of the warp ends and core elements are important in understanding how shapes are formed.

In twining, the manner in which the warp threads are added, either symmetrically or asymmetrically, will determine the object's form. When the base has reached its prescribed size the warp threads are bent upward and the process continued. The position the warp threads are bent in will define the final form the artist is trying to develop.

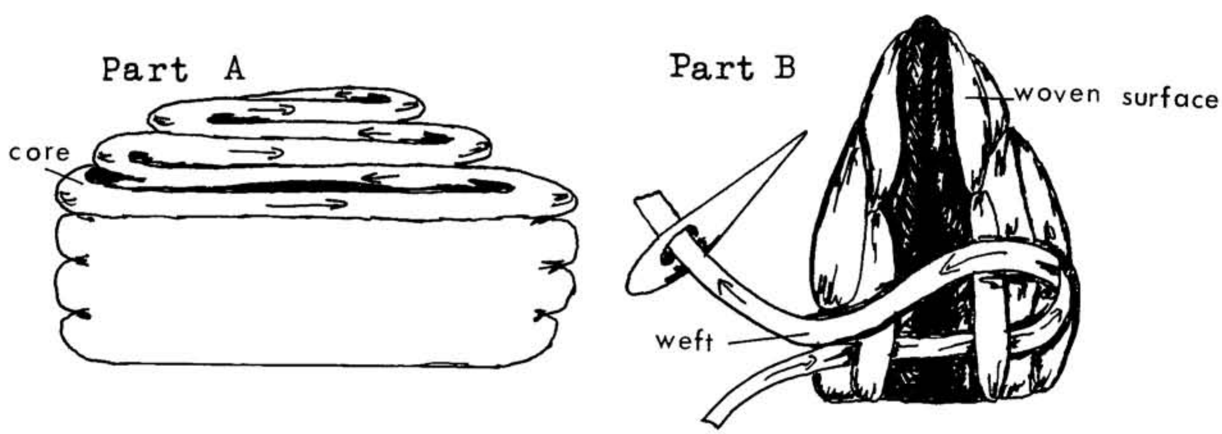
In coiling, as soon as the desired base is finished, the angle in which the core element is held determines the object's form. If the core is placed directly on top of the previous row, a cylinder is produced. However, if the core is held at an outward angle to the preceding rows, the shape bowls outward; the reverse is also true. For an irregular shape the core is held on top, to the side, and to the inside of the previous row at irregular intervals (see figure 15).

Fig. 15. Irregular shapes caused by the positioning of the core element



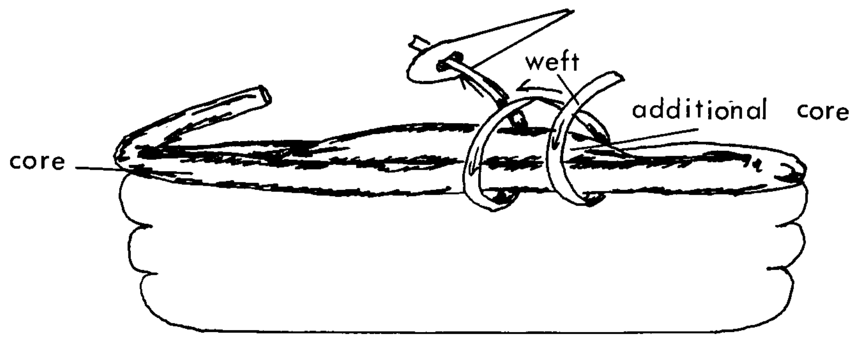

Turning the core element back and forth in a continuous "S" formation rather than continuing around the circumference builds a collar or lip form on one side (see figure 16, part A). If this "S" motion is done in a decreasing manner the outside edges could be held and stitched together producing a cone shape (see figure 16, part B). This stitching is easily executed in the simple interlocking stitch.

