

# Boundweave

## *Learning from the Past*



by Phyllis Waggoner

**L**AST FALL, I attended a chamber music concert where a Mozart string quartet was performed. The program notes told how Mozart, in his early work, followed the musical forms set by his famed teacher Haydn and that Haydn in turn, referred to the work of his contemporaries and predecessors as he developed the classic string quartet. I thought about how the process of studying the past and recycling it into one's own work is common to all creative disciplines.

Boundweave has taken me on such an adventure. It began with my search for a loom-controlled threading that would produce flame stitch-like color effects. I preferred a weft-faced weave because it gave me more control over the manipulation of color relationships. After much experimentation, reading and discussions with other weavers, I found that by repeating a treadling sequence over and over, a boundwoven textile could be woven on many different threading systems. I also learned that the point twill and overshot drafts provided as many design blocks as there were shafts in their threadings, thus providing the weaver with an optimum number of possible color combinations. Eventually I encountered bound rosepath and have found in it a limitless opportunity for variety in design and artistic expression.

Rosepath is one of the Swedish "art weaves," with a history that dates back over four hundred years. Its popularity stems largely from its potential for creating colorful patterns, including the rows of stylized flowers for which it is named. The rosepath threading draft is a point twill followed by an end on the first or last shaft, depending on where the threading begins. The number of



Bound rosepath coverlet woven on a 3 shaft rosepath threading, from Skane, Sweden, in the collection of The American Swedish Institute, Minneapolis. Note back view showing long weft floats.

shafts that can be used for the threading ranges from three to eight, with the eight end repeat on four shafts being the most common. It has been interesting to learn that in Sweden this popular threading has many distinct treadlings and names. With a balanced tie-up, it is woven with one weft as a twill and known as *Korndräll*. Rosepath woven overshot-fashion with a pattern weft and tabby binder is known as *vanlig rosengång*. Rosepath treadled on opposites and woven with two different colored wefts is called *motsatsrosengång*. When the shafts are treadled so that the weft goes over only one warp at a time, the weave is called *bunden rosengång*.

A close relative to bound rosepath is *krokbragd*, a Norwegian boundweave. The most common threading on which it is woven is a three shaft point twill with one shaft treadled at a time. Double *krokbragd* is woven on three- or four-shaft double-point twill drafts, also with an unbalanced tie-up. In all probability the "purists" would say that *bunden rosengång* and *krokbragd* are the only true forms of boundweave.

As part of my research on boundweave I had the privilege of studying the bound rosepath textiles in the collection of The American Swedish Institute in Minneapolis, Minnesota. It is difficult to describe my emotions as I examined these old treasures which are so finely woven and well worn. Their makers were skilled in spinning, dyeing and weaving and their work continues to instruct those of us who see it today.

Many of the pieces in the Institute's collection appear to have been used as wall hangings or coverlets. Some were woven in two sections, each about 22" wide, and then seamed together. The "hand" of the coverlets is supple, almost





Bound rosepath coverlet woven on a 4-shaft rosepath threading, from the collection of The American Swedish Institute, Minneapolis. Each pattern is created using only two colors. Note back side of weaving on left, showing long weft floats.

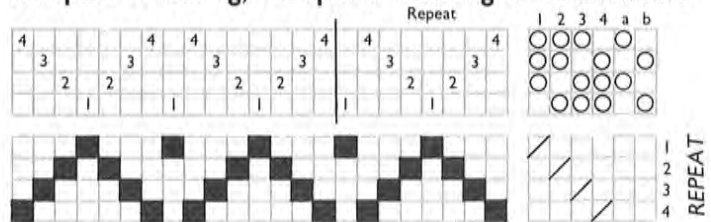
spongy, while the wall hangings are more firm. The wefts for all of these pieces is single spun, usually wool. Occasionally a natural colored linen is also used. The warp is either plied linen or cotton about the grist of a 10/2 linen, with setts ranging from 10 to 12 ends per inch. There appear to be several distinctive pattern systems at work, such as the use of simple 2-color patterns separated by areas of a single color, more elaborate bargello-like color sequences, and extensive use of sampler-like compositions showing a variety of patterns.

