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8 Demystifying Complex Weaves  by Sigrid Piroch
A step-by-step exploration from four to sixteen harnesses

15 What’s in a Name?  by Susan Mansfield
Name drafts drawn by hand or computer

22 Wearing Handwovens with Style  by Anita Mayer

26 Vadmal  by Susan Larson-Fleming
A study group from the frozen North warms up to an ancient technique

30 Finishes for Vadmal  by Suzanne Baizerman

34 Wearable Fine Thread Tapestries  by Elmyra Tidwell

38 Fashion Trends: Spring  by Susan Hick

40 Ribbon Wefts  by Suzy Sewell

42 Random Warp Dyeing  by Gina D’Ambrosio
A spontaneous steam dye process

47 Color Theory for Handweavers  by Pat Boutin-Wald
Part II: Visual Mix

53 Vestment Variations  by Netty Jansen
A weaver from the Netherlands creates garments for the ecclesiastical calendar

59 Cannelé  by Cynthia Broughton
Create a sumptuous fabric that drapes beautifully

60 Clothing Change Through Contact  by Abby Sue Fisher
Traditional Guatemalan Dress

65 Notes of a Pattern Weaver  by Philis Alvic

67 The Shed Regulator for Counterbalance Looms  by William Koepp

Departments
4 From the Editors
5 Letters
8 Complex Weaves
30 Finishes/Shared Traditions
38 Fashion Trends
71 Meet the Authors
72 Publications
75 Calendar
78 Study & Travel
79 Products
81 Classifieds
82 Advertisers Index

On the Cover
Full length vadmal coat by Joan Seeker. The coat was entirely handstitched using Vogue pattern #1233. All seam allowances on the pattern were removed and the edges butted. 7/8 yards in magenta and purple which had also received the vadmal treatment were used for all joins. The top of the sleeves and the sleeve attachment were joined using the roll stitch. Sleeve bottoms, side seams and the collar attachment were joined using the loop stitch. The two parts of the back were joined using only magenta yarn in a buttonhole stitch, then laced with the purple yarn. All of the edges used a buttonhole stitch which was also used to attach the cuffs. For information on warp and weft see the article beginning on page 26.

Our model is Tatiana Reichow, a dancer with The Ethnic Dance Theatre of Minneapolis, Minnesota. Photo by Nancy Leeper
FROM THE EDITORS

I n keeping with our winter tradition, the topic of clothing is at the heart of this issue. We actually got started on this issue at the conferences we attended this summer in various parts of the country—we were very impressed with what we found in fashion shows at major conferences! Styling in handwoven fabrics has come a long way in the years since we began weaving; the relationship between fabric design and garment design is more carefully considered. Handweavers are not afraid of the fine yarns and weave sets required to achieve fabrics that drape well. Weavers are more comfortable with cutting into their fabrics and tailoring shapes when their design conceptions require it, rather than limiting themselves to loom-shaping. Perhaps we all have become more fashion conscious in the decades since the 60s when suède shapes were the rule. We have included in this issue some examples of these trends.

What better way to introduce an issue on clothing than with an article by Anita Mayer who shares her knowledge so generously through her lectures, workshops and publications. Her article helps us to see our woven fashions as part of a "total look" as she discusses wearing handwoven garments with style and flair.

We met Gina D’Ambrosio and her sensational garments at the Intermountain Weavers Conference in Albuquerque and invited her to share with our readers the dyeing technique that she uses to achieve her wonderful colored surfaces. At the same conference, Cynthia Broughton’s white chenille jacket with its rich texture attracted our attention, as did her instructions for it are included in this issue.

Closer to home, we thought the outcome of a Minnesota study group’s project on traditional, a fulled wool fabric, would be of great interest to our readers. Bear in mind that temperatures here in Minnesota have been below zero for weeks, so I’m sure you will realize what sparked our interest in this technique! Associate Editor Susan Larson-Fleming has added interesting background material to the technical information provided by study group members.

To further brighten these Northern winters, Minnesota weaver Suzy Sewell has combined silk and ribbon in a dressy ensemble.

Ethnic weaving in this issue ties into our clothing theme with Abby Sue Fisher’s article on Guatemalan dress. Working from handwoven garments, Fisher translates them into line drawings, then uses that graphic form to help us appreciate the complex cultural and historic factors that may determine what comes off our looms.

Handwoven jewelry is a wonderful way to accessorize your wardrobe. Elmyra Tidwell’s prize-winning necklaces have captured us at several conferences and exhibits in the last few years. We are sure you will enjoy seeing her pieces and reading about her method of working and her sources of inspiration.

Then, from Europe, we have included examples of lingerie garments developed by Nette Jansen of the Netherlands. Three of the styles she describes are done in an ingenuous pick-up damask technique.

In the course of drawing these articles together, we are happy to say that we can offer material for the four-harness as well as the multiharness weavers. Note that the second part of Sigrid Piroch’s article on complex weaves appears in this issue and will be of interest even if your complex loom is merely at the "twinkle in the eye" stage.

Four-harness weavers will also be interested in Susan Mansfield’s name draft article. As an outcome of this article, we have designed a contest and are extending an invitation to our readers to submit their interpretations of the Weavers Journal name draft as entries.

William Koepp’s critique of the shed regulator device, part II of Color Theory for Handweavers by Pat Boutin-Wald and an article on commissions by Phyllis Alvic complete this Winter issue.

The New Year is upon us, and with it the Tenth Year of The Weaver’s Journal. We will give special recognition to this milestone in our spring issue.

New Year’s Greetings to all,
Karen & Sue

Karen Searle & Suzanne Balszerman

THE WEAVER'S JOURNAL

WINTER 1984

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4 THE WEAVER’S JOURNAL
I APPRECIATE the very nice job you did with my Tarbuck article in the summer 1985 issue. I'm enclosing a photo you might enjoy, of various Otavalo's enjoying the issue. The little girl in the Meet the Authors photo with me was my goddaughter, Blanca Yolanda (on the far right in this photo) and everyone got a charge out of seeing her in the magazine. The issue was passed around the Otavalo Saturday market, and will be left with one of the weavers when I leave.

Lynn Meisch
Otavalo, Imbabura, Ecuador

IN RESPONSE TO THE LETTER from Jill Martin, ["Letters," Fall, 1985] I would like to point out that, in my book, Indigo from Seed to Dye, I do not advocate the use of zinc in a dye vat. In fact, I do not include the zinc/calyx recipe found in other publications on indigo dyeing. I included zinc as an alternative to other oxygen reducing agents and do note that zinc as well as sodium hydrosulfite, when damp, are highly flammable. I advocate making bacterial indigo vats, but since this is not always possible, a quick-acting vat can be made with Rit Color Remover™ which is basically sodium hydrosulfite, a reducing agent, sodium carbonate, an alkali, and sodium metaasilicate, a moisture-absorbing sand-like chemical, which reduces the danger of flammability. Rit Color Remover™ is packaged in small amounts and is sealed in air-tight paper with a metal coating.

Besides care in storing reducing agents, there is another caution which should be taken. In using oxygen reducing chemicals, one should wear a mask and preferably a respirator since the fine particles if breathed into the lungs will cause one to gasp for breath or even pass out as the oxygen-seeking chemical combines with the oxygen any reducing agents which might be used.

The Japanese, Africans, Indians, and the Europeans, before the introduction of chemicals for the dye vat, relied on bacterial growth for their indigo vats. The process is carefully explained in my book and only time and daily care is required to keep an indigo vat "working" for the indigo dye.

Dorothy Miller
Aptos, California

THIS LETTER IS IN REPLY to Jill Martin who was concerned about disposing of chrome- evaporators. The mordant bath doesn't seem practical to me. I read of an excellent method for someone who does a lot of dyeing in Dyeing the Natural Way, by Franci's Mustard. She makes her original chrome mordant with 2 teaspoons of chrome in 4 gallons of water for one pound of wool. When she is done mordanting, she stores the remainder in a 5 gallon plastic pail with a good lid. When she is ready to mordant again, she adds 1/4 of a teaspoon chrome and enough water to bring the level back to 4 gallons.

Julie Busch
Benton City, Washington

THANK YOU FOR PRINTING the review of Park Weaves [The Weaver's Journal, Vol. X, No. 2, Issue 38 (Fall 1985), p. 81]. Good reviews sell more monographs, and good sales mean the work of producing the monographs is worthwhile because weavers are using the information.

There are two corrections that should be noted. In case someone comes looking for the Bateman samples, the samples pertaining to the monographs are not in the Costume and Textile Collection (recently renamed "The Henry Gallery Collection") at the University of Washington. They may be placed there when publication of them is completed and the traveling exhibits complete their journeys. After each monograph is published, the samples for that monograph are loaned to the Handweavers Guild of America for traveling exhibits. The Multiple Tabby Weaves and Bateman Blend Weaves exhibits are now available from HGA and the Park Weaves exhibit is being prepared.

The remaining samples are stored in my office at my home, which is on Whidbey Island in Washington state. If someone wishes to study them, they are welcome to come here. Please write to me to make arrangements at P.O. Box 460, Freeland, WA 98249.

When all of Dr. Bateman's manuscript is published (not a series of five as stated in the review, but a series of seven), there will remain a great bulk of his records and his samples unpublished. He listed 389 different warps, and he wove at least five samples on each warp. His samples are accompanied by drawings and complete directions for reproducing them. The publication of all of this information would be worthwhile addition to any weaver's library.

I am hoping that a computer program could be used to record this information more easily than the handmade diagrams I am now preparing for the monographs. If there is someone with unending patience and accuracy who would be interested in completing this part of Dr. Bateman's records, please write to me. I have symbolically held hands with Dr. Bateman for ten of my retirement years. Now I would like to find someone else who would consider completing his legacy to weavers.

Virginia Harvey
Freeland, Washington

I HAVE ONLY RECENTLY started receiving The Weaver's Journal and find it a very interesting and informative magazine. I enjoy the mixture of practical projects and articles of inter-
est on weaving traditions of other countries, particular personalities in weaving, etc. On the subject of computers—I don’t possess one but use one at work (analyzing laboratory data) and think they are useful and practical tools. I agree with Sandy Frediani’s letter in the Summer 1985 issue. I am sure that for a production weaver a computer can save an endless amount of time and therefore money. I think some articles on “computer weaving” should definitely be included (in The Weaver’s Journal). People who dislike computers needn’t read them!

A source of inspiration to me has been Allen Fannin’s book Handlooms Weaving Technology. I don’t know if you’ve reviewed this in the past, but I find his detailed instructions for winding a warp and dressing a loom most interesting. It’s such a time-consuming process that some instructions or efficiency and economy of time are useful for a hobby weaver or a professional. One can read the book and pick out bits and pieces to adapt to one’s own style of warping and loom dressing which is very much restricted by the type of loom one owns! I have definite plans to have a warping board made to his specifications, as his warping method is excellent. I no longer feel that my loom, without a sectional warping beam, is at a disadvantage after reading his comments on the subject.

Sonya King
Lyndoch, Australia

I have refrained from writing regarding Mr. Fannin’s criticism of loom developments and loom builders, but when Mr. Fannin says that handspun and machine spun yarns are indistinguishable, I cannot remain silent any longer.

If Mr. Fannin says handspun and machine spun yarns are indistinguishable he has either not compared them properly or he compares his handspun with machine spun yarn. I cannot imagine where he could get machine spun yarn. There has not been any mulespinning in this country since the 1930s and in Europe since the late 1940s. Handspun yarn has the resilience and elasticity of mulespun yarns, something entirely lacking in ringspun and open-end spun yarn. Open-end spun yarn looks so different from ringspun and handspun yarn that nobody could mistake one for the other.

I regret Mr. Fannin’s hairsplitting definition of handweaving and handspinning and at the same time I am glad he brought it up. Not so long ago I came across some fabric labeled handwoven. Mystified by the low price, I investigated the source and found that the fabric was woven on an old Crompton and Knowles loom on which shuttles had to be changed by hand. By no stretch of the imagination could or should fabric so produced be described as handwoven.

As you remark in the Fall 1985 issue, the majority of handlooms are built for the hobbyist and therefore must be a nice and attractive piece of furniture. In addition, the requirements of most hobbyists are not the ones of production conscious producers. I grew up and served my apprenticeship in Europe in a plant with 85 handlooms. These looms were equipped with Jacquard or dobby heads. All looms had multiple box flyshuttle beaters, exchangeable, flanged warp beams, elastic warp let-off and with it adjustable take-up motions and a few other refinements. We bought the Jacquards and dobby heads but we built all our looms ourselves. The looms were not nice pieces of furniture but they were heavy, sturdy and efficient. The frames were made of 6 x 6 aged, not kiln dried, pine, the beaters were hardwood and the shuttle case invaribly cherry. These looms were 6 feet high with overhead (hanging) beaters and a 2 foot high Jacquard on top of that. Such looms could not be put into any American home because there is not enough ceiling room. A minimum of 9 feet was needed. Our looms had another characteristic that made weaving much easier. The back beam was about 2 inches higher than the breast beam. As the warp in the closed shed position formed a straight line from back beam through headle through reed to breast beam the heddles in the back of the Jacquard harness (or rear shafts) were standing higher than the heddles near the reed, giving a “slant” shed. This is very important especially in multishift looms. There are very few weavers who produce handwoven material on the scale Mr. Fannin apparently wishes to do. It would not pay any loom builder to develop and build looms to meet these requirements.

While writing to you I might also answer Laura Fry (“Letters,” Fall 1985). Until recently the textile industry used computers in production in two separate applications: to control and improve loom efficiency and fabric quality and in jacquard designing. Recently with the new bi-level system, cloth parameters can be changed on the loom by computer even design and colors can be changed with hardly any loss in production. This is still highly experimental and under development, but a mill installation on jet- looms has been reported. Knitters are far more advanced in this respect as they are using computers for design and innovation. Special systems exist that can control the electronic pattern mechanism of modern knitting machines. Handweavers are still employed to design for many weaving mills.

Now I have a question. Where does the yevada charika spinning wheel originate? Where can I get replacement parts for such a wheel?

Walter Hausner
Hackensack, New Jersey

P.S. A single heddle frame is a shaft. The harness is the total of all shafts in the loom with its tieup lamms and pedals.

Many years ago I purchased several spools of CUM cotton in a bright red color. Though the project is not forgotten, the cotton was not the correct yarn. Late last summer I decided to use this cotton for Christmas table runners. Before I could weave the runners, however, it was necessary to finish 45 yards of drapery material, in time to weave table runners, in time to weave fabric for a winter coat (I have been busy!). After finishing the drapery material, I put my mind to the runners and remembered a tea towel that had been featured in The Weaver’s Journal (Vol. VIII, No. 2, Issue 30 (Fall 1983), p. 19). This seemed appropriate for the holidays so I decided to design the runners using the “Star of Bethlehem.” There is an error in the threading.

Look at figure 26 on page 19. Starting from the left, A is a border of 10 threads, then a line. Also on the left there is a pattern. The first end to the right of the border is on shaft 1. Since the pattern threading begins on shaft 1, it cannot also end on shaft 1. Repeating the pattern gives a double thread at the point of repeat. My solution to the problem is to move the line that separates the pattern from the border on the left side of the threading draft, one square to the right. Now the pattern ends on shaft 2 and the thread on shaft 1 becomes a part of the left hand border.

Though this error is over two years old, there might be someone out there who will do as I did and refer back to it. I fully intend to weave every one of those tea towels.

Dianna Kimney
Albuquerque, New Mexico

We regret that several photography credits were omitted from the Fall 1985 issue. In Michelle Wippinger’s “The Art of Silk Dyeing,” the photos were by Judy Noble. In “Color Theory for Handweavers,” by Pat Bouin-Wald, the photos on p. 44 were by John Wald.
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COMPLEX WEAVES

Demystifying Complex Weaves

A step-by-step exploration from four to sixteen harnesses

by Sigrid Piroch

Imagine that you have just bought a multiple-harness loom (maybe you really have, or are about to, or are thinking you might) and are wondering what you would weave on it as a first project. You and your loom can eye one another from across the room for a while, or you can make friends quickly. Remember—you can weave everything on this loom that you could weave before on a loom with fewer harnesses, but now more complex weaves and patterns are possible as well. When you build blocks into patterns there are more blocks and block combinations to play with. When you thread from profile drafts there are more weaves you can apply them to. You can weave all the basic weave structures and unit weaves that you could before, but now you can extend them to more harnesses for more interesting and varied results—not only in the weaves and patterns, but with colors and layers as well.

Surprisingly, more harnesses are not necessarily harder to analyze and understand. Many weaves are clarified when extended to more harnesses because the threading sequence which develops becomes obvious. When you select a first project for trying out those additional harnesses, choose a weave with which you are already familiar. Let us begin here with something most weavers have woven before—point twill.

Figure 1a shows a point twill threading on 4 harnesses with standard tie-up threaded as threaded in point twill sequence, and the resulting drawdown for one pattern repeat (plus one thread to balance the design). Whenever a pattern is threaded and treadled as a point twill on any number of harnesses the resulting design is created by the tie-up. Any change in the design then occurs because there is a change in the tie-up. As a result, many lovely and varied patterns can be created with just this one threading and treadling: with more harnesses available, a greater multiple of pattern possibilities appears.

When any point twill sequence in threading and treadling is drawn down for any number of harnesses the tie-up can be found in two of the quadrants of that drawdown. If the tie-up is turned ¼ turn counterclockwise it will be found in the lower right-hand quadrant. These quadrants and their corresponding tie-ups are printed in black. You will note that the two quadrants overlap by one thread—that is because point twill has a reversing point (unlike straight draw twill). The upper right-hand quadrant pattern will be the mirror-image of the upper left-hand quadrant, and the lower left-hand quadrant design will be the mirror-image of the lower right-hand quadrant design. Complex drawdowns in twill can take a long time to do accurately by hand. If you do not have a computer to accelerate the process, there is another quick method. Make two copies of the tie-up (by hand or photocopying) and insert them into their respective quadrants. You will see half the pattern immediately. The other half can be seen by placing a mirror along the center quadrant edge half-thread. The quadrants which form to make one complete pattern can be called mirrored quadrants.

Figure 1b shows the pattern that develops when the same point twill is threaded and treadled twice. On 4 harnesses, the tie-up is a simple one and the resulting pattern, although not intricate, appears much fancier than the tie-up from which it is derived. The pattern repeats are highlighted, including the one extra thread in warp and weft which balances the design. Here the pattern repeats also develop in mirror-image fashion in both directions. A mirror can be held up to the edges of one repeat to see the full pattern development. These are called mirrored pattern repeats.

Figure 2a shows a point twill threading on 8 harnesses, this time with a little more complex
tie-up which creates a more complex pattern. We have increased from a tie-up of 4 x 4 squares to a tie-up of 8 x 8 squares, broadening the pattern possibilities. Thus, the more harnesses involved, the more intricate the tie-up becomes, and the more complex the pattern that develops. Can you find the tie-up in the two quadrants of the drawdown? By following the same procedure as before, you will find it in the upper left-hand quadrant after turning the tie-up ¼ turn clockwise and in the lower right-hand quadrant after turning it ¼ turn counterclockwise. The other two quadrants are mirror-images of their neighbors as before. Figure 2b shows the resulting pattern development with two repeats (highlighted as before) with the repeats again forming mirrored pattern repeats.

Just as we were able to see the pattern quickly by copying (or photocopying) the tie-up and inserting it in the drawdown, we can also see the full pattern development more quickly for two (or more) pattern repeats when one pattern repeat is copied four (or more) times and these placed, without turning them, next to one another in both directions.

In Figures 2a and b we have a point twill threading on 16 harnesses with its tie-up which now forms a much more complex pattern than could be developed with fewer harnesses. There is so much more design flexibility when we begin with a block of 16 x 16 squares! Can you find the tie-up in this design and the ones which follow? And the mirrored quadrants? Practice with a mirror next to a design of one pattern repeat and watch the full pattern develop before your eyes.

Instructions for making a wool vest with this particular pattern, "Argyle Twill" are given at the end of this article.

It is no more difficult to thread from 1 to 16 and back than from 1 to 4 and back. And it is no more difficult to treadle from 1 to 16 and back.
Figure 4.
Variations on 16-harness point twill designs.

Front and back of the pattern shown in Figure 4a.

Figure 4a.

Front and back of the pattern shown in Figure 4b.