Fig. 16. Continuous "S" formation



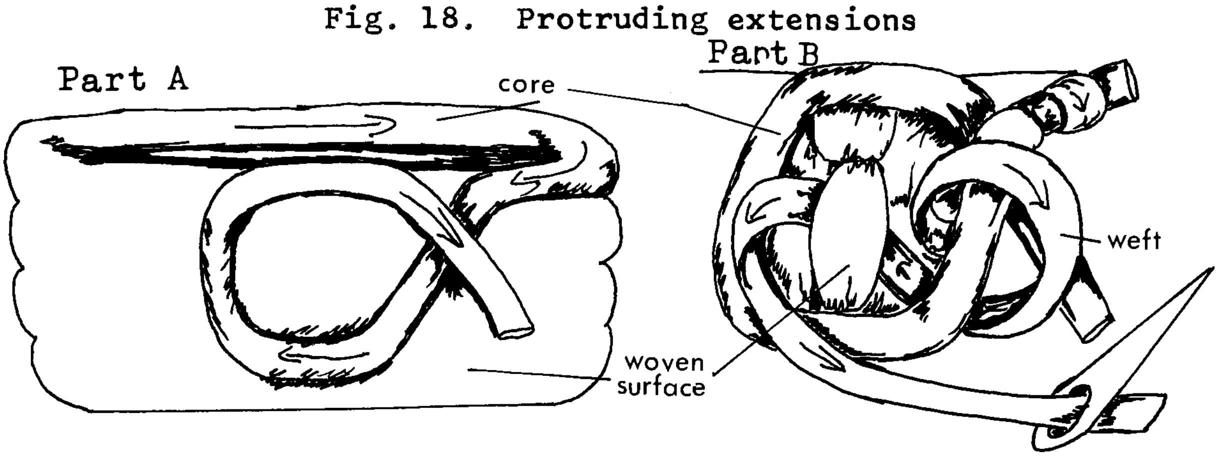
A subtle method of building a portion either higher or wider is to hold an extra core element along with the original one for a specific distance. The weft is brought around the two as if they were one. Both ends of the additional core are tapered so there is a gradual blend into the wider element (see figure 17).

Fig. 17. Adding a supplementary core element




Smaller forms protruding out of the main body are accomplished by placing a core element on top of the existing woven surface (see figure 18, part A) holding it by a simple interlocking stitch. The stitch directly below the core is caught and the core continues to form the desired shape (see figure 18, part B). Following this procedure the main core element is added and continues to produce the overall form.

Fig. 18. Protruding extensions



## CHAPTER THREE

## THE EXPERIMENTS

The first Experiment began as a study in the manipulation of the core element to form irregular shapes, utilizing the single-rod foundation and the simple interlocking coil stitches. The core element was a three-ply jute. The weft elements originally consisted of one and two-ply beige and grey goathairs, one-ply beige and grey sheepswools, one and four-ply brown wools, brown mohair, one-ply burnt orange synthetic and white, bronze and brown rattails. Using these fibers, I wanted to create a form that was not symmetrical, round, or oval. At this time fibers had a specific meaning to me. A fibrous material was a natural or synthetic material that could be spun into a strand of yarn. A nonfibrous material in weaving was any material that was not yarn.

Experiment I was partially developed when the form was studied and the final solution was planned. The solution was designed to consist of two forms that were attached through an extension tube. There was to be a feeling of tension; as if the pieces were trying to detach themselves but needed the attachment for support. The first piece was continued with its intricate forms in light colors with the brown acting as an accent. The first section of Experiment I was finished.

Experiment II was originally designed as the second and larger component of Experiment I. It was to be simplified in form with more dark areas. The basketry techniques and core element were the same ones used in the first piece. The weft consisted of one-ply brown and black sheepswool, one and four-ply brown wools, one and two-ply beige, grey and brown goat-hairs, brown and brown-grey mohair, bronze, brown and black rattails, brown suede strips and black patent leather strips. A great deal of time was spent on each area because of the intricate involvement of materials. During the construction of the second piece, a decision to make it a separate experiment rather than being joined to Experiment I was made.

Experiment I's intricacy of colors and shapes seemed to conflict. In order to unify the total form it was dyed in an orange-brown dye-bath. This process known as cross-dying produced an overall color in various hues. After the piece dried it maintained its form but became much softer and hairier producing a fun tactile feeling (see figure 19). It functioned well as an independent shape sitting on a pedestal.

The existing portion of Experiment II looked weighted when laying on a surface and little air seemed to pass around or through the piece. The finishing segment had to blend rather than appear as an additive element and support the piece. Human hair was added to the large concave area softening the edge and acting as a mysterious veil surrounding the cavern (see figure 20). If the final result had been an outgrowth of the original concept it would have been constructed differently to withstand the tension of its position. Experiment II is to be placed on a pedestal.