In my library I have gathered together a number of books with sections on bound rosepath, many of them published in Sweden. Although I am not fluent in Swedish, I could easily understand the pictures and diagrams. A 1983 Swedish publication, *Bunden Rosengång*, by Inga Lisa Petersson and Birgit Jansson has been an especially valuable resource. It contains many beautiful photos of antique bound rosepath coverlets as well as contemporary reproductions. At first I was puzzled by some of the old treadling notes included in the "Gamla Mönster" ("old patterns") chapter. They showed the regular boundweave treadling sequence of lowering one shaft at a time, using counterbalanced looms with a sinking shed. Occasionally, however, two treadles were tromped simultaneously to make a tabby shed. I finally realized that this was a short cut for weaving two sheds of the same color with one shot. Whenever the pattern called for a color to fall in both sheds 1 and 3, tabby *a* was treadled. Tabby *b* was treadled if the same color was to be woven in both sheds 2 and 4. This condensed treadling sequence saves yarn and weaving time and equalizes the tension difference

that exists between the front and back. After experimenting with this "tabby substitute" I learned that boundweave need not be treadled faithfully in the same sequence. As long as all the shafts for one row are eventually covered, the treadles can be tromped in any order, and when possible, a tabby treadle inserted. This procedure is useful when weaving areas of a single color, because weaving them in plain weave changes the texture too drastically. With a four shaft threading, treadle 1, *b* (2,4), 3 or 2, *a* (1,3), 4 with one weft.

This treadling short cut reminded me of something Peter Collingwood wrote in *The Techniques of Rug Weaving*. He points out that a straight twill threading on four shafts can be woven as a three-shaft point twill krokbragd by lifting shafts 2,3,4/1,2,4/1,3 or 1,3,4/1,2,3/2,4 (jack loom, rising shed). In essence the tabby treadle connects shafts 1 and 3 or 2 and 4, causing them to operate as if all of their warps were threaded on one shaft, perhaps an early form of shaft-switching. When applied to the four-shaft rosepath threading, reducing it to a three treadle

### Rosepath Threading, Tie-up and Treadling for Boundweave



These four weft shots pack together to form one row of weaving. Therefore to actually weave a pattern like the diagram, the color/treadle sequence would be:

- 1D 2L 3L 4L
- 1L 2D 3L 4L
- 1L 2L 3D 4L
- 1L 2L 3L 4d

When the same color is to be woven on both shafts 1 & 3 or 2 & 4, substitute a tabby treadle.

Tabby *a* replaces treadles 1 & 3 and tabby *b* replaces 2 & 4.

- 1D bL 3L repeat
- 2D aL 4L repeat
- 1L bL 3D repeat
- 2L aL 4D repeat

This shortcut saves time and yarn.



If treadle 1, *b*, 3, sequence is repeated, one can weave the same patterns that are possible with a 3-shaft krokbragd threading.



A treadling sequence of 2, *a*, 4 produces 3-shaft double krokbragd patterns.

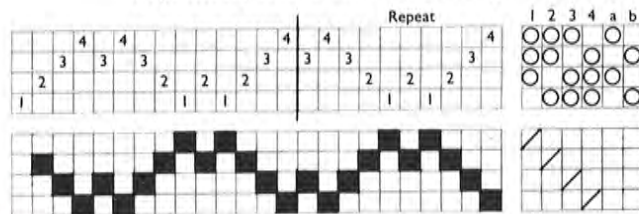




Contemporary 4-shaft double krokbragd wall hanging, woven in Norway, from The International Design Center, Minneapolis. Linen warp, wool and linen singles in the weft.

for the absent wefts. Watch the back of the weaving when shuttling the wefts in this manner because occasionally the repeated "dropping" of a weft will cause a warp end near the selvedge to be missed entirely. However the selvedges are woven, care must be taken that consistent actions are practiced so that the finished piece is woven the same way throughout.

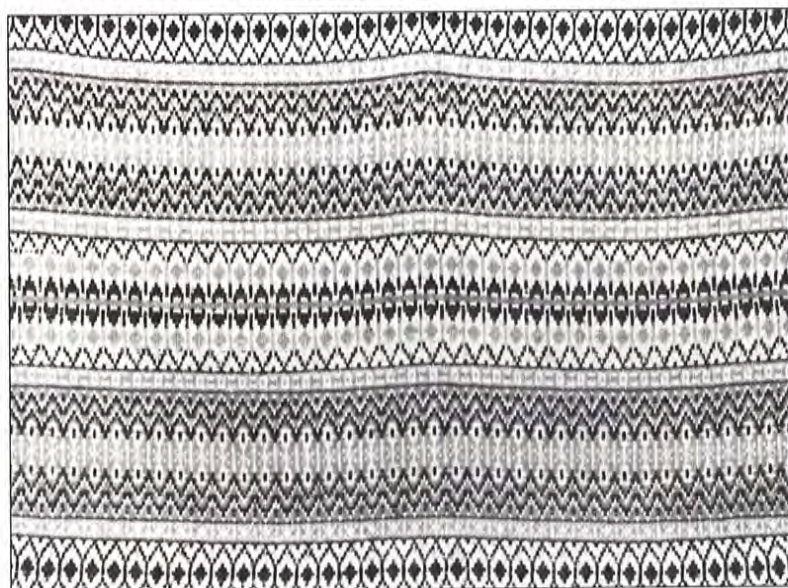
I was not able to satisfactorily determine the selvedge shuttle sequence on the old bound rosepath coverlets. Undoubtedly they were not woven with a floating selvedge because the patterns extend over the edge, and with a floating selvedge an extra block is created that is not always incorporated into the selvedge block. The