Figure 4b.
threads are tied-down at regular intervals so you do not have long floats in the warp and/or weft. To check this, make a drawdown of two or more pattern repeats of a pattern you like. Count the number of dark contiguous squares in both directions, then count the light ones. If you are planning to weave this pattern in fine threads your skips can be over as many as seven or even nine threads, but if you plan to weave it in heavier threads you may want to limit the float spans to four or five threads. The real test will be on the loom. If you think you need to add more tie-downs just add another black square to your tie-up if the long skip is in the white squares, or change a black square to white if the long skip is black. If you still think adjustments need to be made after you have tried it on the loom, it is a simple matter to add and subtract tie-downs by just changing some of the tie-up elements as before—the threading and treadling, of course, remain the same.

There are not as many patterns available for sixteen harnesses as there are for four or eight, so creating your own is a distinct advantage. For more on designing your own point twills (from 8 to 20 harnesses) see Irene Wood’s book Sixteen Harness Patterns: The Finest Twills of All. She gives tips on developing patterns in different design shapes and shows examples of adding in tie-downs. For your inspiration, dozens of beautiful point twills which she has woven, are pictured along with their tie-ups.

Figures 4a through c show a variety of original point twill designs, with photographs of their woven interpretations. Flowers, circles, diagonals, wavy lines, squares, stars, arrows and other design motifs can be produced. Note that the reverse sides of these twills are different but...
Argyle Twill Vest

My daughter Debbie wanted a "preppy" argyle vest for college. I combined AVL's Argyle Twill pattern with its strong diagonals with subtle colors in warp and weft for an unusual argyle/plaid effect. Debbie selected and coordinated these colors with her "color palette" in mind, which happily guaranteed success. The threading for this project is the one shown in Figure 3. The vest has knitted trim.

Size: Women's 12

Warp: Ft. Crailo Lite-spun wool, medium and dark greens.

Weft: Ft. Crailo Lite-spun wool, camel and medium brown. This wool is approximately 1700 yds./lb. Since there are no dye lots for these colors, obtain enough of each before you begin. 1/4 lb. of each of the colors is sufficient for one vest. Allow an additional 1/4 lb. of medium brown for the knitted riblings.

Reed and Sett: 15 dent reed, 1 end per dent, 15 ends per inch; 272 total ends, including a float on each side.

Width in reed: 18". A 3 yard warp is ample for one vest.

Threading: Beginning with dark green, warp one thread for a floating selvedge. *31 dark green, 29 medium green for 2 pattern repeats,* repeat between (*). 3 more times; end with 31 dark green for the last pattern repeat, then 1 dark green for the float. When dressing the loom note that a dark green thread is always threaded on harness 1; thus the dark green threads are threaded from harness 1 to 16 and back to 1, the medium green from harness 2 to 16 and back to 2.

Draft: The circled number indicates a thread added to the last pattern repeat to balance the pattern; the circled x indicates a thread woven on the last treadling sequence to balance the pattern.

Weaving: Using the floating selvedge threads in the traditional manner, and beginning with medium brown, weave 4 picks plain weave, then *follow the treadling sequence (1 to 16 and back to 1); with camel, follow the next treadling sequence (2 to 16 and back to 2)._ Repeat between (*)s until yardage is complete, ending with medium brown and 4 picks plain weave. (Note: medium brown is always thrown with treadle 1.)

The floating threads should help give a good selvedge edge. The yardage before finishing should measure at least 54" long; 60" or longer is even better.

Finishing: Overcast the plain weave borders at each end of the fabric. Wash in cool water gently with neutral soap; rinse, iron when almost dry.

Shrinkage: 15% in length, 14% in width. The width should measure at least 16½" and the length at least 46½".
Assembly: Cut two panels 23 3/4" long from the ends of the fabric and overcast the edges. If your bear was even, the welt stripes will be consistent in measurement, and the cuts for each panel will fall at the same place in the stripe sequence. For a smaller size or short-waisted person a slightly shorter panel may be desirable; for a larger or taller person, a longer panel may be needed.

Cut out the neck shape from one panel for the vest front, taking the shape from a favorite commercial vest pattern. Mine was a half-circle 8 ½" wide by 3" deep. Overcast cut edges. With right sides together, sew the shoulder seams, tapering from ½" at neck edge to 1" at armhole edge, and 1" forward in the front. (The back panel is now 1" longer than the front panel.)

Knit two side panels with medium brown. With #6 needles cast on 18 stitches and work in knit 2 purl 2 ribbing for 9". Bind off in ribbing. Sew one knitted panel to each side of the woven back panel: with right sides up, catch-stitch knitted panel to woven selvedge. The back armhole measurement (from the top of the knitted panel to the shoulder seam) should be about 10½". Attach knitted panels to both sides of woven front panel. Front armholes should measure around 9½". If selvedges are uneven, work 1 row of single crochet over edges before joining to knitted panels.

Knit waist ribbing. With a #8 circular needle, pick up and knit 210 stitches: 89 along back and front, 16 along side panels. Work in knit 2 purl 2 ribbing for 4 rounds, then decrease the stitches by half on next round by knitting 2 together and purling 2 together around. Work knit 1 purl 1 ribbing for 10 more rounds. Bind off loosely in ribbing. Number of stitches and length of ribbing can be adjusted according to size and style preference.

Knit back neckline. With #6 needles, pick up and knit 56 stitches across back neckline between shoulder seams. Work knit 2 purl 2 ribbing for 2 rows. Decrease number of stitches by half by knitting 2 together and purling 2 together across row. Work in knit 1 purl 1 ribbing for 5 rows. Bind off loosely in ribbing.

Knit front neckline. Repeat as for back neckline, but pick up 2 extra stitches on each side beyond shoulder seam: 60 stitches. Make 2 single crochet chains 1¼" long for button loops and attach to the top corners of the front neck ribbings. Sew button to corners of back neck ribbing so that, when closed, the button loop, the front ribbing will overlap the back neck ribbing a bit. For a nice finishing touch, you can crochet over the raw edges on the inside of the vest at waistband and neck, tacking them down to knit ribbings. Finish the shoulder seam allowances in the same way.

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What's in a Name?

Name drafts drawn by hand or computer

by Susan Mansfield

If you are searching for ways to add original designs to your weaving, I would like to recommend a fun approach to designing drafts, name drafts or weaving plans based on names. This can be done either by hand or computer; the only difference is speed. The draft you derive from the name can be changed and manipulated to give many other drafts, so it serves as a catalyst for your creativity. The computer can aid the process by quickly filling in the squares for the drawdown or fabric representation; it works almost as fast as you can think up the desired pattern. Doing drafting by computer is both entertaining and an aid to creative thinking. It’s a lot of fun to see what happens with minor changes and you can check out variations without having to fill in squares on graph paper or set up the loom.

Basic method for deriving drafts

There are four steps in making a name draft: 1. choose and code the name; 2. verify that it follows weaving rules in threading; 3. check that it fits aesthetic expectations; and 4. do the drawdown. You may return to step two after you’ve completed a drawdown to improve or vary the designs. Keep in mind that name drafts are traditionally used for overshot weave, so some of the information presented here may not apply to other weaves. In overshot, a treadle is repeated with tabby between each pick, so overshot requires three picks to produce fabric, one pattern and two tabby.

Code Name

Start a name draft by writing the alphabet and giving each letter a harness number, thus producing a code. You may use four or more harnesses. I have found that there is no great advantage to using more than four harnesses for overshots and swills because the threading code becomes almost random. Next, write your name. I have used Weaver's Journal as the example. Give each letter a number which corresponds to the harness.

Weaving Rules

Examine the sequence of harness numbers (the threading). You want the final threading to produce tabby on alternate harnesses. Dashes in the following threading sequences indicate the problems. The threading corrections can be made in two ways:

Insertion method: If you find consecutive threads on the same harness or a 2 & 4 or a 1 & 3 side-by-side (even or odd pairs), add an incidental or extra thread on the opposite tabby lift. For example, reading and inserting from left to right: threading 23-321 would become 234-321 or 232321.

Change method: You may also change the second thread of the pair to the opposite tabby. For example: 12-234 would become 1234, then 1243, because 1 & 3 were together. Your decision depends on the length of the repeat you want and how much you want to stray from the raw code of the name.

This is not difficult to do by hand. On the computer all you do is enter the name. The computer prints the raw code (letter by letter) and also the changed, derived code for tabby weave. To produce the code, the computer program I have written uses the change method, always substituting the next greater number harness when doubles appear. The program also gives the raw code so I can use it for adding incidental threads. Most of the examples shown use this method.

Aesthetics

At this stage Weaver's Journal draft is 4232341434321 (change method or 4-3-2-1-23421) with added incidental threads underlined. Each incidental thread may be the other one of the odd or even pair. This is where you can use your aesthetic judgement (deciding whether this threading fits the desired weave type, has pleasing figures or shapes, produces a good balance either symmetrically or asymmetrically, is suitable for the intended use or project, and will work with your chosen thread size and type). The computer drawdown quickly try out the different choices — a plus if you are unable to visualize the effect! If you are doing the drawdown manually, changing one thread can be a big job; so the computer is a great help. Sometimes one thread change is all that is necessary to improve the pattern.

The versions of Weaver's Journal shown in drafts 1 and 2 show the threading with only one thread changed; it changes a five thread float to a point.

One aesthetic as well as fabric-use problem you face in weaving some of the name drafts are long floats. Look at this threading, 121212-34121. Notice that the first 6 threads repeat the 1 & 2 combination, thus giving a 6 thread float or web. Thread on the surface of the
Draft 1.

Draft 2.

Draft 3.

Draft 4.

Draft 5.

Opposite pair. Draft 4 Reverse has a thread eliminated on harness 1 and 4 and reverses on 4. Draft 5 Reverse2 eliminates a thread on 1 and on 4 at one side and reverses on 1. Reverse and Reverse2 have the reversal point at opposite ends of the threading sequence. These two drafts have only one repeat of the threading and two repeats of the treading. If the threading is repeated and treading started at the same point, the drawdowns would look the same. Shifting the paper will match the two drawdowns. It is generally a good idea to draw or print out two repeats of the threading and treading in order to see the pattern. (Both of these patterns have too many threads in one fabric when treadle 1 is used. This can be corrected by changing one of the threads to a different harness. Since 3 is also an odd number, replace one of the 1s with a 3, giving ascending and descending numbers a pointed draw. Draft 3 shows long floats and a threading with 2–4 threads adjacent making a non-tabby fabric. The threading is still asymmetrical. In order to balance it from left to right and make it symmetrical, thread one repeat, then thread the sequence in reverse order; do this again. This gives 12321234121–12143212321–123, etc. Again there is a problem, since two threads on harness 1 repeat in the middle and also on the ends. In both spots, eliminating the thread on 1 will cure the problem. Another problem might be adjacent threads which are both even or both odd. This can be solved by adding another thread of the
repeat to print two threadings, so make two copies and tape them together.

Use a straight draw tie-up: harnesses 1 & 2 on treadle 1, 2 & 3 on 2, 3 & 4 on 3, and 1 & 4 on 4.

Drawdown
The final step is doing the drawdown. Treadling may be done either "as written", straight or reverse twill, rose, or opposites, or other choices. If you substitute picks treadled on 1-4 for 1-2, 2-3 for 3-4, 3-4 for 2-3, and 1-2 for 1-4, you will have a different pattern. On a sheet of graph paper fill in squares across the top for the threading and the upper right for the tie-up. Each row represents the harness and each column a thread, in the threading portion, and a treadle in the tie-up portion. Under each column in the tie-up mark the treadle you intend to use. Now fill in the fabric portion of the draft by filling in each square which has threads which match those harnesses tied to the treadle. Assume you treadle 1 first. Treadle 1 lifts threads on 1 & 2, so mark all 1's and 2's in the row. Fill in all the other rows for the other treadles.

A drawdown trick to use if you don't have a computer doing the job, is to fill in several rows of graph paper to represent each pick-up and to write the treadle number on each row along the side. Then cut the graph paper in strips and rearrange them in the particular threading you want. With this method it is easier to fill in the squares, as well as to try different treadlings. All you need to do is shift the strips of paper representing each pick. In overshot Name drafts the two picks of tabby are not necessarily shown in a drawdown since they are taken as a necessary requirement and the design is more noticeable without them and the half-tones they make. See Draft 6. When weaving overshot, picks and harness pairs are repeated to form blocks of floats, thus enlarging the pattern. (You can see the pattern without the repetition of picks on the same treadle, so doing drawdowns this way saves paper.)

The scale of a computer printout is about ten threads per inch, so if you are using smaller threads the design will not be as obvious. Another difference between drawing and weaving the fabric, is that drawing does not have problems with maintaining an even beat or using irregular size threads. When you weave, be sure to check that diagonals have the intended angle so that squares are square. A plastic triangle aids you with this. If you plan to weave a number of different width pieces from the same warp, plan the pattern so you can remove threads from both sides and still have a good design.

Take a look at the completed drawdowns. Notice the diagonals, the stars, tables, roses, flowers, and other patterns which form. Starting at a different spot or repeating certain parts in the threading may give a better pattern or give emphasis to that part. One way to find different turning points is to hold a mirror perpendicular to the paper at different places and angles to see the various patterns which form.

The point twill threadings (123432) produce nice stripes of diamonds. A point twill, then reverse point twill threadings give larger diamonds or star effects which are still in stripes. A couple of the threadings that follow use only a portion of the code for WEAVERS JOURNAL and then reverse the code. This gives table designs, diamonds, or snowflakes depending on whether the threading repeats a 2-3 combination with few 1's and 4's or whether it has more 1234321 sequences.

When I looked at the drawdown of WVJOURNAL, I noticed a diamond pattern starting at the left edge. WVJRNLDraft 7 takes these left thirteen threads, reverses on harness 1 in a leftward direction, giving twenty-six threads in the repeat. In WVJPART Draft 8 the threading starts with the seventh thread of WEAVERS JOURNAL Draft 2 in a straight direction and ends with the seventeenth, since that portion contained a threading to make a snowflake design. The new draft uses ten threads and reverses and repeats them.

Experiment with different treadlings using graph paper or computer printouts. The examples have the "as written" treadling or portions of it, point twill, straight draw, overshot, and rose treadlings. In antique covelets you may find straight draw blocks in the borders combined with other treadlings in the covelet body. Borders of twill or part of the "as written" threading between them emphasize a star or snowflake effect. By looking closely at the drawdown samples you will start to notice subtle effects in the weave which you can emphasize by changing threading in one or more spots. I looked for natural focal points and central patterns and then eliminated excess threads in the repeat or added them between. WJR_REVLDraft 9 is an asymmetrical version of WEAVERS JOURNAL.
which adds 234321 and then repeats.

These drafts can be used as a profile or short draft for any weave you would like to use. For instance, each black square in the threading could represent any even number of threads or a certain sequence of threads. For an overshot a block in the top row could be 4 threads, 1212, while one in the second row would be 2323, third row — 3434, fourth row — 1414. Each pick in the treadling shown would be repeated two or more times with a tabby thread after each. A Summer and Winter threading of four blocks would thread first on harness 1, then on harness 3, 4, 5, or 6 for pattern block, then on harness 2. The treadling would have tabby threads alternate between the 2 pattern picks for each block. Crackle, bronson, and double weave, and Swedish lace could also be woven using your profile draft.

I hope you give name drafting a try. Whichever way you want to do it, either by hand or computer assisted, will be fun and give you new weaving ideas. The steps in either case are the same; code a name, make sure the threading can produce tabby weave and appropriate length floats, is aesthetically pleasing in weave, figures, balance, and fits the intended project.

Happy drafting!

Note: The programs used to derive the drafts in this article are ones which the author has written for use on the IBM PC.

"The Drafter," a drafting program written for the IBM PC is available from Susan Mansfield, 145 Dakota Ave. S., Minneapolis, Minnesota 55416. The price is $40.00 and the program comes in color. Also available are personal name drafts. If you would like Susan to generate a name draft for you, send in the name desired plus $1.50 for 2 drafts.

CONTEST

Are you intrigued by the many design and fabric possibilities in the Weaver's Journal name drafts? If so, we invite you to send us your interpretation of this draft used in an item woven for the home. Cash and merchandise prizes will be awarded to the winners, and instructions for making the winning projects will be published in The Weaver's Journal.

Instructions: Select one of the Weaver's Journal name drafts from the preceding article and use it to create something for the home such as upholstery fabric, table linens, towels, rugs, hangings, etc. Send us a completed piece along with information on yarns used, weaving and finishing instructions, and a brief statement outlining your approach to this problem. (What were the factors that influenced your choice of project and materials?) If you make a group of items such as a set of placemats, send in only two of the set.

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"You've got to be kiddin'!"
Wearing Handwovens with Style

by Anita Luvera Mayer

HANDWOVEN CLOTHING has become stylish and wearable, successfully evolving from the earlier heavy fabrics that were often more effective on the wall than on the body. The problem now facing many weavers is how to coordinate these special creations with the rest of one's wardrobe.

The search for what to wear with handwovens can be expensive, frustrating and time-consuming but one solution is to “plan backwards.” Select a basic garment, a simple dress, pants, skirt/blouse, jumpsuit or jeans/turtleneck in a favorite foundation color (plum, grey, taupe, black) and then design “creative coverings” to coordinate as a second layer. This practical approach can save you time and money by cutting down on both your shopping time and your investment in coordinating clothing. The layering effect also provides added warmth as a bonus for those who live in cool climates. The basic garment could be purchased or made using fabrics such as wool jersey, corduroy or cotton. In warmer climates, cotton pants or a skirt would be practical and comfortable.

It is not enough merely to create a beautiful handwoven garment. It should be worn with pride and style, enhancing the wearer's self esteem and providing a visual gift to others. You are a unique individual and should make that statement in the clothes that you weave and wear. Clothing is a silent language that says a great deal about a person before a word is spoken; it is a visual resume and a non-verbal language. Clothing has been used for centuries to indicate social stature, wealth and occupation.

For you as an individual, it is important to decide what you are saying about yourself and what it is you want to say with the clothing you wear. Each of us has the right to change our appearance to suit various roles and personalities, but we must also develop our own personal style of dressing. Style reflects an individual type of behavior and look in contrast to fashion which is a current trend or fad in clothing. If you understand the importance of attitude, color, proportion and line, you can enhance your attractiveness and develop an individual style.

Attitude

How you look is 90% attitude and 10% physical shape, for if you feel good, you will look good. We all know people who are beautiful, not because of their size and shape, but because of their attitude about themselves and life. Accept and like yourself or do something about the problems NOW. Take control of your body and your life. Discover and emphasize the positive aspects of your appearance, recognize your shortcomings and learn how to minimize them. Seek the advice of experts in make-up, hair style, co-ordinates and color and then use that information selectively. Standing tall with pride in yourself will make you feel better, appear ten pounds thinner and look more stylish.

Color

Color surrounds and shapes our lives and can be used to create illusions. Use color to your advantage to enhance your appearance. Dark colors seem to recede and reduce size, so use them on those parts of the body that you wish to minimize. Dark does not have to be black or unflattering—consider using some of the rich jewel tones. Light values advance and seem larger because light appears to spread, so a light and bright color will focus the eye on the part of the body it covers. Use the light colors for the areas you want to emphasize (a bright collar to focus on the face, bright sleeves to emphasize hands, a colorful sash to focus on the waistline). Contrasting color creates interest so design some of your handwovens to contrast with the basic garment.

Our model Katherine Tilton McAlmon is a St. Paul, Minnesota tapestry weaver and teacher. She has recently shifted her attention to the production of hand-painted clothing.

PHOTOS BY JILA NIKPAY
Proportion

Proportion greatly influences how a garment looks. Verticals, horizontals and illusion interact to contribute to the total look of the clothing on the figure. For example, wide shoulders will make hips look narrower (football players appear to have those slender hips because of the illusion created with wide padded shoulders). Many handwoven garments need a more square shouldered look to balance the hipline, so consider using removable shoulder pads or using tucks at the shoulder for emphasis.

Visually curving yourself in half makes your figure look shorter and wider. Think in terms of ½ and ⅓ of the total garment length. For most figures the ⅓ measurement ends the garment at the waist area, which is one of the most flattering places to focus attention with a contrasting line. The eye is drawn inward to the waist and then upward to the face, away from the lower body. This is most effective when there is a continuous color line underneath the handwoven piece (dress of one color or pants and top in the same color tone). Many garments end at the hipline, thereby emphasizing the broadest part of the body and visually dividing the figure in half.