Fig.19. Experiment 1

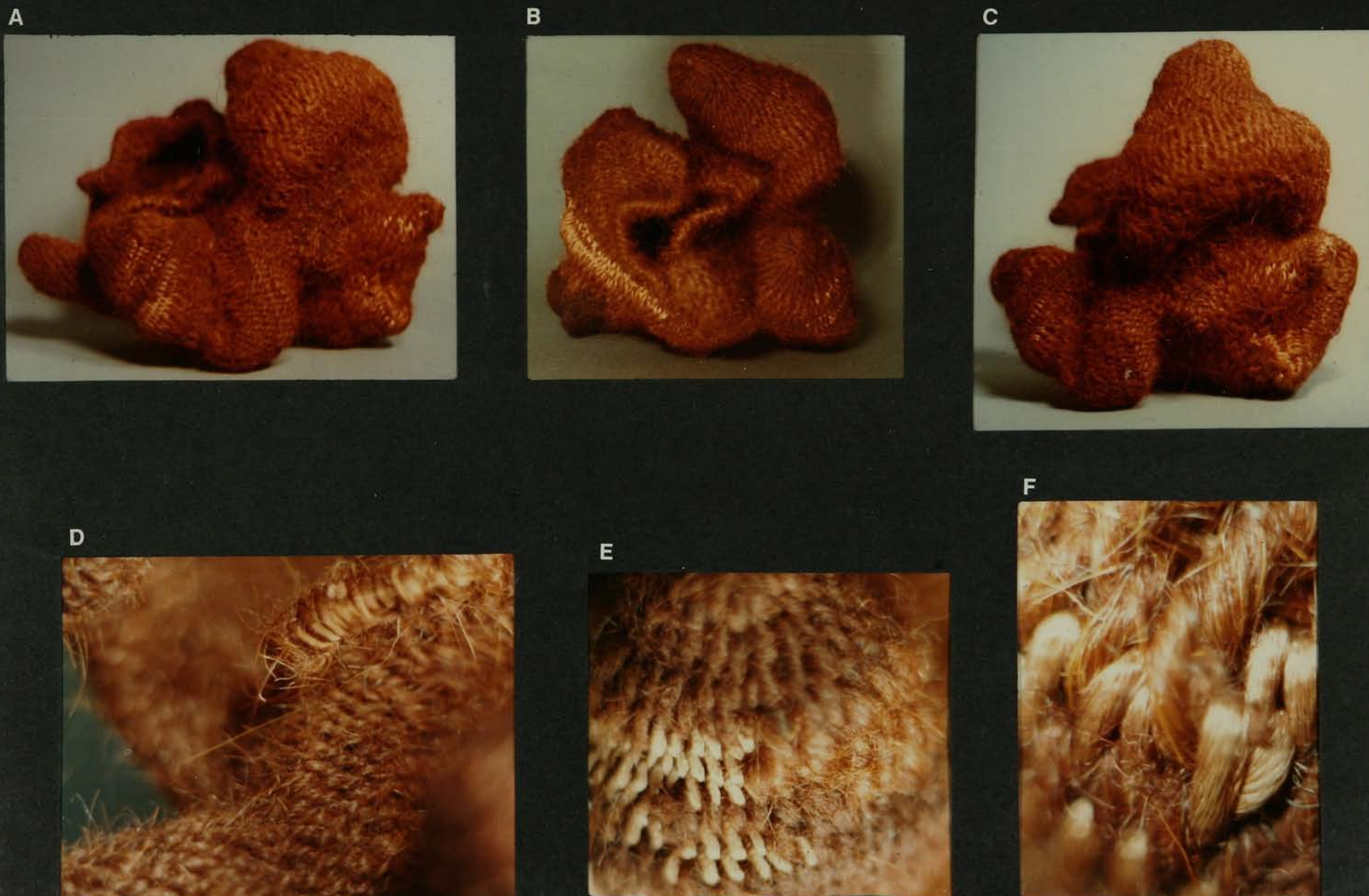


Fig.20. Experiment II

Experiment III was an experiment to be created in one week-end. This was a challenge that I set up for myself as a reaction to the two preceding experiments. It was mainly constructed in the single-rod foundation and simple interlocking coil stitches. Nylon rope, black glamour cord and black unspun mohair were used as the core element. The weft consisted of one-ply grey and black sheepswools, two-ply black goathair, two-ply black alpaca, black roving mohair, black waxed linen, black rattail, one-ply black synthetic and black patent leather strips.

By Monday the main body and top black fan were completed. The soft alpaca fan and supplementing fan sections were added after varied opinions were received. The top fan was delicate in texture but heavy in construction (see figure 21, part E). The lace stitch was used in sections of the other layers to complement the effect of the various black materials (see figure 21, part F). However, the presentation of the experiment, an aspect which was neglected in its perceiving and execution, became a problem. The piece was suspended in front of and placed on every conceivable material. Finally it was suspended in front of a reflective surface which worked well as the solution. Two mirrors at right angles, forming a corner, created the exact environment desired in which to suspend the piece. It accentuated the delicacy of the fibers and its form. Air circulated around the piece, between the sections and through the slots of the lace stitches; yet it was situated in a contained environment (see figure 21, parts A and B).