sequence, the draft becomes a three-shaft double krokbragd.<sup>1</sup>

My early bound rosepath rugs were woven before I had learned about the option of substituting a tabby shed within the treadling sequence. Designing the patterns was great fun, but after the rugs were removed from the loom I discovered a tension problem which caused them to curl at the ends. The culprit is the nature of the weave structure, with the weft passing over each warp individually on the front and floating over many warps on the back. My efforts to control this problem included fine-tuning the beat, adjusting warp tension, modifying the warp/weft ratio, bubbling the weft differently and blocking the finished rug. All of these things were helpful but the real secret was to use a tabby shed whenever possible during weaving. This equalizes the tension between the front and back and reduces the number of weft floats. The three shaft krokbragd three-treadle sequence contains a tabby shed; hence, pieces woven on this threading do not curl.

Over the past two years I have woven a series of rugs on a 12/6 seine twine warp set at 8 e.p.i. and threaded in a 4 shaft rosepath draft. A floating selvedge is added to keep order among the wefts as they appear in the various sheds at the selvedge. When weaving with a floating selvedge, the shuttle enters the shed over the floating selvedge and exits under it. There are numerous ways to deal with the wefts at the selvedge which must be worked out during the weaving. One solution is to carry only the color that appears in the block at the selvedge over the floating selvedge and exit under it while bringing the remaining wefts under the floating selvedge, both as they enter and exit. This procedure requires the floating selvedge to be wrapped periodically with the "selvedge" color to compensate



Fragment of a 4-shaft bound rosepath coverlet, from the collection of The American Swedish Institute, Minneapolis. Some patterns were woven using three colors, others with only two.



Four-shaft bound rosepath coverlet, woven in two sections and sewn together, from the collection of The American Swedish Institute, Minneapolis.

1. Elmer Hickman, in his 1948 monograph on *Krokbragd*, comments about the lack of written information about this weave. He says, "... it is missing from practically all the Swedish weaving books, even though the back cover of the Swedish publication *Palmgren's Vävbok* shows an excellent color reproduction of Krokbragd in 3 harness weave." The front cover of this book shows a 4 shaft bound rosepath weaving. It appears that the front and back covers were woven on the same warp. The back cover was probably treadled with the 3 treadle sequence that uses a tabby shot.



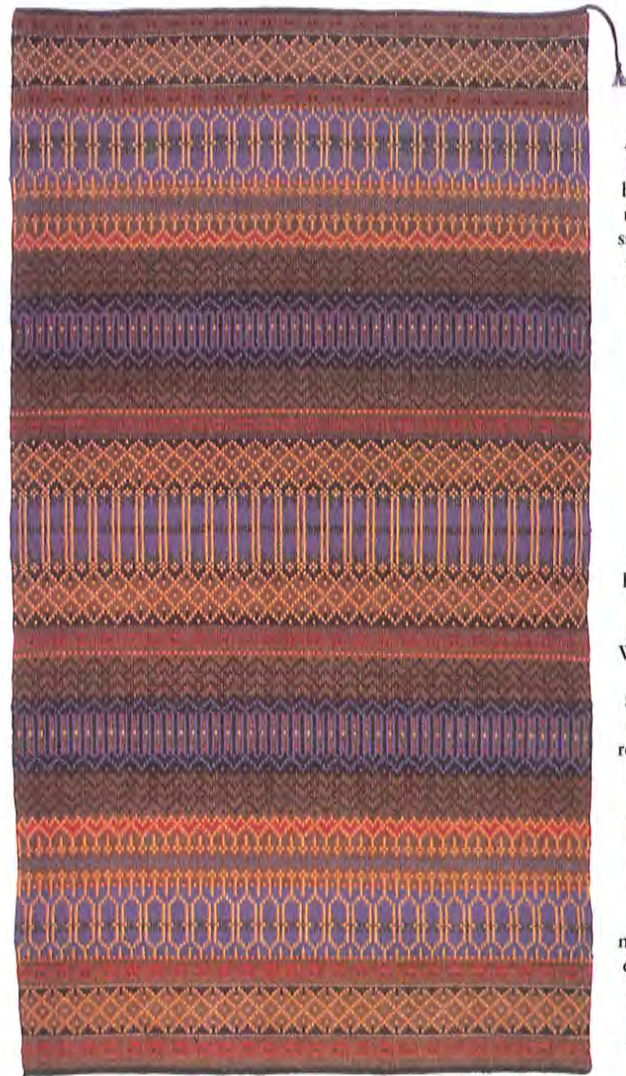


antique pieces were usually woven with only two colors at a time and so the weft arrangement at the selvedge was woven in their natural sequences. Because the wefts are so fine the different color combinations and floats at the selvedge are not visually bothersome.