Using a length that is ⅓ of your shoulder-to-hem measurement pulls the eye downward, giving the illusion of height and slenderness. Ending a second layer about three inches above a dress or skirt hemline is very flattering to a majority of women. The length of your legs, total height, shoe type and personal comfort are all factors to consider in determining the correct use of proportion. The most important message is to avoid visually dividing your figure in half.
Line

Lines create visual pathways by leading the eye up and down or across the body. A vertical line emphasizes height, a horizontal line focuses on width, a diagonal line slims and a curved, exaggerated line focuses attention because it takes more time to view the contour. Vertical lines can be created with fabric stripes, vertical seams, and selvedge emphasis. Jewelry (long necklaces and earrings) and V-type necklines also add length. Garments which open down the front (kimono, jackets, vests) are especially slenderizing because the narrow opening becomes a vertical line. A loose fitting chemise, tunic or shift is an unbroken line that can camouflage a thick waist or balance a heavy bust. Wearing a loose tunic or dress casually belted below the waist and softly bloused is very attractive on almost all body types. A continuous color line elongates the body, so if hose and shoes are in the same light or dark tones of your basic garment you will look taller and slimmer.

Planning

Some specific figure considerations need to be reviewed in planning basic garments and handmade co-ordinates. A garment should never overwhelm or detract from the wearer. This is doubly important for smaller women. The shorter figure type also needs to scale down accessories and have enough leg showing to give length to the figure. Short tops that come to the waist with one color line underneath are recommended for the smaller woman. The most effective way for the large woman to dress is to emphasize the vertical line of the figure. The fuller figure needs simple garments with graceful flowing lines such as shifts and caftans. These give a long continuous line that covers the figure without attempting to fit any area snugly. Having part of the leg visible also slims the silhouette. Color, design accents, and jewelry can focus attention where desired. Hose and shoes in the tones of the basic garment will slim the leg and create verticals. Lightweight fabric is as important for the fuller figure as for the petite woman.

Clothing is one means of self-expression. Take inspiration from yourself, like who you are and take care of yourself. In today's world, we often let other people make our decisions for us and lose our individuality and perhaps our sense of well-being as well. Strive for simplicity in what you weave and what you wear. Look to history for a source of ideas for the past is a way to understand the present and to meet the future. Clothing is a tool for you to use to express your personality and outlook on life. You give importance to the clothes that you weave and wear. Have fun with creative coverings and wear them with style!
The Dress
Basic black "T-Dress" with detachable cowl can be worn belted or not. Several possibilities are shown here. —Create your own style!

Note the stunning vertical effect achieved when the basic black dress is paired with the peacock scarf.

Basic T-Dress
Think thin, think tall

Fabric needed: 2 yards of stretch jersey fabric, 54" or 60" wide, depending on width needed.
- Dress can be worn strapless with neckline as shown.
- Neckline shape can be changed.
- Length indicated is quite long—check your desired length. Allow for belting and blousing, however.
- This pattern fits sizes 12 to 18, 5'5" and taller. Dress needs to be scaled down in width and length for smaller and shorter figures.
- Some wearers find armholes too tight. They can be cut wider.
- Cowl piece is stitched on the sides, left open at top and bottom. This piece can be tucked into neckline if a cowl is desired.
- Cut tie belt from remaining fabric. Finished size: 1" × 82".
Vadmal

A study group from the frozen North warms up to an ancient technique

by Susan Larson-Fleming

"It's a waste of good wool!"

Lossing fifty percent of your handwoven fabric to shrinkage is not a comforting thought and could deter a weaver from attempting to make vadmal. Fortunately this was not the prevalent opinion when the Eclectic Weavers study group finally decided to work with a process for producing this felt-like fabric. This gathering of 12 to 15 Minneapolis/St. Paul weavers, founded in 1970, started as a study group of the Weavers Guild of Minnesota. They examine a different weave or technique every year. During 1984/85 the topic was vadmal. The result was a selection of garments reflecting individual preferences in color, cut and finishing but sharing a common process.

Vadmal has been defined as coarse, fulled and napped, homemade woolen fabric woven for everyday use.¹ The distinctive look of vadmal is achieved by manipulating the woven fabric after it is removed from the loom. The felt-like effect results from a finishing process which subjects the woven fabric to moisture, heat, pressure and agitation making the resulting vadmal difficult to distinguish from felt. This finishing process is more correctly defined as fulling rather than felting because fulling indicates a manipulation of an already woven fabric.²

The Swedish word vadmal comes from vadmatt which means the measure of one length of woven fabric.³ The term appears quite early in Swedish historical documents and was identified as an important object of trade and medium of exchange. Because of its use as currency, domestic manufacturers of vadmal must have been quite widespread. In 1380, a royal ordinance granted Swedish peasants the right to use vadmal as a means of trade and allowed them to sell it to one another. Fine woolen cloth or broadcloth, which dominated organized trade production, remained exclusively a trade object controlled by city merchants.⁴

In present day usage, vadmal denotes a two- or four-shaft woolen material which is fulled. How and when this definition reached common acceptance is not known. What is probable is that vadmal once referred to certain woolen fabrics which were woven on a warp-weighted loom and were according to standard measurements. The warp-weighted loom was used in Iceland until the late 18th century and records from this period show that vadmal had at one time been associated with unfilled cloth but always with 4-shaft twill.⁵

Woolen cloth dominated European cloth production during the Middle Ages. The type of wool fabric worn indicated social standing. Until the 18th century, nobility and bourgeoisie confirmed their upper status by wearing broadcloth. For the lower classes, homespun predominated. In Sweden this distinction remained until the 20th century.⁶ Among these homespun, home manufactured fabrics was vadmal.

Vadmal has been used traditionally for both clothing and interior decoration. In Sweden, archives records and literary sources indicate that the walls of rooms were draped with lengths of woolen material including vadmal. Fabrics and clamped net strips hung from ceilings and entire rooms were lined in fine woolen cloth or vadmal. Later, lengths of vadmal and linen tabby (preferably patterned) were attached to walls as tapestry. This custom was still followed in peasant households in many areas through the mid 19th century.⁷ Since the Middle Ages, embroidered mittens of vadmal have been given as traditional wedding gifts. Stockings of sewn vadmal and linen fabric continued to be used alongside knitted stockings during the entire 19th century.⁸ Outerwear and work clothes were also made of vadmal because of its warmth and sturdy construction.

Twentieth century weavers such as the

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¹ Ann-Maja Nylén, Swedish Handcraft, pp. 19 & 414.
² Irene Linsky, The Primary Structure of Fabrics, pp. 22-23.
³ Elias Werner, Vasa Omt. p. 497.
⁴ Nylén, ibid. p. 124
⁵ ibid. p. 125
⁶ ibid. p. 126
⁷ ibid. p. 80.
⁸ ibid. p. 332.
Coat designed and woven by Jean Seeker.

- **Warp:** Cam 7/2
  - Magenta
- **Weft:** J. Hydrop
  - Butech, Galashiels, Scotland, 16/2 light blue, purple, royal blue and red violet
- **Setts:** 6 c.p.i.; 6 p.p.i.
- **Comments:** After weaving, selvedges were sewn together to form a tube to prevent "ruffling" along the edges during the shrinking process. The fabric was washed in a washing machine set on regular cycle using extra hot water from a teakettle, followed by a cold rinse. Bath towels were added to the wash for friction. During this process the material shrunk more than 50% in width but about 30% in length. Before drying, the fabric tube was cut open and then wrapped around a plastic tube with dry towels separating the layers. The fabric was unwrapped each of the three days it took to dry, and dry towels were added.
Eclectic Weavers have rediscovered vadmal and have used its “homely” nature to create lovely and original garments.

Before the cloth is submitted to the vadmal process, it must be loosely woven. Since the material shrinks 50%, a lot of fabric must be produced. It is particularly important that the sett and beat be loose to allow maximum fulling.

Yarns
Two-ply wools such as Harrisville Shetland, CUM and Bergå were used both for warp and weft in the group’s experiments. Single ply wools are usually too tightly twisted to allow maximum fulling. Different yarn weights full differently, so sampling is very important to establish the amount of shrinkage.

Sett
5 c.p.i., 6 c.p.i., 8 c.p.i. were all used to achieve the correct sett. Anita Mayer has recommended dividing a tabby sett in half for vadmal weaving. A closer sett will produce a fulled fabric which is not so thick.

Weaving
The weaving is fast but very controlled. The beat should not be too hard. If the fabric becomes too compact it does not full as much.

Fulling
Fulling completes the vadmal process and gives it its distinctive hand. During fulling the loosely woven fabric will shrink approximately 50% in your washing machine:

- Use one cup of Tide™ or Ivory Liquid™
- Set the washer cycle at Hot Wash/Cold Rinse or vice versa. Most of the shrinkage occurs during this step. You may add a towel to balance the wash load.
- Leave the fabric in the machine through the full wash and rinse cycle, but do not spin dry. Some of the weavers added an extra period of agitation.

The fabric may be air-dried, put in the dryer, or rolled up between bath towels to dry. Plumbers’ pipe can be put in the center and fabric plus towels rolled around it. The material is then rewound using dry towels. If you roll the fabric, pressing is unnecessary.

One unexpected side effect came to be known as “ruffling.” Ruffling is the uneven fulling of the fabric due to selvedge shrinkage. Tumbling in the washer or the difference in density on the selvedge ends produced during weaving may account for this phenomenon. The

Jacket designed and woven by Shirley Herrick.

Warp: Mixture of fine 2 ply and singles from Iceland plus Harrisville 2 ply in pink, blue and purple.
Weft: Harrisville 2 ply in lavender.
Sect: 8 c.p.i.
Comments: Cloth was washed in a washing machine for 10 minutes using Ivory Snow™, and then dried in a dryer. Shrinkage varied from ½ to ⅞. The jacket has sleeves knitted in cable stitch and an underarm inset knitted in rib stitch.
problem may be solved by sewing the selvedges together with a loose overcast stitch either by hand or machine before fulling.

A successful vadmal fabric may be cut and it will not ravel. The weave structure should not be visible: colors will blend and patterns mesh. Vadmal is warm, windproof and waterproof, proof positive of its past success as a fabric for work clothes. And remember: vadmal fabric can be woven on both floor and frame looms.

References

Selected Bibliography

"If I shook it, the weft would all go to one side!"

Jacket designed and woven by Phyllis Plisden

Warp: Glass House Sherland in blue, burgundy and light blue; Glass House Roughspun in burgundy; Glass House Chenin in violet.
Threaded randomly.
Weft: Glass House Sherland in Black Raspberry
Sett: 6 e.p.i.
Comments: The weft was 6 e.p.i. The fabric shrunk 50% during fulling. The fabric was fullled for two 12-minute cycles at the "regular" setting. It was then air-dried. The jacket was finished entirely by hand. It was interfaced to provide the soft vadmal fabric with more firmness. The sleeves are knotted. Slettre braid, a Danish technique, was used on the edges and is shown hanging from the neckline.

Jacket designed and woven by Mary Johnson

Warp: 2 ply Harrisville Shetland
Weft: 2 ply Harrisville Sherland
Sett: 6 e.p.i.
Comments: Sleeves for this twill jacket were crocheted from the same yarns used in weaving.


WINTER 1986 □ 29
Finishes for Vadmal
by Suzanne Baizerman

The vadmal garment: a perfect challenge for the ardent finisher! Like an artist's blank canvas, vadmal with its blurry, fuzzy surface beckons the finisher, providing the backdrop for a full array of finishing techniques.¹

The finisher, however, must also work around another major characteristic of vadmal: the sturdy "hand" of the fabric. To accomplish this, vadmal garments might have major components (like the sleeves on a jacket) replaced by complementary, more flexible pieces of knitting or crochet. (Figures 1 and 2) Hems which would add bulk might instead feature edges bound in some suitable trim. Knitted ribbing might be added to fit lower garment edges more closely to the body.

To give you a "start" on your vadmal finishing, five areas will be of special interest: 1. cutting out the garment, 2. joining garment pieces, 3. lining the garment, 4. finishing edges, and 5. adding closings and other embellishments.

Cutting Out the Garment
Deep down, many weavers believe that their handwoven fabric will simply spring apart when cut. Don't worry about vadmal raveling: the fulled surface holds those cut edges in place! Remember, though, in choosing a garment style to cut, that lines should be kept simple because of the stiffness of the fabric. Eliminate as many details, seams and hems as possible to keep bulk to a minimum. The garment will conform somewhat to the body shape as it is worn.

Joining Garment Pieces
Garments may be joined using machine or hand methods.

Machine sewn joints: In general, use a larger needle (size 14–16) to sew seams, and set stitch length at 10 stitches per inch. Trim corners, clip and notch curves carefully (Figure 3); press well. Face garments with a matching lighter weight wool to reduce bulk in such areas as waistbands, cuffs and necklines. Since facings tend to roll to the outside, understitch these areas through facings and seam allowances close to the original row of stitching used to join facing to garment.

While standard seams with seam allowances may be used, some weavers have found that a simple overlapping seam is effective, and that the vadmal compresses well.

Crocheted joints: Many weavers crochet all around the edges of garment parts, then crochet...
these crocheted edges together to join. (Figures 1 and 4)

Hand-stitched joins: The ancient stitch is an inconspicuous way to join garment parts. (Figure 5) This join butts pieces together and, like the machine sewn seam, can be ornamented later with a variety of decorative embroidery stitches. Examples of such stitches are the Cretan stitch, feather stitch, herringbone, buttonhole, figure-eight, and the Van Dyke stitch. (Figures 6 and 7) Note that these decorative stitches by themselves might not be strong enough to withstand the stress of supporting these sturdy garment pieces.

Other embellishments might be used to ornament a seam, or to create the illusion of a seam: knotted seams; flat braids such as the 5-strand or the 4-strand, two color (Figures 7 and 8); the 5-finger braid; or spool knitting.

Selection of the appropriate materials for covering seams can provide a field day for the creative finisher. Both color and texture can be utilized to contrast with the vadmal ground weave. For example, the reflective qualities of silk might make a particularly exciting foil for the cloud-like vadmal texture.

Lining the Garment

The vadmal fabric will stretch to fit the contours of the body. Lining the garment will help retain the original shape. Some weavers have lined component parts prior to joining. (Figure 9)

Finishing Edges

Since standard, turned-under hems add too much bulk to the vadmal garment, weavers have used other finishes on edges. A simple knitted or crocheted edge is one possibility. (Figure 1) There are commercial bias tapes made to enclose an edge, but weavers can choose to make their
Buttons can also be made of felted yarn or they can be knotted of yarn or plied strands. Examples of the latter would be the monkey fist knot or the Chinese button.

While machine made buttonholes may be used on vadmal, corded or machine-bound buttonholes are also suitable for these heavy fabrics. Thinner fabrics, fine leather or Ultrasuede™ could be used. Try these fabrics for wel hand pockets, too. (Figure 2)

There are many other materials which contrast well with the vadmal surface and therefore may be considered for embellishments. Try buttons, other closings, beads, or other jewelry accessories made of any of the following: bone, wood, ceramic, horn, or metals, such as brass, copper, silver or pewter.

Notes
1. The author gratefully acknowledges the contributions of the biannual Weavers of Minneapolis. Paul to this article. In addition, Ann Sageforce who teaches clothing construction classes at the University of Minnesota made many valuable suggestions about machine sewing.

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Wearable Fine Thread Tapestries

by Elmyra Tidwell

Body art has taken many forms through the ages, ranging from primitive in the use of painting and tattoos, to highly refined forms such as jewelry, lace and other adornments. For centuries, what people have chosen to wear has reflected their individuality and their times. Today, the most common form of body art worn in America is the designed t-shirt. Elmyra Tidwell has gone far beyond the mass-market T-shirt concept of adorning the body with her exquisite woven tapestry neckpieces. She has related for us her sources of inspiration and the process behind her creation of these works of art.

When people see my work for the first time, they usually think in terms of miniature tapestry. My necklaces are larger than most mini-tapestries, but I don’t like them to exceed twelve inches in diameter.

I started weaving my first necklace by accident. I had tried to weave larger tapestries using heavier yarns for weft but without success because I did not have the shades of yarn I needed; also the heavier weft yarns consumed too much space, limiting the amount of detail that I could develop. I did, however, have a great many shades of colors in cotton and size #70 silk sewing thread. On a whim, I decided to try this thread to study the use of color in tapestry and to learn how to achieve the gradual change from one color to another.

I planned to weave only enough to make a small tapestry necklace, but as you can see, my first necklace did not stay very small. It grew and grew. Each time I worked on it, I discovered something new developing: it was magic before my eyes. I was hooked on fine thread tapestry.
and this was the birth of my first necklace. This was the only piece I began without a preconceived plan, cartoon, or theme. I had barely started it, however, when I realized that I must decide on a theme and a definite shape for it. Since I am interested in astronomy and could see a relationship between the colors I was using and the elements in the universe, I portrayed the colors as they appear on a spectroscope. To me, science and religion cannot be separated—for in the end they are one in the same—so I added religious symbols to the theme and entitled the piece, "The Colors of God's Cosmos."

Everyone enjoyed my first necklace and I was encouraged to attempt another. This time I selected a subject that would appeal to an audience of all ages: the circus. This idea developed into "Under the Big Top." The piece, shaped to resemble a clown's collar, brought the main arena events into action, front and center. The more I thought about the theme, the more I wanted to make sure this piece incorporated all the excitement of the circus, including music to complete the mood. At this point, I realized that the design was becoming an expression of my thoughts and feelings, and in the process of weaving, each character had come alive.

My third necklace, "Oriental Guardians," expresses my infatuation with oriental art, particularly the beautiful embroidery of the Chinese. This piece, with its traditional Chinese character border, depicts the oriental belief that dragons breathing fire soar through the sky guarding all life within its world. The entire necklace tries to capture the mystical aura and complexity of oriental art.

My most recent piece is a celebration of the 1904 St. Louis World's Fair, called "I Remember You St. Louis." I researched the event with fervor, inspired by my late father's remembrances of the Fair. I wanted the events and excitement of the Fair woven into fabric. There was so much to include—the flavor of cultures from around the world and many original inventions: ice cream cones, iced tea, hot dogs, and an electrically lighted building. A visitor could watch the overhead airship, have a picture taken, or witness the third summer Olympics. Today, the Fair's bandstand and outdoor aviary remain tourist attractions in Forest Park. Many viewers of my necklace tell me that it transports them back in time to the World's Fair.

I selected fine thread tapestry for my work because it allows me to create greater detail on small tapestries. When heavier wool yarns are used, small details cannot be woven in a small area. The tapestry has to be large enough to accommodate the heavier yarns, otherwise there is not enough space for the figures or background. With finer threads, however, I can weave a finely detailed tapestry of any size, tiny or large. Remember, the size of the yarn has to fit the tapestry's purpose, the desired amount of detail, and its overall size.
Yet, finer threads do have a drawback: sewing thread does not offer texture. I had to learn how to create texture in my pieces through color and extra warp threads here and there as I wove. This allowed me to weave one area on top of the other. Pulling in slightly on the warp threads, I was also able to allow light to penetrate through the piece, giving it the sense of texture and illusion. As I became more creative in my techniques, I began to break the standard rules of tapestry weaving. And again, the results were magical.

TO CONSTRUCT these necklaces, Elmyra uses a "loom" that is a circular piece of cardboard measuring 14 or 16 inches in diameter (See Figure 1). Around the outer edge of the cardboard, she cuts notches ¼ inch deep and about 6 to the inch. When it is later warped, it will give 6 e.p.i. at the edge and 12 to 14 e.p.i. at the center ring. Next, she covers a metal neckring (available in most craft shops) with sewing thread of any color to keep the warp threads from slipping on the ring. Her hand-drawn design is taped securely
onto the cardboard at the outer edge just in front of the notches. The neckring is then placed in the center of the cardboard. The silk or cotton thread 30/3 is cut into convenient working lengths. One end of each length is secured into one of the edge notches. The loom is warped by bringing the thread toward the neckring, under and around the ring, then back to the cardboard edge, and around the next notch. This method of warping is continued all the way around the cardboard. When she starts to weave, she begins at the neckring and works toward the outer edge of the cardboard.

Working with the finished side up, Elmyra weaves with a regular sewing needle. A lighted magnifying glass on a stand helps her see the details, and she uses only her fingernail to pack the weft.

Since all the unused ends of weft thread remain on the top side until the piece is removed from the cardboard, they must be worked through separately and cut off on the back side. This operation alone can take ten to fourteen days.

Elmyra tries to complete one piece a year—her last neckpiece took 586 hours to complete. "But these hours do not drag—they pass quickly and are well worth the effort." Understandably, these pieces become very much a part of this artist. Also understandably, she does not sell them. "It would be hard to place a price on any weaving that takes so many hours."

Elmyra has created her own rules, methods and techniques for weaving neckpieces. People often ask her about her inspiration and her advice to tapestry weavers:

How do you continue to come up with new ideas?
Ideas come to me from the combination of encouragement of others, the love of doing this work, and the inspiration of all life around me. Your everyday life, past and present, can give you the inspiration you need to create an idea that will come alive.