Fig.21. Experiment III

Two alternate materials were tried as core elements in samples, prior to the beginning of Experiment IV. Half-inch high fiberglass insulation was used as the core element in a six inch high coiled container, which was the first sample. The cylinder was light in appearance and when picked up, it felt too light for its size. The other material used as a core element was plastic tubing. Translucent straw, monofilament, synthetic and natural yarns were used as the wefts on the tubing. The last sample was, at times, translucent and lighter in appearance but only a little lighter physically. The effect that this sample gave was incorporated into Experiment IV.

The techniques of basketry had become a tool that could be employed to create practically any desired form. Experiment IV was to express social comment rather than just being a pleasing organic form. The first idea was to construct a skull in which the viewer could see inside, see himself and see the diseased brain that has evolved in our society. The outside shell was to be constructed from the lazy squaw stitch and the inside from the single-rod foundation. Different size plastic tubing was to be the core element. The weft was to consist of plastic strips, various white, orange, pink, red, green and purple synthetics and silver metallic yarns. Reflective mirrors and beads were also to be incorporated.

Involvement in the blending of fibers plus the incorporation of a mirror occurred in the beginning segment. The materials were worked in a somewhat pleasing manner yet looked a little diseased. After realizing that my materials had become somewhat pleasing, the experiment was rethought.

I wanted to illustrate how plastic the society had become when outdated buildings are torn down and replaced by prefabricated modules. Objects used daily seem to be run by either gears, wires, springs, robots or computers. Artificial organs, pollution and alienation are elements in our society.

The skull-like form was still to be used as the basic shape in Experiment IV. The outside shell was constructed by using the lazy squaw, single-rod foundation and simple interlocking stitches; and the inside forms were constructed with plain twined weaving. The core elements were different sized plastic tubing and the warp threads were wires and plastic cords. The weft consisted of plastic strips, metal wires, electrical wires, plastic cord, monofilament and plastic spheres. Other materials found inside the caverns are: plastic organs, a baby doll cast in resin, an animal cast in resin, toy robot, springs, gears, wire mesh, plastic cords and red and purple wrapped elements. The piece was to be suspended in a cubicle having metal sides with plastic wrapped around the exterior.

Experiment IV in completion looked more like an African mask of the year 2000 A.D. (see figure 22, parts C and E). Therefore a new solution for the presentation was needed. A piece of wire mesh was rolled into a pole, surrounded by a two by four inch wired mesh fence and both were set into a two and a half inch mold of cement. The mask sits on the wire pole. The stand is just as important as the head and both elements are needed for the total effect (see figure 22, parts A and B).

Experiment V was to illustrate one of the ideas that appeared in Experiment IV, the concept that plastics surround and are part of every element in our world. Artificial insemination is an artificial method of inducing pregnancy which is just one example of this idea. The form was to be a womb. Experiment V shows that the naturals are still desirable but the plastics are trying to ooze their way in and around the naturals.

Single-rod foundation was used as the technique. Three-ply rope and plastic tubing were the core elements. The weft consisted of thin plastic tubing, two-ply camelhair, two-ply brown goathair, one-ply white sheepswools, two-ply beige alpaca, one-ply natural wool, one and a half lea linen and roving flax.

In the preliminary sketch the two extensions which represent the cervix were placed in a plexiglass tube and the rest of the womb rested on it. It was as if the womb had burst out of the test tube. Instead, I created an enlarged test tube out of clear vinyl and suspended the experiment in it (see figure 23).