The weft I used in the rugs illustrated in this article was a two ply mill end, 900 yards/lb, which was hand dyed either with synthetic or natural dyes. In her workshop on loom-controlled designs for rugs, Clotilde Barrett suggested pre-washing rug wool wefts. This is especially useful for mill ends and coned yarns that have been compacted. The yarns bloom, making the surface of the textile very pleasing in appearance and texture. The use of one type of weft for the entire weaving contributes a unifying element to the piece.

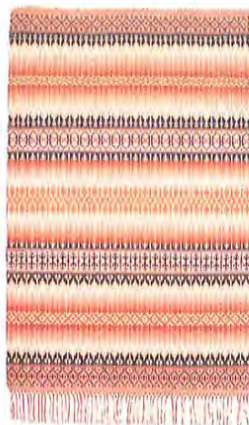
Folk art of all media and genre provides me with inspiration for pattern and color combinations. I have found the borders of oriental rugs to be helpful in visualizing ways to combine patterns of different scale and complexity. One of my favorite books for ideas is *Spanish Textile Tradition of New Mexico and Colorado*, published by The Museum of International Folk Art in Santa Fe, New Mexico. Since my tendency is to use every possible pattern and color combination in one piece, this book helps me exercise restraint while visualizing different pleasing compositions by illustrating so many patterned rugs within its pages.

Most of my designing is done at the loom. This is risky business because one must remember that usually the finished piece will be viewed from a greater distance than that from which it is seen by the weaver. Color and pattern combinations that look interesting up close will often blend together as the viewer moves farther away. I have found value contrast to be the most impor-



Far left: Detail of boundweave wall hanging woven by the author on the same warp as piece at right. Some of the patterns were woven using the tabby shortcut.

Boundweave wall hanging woven by the author on 4-shaft rosepath. Warp is 12/6 seine twine, sett at 8 c.p.i. Weft is 2 ply wool. The irregularly dyed weft is reminiscent of color variations found in oriental rugs. Hearts are traditional Scandinavian motifs. Finishing technique is the woven edge from Baizerman and Searle's *Finishes in the Ethnic Tradition*, p. 10.



Boundweave 4-shaft rosepath wall hanging woven by the author. Weft yarns are colored by natural dyes. Note how value contrast in the weft produces eye-catching patterns.

tant color dimension to consider when choosing colors for this weave. For those who have read *Drawing from the Right Side of the Brain*, let me suggest that designing at the loom is a good right-brain exercise. The weaver must visualize which sheds the colors must appear in to form a pattern and make spatial judgements about extending the designs relative to the whole composition.

Finally, I encourage the weaver to consider the warp color and finish as important visual elements within the total appearance of the finished piece. The warp color should be integrated within the color palette of the weaving and the warp finish should reflect the character of the weaving. If, for example, fringes appear to be too ponderous or fussy, then perhaps a Philippine or woven edge would be more suitable. When finishing edges, work on the *wrong* side of the rug because it is easier to draw the warps back into the piece from this side.

One of my favorite college courses was History of Furniture Design. In our study of 18th century furniture, we learned how the refined designs created in Paris were interpreted in the provinces far from the "style center." The provin-



cial craftsmen used local materials and adapted the Louis XV style to suit the needs and tastes of their customers. Often I am reminded of this phenomenon when I see influences from distant style centers evident in creative work. It is intriguing to study the evolution of boundweave from its past to the present, both in Scandinavia and on this continent.

Last summer I entered two bound rosepath rugs in the 4th Annual Weaving in the Nordic Tradition contest held at Vesterheim—The Norwegian American Museum in Decorah, Iowa. I was honored to learn that I had been awarded the first prize. It was interesting to note that there were many bound rosepath and krokbragd entries, indicating that many weavers are interested in boundweave. Here is one more instance of a venerable old art form that is interpreted by contemporary artists and incorporated into their work. This summer Vesterheim is offering a class in Krokbragd, July 18 through July 23, taught by Norwegian weaver Astrid Lithus.

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