How do you know when you finish a piece that is really good?
If you accomplish everything that you planned in a woven piece and you, yourself, are satisfied with it, then it is good. No matter how anyone criticizes your finished work, do not take it too seriously or let it discourage you. Always consider what they have told you as constructive criticism, but at the same time, remember they may not be correct either. Value is what your work means to you—how others feel is only secondary.

What kind of general pointers can you give tapestry weavers?
• Remember that each tapestry has two parts: figure and background. Each is a design in itself.
• Control the internal elements of a tapestry: The size of the figures in relationship to the background field, their position in relation to all other figures, and their size in relation to the whole tapestry.
• Control color: Use a color wheel—it will help you. Allow enough space between color changes to make them gradual. Consider color values and their effect on each other.
• Express the five senses: Try to express as many of the five senses as possible in your work. Not only sights but feelings, sounds, tastes, and smells. All of these can be achieved through color. Think about it. I'm sure that you have observed all of these senses in a piece of artwork but were not conscious of it.
• Develop a theme for your tapestry: Write down ideas and review them later. You may decide not to use any of them, but remember, new ideas can develop from the original inspiration.
• Tailor your mood to the piece: Even though your work is in a particular style, don't forget that your mood can greatly affect your work as well. Being able to work in any style or mood is a great asset to an artist.
I am writing this before the first snow flies. It seems easy to write about Spring while the leaves are still green and attached to their branches. The fashion industry has just shown its Resort/Cruise collections. The industry is loath to connect this season with any mention of Early Spring. There is plenty of information, however, to point out the trendy directions.

Popping up as always this time of year are nautical themes and treatments, from sailboats on sweaters to signal flag colors, middy collars, and striped inserts in deep V necks. More fun to focus on are fabrics.

Surface interest is kept very subtle this season. Effects come from two kinds of texture: tactile and visual.

The "feel me" fabrics generally rely upon weave structures to accomplish their purpose. Many are complex and include waffle, pique, satin, and matelasse. Color can be used to heighten the end result. If bouclé and slub yarns are incorporated, they should be unobtrusive.

The important contrast of shine and matte appeals to the eye. These elements are put together either in the same fabric or in separate garments. Shine in fabric is produced by dobby and jacquard weaves, the process of calendering, or by using yarns such as rayon, silk, and polyester.

It would be interesting to play with combining the two factors. A silk jacquard plaid was shown that resembled a miniature four-block overshot without the incidentals. Seersucker has possibilities, as do lace blocks and stripes. Jaspé yarns offer more opportunities for a personal fashion statement.
The proliferation of prints may seem a bit overwhelming. The florals will either be soft and airy or bold and bright. Ethnic influences come from Egypt, Africa and the Americas. Some fabrics are embellished with amusing cartoons while others are reminiscent of Sixties psychedelia. Denim is patterned, and even the textured wovens are printed. Cabbage roses and paisleys seem passé. Try fruit, leaves, and fish as single or repeated designs.

There is no reason for the hand weaver to despair, though. Plaids and stripes are in abundance, and the ethnics are often woven. If a print is to be combined with another pattern, a stripe is best. A wide stripe can be worn with a narrower one. Gingham and tablecloth checks, especially white with yellow or blue, have fresh appeal. And cross-dyeing can give fabrics a bit of extra zest.

The fabrics are made into clothes that are wonderfully simple and well suited for hand-wovens. Clean lines, easy fit, and some draping all play a part. American sportswear leads the parade.

Big shirts are worn as jackets, open to reveal little bandeaux. Related to the big shirt is the kimono jacket with shaped hemline and the duster. More midriffs are bared thanks to flyaway cropped tops. Other casual toppers to consider are oversized cardigan and sweatshirt shapes, camp shirts, woven tanks, and simple square T-shirt forms.

The popular turtleneck is carried over from last season. It shows up as a part of the halter and the tank, depending on how much shoulder is revealed. Another returning neckline treatment is the Nehru collar.

Skirts are still either short and slim or long and flared, as in the circle variety. Fluidly draped sarongs hang from just below the waist.

There is a pair of pants for everyone. They range from tight knit leggings to generous cuts. High water pants are still around, and bell bottoms are staging a comeback. Shorts are Bermuda length and cut with wide legs.

Long fingertip jackets are worn with short skirts. The cropped tops are great not only with shorts but also with long full skirts. Short tent dresses or tunics slide over leggings.

Spring's pastels are watercolor pales, very clear and splendid with each other and with pristine white. The most used are seafoam green, aqua, light blue, periwinkle, mauve, pink, rose, and peach.

For those among us who want to get hot, we can choose from turquoise, jungle green, fuchsia, tangerine, and bright yellow.

The ethnic prints suggest brick, burnished gold, indigo, deep wine, and bright red and green. Wovens with ethnic themes might employ nontraditional colorations such as the pastels.

Finally, the shades of the Sixties add two combinations to note: orange & yellow; pink & orange.

As I finish, ten inches of snow have fallen. Time to hibernate and dream of Spring. See you then!
I became interested in experimenting with ribbon wefts while designing a number of jackets with fabric strips of various types used as weft. I had some success using rayon seam binding as weft, so when an opportunity to experiment with some polyester knitting ribbon came along, I was eager to try it.

The skirt and jacket ensemble was woven on a cotton and linen warp, with silk weft. Ribbon was added to the weft for the jacket. The basic weave is a 2/2 twill with the treadling sequence altered for the jacket portion so that the ribbon floats on the surface of the fabric. I found it necessary to use the ribbon along with a somewhat textured yarn to provide some "grip" to stabilize the slippery ribbon floats. A modified commercial pattern was used to cut the jacket. No pattern was necessary for the skirt; it was made from three rectangular panels of the skirt fabric.

Warp: One eight-ounce skein of rosy-pink 16/2 mercerized cotton ("Sade" from Schoolhouse Yarns) and a variegated cotton/linen mill end in a similar weight. Its colors range from pastel blue to green to pink to rust, adding a liveliness to the finished cloth. *Warp length:* 7 yards.

Weft: One pound (2100 yards) terra cotta "Con- tessa" silk from Silk City for skirt and jacket; Offray Knitting Ribbon, 2 ½ spools (250 yards) Sable and 1 ¼ spoons Cinnamon for jacket.

Reed: 12 dent

*Sett:* 24 e.p.i.

*Width in reed:* 26 ½

Skirt: Weave 5 yards (or 3 skirt lengths, including take-up allowance) in 2/2 twill (tieup #1) with silk weft. 16-18 p.p.i.

Jacket: Weave 2 ½ yards (amount needed for size 12) using tie-up #2. One shot of ribbon is followed by two shots of silk. Sable was used as color A and Cinnamon for color B in the jacket picture. The two tie-down shots of silk hold each shot of ribbon in place.

Fabric finishing: Wash both jacket and skirt fabric in warm water in the washing machine without agitation; spin, then line-dry.
Construction: Jacket was cut from Butterick pattern #6790. The following modifications were made to make the pattern more suitable for handwoven cloth:

Bodice: Side seam straightened, all darts released, ¼" trimmed from neckline to allow a stand-up collar.

Collar: A simple band collar was made from a 1½" strip cut along the selvage.

Sleeves: 2 inches were added to the sleeve cap for a slight puff.

Closure: Loop and buttonhole closures were used. (I never put buttonholes in handwoven fabric!) Loops were made from ribbon, buttons were crocheted with silk.

In cutting the jacket, the sleeve bottoms and the right front were placed along the selvage to take advantage of the little picots that are formed as the ribbon turns around the selvage.

Apply Seam Saver™ along edges or use a serging machine immediately after cutting to secure cut edges. The jacket can then be constructed according to pattern directions. If slippery yarns have been used throughout, you may wish to back the ribbon fabric with an iron-on interfacing before sewing.

The skirt is made from three panels (a front panel and two side-back panels) plus a waistband. It is pleated in front and back with small gathers on the sides for ease. Pockets may be put into the side-front seams, and a zipper closing in back.

Both jacket and skirt are fully lined. I used a polyester lining called “Hang Loose” for the skirt. It is lightweight and easy to work with. The jacket is lined with “Palazzio,” another polyester lining designed to be used with Ultrasuede. It has a beautiful drape and some give so it is equally well-suited to handwoven garments. Both are available at better fabric stores.

Model Renée LaGource is a dancer with the Ethnic Dance Theatre of Minneapolis, Minnesota.
Detail of “Winter Shadows” sash.
ARE YOU TIRED of the winding involved with dyeing yarns and preparing them for weaving? I certainly was until I came across an article in the Spring 84 issue of The Weaver's journal on steam space dyeing warps using Cushing dyes. Little did I realize how reading this article would open up a whole new realm of color experimentation that would dramatically affect my work with fabrics.

The perfect guinea pig, a white cotton warp chain from a small project that never came about, was hanging in my studio: I was all set to explore this new area of dye experimentation.

I set to work. I washed the warp, layered it in the steamer and sprinkled dye directly onto it as I went along. After steaming the warp chain, I dipped it into the steamer water. I loved the splortchy, random ikat-like effects that resulted after it was woven into a series of warp faced runnels. I wondered how I could control this technique on a warp where the design placement was important to the overall look of the finished piece.

With that in mind, I began to experiment with a series of sashes in monochromatics and multicolor blends combined with white resist areas. I finally came up with the method which works well for me. I use it for a variety of woven garments, including shawls, blouses, dresses, jackets and coats.

Sashes and scarves are a great way to experiment with sett, new color combinations and patterns. They are also nice items to give as gifts, to sell or even to add to your own accessory collection.

The yarns used in these sashes are a mixture of silks and cottons. Wools can be used but they need more of the dye powders for deep rich color, as well as a much longer steaming time (and more patience in general).
Equipment for Dyeing

- A large area for spreading out warp. Floor space or a table next to a sink and burners is ideal.
- Lots of newspaper.
- A large piece of plastic, or, in a pinch, big plastic garbage bags will work. (This is used to cover the area you will spread out the warp on for dyeing).
- Steamer and racks: A large pressure cooker, water bath canner, or a tamale steamer. Use any large pot that some sort of rack will fit into. If you have two racks it is a good idea to use both so your warp will be well away from the steamer water.
- Teakettle for boiling water.
- Facemask, rubber gloves. (Please use a face mask! It’s amazing how the tiny dye particles float around in the air).
- Vinegar solution in a spray bottle. 75% white vinegar to 25% water.
- Cushing Dyes. A large tray with the packets arranged the way you like, really like an artist’s palette.
- Enamel, stainless steel, or large ceramic bowls large enough to hold the part of the warp chain not being dyed.
- Plastic wrap, if you want to tie white resist areas on your warp chain.

Method

Step 1. Determine the number of sashes you want to weave on one warp and decide on your width, sett, and length. You can use just one type of cotton or silk yarn but it is more interesting to try a variety in different weights. Vary the texture and finish too: smooth and shiny, mercerized or unmercerized, boucles,
chenilles, even accents of cotton plied with metallics.

Step 2. After winding your warp and tying the cross, tie the beginning and end of your warp tightly with some strong yarn. With a tape measure, mark the length of each sash and tie the warp tightly at these points. Make sure you allow for waste at each end of the warp. Tie some loose figure-eight ties at random points through the warp to help keep it from tangling. Stick pieces of masking tape to your ties and make a note on each one with a ballpoint pen for the beginning, middle, and end of each sash.

Step 3. Chain your warp if you will not be dyeing it right away.

Step 4. Unchain your warp and wash it in hot water to remove any sizing and to preshrink the yarns. Rinse and squeeze out excess water.

Step 5. Dyeing:
a. Put newspaper over your sink area and dye space. Lay out the plastic where you will spread out your warp for dyeing, then put down a fairly thick layer of newspaper on top of the plastic. You will need to add more paper each time you dye a new section of warp in a new color combination.
b. Fill teakettle and heat. Put about an inch of water in the steamer with racks and heat. Coil the unchained warp into your second pot with the first area to be dyed on top. Take this end to your dye area and lay out the first section to be dyed.
c. By now the teakettle should be boiling, or close to it. Pour some of the hot water over the warp to be dyed. Do not saturate the fiber— you don’t want it sitting in a pool of water.
d. Have your dye packets ready to sprinkle; put on the facemask and gloves. Pour on more hot water as needed to make blending colors easier.
e. Spray this dye-sprinkled section with the vinegar solution when finished. Flip over the lid to the steamer and use this as a tray. Put the dyed warp section on it and take this and the pot with your coiled warp to the steamer and sink area. Put the dyed warp segment into the steamer and steam for about 20 minutes. The undyed portion is left in its pot or bowl next to the steamer.
f. When steaming is done, take out the dyed section and rinse it in the sink until water runs clear and squeeze out the excess.
g. Repeat the five steps until all of the warp chain is dyed.
h. Hang up the warp to dry outside on a clothesline, or wherever it is convenient. (At one point due to rain I had warps draped over the loft in our house—a great way to enjoy all the wonderful colors!)

Detail of “Iris” silk shawl. Plain weave. The warp is pulled in places before beaming to shift colors even more.

Detail of “Journey to Kirihai” shawl: M’s & O’s weave in silks with some cottons. Notice how the pattern disappears and then reappears in different color sections. (left)
they were six inches shorter than the rest of the warp yarns. This causes these yarns to shift more. I like the shifting effect in some projects, but it is something to be aware of in planning your design. If you do use a variety of yarns in your warp, it is a good idea to test yarns you are not sure about for shrinkage differences.

- The steamer water can cause problems. It gave me some ugly surprises before I figured out what to do about it. As the steamer water evaporates, excess dye liquids from the dyed warp drip into the water and become more and more concentrated. This starts to bubble like a cauldron brew and will bubble right up through the racks and blotch your warp with dark muddy or black areas. Changing the water after dyeing a few segments, using two racks so that the warp sits up higher in the steamer, plus keeping a watchful eye will help prevent these ugly blotches.

- If you want large white areas in a design, plastic wrap can be used to tie off large areas of resist. It is best to wrap all your white areas before you begin dyeing, since those tiny specks of dye powder always seem to find their way to areas of the warp where you did not want them. Cellulohane ikat tape can also be used for more traditional looking ikat effects.

- If you wish, you can dye your whole warp before steaming instead of doing it a section at a time. Put a section of newspaper between each section that you dye and pile it all into a pot or bowl as you go, then take the whole thing over to the steamer and either steam one section at a time or steam it all at once. The only drawbacks with this are that your colors may spot on the different dyed sections. If you were doing all monochromatic colors, or all light or all dark on the same warp it really would not matter so much.

- Dye two or three warps at once to save time—while one is steaming you are painting on another one in a continuous rotation. This creates a flow that works well for me, but the pace can be a little frenzied. (Not everyone enjoys being in hyper-drive like me when working with color!)

This process may seem complicated and time consuming, but compared to painting the warp directly on the loom or using traditional ikat methods, it actually involves much less time while still producing very similar and satisfying results.

Notes
- Newspaper plays an important role in this process by absorbing excess water and dye. I have tried dyeing this way in the bathtub without newspaper and found the colors blended and ran too much, and a lot of dye went down the drain!
- Smooth tussah silk yarns and some chenilleys shrank more than other yarns in the warps, so that when I wound the warp onto the loom

Detail of "Autumn Sky" dress or tunic in silk and cottons. This dress was woven on the same warp as the "Winter Shadows" dress.
Color Theory for Handweavers

Part II: Visual Mix

by Pat Boutin Wald

The first article in this series introduced the vocabulary of color theory. It described the three qualities of color (hue, value and intensity) and color relationships as illustrated by color wheels and color solids. This article will begin to integrate color theory with specific textile techniques.

It is not easy to get theory to match up with experience; even when discussing the same topic, theory and experience do not necessarily speak the same language. The translation of theory into a visual object requires creativity, so each person's solution to this problem will be unique. Someone writing from a more scholarly point of view might suggest that you not begin experimenting with a theory until you have understood it thoroughly. As a fellow artist, I invite you to jump right in. An important part of the learning process is making mistakes, and some mistakes can even lead to masterpieces.

With this in mind, let's talk about visual color mixing. When the theory of visual mix was first introduced to the art world, it was not entirely accurate from a practical point of view, yet it inspired the impressionist movement and a revolution in the artist's use of color. The visual mix theory was introduced by M. C. Chevreul who developed this theory while working with textiles.

Visual Color Mixing

In 1839, M. C. Chevreul who was then Director of Dyes for the Gobelins Tapestry Works, published a book called The Principles of Harmony and Contrast of Colors. In one of his theories concerning color, he described an effect which he called optical mix. Chevreul observed at times that fine threads of different colors woven together in a tapestry would be blended by the eye and form a single new color. Chevreul theorized that the colored light reflected from the individual threads had been mixed by the eye. He concluded that optical mix was the mixing of light and therefore followed the rules of additive (light) mixing.

When colored pigments or dyes are mixed, each color added absorbs or subtracts colored light. This type of color mixing is called subtractive and is the most familiar kind of color mixing. This is the way color behaves in the dye pot. When you add colors to a subtractive mix, the results get increasingly darker. When all three primaries (yellow, red and blue) are present, all light is absorbed and the result is black.

The mixing of colored light works in just the opposite way. The more colored light that is added, the lighter the resulting color becomes. When all three additive primaries (red-orange, green and blue-violet) of light are shown on one spot, they combine to form white light. Additive color mixing is full of contradictions to the

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Mother Nature rarely uses large areas of a single color.

normal (subtractive) way we think about color mixing. It is hard to imagine that red-orange and green combine to form yellow, but that is what happens in additive mixing.

As weavers and painters experimented with Chevreul's theory of optical mix, it became apparent that it did not conform to the rules of additive mixing. Theorists who followed Chevreul's pioneering work found that optical mix showed characteristics of both additive and subtractive mixing. Optical mix was apparently a separate phenomenon that required its own name. In fact, it was given several names: mosaic mix, partitive mix, pointillism, medial mix, visual mix. For this study I will use the term visual mix.

There are four primary colors in visual mix. They are yellow, red, blue, and green. When dots of these colors are blended by the eye they form medium grey, halfway between the white resulting from additive mixture and the black resulting from subtractive mixture.

Now imagine a weaver who with one throw of the shuttle can create hundreds of small dots of color. The effect that is so difficult to achieve in most media materializes easily in many textile techniques.

The fine dots of color that create visual mix occur in:
- a balanced weave, when the warp and weft are different colors;
- the mixing of colored yarns in a rya weave;
- weaving, knitting or crocheting with multiple strands of colored yarns;
- heathered yarns composed of multicolored fibers;
- felt made from heathered fleece;
- handmade paper from blends of different colored pulps;
- in tapestries when colored threads are thrown alternately to achieve fine lines of color.

Fiber artist Helena Hernmarck uses clusters of many fine, colored threads as the weft in her large tapestries. A rosetta weave allows these threads to float on the surface. The resulting dots of color create the life-like images in her tapestries and reflect the relationship between technique, color and the photographic images that she draws on for inspiration.

It is inevitable that anyone who works with color in textiles will become involved with visual mix. Let us look at some of the factors involved in creating this effect successfully.

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**Visual Mix Applied to Textiles**

Traditionally, visual mix has been associated with impressionist painters. Imagine Seurat, the famous pointillist painter, applying dot after dot of paint to a canvas in order to achieve this effect.

**Determining the Results of Visual Mixing**

A quick way to determine the results of visually mixing colors is to spin them on a top. To do this, glue colored paper or paint the colors on a cardboard disc. Put a dowel or pencil through the disc and spin it (above). As you look at the spinning disc, the colors will be thoroughly blended by your eye.

To experiment with different proportions of color in the mix, cut out two discs, one of each color to be combined. Punch a hole in the center and cut a slot through the radius to the center hole of each disk. Slip both discs, one on top of the other, onto the dowel. Slide slot B into slot A and rotate the discs to adjust the proportions of color showing.
Creating Visual Mix

When dyes, pigments or colored lights are combined, they always mix and form a new color. All colored dots, however, are not automatically blended by the eye. Certain conditions must exist to create visual mix. These conditions were described very accurately by Chevreul. The most important factors controlling visual mixing are:

- the size of the dots or lines;
- the distance from which they are viewed;
- how similar the colors to be blended are in value, hue and intensity.

Visual mixing will occur most effectively the smaller the size of the colored dots, the greater the distance from which they are viewed, and the more similar the colors are in value, hue and intensity.

Value is the color quality that has the greatest effect on visual mix. Colors blend when they have uniform value. If you are combining two hues of different values, you can adjust their values by selecting tints or shades of that hue. (Figure 3) For example, if you want to combine yellow and red, you must first observe that yellow is lighter in value than red. Therefore, you will need to lighten the red (use a pink tint) or darken the yellow (use a shade of yellow such as tobacco or gold).