Fig. 22. Experiment IV

A

B

C

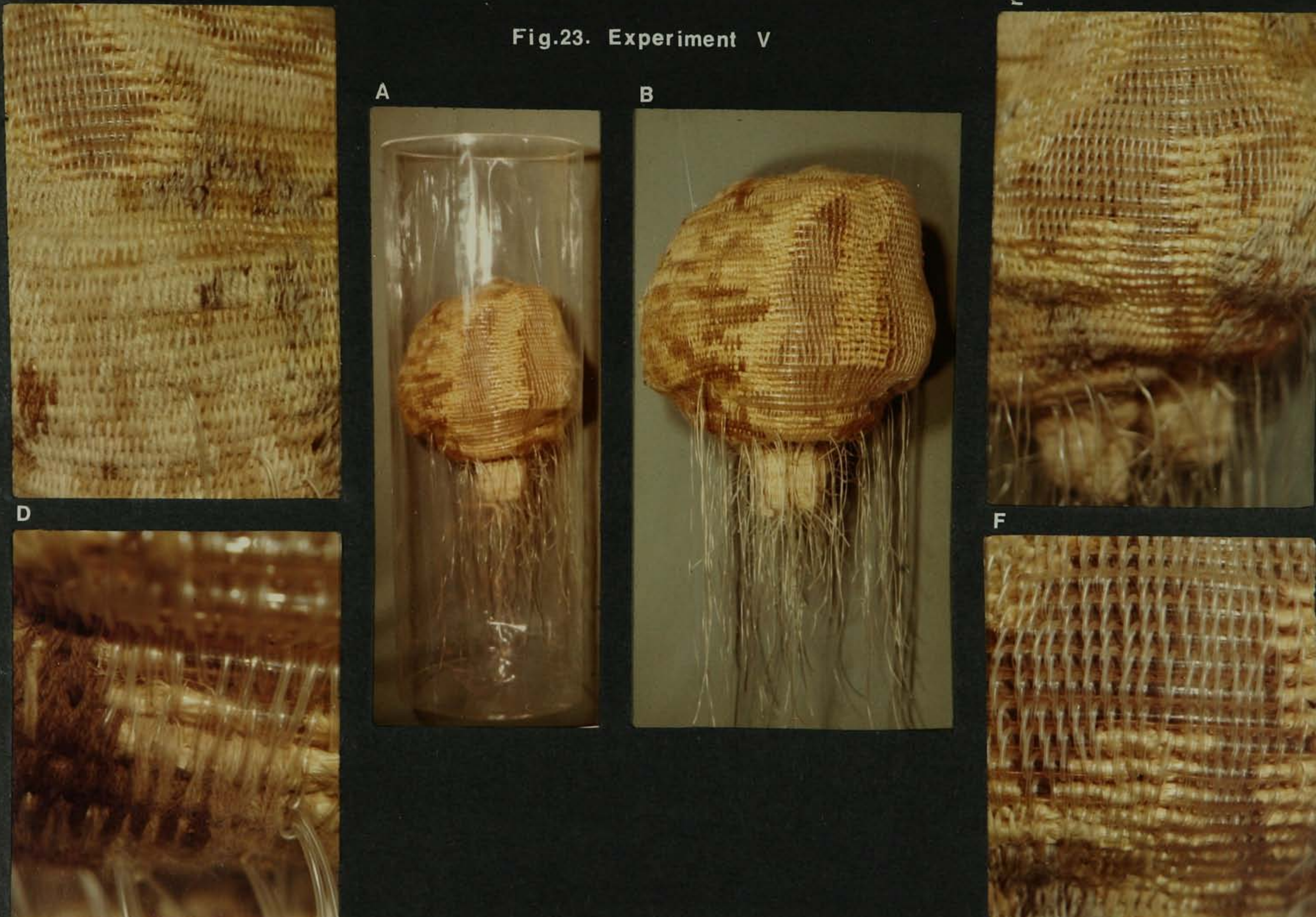
D

E

F

Fig.23. Experiment V

C D A B E F



## CHAPTER FOUR

## THE CONCLUSION

From this thesis I have drawn conclusions as a result of the basketry techniques used and the Experiments constructed. In the future, I will follow the direction in which these Experiments have led me.

There are three major advantages these techniques have over weaving techniques that are executed on the loom. First, the work has become portable and can be done in anyplace. Second, the form can be seen step by step in its three dimensional state, permitting a change in the form at any time during its construction. Third, and most important, a three dimensional form can be created that is structurally stable. Usually three dimensional textile pieces have to be stuffed, wired or maintained with a sculptural shape.

Each Experiment has been a definite outgrowth and further development of the previous one. I have become aware that it is not enough to just think out the experiment; the entire concept should be thought out including the presentation. If the experiment requires a pedestal or a specific environment it is imperative to remember that these are significant elements in the entire sculptural vision.

The manner in which I approach my work has changed. The last two Experiments and future work will make a personal comment rather than just a pleasing form. It is not necessary for every viewer or even the majority to understand the statement being made. The work can be viewed just on the basis of form, color or design.

The complete effect desired in a piece should be thought of in relationship to its component elements. The components: technique, core element, warp threads and weft should be reflected in the end result. This might mean that new materials should be sought rather than just using the conventional ones. Materials and techniques should be instruments used to construct an idea but not become so important that the concept or statement of the piece becomes secondary.

As a result of the Experiments my personal definition of fibrous materials in weaving has changed. A fibrous material is any material that I can weave into a piece.

My immediate future works will relate to the conflict between natural and artificial order of existence.

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