Colors also mix more easily if they are similar in hue. Chevreul describes this as pairs of colors that are “inclined” toward each other. If you wish to mix blue and yellow, it helps to choose a blue-green and a yellow-green.

Why Use Visual Mix?

The impressionists turned to visual mixing in an attempt to represent the additive world of light using the subtractive system of mixing pigment. Visual mixing of analogous hues resulted in

Bergå Yarns Color System

If you want to experiment with hue, value and intensity, but feel that you would like some collaboration on identifying degrees of these properties, consider the Bergå yarn color system.

Bergå uses a system for categorizing yarns by hue, value and intensity. (They use the corresponding terms shade, brightness and intensity.) Each yarn is identified by a four digit number. The first two digits denote the color's hue, the third digit the value and the fourth digit the intensity. For example, a yarn that is numbered 2159 represents a slightly reddish blue hue of medium value and very intense coloration.

I used one of the Bergå yarns, Filgarn, to design the knitted Fair Isle swatches shown in this article. The numbering system proved very useful in selecting the yarns. Just studying the sample cards is instructive. Although you may not agree with every color description (each person perceives color differently and should feel free to rely on his or her own sense of color) this color system provides a firm base from which you can improvise.

Bergå has an extensive range of colors (128 in the Filgarn alone), a pleasant change from the limited color range available in many yarns. Our sample cards were provided by The Wool Gallery, 459 High St., Salem, Oregon 97301. A sample set of ten cards is available from The Wool Gallery for $15.00 ppd.
Color Patterns

So far we have been using the theory of visual mix to create color blending. There will be times when a visual effect requires colors that do not blend. This is true for weavers in an infinite variety of 2-color pattern weaves, and for knitters in color patterns such as Fair Isle designs. In many Fair Isle patterns, and in woven patterns such as bound weaves, one faces the challenge of trying to maintain a pattern on a background that keeps changing color. One simply has to remember that a pattern color will stand out (colors will not blend) if there is a contrast in value with the background color.

The pattern as a whole will remain most distinct if the amount of value contrast between background and pattern color is kept as constant as possible throughout the pattern. To be specific: on a medium background, use an extremely light, or dark, pattern color. On a light or dark background, use a medium value pattern color. If too great a contrast is used, such as a very light pattern on a dark ground, the pattern will appear to leap off the background. (Figure 4)

If the colors of the background and pattern are too similar in value, the pattern will disappear. (Figure 5) If your pattern does disappear, this does not mean you cannot use those hues, it means that you have to adjust their value levels to be more distinct. A medium value red, for example, may need to be a lighter pink, or a darker shade of maroon.

You might want to practice with neutral greys or browns to find out how great a value difference you will need between the pattern and the background. The amount of contrast required can vary with different patterns and yarn sizes. Finer yarns and patterns with fine lines or small dots require greater value contrasts.

Color Blending

On the Loom

A Workshop by Irma Robinson

When Irma Robinson started weaving in the 1930s, most weavers were self-taught. Color books and classes were designed for painters and Irma knew from experience that color mixing of threads was different than mixing paint. Then Irma met Jane Givan Johnson, an art teacher at the Cornish Institute in Seattle. "She's the first one who ever told us anything about how to use color," Irma said. And what she told them was about the mixing of colored light. Irma still speaks with excitement about that discovery. "It's the rainbow and our eyes are tuned to that rainbow."

Irma continued to experiment with color mixing on the loom. She constructed her own

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2. See "Heathered Yarn" by Karen Seattle (The Weaver's Journal, Vol. 9, No. 2, Fall 1984); and "Knitting with Handspun" by Marte Archer O'Connor (Knuten, Vol. 2, No. 1, Fall 1983).
color wheel made from yarns and based on the primaries of light. In the ’60s, Irma began teaching workshops to share what she had learned. Her teaching career lasted more than twenty years and included eighty workshops across the United States, New Zealand, and Australia.

For her workshop, Irma warped six looms, one loom in each of the primaries (red, blue-violet, green) and secondaries (yellow, magenta, turquoise), based on the additive color wheel. The warps were not simply red or yellow, however. For each thread of the main color, Irma added one thread of each of the two hues adjacent to it on the color wheel. For example, the magenta warp was composed of one thread of magenta and one thread each of red-magenta and violet-magenta. Similar values of the three hues were selected.

Students took turns weaving on each of the looms. For wefts, Irma again referred students to the color wheel. They selected colors within three steps on either side of the warp hue. For the example shown on a magenta warp, the weaver has chosen weft colors ranging from blue-violet to red.

For hues of the warp and weft to be blended by the eye, they must be similar in value. A great deal of time in the workshop was spent around the yarn table looking for just the right value of a hue. In the fabric samples shown, the weaver wove on a magenta warp with a blue-violet weft. Since blue-violet tends to be darker than magenta, a tint of blue-violet was chosen.

Each warp presents the weaver with a unique problem. Irma says that the most difficult warp for students was the yellow warp. When they wove with red on a yellow warp, they had to choose a very light value of red. "Everyone was always surprised at how nicely pink blends with yellow."

From her years of teaching, Irma’s advice for selecting colors to mix visually on the loom is: "remember, value is more important than hue in blending."
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Two years ago, friends of mine, a clergyman and his wife, asked me if I would weave a light-weight, desert-sand colored vestment. Stimulated by articles about ecclesiastical weavings in The Weaver's Journal, my answer was an enthusiastic yes. I thought it an exciting and challenging order. After studying catalogues of firms that make primarily Roman Catholic vestments, visiting a convent where the nuns weave beautiful silk vestments, and consulting other clergymen, it became clear that we could choose our own style. Since my friend is a Calvinistic clergyman, we decided to make the vestments in a delicate and simple design.

For the gown we chose 24/2 worsted wool, the weft a lighter shade than the warp, and a variation of the rosepath threading on 4 shafts, to be treadled as straight 2/2 twill. For three of the four stoles which would go with the gown, I used 28/2 mercerized cotton, again with the weft a lighter shade than the warp.

I am fascinated by damask weaving and wanted to use this technique for the three colored stoles, but I do not have a damask loom. I recalled reading an article by Elveana Merrit about pick-up damask weave. Later on I also found an article by Abelie v.d. Wal on the same subject and I used her technique on 5 shafts for the colored stoles.

The white stole gave me some problems. How could I make white contrast with the sand color of the gown? I experimented with shadow weave, using thick-and-thin yarn instead of two shades of the same color, which gave an interesting texture. I decided to weave this stole of silk so that the luster and the relief together would make the stole contrast with the gown.

The clergyman and his wife watched the project grow as I worked with great excitement. By observing the process they were able to see...
that weaving is a creative but laborious activity rather than a simple way of making things. Now the vestments are of more value to the owner than if he had chosen the gown and the stoles from a catalogue. I am glad to say that my friends are very happy with the results, and they were even willing to display the vestments at the annual meeting of the Dutch Weavers Federation.

Gown

Warp: 1.1 kg (2.42 lbs) 24/2 worsted wool, 12,000 m/kg (6000 yds/lb), beige colored.
Weft: 1 kg (2 ¾ lb), same as the warp, but a lighter shade.
Length: 6.20 m (6 ¾ yds) including .60 m (¾ yd) of waste
Width: 1.60 m (64")
Sett: 12 c.p.cm (30 c.p.i.)
Reed: 60/10 (15 cm), i.e. 2 ends per dent and both selvages 2 x 3 c.p.d.
Threading: See Figure 4a. There are a total of 1920 warp ends.
Weaving: Start with the sleeves. Weave 20 cm (8") of 2/2 twill, then 15 cm (6") of pattern weave (Figure 4b). Then weave the rest of the fabric in 2/2 twill. I use a temple to maintain the width.
Finishing: When taken from the loom, the fabric measured 1.53 x 5.55 m (61" x 6½ yds). As it was too large for my washing machine, I had it steamed and pressed at a dry cleaner. After processing it measured 1.50 x 5.40 m (60" x 6 yds). The gown was sewn by a professional tailor.

5-Shaft Satin

Pick-Up Damask

This is the technique I used for the three colored stoles. It enables the weaver to weave damask patterns without using a draw loom. Although this method of weaving is extremely laborious, the results are very satisfying, especially when fine yarn is used. I think it is difficult to weave a wide variety of complicated patterns this way, but the technique works well for simple patterns like the three designs I used for the stoles. Sample it out first using strong and not too thin yarn, such as 8/2 cotton.

For your convenience I will summarize briefly the technique of 5-shaft pick-up damask, described by Abelje v.d. Wal.

For a 5-shaft satin warp faced damask one needs the weave draft shown in figure 7. For a weft faced fabric, use the draft shown in figure 8. For pick-up damask weaving combine both tie-ups (figure 9); ten treads are required. I have modified the tie-up as in figure 10 for ease in weaving. First, make a profile draft of your de-
Figure 5.
Profile draft for red stole.

Figure 6.
Red stole.

Figure 7.
5-shaft warp-faced satin.

Figure 8.
5-shaft weft-faced satin.

Figure 9.
Combined tie-up for pick-up damask.

Figure 10.
Modified tie-up for pick-up damask.

Each block of the profile draft represents 5 ends and 5 picks.

1. **Treadle 6**: The ends of shaft 2 are up, and those of shafts 1, 3, 4, 5. Put a pattern-stick from under the warp over the ends in the shed where the pattern is to go. Then change to treadle 1. Now the ends of shafts 2, 3, 4, 5 are up, except where they are under the pattern-stick. Here only the ends of shaft 2 are up. Throw the weft-pick, take the stick away, treadle 7 and beat.

2. **Treadle 7**: The ends of shaft 5 are up, and those of shafts 1, 2, 3, 4 are down. Put the pattern-stick from under the warp over the ends in the shed where the pattern has to get, i.e. over 1, 2, 3, 4. Then change to treadle 2. Here the ends of shafts 1, 2, 3, 5 are up, except where they are under the pattern-stick. Here only the ends of shaft 5 are up. Throw the
pick, take the stick away, tredle #8, and beat.

3. Tredle 8: The ends of shaft 3 are up, and those of shafts 1, 2, 4, 5 are down. Put the pattern-stick from under the warp over the ends in the shed where the pattern has to get, i.e. over 1, 2, 4, 5. Then change to tredle 3. The ends of shafts 1, 3, 4, 5 are up except where they are under the pattern stick. Here only the ends of shaft 5 are up. Throw the pick, take the stick away, tredle 9 and beat.

4. Tredle 9: The ends of shaft 1 are up, and those of shafts 2, 3, 4, 5 are down. Put the pattern-stick from under the warp over the ends in the shed where the pattern has to get, i.e. over 2, 3, 4, 5. Then change to tredle 4. The ends of shafts 1, 2, 3, 4 are up, except where they are under the pattern stick. Here only the ends of shaft 1 are up. Throw the pick, take the stick away, tredle 10, and beat.

5. Tredle 10: The ends of shaft 4 are up, and those of shafts 1, 2, 3, 5 are down. Put the pattern-stick from under the warp over the ends in the shed where the pattern has to get, i.e. over 1, 2, 3, 5. Then change to tredle 5. Here the ends of shafts 1, 2, 4, 5 are up, except where they are under the pattern stick. Here only the ends of shaft 4 are up. Throw the pick, take the stick away, tredle 6, and beat.

Repeat this 5-pick-sequence for each row of the profile draft.

Here is a summary of the weaving sequence:

Tredle 6, pick-up, tredle 1, throw the pick, and beat.
Tredle 7, pick-up, tredle 2, throw the pick, and beat.
Tredle 8, pick-up, tredle 3, throw the pick, and beat.
Tredle 9, pick-up, tredle 4, throw the pick, and beat.
Tredle 10, pick-up, tredle 5, throw the pick, and beat.
Three Colored Stoles

Warp: 130 g (¼ lb) mercerized cotton, 17,500 m/kg (8670 yds/lb), dark green, dark red and dark purple.
Weft: 100 g, same as the warp, but a lighter shade.
Length: 2.50 m (2¾ yds) including .60 m (24") of waste.
Width: .40 m (16")
Sett: 24 e.p.cm (60 e.p.i.)
Threading: Straight draw on 5 shafts. In the center, 2 ends of the lighter weft yarn are added to mark the line where the fabric is to be cut later on (see Figure 13). There are a total of 962 ends.

Tie-up: Use the tie-up shown in Figure 10.
Reed: 80/10, i.e. 3 e.p.d. (both selvedges 2 x 4 e.p.d. and in the center 1 x 4 e.p.d.)
Weaving: First 2 picks 1/4 = treadle 6 and 7, followed by 13 picks 4/1 = starting with treadle 3, etc.
When taken from the loom, the fabric measured .37 x 1.90 m. (14¾ x 83"). Buy lining fabrics of a coordinated hue.

5-shaft satin weave, warp-faced
The profile drafts are shown in figures 2, 5 and 11. Figures 15, 16 and 17 show the dimensions of the fabric. The two patterns of one stole are woven in mirror image. To mark the blocks of the next row of the pattern, put pins with colored heads in the newly woven fabric. Use a template.
Note: The ground in each stole is warp-faced, the patterns are weft-faced except for the little crosses and rounds in the transverse lines at the bottom of the purple stole. The transverse lines are partially 1/4 and 4/1 satin weave and partially pick-up technique. Only the pattern of the transverse lines of the red stole is 1/4 and 4/1 satin, but here the figures represent the number of picks rather than the number of blocks.

White Shadow Weave Stole

Warp: Chappe-silk 20,000 m/kg (10,000 yds/lb) and Chappe-silk 4,000 m/kg (2000 yds/lb), 150 g (¼ lb) alternately used.
Length: 2.50 m (109") including .50 m (22") of waste.
Weft: 150 g (¼ lb) same as the warp, used alternately.
Width: .41 m (16.4")
Sett: 8 e.p.cm (20 e.p.i.)
Threading: Use the draft shown in Figure 19. Here I prefer to mark the thick and thin ends. In the center I added thick end on shaft 7. There are a total of 329 ends. Figure 20 gives a schematic diagram of the threading, showing selvedge edges and A-B repeats and placement of extra thread.
Tie-up: See Figure 19.
Reed: 80/10, i.e. 1 e.p.d. and both selvedges 3 x 2 e.p.d.
Weaving: Treadle as drawn in, except the extra center end. Skip one pick at the turning point A 2 x B to B 2 x A and vice versa, to avoid two thin or two thick picks in succession. Be careful and use a template.

When taken from the loom the fabric measured .37 x 2 m (14¾" x 80"). After careful washing, using a special detergent suitable for silk, the sizes were .35 x 1.94 m (14" x 77¾"). The extra thread in the center is pulled out of the
fabric. Machine zigzag along this line with silk thread and cut the fabric lengthwise between the zigzags. I purchased a pure silk lining for this stole.

**Construction of the Stoles**

Machine zigzag along the center line I and the line II. Cut between the two zigzags lengthwise and along the line II. Machine-stitch the two pieces, right sides together, along line II. This is the back seam. Cut two interfacing pieces, 1.80 m (72") in length and 14 cm (5½") in width. Cut along the line II.

Cut two lining pieces, 6 mm (¼") narrower than the pieces of the woven stole.

Machine-stitch the interfacing along the lines II, fold under and press the seam allowances.

Put the stole on the table top with the right side down. Place the interfacing pieces on it. Pin the seam allowances of the stole over the interfacing and sew by hand, carefully and with loose stitches, to the interfacing. Then lay the inner side of the lining on the stole. Baste and hand-stitch carefully hiding the stitches between the two layers. Attach a finger-crocheted cord of 20 cm (8") to the stole pattis. This cord, if crocheted from the yarns used in the gown, will hardly be visible at the back of the collar.

With the purple stole the warp ends are cut to provide a fringe for the ends of the stole.

Seam press carefully.

**References**


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**Handweaving with Robert and Roberta**

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A LIGHTWEIGHT CHENILLE JACKET is an ideal wrap for summer evenings. Much of the appeal of this kimono-shaped jacket lies in its simple lines and textured surface. The combination of chenille and perle cotton in a float weave called Cannelé gives a rich visual and physical texture to the fabric, as well as enhancing its drape.

The draft is from a booklet on surface texture weaves published in 1983 by the Shafters, a Canadian study group. The warp can be wound most easily with a warping paddle using four strands of perle cotton and one of cotton chenille. Since the chenille is very elastic, it should be kept under slight tension while warping.


Weft: same

Warp length: 6 yards (includes 16 inches loom waste)

Selv: in 10 dent reed, 2 ends 12/2 cotton per dent; 1 end chenille per dent.

Width in reed: 18" (300 ends)

See figure 1 for threading and treadling. Thread A to B once for the right selvage. Thread B to C 29 times, C to D once to balance, and D to E for the left selvage. Beat lightly during weaving to square the pattern.

Finishing: Hemstitch or zig-zag stitch each end of the fabric and wash it in the washing machine on gentle cycle using warm water. Spin-dry only long enough to remove excess moisture. Hang the fabric over several supports until almost dry. Steam lightly. The finished fabric will measure approximately 14" by 4.5 yards.

Construction: See figure 2 for cutting layout. All seams are ½ " unless otherwise specified. With right sides together, sew the center back seam from the bottom edge for 20 inches. Taper the seam allowance down to zero over the next two inches. Back-stitch at the point to reinforce.

Match the shoulder line of the sleeve to the shoulder line of the body and sew, right sides together, from seam allowance to lower edge. Sew the side seams from seam allowance to lower edge. (figure 3) Finish the raw edges of the sleeve seams with seam binding. Hem the sleeves and lower edge with a 1½ inch hem. Make a multi-strand rope belt out of chenille.

Note
1. The Shafters are eight Ontario weavers who meet four times a year to discuss all aspects of the weave chosen for that year. Contact person for The Shafters is: Edna Phillips, 204 Ridgwood Rd., Peterborough, Ontario, Canada K9J 1P3.
Clothing Change Through Contact

Traditional Guatemalan Dress

by Abby Sue Fisher

HIGHLAND GUATEMALA is the home of two distinct cultures: Spanish and Indian. A unique array of Indian garments has resulted from an integration of the traditional clothing of Guatemala before the conquest, and European styles of clothing. For more than four centuries, the non-fitted garment styles of the Mayan Indians were subject to the influences of the tailored and fitted European styles. It is this European influence in the development of Mayan dress that is fascinating to the student of clothing change. Few other cultural areas can offer such diversity.

During the time that I spent as a research affiliate at the Museo Ichel del Traje Indígena, (Guatemala’s native costume museum) located in Guatemala city, I was granted permission to examine, measure and make drawings of 174 garments in the museum’s collection. My purpose was to demonstrate through line drawings the prevalence of European influences in traditional Highland Guatemalan dress. Access to the museum’s extensive collection was invaluable, allowing a complete study of Highland clothing construction. It would have been difficult to run from village to village examining garments, and the chances of seeing a variety of old and disappearing styles would have been slight. The drawings were made from authentic garments worn in more than twenty Guatemalan villages, spanning a century up to 1980.

The European elements of garment construction that have been incorporated into Highland costume over the last four hundred years include sleeves, collars, cuffs, pockets and gussets. These appear to be simply attached to the basic rectilinear shape reminiscent of pre-contact dress, as illustrated in the shirt from Nahualá (figure 1).

I found that men’s garments are more susceptible to change than women’s clothing in Guatemala, primarily because men have more contact with society outside of their native village. A comparison of pre-Columbian male attire to modern Indian clothing, reveals that few indigenous traits now remain, whereas a review of female clothing indicates very little difference in garment construction between pre-contact and present times. The focus in this article is on male attire.

I have defined traditional clothing as the established custom of wearing a regional costume that is prescribed and passed on from generation to generation. The term hybrid is used to describe the mixing of European and Indian traits that form the modern repertory of indigenous Guatemalan clothing.

Pre-Columbian Dress

Patricia Anawalt, a specialist on Indian clothing in Mesoamerica, did extensive research toward establishing a pan-Mesoamerican costume repertory at the time of Spanish contact.

Anawalt’s definition of pan-Mesoamerican costume (1976) addressed shared concepts of garment construction. All Mesoamerican garments were rectilinear in construction and produced from rectangular pieces of cloth, several of which could be sewn together to create varying widths and lengths.

All cloth was woven on backstrap looms which restricted the maximum width of a single breadth of cloth to that of the weaver’s reach.
Fabric shapes were predetermined for specific garments. Fabric came off the loom with four selvedges and could be put to use with little or no sewing. There was no cutting or tailoring of cloth. Garments were non-fitted and worn draped, folded around or tied onto the body. Only special-purpose garments such as warrior suits were fitted with body-encasing construction. Use of these elaborate costumes was controlled and restricted to a small percentage of the population (Anawalt 1976). The indigenous populations did not incorporate the practice of covering the limbs into their daily attire and were satisfied with just a few garment shapes.

Several men's garments worn in Mesoamerica could be considered everyday apparel. The function of these garments varied with region and tribal affiliation.

- The loincloth was perhaps the most common and functional male garment. It was a long narrow strip of cloth that wrapped around the waist, passed between the legs and tied in a knot with the ends hanging down. Although the garment was always consistent in shape, it could indicate status depending on fiber content and elaboration of design.

- The hipcloth was a rectangular piece of cloth that, once folded in half, produced a triangular shape that was tied around the lower torso of men. Today in the village of Sololá, located in the central highlands of Guatemala, men wear a rodilera, a blanket-like rectangular cloth worn wrapped over the pants and secured with a cloth belt. The rodilera could easily have been adapted from the pre-Columbian hipcloth (Pancake 1977, Gayton 1976).

- The cape, also referred to as tiina, cloak or mantia, was worn throughout Mesoamerica. The cape came in a variety of sizes, always rectangular in shape with length varying from waist to ankles depending on status. Some were back capes, secured in center front by knotting two corners while others were chest capes, fastened behind the neck (Anawalt 1980).

- The xicoli was a short sleeveless jacket open down the front which could be secured with ties. In pre-Columbian Guatemala it was an item of secular dress, whereas in the Aztec culture (Mexico) it was a special-purpose garment. The xicoli was an exception in everyday attire in that it was sewn to form its shape. The cape, loincloth and hipcloth were all single pieces of fabric.

**European Dress Styles**

In contrast to the pre-Columbian clothing which was rudimentary in form but elaborate in decoration, the garments worn in Europe were ostentatious, often exaggerating the human figure in form and fit. Skilled tailors worked together with
weavers and fashion designers to create some of the most unusual costumes in history.

Although Spain and Portugal were responsible for discovering the New World, their was not the only influence to penetrate Middle American culture. During the sixteenth century Spain had gained great wealth and power. Dress styles established in the Iberian peninsula influenced all of Europe. The glory did not last and in the seventeenth century Spain's power and influence diminished. Costume in Europe became less nationalistic due to extensive trade, royal marriages and communication between countries. One country after another dominated the fashion scene for a time, but similarities soon arose which made it hard to separate one country's styles from another. Thus, we look to Europe as a whole to accurately identify foreign influences found in indigenous Guatemalan dress.

Throughout the history of European clothing, various elements of dress were introduced which can successfully be traced to Guatemalan clothing. Collars, collars, sleeves, lapels, gussets, buttons, pockets, pleats and plackets were all used lavishly to enhance fashion trends and to facilitate fitting. Styles ranged to a variety of extremes. Collars and cuffs grew to huge proportions in the sixteenth century but shrank to modest size by the eighteenth century. Sleeve styles evolved from full-topped and baggy to fitting so tightly that small buttons were necessary at the cuffs. Lapels also grew and shrank in proportion according to fashion modes. Pocket styles varied from patch, welted and slit pockets to curved, flapped pockets with decorative buttons. Gussets were introduced to relieve stress points in a garment, usually under the arms of a shirt and in the crotch of pants.

Clothing Change Through Contact

The intrusion of Spanish influence in 1524 into traditional lifestyles of the native Guatemalan gave rise to a dual social stratification which is still prevalent in Guatemala today (Reina and Hill, 1978). Virtually all aspects of Indian life were altered through the domination of foreign ideas. Religion, lifestyles, political systems and even traditional dress changed under the influence of Spanish control.

The introduction of the Spanish of the treadle loom, wool and the spinning wheel were all favorable innovations and greatly increased the pace of textile production in Guatemala. Many Indian women found it unnecessary to discard their native weaving implements, which persist in the highlands of Guatemala today. Men became weavers on the Spanish introduced treadle loom and spun fibers on the spinning wheel. Subsequent to these technological innovations, some traditional garments were pro-
Hybrid-Style Clothing

Hybrid-style Guatemalan clothing represents an amalgam of Spanish and Indian traits. Stable elements of dress were retained while other elements were modified through the introduction and addition of new traits due to foreign influence (Delgado 1968). The shirt and pant styles illustrated show this blending of European and indigenous traits. The garments I studied fall into the following categories: 1. very fitted, European-styled clothing; 2. garments that have retained several pre-Columbian traits; and 3. garments that display a blend of European indigenous traits.

Although contemporary, the old-style pants shown in figure 2 with their loose fit and rectilinear design seem to be a carryover from pre-contact clothing and traditions. The pre-Columbian traits are evidence of the retention and stability of former dress styles. More European style elements are seen in figures 5 and 4.

The hybrid-style Guatemalan shirts are undeniably influenced by sixteenth-century European shirt styles. The xicolli is the only pre-Columbian garment that resembles a shirt in any way. With European influence came the concept of outlining the torso and encasing the limbs, achieved through complex tailoring techniques (Anawalt 1976).

There is an incredible diversity in hybrid shirt and pant styles worn in villages in close proximity to one another and within the same time frame. The shirt and pant styles adopted by each village, whether they were influenced by European elements or retained pre-Columbian traits or both, are an integral part of Guatemalan dress.

Today there is a tendency among Guatemalan Indians who continue to wear a traditional folk costume to carry themselves with pride and self-esteem. Their costume is a cohesive factor in interpreting their cultural and local identity. At the same time, local costume may inhibit anonymity and therefore hinder economic pursuits when men are forced to travel and work away from home. A man may choose to become anonymous by replacing the costume which represents his local identity with modern clothing that will enable him to blend into the mainstream. He can then feel more comfortable when dealing with outsiders. Upon returning to his village he may return to his customary raiment.

As the twentieth century encroaches upon those cultures that have avoided modernization, there is increasing pressure to change traditional dress. Because of a breakdown in social customs and ancestral belief systems, the older people have not been able to successfully pass on traditions. The younger generation exemplifies a mix-

![Figure 5.](image)

Old-style shirt from San Antonio Palopó suggestive of pre-contact dress with its simplistic design. Made of backstrap-woven fabric and constructed of two fabric breadths with a neck opening, straight sleeves and a small stand-up collar. This shirt is pulled on over the head and, although elaborately woven, its loose-fitting form lacks detail.

![Figure 6.](image)

The sophisticated design and cut of this European-styled shirt from Sololá differs markedly from the one shown in figure 5. Complex tailoring techniques are utilized to facilitate fitting: shoulder yoke, center front placket, darts, underarm gussets, collar, cuffs, pockets and a front opening with button closure. Most of the European-style hybrid shirts are made of treadle-loomed fabric, but this shirt from Sololá was made of backstrap-woven fabric which was cut and then tailored by machine sewing. The gussets in this shirt were cut on the bias, allowing even greater flexibility of movement.
intrusion of outsiders. The change of traditional clothing over many years, whether partial or complete, is a subtle, non-verbal recognition of foreign influence. I am very grateful to the Museo Ixchel del Traje Indígena for granting the opportunity to make drawings of a portion of their collection. Without their cooperation, this analysis would not have been possible.

Bibliography


Notes of a Pattern Weaver

by Philis Alvic

SOMETIMES THINGS GO RIGHT. The witticisms on my Murphy's Law Calendar notwithstanding, occasionally something does work to my best advantage. For years I have read articles about successful artists which made it all sound so easy. All one needed to do was produce good quality work and the public would beat a path to your door carrying fists full of money. However, my experience in dealing with the marketplace tends to be complicated, even when things finally reach a satisfactory conclusion. In the following tale, the progression of events was very smooth, even though the gaps of time between each episode were quite long. With the eternal optimism that every artist must possess to keep going, I am eagerly looking forward to situations like the following becoming the normal pattern in negotiating the sale of my work.

It all began one winter morning when I received a phone call. The person on the other end of the wire introduced herself as the director of an art gallery and said, "I hear you're a weaver." After I admitted to this, she then expressed the need for a wall hanging and gave me the specifications. When she ended with "... and the client doesn't want to spend too much money," I immediately flinched. I have had my hopes raised before, and have spent considerable time trying to please a potential client only to find that I was never really in the running because of price, color, or some other reason. With this in mind, I gave a rather stark description of my work, pointing out major characteristics without using adjectives and concluding with "... and they are expensive." Much to my satisfaction, the conversation did continue, with the gallery director asking to see some slides. That afternoon, I sent her my standard slide sheet and resume, knowing that this first encounter had established me on very comfortable ground from which to proceed.

The person who phoned was entirely unknown to me and she didn't have much information about me. She had never seen my work and only had a phone number passed on by some wonderful soul. I have never found out who suggested me or exactly how the contact was made. This seems to perfectly illustrate the theory that one can never have one's name in too many places— a system known as networking in current jargon.

I received another phone call from the gallery director about a month later, informing me that the interior designer involved in the project had given the nod to one of the pieces in the slide sheet and wanted to see it. The piece chosen was one of the most expensive of the group offered. Since I was afraid of being excluded on the basis of cost, I decided to send an additional piece for review along with the one requested. I then ironed, rolled, boxed and shipped the two hangings within the next 24 hours.

I am always eager to send my pieces when they are under consideration because I believe that the work speaks better for itself than a slide does. Most people have difficulty visualizing an object in a given space. (Consider the last time that you tried to rearrange furniture in a room.) When anticipating an addition, it is always better to have the exact item to try out in the space.
It is even better to have two different items to try. One of them just might work to better advantage in the location. Also, I like people to have a choice. I think that a client prefers to feel that he or she is an active participant in the choice of an item.

After another month, I was informed that the interior designer liked both of the pieces and had taken them to try in the space. This was exactly the response I had hoped for. Each hanging would have the opportunity to stand on its own merits and be evaluated on location. Although I would have liked to point out some of the finer attributes of each, I knew that it was now up to others to promote them.

A wonderful result of this particular chain of events is that the hangings do fit into the space as though they had been commissioned and designed specifically for it. The pieces are the correct width for filling the niches between the windows. They provide a visual link with the very high ceilings and brighten and add interest to an office decorated primarily in white and naturals. The two pieces complement each other well, which shouldn’t be too surprising since I did them both, and a strong stylistic resemblance is to be expected in any artist’s body of work. The design of one consists of very simple geometric shapes, while the other is comprised of shapes that are not distinctly defined. They both have a similar woven surface, using Summer and Winter as the common weave structure. The colors of the two are compatible and they share many of the same reds, blues, and greens. The differences between the two hangings bring out the finer points of each. The one with the simple design is quilted and stands as a comparison of different textured yarns. The more complex piece comes across as a luminous color study. The direct presentation, using only concealed boards in the top and bottom of each piece works very well in this space.

The gallery director and the interior designer had presented my work in a positive way that got results. I had the good fortune to have pieces available that fitted the requirements of the location. This experience reinforced my need to be continuously working, producing pieces with variety and exploring new ideas so that they continue to have vitality. As my pieces accumulate, I feel like a collector of my own work rather than an artist in the business of selling it, but in this instance, I would not have sold anything if I had not been able to ship work immediately from accessible stock. Clients want things to happen very fast even though they might keep you waiting on their decision for months. I have always, however, found it to be to my advantage to respond quickly.

The interval between shipping and hearing about the fate of my work lasted several months. Despite the wait, the news was very good. The client liked both pieces and purchased them both. My work now hangs in the private office of Dr. Donald Swain, President of the University of Louisville. During the photographing trip to Louisville, I was pleased to note that there were several other pieces of original art in the office complex. My pieces fit very comfortably into the space. It was nice to see my hangings in such a distinguished setting, and even nicer to hear praises from the people who work near them.

The working relationship with people who present one’s work is so important. I try hard to impress them as being open and flexible but within defined limits. During phone conversations I call attention to certain qualities of my work or to aspects of my own background that I think might interest the client. I also reinforce the phone calls with letters to emphasize specific points. Living in a rural area, I feel that I have to try harder to be accessible since I can’t drop into a gallery for friendly chats with the director. Building a solid relationship with those who represent me is important, not only for the impending transaction, but also to put myself in a position for more interaction in the future.
The Shed Regulator for Counterbalance Looms

by William Koepp

It is a well known fact that the counter-balance loom has difficulty lifting three shafts against one shaft, and through the years owners of these looms have had this tedious fact pointed out to them frequently by its detractors.

A weaver who contemplated doing a 3/1 twill or a double weave on a counterbalance loom would have done well to research this problem, and in reading, would have found oblique references in a few sources to a device called a shed regulator. Although the shed regulator was mentioned in a few weaving books, it usually was not pictured or explained in any detail, so the shed problem usually remained for the weaver to ponder.

Origin

The shed regulator was conceived by noted weaver and author S.A. Zielinski early in 1950. The device was mentioned in the 1951 Master Weaver, Volume 1, and again in 1953, in Volume 4. Mr. Zielinski collaborated with Robert LeClerc to place the device on the market in 1955.

The design involved placing an additional roller above the top roller of the loom, and by using a set of cords, raising and lowering the entire set of shafts as needed for each shed. The shed would be centered in the reed, and would open to its maximum. The device allowed the loom itself to regulate the height of the shed during the weaving process with no loss of time or rhythm.

Some years later, Robert LeClerc developed a new version of the shed regulator that uses a lever-type action to raise and lower the shafts of the loom. This device is still available through Nillus LeClerc Co., and is shown in great detail in Volume 6 of the newest printing of the Master Weaver series.

Building your own

Since our counterbalance loom is home-built, I decided to build a shed regulator for it out of wood. The project went quickly and it works so well that I wish I had done it years ago.

In planning my shed regulator, I followed the LeClerc design. This version dictates that the top roller be removed from the loom and remounted on two pieces of wood which I will call the swing-arms. On some looms the roller may have to be shortened, but luckily in my case this was not necessary. The swing-arms are mounted to the loom by two smaller pieces of wood called the connectors, and the rest of the swing-arms are joined by a rigid board: the back bar.

The basic idea is to move the pivot point of the top roller straight back three inches toward the warp beam, and then add another seven inches of swing-arm to give sufficient leverage for the treadles to raise the roller. The roller is lowered by the shafts pulling it down against a pair of springs. The connectors hold the pivot-point bearings which allow the swing-arms to move the roller. The connectors are bolted or screwed to the loom frame, since the shed regulator is a permanent fixture on the loom. It can be locked in position by the bypass cords when not needed (such as for balanced 2/2 twill).

The swing-arms hold bearings for the roller one inch from their ends: the bearings for the pivot-bolt are placed three inches from that point. The total length of the swing-arm is eleven inches. Note that the top roller of the loom may have to be shortened to fit in the new position depending on the make of loom that you have. Build the connectors and the swing-arms first, attach them to the loom, and measure between them to see if the top roller needs any shortening.

The back bar is cut to fit the width...
of your loom, from swing-arm to swing-arm, and a brace of wood is glued and screwed into each inside corner after the roller is fitted into place.

I have mentioned bearings several times, and I feel that small bronze or nylon bearings at these points are desirable. I do not advise running bolts through raw wood at all, because bearings are cheap and readily available, and they do not wear into an oval shape as easily as wood does. (If you do have wooden bearing surfaces on your loom, force wax into them, not machine oil.)

Now some holes are needed. Drill three holes 1 inch apart in the bottom of the swing-arms to put in screweyes, used to attach the springs to the shed regulator. The last hole will be near the corner of the swing-arm/back bar. The holes will allow you to put in the screweyes without splitting the wood, so practice on a scrap of wood first to see what size drill bit to use. Once holes are made, install a screweye pointing down into each swing-arm near the corner.

Drill one 1/16" hole, directly above each treadle through the back bar 1/4 inch up from its bottom edge. These holes will be used for attaching cords from the treads to the shed regulator. Insert eye-bolts through each hole, eyes facing the weaver, and tighten them. If maximum leverage is needed, turn the eye-bolts around with the eyes facing the warp beam.

Attach a limber spring (similar to a screen door spring) to the swing-arm screweyes, and down to the frame of the loom directly below the swing-arm. Use another screweye here. I use a short piece of light chain at the upper end of the springs to make adjustments easier. Adjust the springs to hold the swing-arms at a level attitude with the shafts in place, suspended from the top roller.

Make a pair of by-pass cords which can be hooked up in place of the springs to lock the shed regulator into position when it is not needed. The cords should hold the swing-arms level when they are used.

The connector must take a lot of strain, so it must be made to fit really well around the side loom-frame member to prevent it from twisting. Since I cannot know what your loom is like, it is not possible for me to draw the exact shape that you will need. Just be sure to make it very strong, and there should be no problem with it tilting downward.

As only one or two treads are near the center of the loom, the outer treads may tend to exert torque on the back bar, which would result in having one end of the top roller sink a bit lower than the other end. This means that you need to make the back bar as rigid as possible (an engineering student could have a lot of fun with this). I strengthened my loom by gluing braces into the corners.

**Attaching the treads**

Make treadle cords and attach them where needed. Let us say that you will lift three shafts and sink one shaft. This cord will be adjusted so that it is snug when the treadle is at rest, as this 3/1 shed raises the shed regulator to its highest position. If you are doing a 1/3 shed, that is, one shaft lifted and three sinking, the treadle cord might be eliminated or set very loose, so it will stop the shed from going too low in the reed. It all depends on the amount of travel your treads have to work with. Any cord that passes through the warp should be as near vertical as possible, to minimize any harm or abrasion to the warp itself.
Adjusting the mechanism

All right. We know that a 3/1 shed has a snug treadle cord and that a 1/3 shed has a very loose treadle cord adjustment. All that remains is the 2/2 shed. The treadle cord for the 2/2 shed should be adjusted somewhere in between the other two cords, so that it holds the shed regulator level at the bottom of the treadle stroke. If you are doing only a 2/2 shed and you don't need a 3/1 or a 1/3 shed, unhook the two springs and hook up the by-pass cords to shut the shed regulator off. The treadle cords would not be needed for this weaving either, so they should be un-hooked.

The rule to follow in adjusting the cords is to be sure the open shed is centered in the reed. It should not strike only the bottom of the reed or only the top of the reed. If the shed strikes both the top and bottom at the same instant, it is centered.

It has been stated in at least one weaving text that the shed regulator only produces a shed that is half as high as a regular shed, and that a smaller shuttle is needed when a shed regulator is used on a loom. This was a great surprise to me, and I immediately went to the loom to reasure myself that this was inaccurate—at least with the shed regulator that is described here. With a helper pressing the treadles, I held a caliper in the shed at the reed. The following measurements were made: the 3/1 shed was 25/6 inches high, the 2/2 shed was 25/6 inches high, and the 1/3 shed was 25/6 inches high. All of these sheds are bigger than my largest rug shuttle, so I conclude that this shed regulator does not reduce the shed size to any significant degree.

Other possibilities

The shed regulator has another advantage for you, according to Master Weaver No. 56, 1961: "... a counterbalanced may be turned in a matter of half a minute into a reversed jack-type; much better than the standard jack-type. Where in a standard jack-type all shafts are sunk, and must be raised to open a shed by the sheer force of the foot which presses the treadle, in the reversed jack-type all shafts are raised by spring action, and it requires a very slight effort to bring them down. What is more, the pressure is easily adjustable to meet all requirements such as sticky warps, when in jack-type looms it cannot be adjusted short of tying weights to shafts.

... we adjust the springs so as to raise all shafts to the upper position, when the warp just clears the upper part of the reed. Then we can use all treadles independently, or in groups of two or three."

This would be very handy when more treadles are needed than the loom could provide. You might have to use a double-length spring, anchored to the lowest point of the loom frame.

The shed regulator is a great addition to any counterbalance loom, and I can only admire the men who worked on its development through the years. But remember—to use it, you must understand it. After the shed regulator is on and your loom is all warped up and ready to go, tie up each treadle cord, treadle the shed and measure the shed height. Try loosening the cord; treadle and measure again. See what tightening the cord does. Try all the sheds, experiment with the treadle cords, the spring positions, the eye-bolt positions and the screw eye positions until you are satisfied with your shed. Then get down and sight the warp to be sure it runs truly straight through the center of all of the heddles, from back beam to breast beam. Finally, check the shafts, beams and rollers with a small level.

The shed regulator is a weaving tool, a device that must be correctly hooked up to do its job. It does not require a lot of mechanical aptitude, but it does require common sense.

Note: Portions of The Master Weaver were printed with the kind permission of Robert Leclerc, president of Nilus Leclerc, Inc. Permission was also generously granted by Mrs. M. Zielinski, New York, NY and Fulford, Quebec. Final thanks, of course, goes to the late Stan Zielinski, a great weaver and a great author.

1965 by William Kopp
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The Journal for Weavers, Spinners & Dyers

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MEET THE AUTHORS

Fiber artist, teacher and writer Phyllis Alvic graduated from the School of the Art Institute of Chicago in 1967. Since that time she has frequently exhibited her work. At her studio in her home in western Kentucky, Phyllis weaves loom-controlled wall hangings and investigates weave structures. She shares her experience and opinions about weaving through lectures, workshops and writing.

Pat Boutin Wald received her MFA in textiles in 1976 with a thesis exploring color in handmade felt. Her work has been exhibited with the American Craft Council's "Young American Show," and in Manila, The Philippines in "Fiber as Art." She currently designs handmade papers and teaches color workshops for fiber artists.

Cynthia Broughton is from Mesa, Arizona. Most of her work is in clothing-weight fabric, usually with aloom-controlled pattern. Many of her designs have been inspired by antique and ethnic fabrics. She has exhibited extensively throughout Arizona.

Gina D'Ambrosio raises sheep, spins, dyes and weaves near the mountain village of Magdalena in central New Mexico. With a background in painting and sculpture, she has worked as a self-taught fiber artist for the past 10 years. Gina specializes in fancy-textured handspins and weaving fabric for clothing which she designs, and color is very important to her work. Gina gives workshops and lectures on fibers, spinning, dyeing and design. She has exhibited in New Mexico and nationally.

Abby Sue Fisher is a graduate of California State University at Chico and has been a research associate at the Ichel Museum in Guatemala City. She is interested in the study of ethnographic textiles with a special concentration on Guatemala. She is currently a research associate at the Textile Museum in Washington, D.C.

Susan Hick and the loom were first introduced in 1973, and they have been fast friends ever since. Researching "Fashion Trends" provides a bonus for Susan. Her special interest is in weaving yardage for clothing which she sells through Fiber Matrix, a cooperative endeavor in Denver, Colorado.

Nitty Jansen has been weaving for eight years and is head of a local branch of the Weaving Federation of Holland. She is an enthusiastic weaver who regrets not having started weaving when she was younger. Most of her weaving has a practical application. She lives in Bunnik, The Netherlands.

William Koepf's interest in weaving developed after building a counter-balance loom for his wife in 1975. A few years later, he drew plans for and constructed a larger counter-balance loom that he uses today. He lives in Bakersfield, California and works as a deputy sheriff, with weaving sharing time with other interests, including woodworking, back-packing, chess and collecting old weaving books.

Sue Weideman has a degree in textiles and clothing from Cornell University and a certificate in Computer Programming from Central Data Institute. She has been a weaver since 1971 with a special interest in clothing. She has taught weaving and lectured at the Weavers Guild of Minnesota.

Anita Luvera Mayer began her focus on handwoven garments in 1972 after six years of self-study experimentation and selling. The clothing which she designs and wears always relates to ethnic garments of other cultures and are constructed from woven rectangles and squares with no cutting into the fabric. Finishing and embellishments are always done by hand and each piece is considered an investment of the individuality of the artist and the wearer. Anita has exhibited nationally and has been featured in national fiber publications. Her book, "Clothing from the Hands That Weave" was published in 1984 by Interweave Press.

Elmyra Tidwell started weaving in 1977. She is self-taught in tapestry weaving and focuses all her creativity on her necklaces. She lectures on how to weave tapestry with fine threads. She is very interested in complex weaving and has recently converted her countermarche loom into a drawloom.

unusual and complex weaves with fine threads, emphasizing color development. She has given workshops, lectures, demonstrations and exhibitions in Pennsylvania, Ohio and New York.

Suzy Sewell is a fiber artist specializing in one-of-a-kind garments and ensembles. Her pieces have been shown in fashion shows and exhibited in galleries throughout the Twin Cities area. She lives in Minneapolis, Minnesota.

WINTER 1988-11 71
REVIEWS

A RUGWEAVER’S SOURCE BOOK: A Compilation of Rug Weaving Techniques
Edited by Linda C. Ligon

Interweave Press has published an excellent compendium of rug techniques in A Rug Weaver’s Source Book. It covers the process of rug weaving from the initial stages of planning and preparations through the finishing techniques.

Eight weavers, Marilyn Dillard, Lynne Gles, Inga Krook, Hector and Halcyon Schomp, Bryn Pinchin, Martha Stanley and Carol Thilenius contribute their expertise in individual sections. Following a comprehensive introduction by Martha Stanley are six chapters dealing with plain weave, weft face twill, rag rugs, warp face, rya and block weaves. Included in this volume is valuable information on equipment and loom adaptations necessary for rug weaving. A selected bibliography is included as well as an extensive appendix containing material on finishing techniques, card-woven selvedges, construction of a “bubbler” and the Swedish double binding technique.

The chapter on rag rugs, though limited to the Swedish tradition, is one of the few sources on the subject available in English at this time. Most of the chapters contain detailed instructions for specific rugs. There is a sense of dedication, enthusiasm and sharing of “trade secrets” which is refreshing.

The layout is clean, with clear and complete illustrations and outstanding photography. A Rug Weaver’s Source Book is an easy to read text on rug weaving which should not intimidate the beginning or the intermediate weaver.

Janet Meany and Paula Pfaff
Janet and Paula teach classes in rag rug weaving at the Weavers Guild of Minnesota.

COSTUMES OF MEXICO
Chloé Sayer

I freely admit that I am addicted to books on ethnic weaving, especially those on Latin American topics. Yet a recent survey of my bookshelves revealed surprisingly few major works published in English on Mexican textiles or costumes. There was, of course, the venerable Mexican Indian Costumes by Donald and Dorothy Cordy in 1968, and later the impressive Indian Clothing Before Cortes by Patricia Anawalt in 1981.

Now I have added a large new work to the shelf: Costumes of Mexico, by Chloé Sayer. Visually, it is a delight, a handsomely laid out volume with fine quality, color plates—the texture of the Huichol beadwork looks so real—and a pleasing array of black and white photos. This visual aspect might be enough reason for us ethnic weaving addicts and for others who are visually oriented to buy this book. It is satisfying to take in the graphic images of Mexican textiles or to seek inspiration in the lines of the garments and the faces of the people. Sayer’s book is a stunning complement to the Cordy’s work, expanding and updating the photo-documentation in this fine early volume, yet maintaining the same high standards. Both books are published by the the University of Texas Press.

However, there are also those of us who seek more than the cultural and historic context of these textile crafts. The first half of Sayer’s book, Parts I and II, provides an especially satisfying, readable summary of the roots of Mexican costume in pre-Conquest and Spanish Colonial days and in the 19th Century post-Spanish period as well. This book can be highly recommended to anyone looking for a thorough introduction to the topic.

The second half of the book, Part III, in addressing the 20th Century, is not as successful. First of all, the 20th Century covers a lot of ground. It is not always clear or this section just what is being discussed—early 20th Century practices which have disappeared or themes of today which are thriving. The second problem is a matter of organization. The author raises a subject, for example embroidery or specific parts of men’s costumes, then draws in examples from all over Mexico to illustrate the subject. I got a little weary of trying to keep it all straight. The overly wide columns of type contributed to the difficulty in reading and confusion of topics covered.

However, for the most part there is solid information in Part III about “Fibers, spinning and dyeing” (Chapter 5), “Weaving, embroidery and other decorative techniques” (Chapter 6), and contemporary male and female dress (Chapters 7 and 8). An astute weaver, spinner or dyer might quibble with the fine points, like the references to mordants used with indigo (p. 136). This is not a “how-to” book. Weaver’s looking for detailed, technical pointers will be disappointed.

For those with a scholarly bent, the book too often fails to give citations for sources mentioned, perturbing to those wishing to delve further into a given topic. For example, on page 38 there is a tantalizing reference to Mayapan double cloth but no way provided to follow up on it.

We addicts, of course, always want too much. Now that we have two volumes tackling this comprehensive topic of Mexican costume, I’d like to see more work giving deeper accounts of weaving and costume in specific regions or cultural groups. Mexico has much to offer us. I would love to add more major works on Mexican textile topics to my shelves.

Sue Baizerman

THE NEW HANDBOOK OF TIMESAVING TABLES FOR WEAVERS, SPINNERS, AND DYERS
Bettie G. Roth & Chris Schultz
2nd ed. P.O. Box 951, Elk Grove, CA 95649; published by the authors, 1983. 41 pp.

WARP WITH A PADDLE and BEAM WITHOUT PAPER
Lucille Landis

WEAVERS’ WISDOM: 250 Aids to Happier Weaving
The Weavers Guild of Boston
Boston: The Weavers Guild, 1980. 23 pp. (Weavers Guild of Boston, c/o Betty Shannon, 5 Cambridge St., Winchester, MA 01890.)

Can there be too many books of helpful hints for weavers? I don’t think so. In the continuing search for the perfect method of doing things, these three books step bravely forward to offer advice, consolation, hope and enjoyment.

The New Handbook of Timesaving Tables consists of exactly that, tables and charts to speed you on your way or at least clear up some nagging problems. Topics covered include thread count, sett, burn tests for various fibers, reed sizes with metric conversion, weights and measures, temperatures, body measurements, yardage conversion, knitting needle and crochet hook conversion, tables of standard sizes for different projects. Worksheets for computing warp on a plain warp beam and a sectional warp beam are included. For dyers, the authors provide classes of synthetic dyes, safety precautions for dyers, dyestock solutions, percent shade, percent of color for mixed colors. There is a chart giving fiber classifications for natural and man-made fibers, information on sheep breeds and grades of
wool and comparison of fiber properties. Finally the authors include a selected bibliography of texts on dyeing, textile industry and fabrics, weaving and fibers.

The paper bound pamphlet is printed on tan colored paper and illustrated with line drawings. It measures 5 1/4” x 8” making it a convenient companion.

Warp with a Paddle by Lucille Landis is based on material which was first published in the Summer and Fall 1975 issues of Shuttle, Spindle and Dyepot. The information included in the original articles has been revised and enlarged.

The author notes in her introduction that her method is “an adaptation of industrial procedures and yields a quality warp with uniform tension which lasts throughout the weaving.” The system, taught to Landis by Clara Cherepov, briefly involves the following steps: use of a paddle to wind warps onto a warping board or mill; use of a raddle to control the warp during beaming; picking a threading lease near the beginning of the warp and a raddle lease near the end; beaming before threading; using discs on the warp beam instead of paper or sticks to support warp threads.

Landis divides her monograph into chapters which detail warping with a paddle, beaming with or without paper, how to figure a warp, and winding a warp of graded color. The text is illustrated throughout with black and white photographs. It is paper bound and measures 8 1/2” x 11”.

Weavers’ Wisdom, produced by the Weavers’ Guild of Boston is a very attractive paper bound book. It is distinctively printed and uses wonderful line drawings which provide international symbols to identify chapter subjects. A cone of yarn signals the chapter on Making the Warp, a slay hook lets you know advice on dressing the loom is on the way, and an award ribbon encourages you to check the chapter on exhibition and sale of textiles.

Each chapter consists of a series of one- or two-sentence hints providing advice: “To maintain even tension and to minimize twists when chaining a warp, pull the threads through the loop with alternate hands.” “Tying-in the edges of a warp a bit tighter than the central section helps to prevent sagging and uneven selvages.” “Use a yard stick to make a raddle.” “A mouse trap mounted on the castle can be used to hold drafts or threading directions.”

An historical quote pertinent to the topic at hand introduces each chapter: Jack Lenor Larsen for “Dressing the Loom,” Shakespeare on “Weaving.” “There is something for everyone in a book of this type.” I am sure the authors must have heartily enjoyed gathering together all these words of wisdom.

Susan Larson-Fleming

THREADS
Published bimonthly

The newest fiber magazine, Threads, made its debut in October, 1985. It is impressive for its large format and beautiful presentation of articles by well-known figures from many areas of the textile arts. Sewing, hand-and-machine knitting, weaving, dyeing, embroidery and needlepoint are covered regularly. The first two issues also contained articles on special techniques such as basketry, spinning, felting and twining. While most of the articles are for the reader interested in a brief overview, several “hands-on” articles are included in each issue. Book reviews, product information and calendar of events appear in each issue.

Threads is published by the Taunton Press, publishers of Fine Woodworking and Fine Homebuilding, two quality publications in their fields. Their expertise applied to the field of fibers should assure Threads a secure future. Subscription rate is $16.00/yr. The Taunton Press, Inc., 63 South Main St., PO Box 355, Newtown, CT 06470.

Karen Searle

FROM WOODS AND FIELDS
Edited by Connie Magoffin
Minneapolis, Connie J. Magoffin

“A newsletter devoted to the topic of natural dyeing for the purpose of communication among natural dyers” is Connie Magoffin’s goal for the small bimonthly publication that she began in 1983. The newsletter developed out of a regular column on natural dyeing that Connie wrote for her guild’s newsletter.

She is accomplishing her purpose very well. Each informative four-page issue contains one or two articles on a specific natural dye subject, supplemented with samples, bibliography, dye plant sources, and other pertinent information. Volumes 1 and 2 have dealt with such subjects as easter egg dyeing, reed dyeing, planting a dye garden, using a microwave for natural dyes, and information on specific dyepants such as iris and cosmos. The issue on road dyeing gives instructions for using four dyes: indigo, cochineal, onion skins and walnut hulls. It also includes instructions
for making a woven reed ornament. The recipes and instructions are clear and easy to follow. Both beginners and experienced dyers will find its information useful.

Connie brings to this project a background in art education and extensive experimenting and teaching in the field of natural dyes (the subject of her master's thesis). Subscription rate is $10.00 for six issues and may be ordered from Connie J. Magoffin, 3248 Collax Ave. S., Minneapolis, MN 55408.

Karen Sears

**News**

**TRADITIONAL TEXTILES OF TUNISIA AND RELATED NORTH AFRICAN WEAVINGS,** by Ingrid Reswick and Connie Magoffin, explains and illustrates the weaving techniques, designs and colors, and the roles and uses of the textile arts in Tunisia. The book is distributed by the University of Washington Press for the Craft and Folk Art Museum of Los Angeles. 270 pp., 35 color plates, 82 b/w illustrations. ISBN 0-925-96281-X, paper only, $24.95.


For information on University of Washington Press books, contact: Publicity Department, University of Washington Press, P.O. Box C-50096, Seattle, WA. (206) 543-4050.


**PAST PERFECT CLOTHES NEWSLETTER,** covers sources for clothing patterns as well as ready-made items, from the Medieval period through the 1940s. One year's subscription is $10.00 for 10 issues. For information: Eileen Macintosh, 23 Underwood St., Belmont, MA 02178.

**BEGINNINGS WOVEN AT HOME,** is a 17-minute video featuring Cheryl Taylor, owner of Dream Weaver in Atlanta, Georgia. The lessons, featuring a four harness, jack type floor loom, go from "Preparing the Warp" to "Finishing the Project." $39.95 plus $4.50 handling charge. For information: Dream Weaver, Dept. 75-BW, 650 Miami Circle NE, Atlanta, GA 30324.
EXHIBITS, FAIRS, FESTIVALS

ARIZONA
Mesa: The 8th Annual Yahki Exhibition will be held March 14–April 19, 1986 at Galeria Mesa, 155 North Center, Mesa, Arizona. This is a national juried contemporary crafts exhibition.

ARKANSAS
Mountain View: The 24th annual Arkansas Folk Festival will be held April 17, 18, 19 and 20, 1986. Included in the festivities will be the Ozark Craft Guild’s Spring Show and Sale. For information: Mountain View Chamber of Commerce, P.O. Box 133, Mountain View AR 72560.

CALIFORNIA
San Francisco: The ACC Craftfair will be held in San Francisco, August 6–10, 1986, at Fort Mason Center.

COLORADO

DISTRICT OF COLUMBIA

FLORIDA
Boynton Beach: Boynton’s G.A.L.A. (Great American Love Affair) will be held February 28, March 1, and March 2, 1986 at the Civic Center Grounds, 128 East Ocean Avenue, Boynton Beach, Florida. For information: Eleanor Wollenweber, Chairman, P.O. Box 232, Boynton Beach, FL 33426-0232.

IDAHO
Boise: “For the Floor: Contemporary Artists’ Rugs,” an exhibition organized by the American Craft Museum, will be held at the Boise Gallery of Art, August 2–September 14, 1986.

ILLINOIS
Chicago: The Chicago Historical Society, Clark Street at North Avenue, Chicago, IL 60614 will present the exhibition “Edward F. Worst: Craftsman and Educator,” October 23–March 10, 1986.

INDIANA

MARYLAND
Baltimore: ACC Craftfair Baltimore will be held at the Baltimore Convention Center, February 26–March 2, 1986.

MASSACHUSETTS
West Springfield: ACC Craftfair West Springfield will be held at the Eastern States Exposition Center, June 16–22, 1986.

MICHIGAN

MINNESOTA

NEW MEXICO

NEW YORK
New York City: George Little Management, Inc. will sponsor “Surflex ’86,” a surface design exhibition, at the Jacob K. Javits Convention Center, May 10–13, 1986. For information: Alan Steen, Show Director, George Little Management, Inc., 2 Park Avenue, Suite 1100, New York, NY 10016 (212) 686-6070.

NORTH CAROLINA
Chapel Hill: The fourteenth Triangle Weaver’s annual festival will be held March 15–30, 1986 at the Horace Williams House in Chapel Hill, North Carolina. The festival is a non-juried exhibition of fiber art.

OHIO
Dayton: “For the Floor: Contemporary Artists’ Rugs,” an exhibition organized by the American Craft Museum, will be held at the Dayton Art Institute, January 18–March 9, 1986.
Cincinnati: 16 embroideries from Turkey and several Aegean islands, selected from the permanent collection, are on view at the Cincinnati Art Museum until January 1986.

TENNESSEE

TEXAS
Dallas: ACC Craftfair Dallas will be held at Market Hall, Dallas Market Center, April 17–20, 1986.

WASHINGTON
Seattle: “Fiber Fair,” organized by the Seattle Weavers Guild will be held at the Bon Marche, 3rd and Pine, Seattle, Washington in March, 1986. Included will be “Fiber Inter- action ’86,” a juried exhibition of work by...
members of the Seattle Weavers’ Guild, a textile arts sale, plus workshops, lectures and demonstrations. For information: SASE to Aileen Nelson, 18155 151st Ave. N.E., Woodinville, WA 98072.

Tacoma: “Focus on Fibers,” a juried competition of handwoven, felted and handspun items, will be held at the Kittredge Gallery, University of Puget Sound, Tacoma, Washington, February 23–March 14, 1986. For information: Tacoma Weavers Guild, c/o Pam Cox, 2206 62nd Ave. N.W., Gig Harbor, WA 98335.

WISCONSIN

Milwaukee: “Fiber R/Evolutions” will be held at the Milwaukee Art Museum, March 20 to March 30, 1986. The exhibition, both invitational and juried, will travel to national museums for the remainder of 1986 and 1987.

CONFERENCES

CALIFORNIA

Berkeley: “Surface Design: In Use,” the southwest regional conference of the Surface Design Association, will be held at the University of California, Berkeley, May 31 and June 1, 1986. For information: Pacific Basin School of Textile Arts, 1659 San Pablo Ave., Berkeley, CA 94702 (415) 524-0777.

COLORADO

Denver: The 1986 Midwest Weavers Conference will be held June 6 through 9, 1986 at Loretto Heights College in Denver, Colorado. For information: Rocky Mountain Weavers Guild, Attn: Connie Deiter, P.O. Box 22687, Denver, CO 80222.

FLORIDA


Winter Park: The Florida Tropical Weavers Guild will hold its annual state convention at the Langford Hotel, Winter Park, Florida, April 18–20, 1986. The theme is “Something Spacy.” Workshops in weaving, basketry and other fiber arts are planned. Workshop leaders include Doramay Keesey (weaving) and Shereen LaPitanze (basketry). For information: Donna Sullivan, 1334 Montego Road W., Jacksonville, FL 32216.

KANSAS

Chanute: The Alliance of Weavers and Spinners conference will take place April 12, 1986 at the Neosho Community College. For information: KAWS '86 Committee, c/o Dooreen M. Hutchinson, Southeast Kansas Weavers Guild, 1009 Idaho, Neosho, KS 66757.

MASSACHUSETTS

Nantucket Island: The Northeast Regional Surface Design Conference will be held September 26–28, 1986 at the Nantucket School of Design. For information: Cathie Joselyn, Art Department, Clarion University, Clarion, PA 16214 (814) 226-2523.

MICHIGAN

Ypsilanti: “Lace Place Ten,” the tenth anniversary conference of the Great Lakes Lace Group will be held April 30 to May 4, 1986 at the Hoyt Conference Center, Eastern Michigan University, Ypsilanti. For information: Linda Knapp, 7757 Redford, Detroit, Michigan 48219.

NORTH CAROLINA

Raleigh: “Color: The Spectrum of Expression,” the southeast regional conference of the Surface Design Association will be held March 13–16, 1986, at North Carolina State University, Raleigh. For information: Susan Wilchins, School of Art, Box 7701, N.C.S.U., Raleigh, NC 27695 (919) 737-2202.

UTAH

Salt Lake City: The Utah Handweavers Conference, sponsored by the Mary Meigs Awlweaver Weavers Guild of Utah, will be held April 4 and 5, 1986 at the Salt Lake Art Center. Nell Znanovewski is the keynote speaker. For information: Sondra Paul, 1162 Lorraine Dr., Salt Lake City, Utah 84106 (801) 486-6487.

WASHINGTON

Seattle: “SD Biz,” the northwest regional Surface Design Association conference, will be held June 27–29, 1986 at the University of Washington, Seattle. For information: Richard Proctor, School of Art DM-10, University of Washington, Seattle, WA 98195.

CANADA

ONTARIO


WEST GERMANY

Deldenhorst: “Marketing Chances—Handweaving/Weaving Design,” the international crafts meeting at Textilforum at Eichenhof Farm, will be held May 30, 31, and June 1, 1986 at Deldenhorst (near Bremen, West Germany). For information: Textilforum e. V., P.O. Box 59 44, D-3000 Hannover I, West Germany.

TO ENTER

Deadline February 21, 1986 for the 29th annual Guildford Handcrafts Expo, July 17, 18, 19, 1986 on Guildford Green, sponsored by Guildford Handcrafts, Inc. Open to all craft media, juried by 5 slides only. For information: 29th Annual Guildford Handcrafts Expo, P.O. Box 221, 411 Church St., Guildford, GU 06437.

Deadline February 28, 1986 for “Connecticut Creations,” a regional exhibition open to Connecticut craftspersons and artists, May 4 to May 24, 1986 at The Mill Gallery, Guildford Handcrafts Center, 411 Church St., Route 77, Guildford, CT. Juried by 5 slides only. For information: SASE to Connecticut Creations, Guildford Handcrafts Center, P.O. Box 221, Guildford, CT 06437.

Deadline February 28, 1986 for “Small Expressions '86,” a juried exhibition of small scale works presented as part of Convergence '86. For information: Small Expressions '86, c/o Convergence '86, 346 Dundas St. W., Toronto, Ontario, Canada, MST 1G5.

Deadline March 1, 1986 for entries in “Spodight '86,” a juried exhibition of work by Southeast Craftspersons, May 21–24, 1986. This exhibition is held in conjunction with the annual American Craft Council Southeast Conference. For information: Ray Ferguson, Conference Coordinator, College of Education, University of Florida, Gainesville, FL 32611, (904) 392-0761.

Deadline March 1, 1986 for entries in the Sheep to Garment Competition, July 22, 1986, held as part of Edmonton’s Klondike Days Exhibition. For information: Lyn Pfeuffer, Box 120, Bragg Creek, Alberta, T0L 0K0 or Lois Milner, R. R. 8, Calgary, Alberta T2J 2T9, Canada.
Deadline March 31, 1986 for participation in a four harness sample exchange offered by the Squamish Weavers and Spinners Guild, Britannia Beach, British Columbia, Canada. The theme is Huck Weaves. For information: Jare Ivenson, Box 97, Britannia Beach, British Columbia, Canada, VON 1JO.

Deadline April 1, 1986 for “Personalized Fibres,” to be held at a time of Convergence ’86. For information: Handspun Entries to: Carole Gay, 34 Scatter Avenue, Etoibicoke, Ontario, Canada M9B 1G6; Handspun entries to: Barbara Zimmer, 97 Markland Drive, Etoibicoke, Ontario, Canada M9C 1N7.

Deadline April 1, 1986 for “Needle Expressions ’86,” a national open competition sponsored by the National Standards Council of American Embroiderers. The exhibit will be held at the Achesæum in Alexandria, Virginia from August 31 to October 12, 1986. Slides due by April 1. All entries must be accompanied by entry form. For prospectus: SASE to Dixie Retting, 7854 Middly Lane, Alexandria, VA 22306.

Deadline April 1, 1986 for applications to apply for summer 1986 assistantships at the Arrowmont School of Arts and Crafts. Assistantship awards are available for students. For information: Arrowmont School of Arts and Crafts, P.O. Box 567, Gatlinburg, TN 37738.

Deadline April 1, 1986 for applications for “Friends of Arrowmont” scholarships in the amount of $125.00 available to a select group of students who show monetary need in order to be able to attend a class at the Arrowmont School of Arts and Crafts. For information: Arrowmont School of Arts and Crafts, P.O. Box 567, Gatlinburg, TN 37738.

Deadline May 1 for slides and May 24, 1986 for hand-carried entries for “Fiber Celebration ’86,” a juried exhibit sponsored by the Northern Idaho Weavers Guild. The exhibit will be held June 2 through June 27, 1986 at the Loveland Museum, Loveland, Colorado. For information: SASE to Fiber Celebration ’86, 5515 West Hwy 34, Loveland, CO 80537.

Deadline June 1, 1986 for a design competition in celebration of the Great Lakes Lace Group’s 10th anniversary. For information: SASE to Linda Knapp, 17757 Redfern, Detroit, MI 48219.

Deadline August 2, 1986 for “Just for Fun,” a multimedia exhibition open to all craft media and fine arts. Sponsored by Guilford Handcrafts, Inc. the exhibit will run from October 5 to October 25, 1986 at The Mill Gallery, Guilford, Connecticut. For information: SASE to Just for Fun, Guilford Handcrafts Center, P.O. Box 221, Guilford, CT 06437.

no deadline stated “Wearable Art for the Collector,” juried exhibition, fashion show and sale at the Evansville, Indiana Museum of Arts and Science, April 7-May 5, 1986. For information: SASE to First Additions, 2920 North Commonwealth 4B, Chicago, IL 60657.

no deadline stated The Association of Michigan Basketmakers is currently accepting teacher proposals for the 1986 Michigan Basketmakers Convention, Detroit, Michigan, October 1986. For information: Kathleen P. Croome, Convention Chairperson, c/o Tint & Split Basketry, 2925 Ford Rd., Garden City, MI 48135.

ANNOUNCEMENTS

Position available: Arrowcrafts Shop Manager, Gatlinburg, Tennessee; Art/Crafts & Business/Marketing background and experience. For information: Sandra Blain, Arrowmont School of Arts and Crafts, P.O. Box 567, Gatlinburg, TN 37738. (615) 436-5860.

“Access: Ability,” the only national not-for-profit network of artists creating hand-made, one-of-a-kind and limited edition garments, accessories and jewelry is now operating. The organization provides a forum through which wearable artists can communicate with and support one another. Membership: $35.00/year. For information: Sue Nechin, Executive Director: Access: Ability, 2520 N. Commonwealth, 4B, Chicago, Illinois 60657 (312) 248-7352.

Weaving and Spinning Teachers of the Year: In an effort to give deserved recognition to outstanding teachers in the fiber community, Teaching for Learning is sponsoring Teachers of the Year awards. Both weaving and weaving teachers will be recognized with up to three awards given in both categories. The judges are Else Regensteiner, Peri Grayson and Deborah Chandler. Nominations may be made by anyone sending in the nominee’s name and a short essay on why this teacher qualifies for an award. Initial nominations will be taken from January 1 through April 15, 1986. Award recipients will be announced in the September issue of Teaching for Learning. For information: Deborah Chandler, Weaving Futures, Box 7294, Boulder, CO 80306.

The Utah State Navajo Sheep Project has now found a permanent home. The project will be housed five minutes northeast of the main Utah State University campus and focus on the Sheep Project. The Department of Animal, Dairy & Veterinary Sciences, Utah State University, Logan, Utah 84322-4815.

A few Churro sheep fleeces remain from the project’s annual wool sale. Write to the above address for a price list. Fleeces will be sold on a first-come-first-serve basis.
STUDY & TRAVEL

STUDY

ARIZONA

Mesa: The Mesa Cultural Program offers an ongoing series of classes in the fiber arts. For information: Mesa Cultural Program, P.O. Box 1466, 155 N. Center, Mesa, AZ 85201.

CALIFORNIA


Mendocino: The Mendocino Art Center Textile Apprenticeship Program will now have Artists in Residence during winter and spring. For information: Loll Jacobsen, Program Coordinator, Textiles, Mendocino Art Center Textile Apprenticeship, 45200 Little Lake St. P.O. Box 765, Mendocino, CA 95460 (707) 937-0228.

MAINE

Deer Isle: Brochure available for 1986 Summer workshops. Applications deadline April 15, 1986. Beginning, intermediate and advanced level classes in clay, quilts, wood, metals, fiber, graphics, fabrics, weaving, glassblowing, papermaking, blacksmithing, jewelry, clothing design. For information: Haystack Mountain School of Crafts, Deer Isle, Maine 04627 (207) 348-6946.

MASSACHUSETTS

Somerset: Concentrated 15 hour workshops on dyeing, March 21, 22, 23, and May 2, 3, 4, 1986. Procion fiber reactive dyes on cotton and silk and acid dyes on wool. Workshops will cover procedures, practical information and include hands-on dyeing experience. Enrollment is limited to 10. For information: Pro Chemical & Dye, Inc., P.O. Box 14, Somerset, MA 02726.

MISSOURI

Fayette: The Weaver’s School provides an intensive weaving experience for those interested in exploring beyond the four shaft loom. Classes include: Introduction to Complex Weaves, The Weaving and Finishing of Coverlets, and The Drawloom. Samples are woven on eight shaft looms and Glimakra countermachines looms with draw attachments. Students live inexpensively at the school for 2, 3 or 5 day classes with the option of remaining longer for individualized instruction or project weaving. Classes are restricted in size to insure maximum individual progress. For information: Madelyn van der Hoogt, The Weavers’ School, Route One, Fayette, Missouri 65248 (816) 248-3462.

NEW JERSEY

Saddle River: Palisades Guild of Spinners and Weavers, Saddle River, NJ presents a lecture and hands-on workshop with Allan Fannin on March 21, 1986 and a workshop on March 22. Mr. Fannin will design and tailor the program for the individual participants’ interest, skill and questions. For information: Dixie Francis, 7 Fox River Crossing, Mahwah, NJ 07430 (201) 262-6395, 9-5, M-F or (210) 825-9049 after 6 p.m.

NEW YORK


OHIO

Oberlin: Charles Lermont offers a variety of workshops at the Loom Shed for 1986. For information: The Loom Shed, 278 S. Pleasant St., Oberlin, Ohio 44074.

PENNSYLVANIA

Lancaster County: Krara Cheropov will conduct fiber arts workshops at Historic Smithton, in Lancaster County. Classes will be offered in the fundamentals of weaving, garment and product design. For information: Krara Cheropov Workshop, Historic Smithton, 900 West Main St., Ephrata, PA 17522, (717) 738-3333.

MENNESOTA

Galitub: The Arrowmont School of Art and Crafts announces its 1986 Spring Workshop Program of one-week fiber classes to be held March 3-28, 1986. The School will offer one and two week classes in fibers during its 1986 Summer Workshop Program, June 9-August 15, 1986. For information: Arrowmont School of Arts and Crafts, P.O. Box 587, Gatlinburg, TN 37738 (615) 436-5860.

VERMONT

Ludlow: Fletcher Farm School for the Arts and Crafts will offer week-long and weekend fiber courses for beginning and advanced students, during its summer session. For information: SASE to Fletcher Farm School, Ludlow, Vermont 05149.

WASHINGTON

Tacoma: The third study retreat sponsored by the Council of American Embroiderers will be held June 1 to 14, 1986 at the University of Puget Sound, The Summer Seminar. “From Sound to Summit.” will be held from June 9 to 14, 1986, in conjunction with the study retreat. For information: SASE to NSCAE, P.O. Box 8578, Northfield, IL 60093.

WEST VIRGINIA

Ripley: The Cedar Lakes Crafts Center announces its spring schedule of crafts workshops. The first week of workshops, March 3-7, 1986, includes weft face rug weaving; March 24-28 includes clothing construction. For information: Cedar Lakes Crafts Center, Ripley, West Virginia 25271 (304) 372-6263.

AUSTRALIA

QUEENSLAND

Brisbane: The Australian Flying Arts School announces a new Weaving Correspondence Course, written by Janet De Boer, and sponsored by the Crafts Board of the Australia Council. For information: The Coordinator, Correspondence Courses, Australian Flying Arts School, c/o Brisbane CAE (Kelvin Grove), Victoria Park Road, Kelvin Grove Q 4059.

TRAVEL


Peru and Bolivia: The Ancient Weaving World of Peru and Bolivia, a tour led by John A. Davis, March 11 to 24, 1986. For information: Holbrook Travel, Inc., 3540 NW 13th St., Gainesville, Florida 32609, (904) 377-7111.

Harrisville Designs

Harrisville Designs introduces the Model T/8 loom, an eight harness version of the Model T. It features a 36" weaving width, 8 harnesses, jack action, reed slotted, and is of hardwood construction. The loom comes with 800 large eye or flat steel headers and a reed of your choice. It has an adjustable friction brake system and snap chain tie-up system. Harrisville Designs now offers their entire line of looms in assembled form as well as in kits.

Harrisville also announces production of the Shuttlette, a small version of the larger HD boat shuttle. It takes the same full-sized bobbin as the bigger shuttles.

Harrisville Design Direction is a weavers' pattern booklet complete with fabric swatches, yarn samples, weaving draft and instructions. It is intended for beginning to advanced weavers and includes all information necessary for choosing and buying colors and amounts, warping, weaving and finishing the fabric. An artist's sketch of a possible garment is also included.

For information on any of the Harrisville Designs products, contact Harrisville Designs, Harrisville, New Hampshire 03450, (603) 827-3333.

Ribbon

C.M. Offray & Son, Inc., are manufacturers of a luxurious double-faced satin ribbon in several widths ranging from 1/4 inch to 1 inch, plus numerous other novelty and grosgrain ribbons. They have recently introduced a polyester knitting ribbon in a 1/4 inch width suitable for use in weaving. (See the ribbon jacket elsewhere in this issue.) The following distributors can be contacted for information on local sources of the ribbons:

Craft World, P.O. Box 779, New Windsor, MD 21776. Leisure Arts, Inc., P.O. Box 5595, Little Rock, AR 72215. Kentex Corporation, 31332 Via Colinas, #107, Westlake Village, CA 91362. Cosgrove Enterprises, 13000 N.W. 38th Avenue, Opa Locka, FL 33054. Leff Brothers, P.O. Box 474, Houston, TX 77001. Gay Bowles Sales, Inc., P.O. Box 1060, Janesville, WI 53547.

Flax

Euroflax, Inc. of Rye, New York currently stocks two forms of flax for the handspinner. Flax roving is a fiber that has been cleaned, dyed and combed. It forms a loose, continuous siver of about one inch in diameter that can be spun dry from the hand without further preparation. It is available in 31 colors.

Long line flax is stocked in natural and a limited number of dyed colors. It comes in 3.5 ounce (100 grams) stricks (twisted hanks). For information: Euroflax, Inc., P.O. Box 241, Rye, New York 10580.

Designer Witch Engine

Simpson's of Llangollen, Wales announces the development of a Designer Witch Engine for the American weaver. It is a dobby mechanism of 24 harness capacity designed for attachment to a variety of looms, particularly those with an overhead castle such as the Glimakra Standard. It will fit looms with an inside weaving width of 42 to 64 inches. In most cases, it requires no changes to the basic loom and it can be readily be dismounted and replaced with the normal harness assembly.

This loom is in addition to the Production Witch Handloom which was introduced at Convergence '84 which is larger with a 36 harness capacity, a four box fly shuttle, automatic cloth advance and other features that enable very rapid production. For information: The Looms, Shake Rag St., Mineral Point, Wisconsin 53565.
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Summer 78 $2.50 Fabrics for interiors, summer & winter rugs, corded weaves, wool blankets, aprons, double weave rug, double weave jacket, Andean cross-the-warp technique, part 2.

Winter 79 $2.50 Woven garments, spring placemat garnet, woven blankets, Japanese coat, crinkle weave, raw silk reeling, natural soap recipe.

Spring 79 $2.50 Sweater weave, miniatures, coverlets in 2.6 weaves, spot weave mug, woven garments, basketry.

Summer 79 $2.50 Rug issue. Shaped, scalloped rugs, rug rugs, corded weaves, back-locked double weave, multi-harness crinkle weave, spinning dog hair, business of weaving.


Spring 80 $2.50 Rug issue. Rug design, shadow weave rug, shaft structural, merino bands, summer & winter polo afghan. Series: Multi-harness weaving course, parts 2, 2-twists and sash, Tapestry course, part 2.

Summer 80 $3.00 Shaft weaving, corkscrew weave, 4-harness damask, transparent foil embroidery, plain needle basketry, balinese ikat, silk dyeing and stitching. Series: Multi-harness weaving course, part 3: Shaft weaving, Tapestry course, part 3.

Fall 80 $3.00 Keep-warm projects, man-made fibers for weavers, Kamiko red pick-up, place mats, warp & weft, effects in summer & winter, shaft switch rugs, wedge weave. Series: Multi-harness course, parts 4, 2-twists derivatives, Tapestry course, part 4.

Summer 81 $3.00 Tablecloths, tunics, window coverings, fringe-loom weaving, multi-harness S’s and O’s, satin with long-eyed heddles, shaft switching for 3-and 4-twists, felt

Summer 82 $4.00 Fabrics for interiors, interview with Jack Lenor Larsen, textured double cloth: mohair, worsted, synthetics, cardboard rug selvages, linen shirt, catherine braid, backstrap weaving.

Fall 82 $4.00 Novelty flax issue. Flax processing and spinning, linen weaving and dyeing. Linen aprons, shirts, towels, roman, rug design, blocks and profiles, batonage, Wovenets 1. Series: Whig Rose study, part 1.

Winter 82 $4.00 Clothing issue. Coats, capes, triangular shawl, plaid shawl, vest & skirts, jackets, crochet finishes, band finishes, tapistry bag, double cowl twills, silk-coat weave with long-eyed heddles. Series: Whig Rose study, part 2.

Spring 83 $4.00 Rug issue. Rag rugs, rug weaving, rug projects, double-cowl pick-up, designing 4-harness double weave, color in summer & winter, embroidered patterns, painted twills. Series: Intro. to computers for weaving, part 1.

Summer 83 $4.00 Ethnic textiles issue. Museum textiles, Shaker textiles, Norwegian Tapestry, Sami, Navajo weaving. Southwest Indian twill tapestry, Sunbank, kashli, Guatemalan weaving, Japanese weaving, traditional damask, 4-block double weave for 4-harness space dyeing. Series: Intro. to computers for weaving, part 2.

Fall 83 $4.00 Hand-dyed yarns for weavers, handspun & handwoven saddle blankets, rainbow, dyers, flame retardants, mothproofing, yarn counts, name draft program, transparency, onion basket. Series: Intro. to computers for weaving, part 3.

Winter 84 $4.00 Clothing issue. Jackets, shirt and skirt projects, woven sweaters, beginners tops, weave & knit garments, smocking, blouses, knitwear, kimono coat, computer weaving cotton spinning. S. LaPlace baskets, vestments, multi-shift over-shot on over-edges.

Spring 84 $4.00 Rug issue. Flamepoint rugs, meet & separate rugs, block drafts for rugs, shaft-switching devices and techniques. Multi-colored dyeing, Real-Aid dyeing, quilted coverlet, blanket weave, Tartan table, black weaves with long-eyed heddles. Masterweaver boom.

Summer 84 $4.00 Jacquard looms. Circle of Rameses, Norwegian card-woven belt, place mats, overshot hanging, felting jacket, Bederwold dress, shaft-switching, Greek spool-tying, knotted Chinese button.

Fall 84 $4.00 Axonometric spinning and weaving tools, turned drafts in double 2-twists, Chinese drawloom, natural dyeing, ramie blouse, heathered yarns, Salish spinning & weaving. Series: Textile conservation, part 1.


Summer 85 $4.00 Weaving by hand & machine, Middle Eastern Kaftan fabrics, hand woven bag, Greek ceramics, Pleatloom shirt, waist belt, Japanese hats, Ikat blankets of Balinese, Series: Textile Conservation, part 4.

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PUBLICATIONS

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TRAVEL


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