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AN EARLY SCANDINAVIAN MANUSCRIPT FOR MULTI-SHAFT PATTERN WEAVING FROM THE DEICHMAN COLLECTION IN OSLO

by Patricia Hilts

PART II THE WEAVING PATTERNS FROM THE DEICHMAN MANUSCRIPT

CORRECTION:

Page 5 of the May issue of the NTL, footnote 14 should have read "A yet different form of the Valknut is composed of three interlocking triangles". Please note this correction.

Although the manuscript in the Deichman Collection is very brief, its two pages include basic instructions and a carefully chosen set of patterns for the sort of linen that appears as drell in early inventories. On the basis of the drafts alone, we cannot date the manuscript to within the 1580-1635 time span suggested by Amundsen, but we can say that the patterns are of the type that were prevalent in the seventeenth century.

On the basis of my own research in the history of weaving, I have become convinced that treadle-loom pattern weaving went through a period of rapid development between the early sixteenth century and the middle of the eighteenth.¹⁵ In the late sixteenth and early seventeenth century, treadle-loom weavers wove twill patterns almost exclusively, and the few surviving seventeenth-century books and manuscripts are dominated by twills. Only at the beginning of the eighteenth century did block patterns similar to those found much later in North American geometric coverlets become plentiful. Significantly, there is only one small block pattern among the many twill designs in the 1658 manuscript pattern book of Thoman Lins from the south Tyrol, which is the earliest securely dated weaving manuscript that I have found.¹⁶ Marx Ziegler's weaving book published in 1677 in Ulm, Germany, contains only a few block patterns but a rich variety of twills.

The twills in early pattern books were not simple three or four-shaft weaves, but complex designs that typically required twelve, sixteen or more shafts and were intended for professional linen weavers. In German-speaking areas, linen weavers recognized two basic types of complex twill patterns. The first type was based upon a diamond grid that often contained stylized stars or flowers. The tie-ups for such patterns showed one-quarter of the pattern. The draft was usually not shown because it was simply a point threading in which each repeat ran from one up through the number of shafts required and then back down to one. German weavers called these patterns *hin und wieder Arbeit*, literally, back-and-forth work. The second type of twill pattern used a complex draft containing many breaks and reversals, and German weavers called these patterns *gebrochene Arbeit*, literally, broken work. One typical example of a draft for this type of twill resembles an M followed by a W. *Gebrochene* twills required a simple tie-up composed of diagonal lines, and the combination of zig-zag draft and diagonal tie-up could produce complex maze-like designs. (Figures 4-13) Although most of the weaving manuscripts that have been

¹⁵ This historical development is traced in the introduction to Hilts, *The Weavers Art Revealed*, *Ars Textrina* 13.

¹⁶ Thoman Lins manuscript, Österreichisches Museum für Volkskunde, Vienna.

studied were written in German, both types of twill patterns existed throughout Europe. Diamond patterns on textiles similar to the *hin und wieder* twills in early manuscripts have been found in Europe from the early Middle Ages.¹⁷ Textiles with twill patterns similar to those produced from *gebrochene* drafts survive from the beginning of the sixteenth century. One of the earliest representations of such a twill pattern comes from the Autun triptych of 1515, and an example from a piece of linen found in Sweden that was used as the lining of a chasuble has been dated to circa 1500.¹⁸

A pre eighteenth-century date is consistent with the weaving drafts in the Deichman manuscript since it contains no block patterns but only the two types of twills mentioned above. Had a well-developed block-pattern draft appeared in the manuscript, this would have cast considerable doubt on the attributed dates of 1580 - 1636, for such block patterns would have been highly unlikely at that time. Several patterns in the Deichman manuscript are similar to twill patterns in Thoman Lins' manuscript and in Marx Ziegler's published weaving book. The only *hin und wieder* pattern, "square with star," is closely related to a star pattern in Ziegler's book, and the Valknut pattern resembles a *gebrochene* pattern from Ziegler.¹⁹ A number of the *gebrochene* patterns also have counterparts in surviving seventeenth-century textiles. A linen towel with a design similar to the Valknut pattern and bearing an embroidered date of 1618 is preserved in the National Museum of Denmark (figure 15), and another draft in the manuscript produces a pattern (figure 12) similar

to that in the fabric used as canvas for a portrait of a Scottish earl painted in 1626.²⁰

We may be certain that the writer of the Deichman manuscript was either a professional weaver or was preparing to become one because one of the patterns required a 16-shaft loom, which few ordinary households would have possessed. Professional weavers of the time wrote their tie-ups by making a hand-ruled grid similar to graph paper. However, these weavers did not use a grid for their drafts. Instead, they drew staff lines resembling musical notation, with marks to indicate how threads were to be entered into the loom. For some patterns, a mark placed either on a staff line or in a space between the staff lines indicated each thread. For twills, however, a continuous diagonal line was usually drawn sloping upward or downward across the staff to indicate a continuous sequence of threads placed in order upon the shafts, for example: 1,2,3,... running upward or 8,7,6,5... running downward. The single *hin und wieder* pattern, which appears at the bottom of the right-hand page of the manuscript, is a good example of this notation. A draw-down of this pattern, appears in Figure 14. The first two *gebrochene* drafts in the Deichman manuscript were also completely written out and placed on staff lines extending from the grid of an 8-shaft tie-up; the third draft was likewise attached to its own 6-shaft tie-up. The remaining drafts, however, were written in a standard shorthand form that did not show staff lines for all of the shafts but indicated the general shape of the draft by showing only the lines for the beginning, ending, and reversal points of the twill sequences. The interior lines, which indicated the reversal points, thus divided the whole number of shafts into subsets, which I have called divisions in my earlier publications. The number of shafts in the subsets depended on the total number of shafts chosen for the pattern, which was not determined by the draft itself. In some cases the shafts would be divided into two divisions, and in other cases, into three. In general, 2-division drafts were written with two

¹⁷ Brigitta Schmedding, *Mittelalterliche Textilien in Kirchen und Klöstern der Schweiz* (Bern, 1978), p. 43 (fig. 28) and p. 67 (fig. 61).

¹⁸ Hilts, *Ars Textrina* 13, pp. 28-29. Margareta Nockert, "Mönstrade linnetyger i sverige," in: Paolo Moro and Giorgio Ferigo (eds.), *Linen on net. The Common roots of the European Linen patterns* (Tolmezzo, Italy, 1999), pp. 137-141 (fig. 3,5).

¹⁹ Hilts, *Ars Textrina* 13, p. 222, pattern #Z57 (star); and p. 198, pattern #Z10 (valkunt).

²⁰ Paludan and Wieth-Knudsen, *Damask og Drell*, p. 36 (fig. 8). Marjie Thompson, "The Earl's Canvas," *Weaver's* 38 (1997), pp. 38-40.

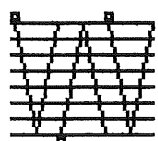
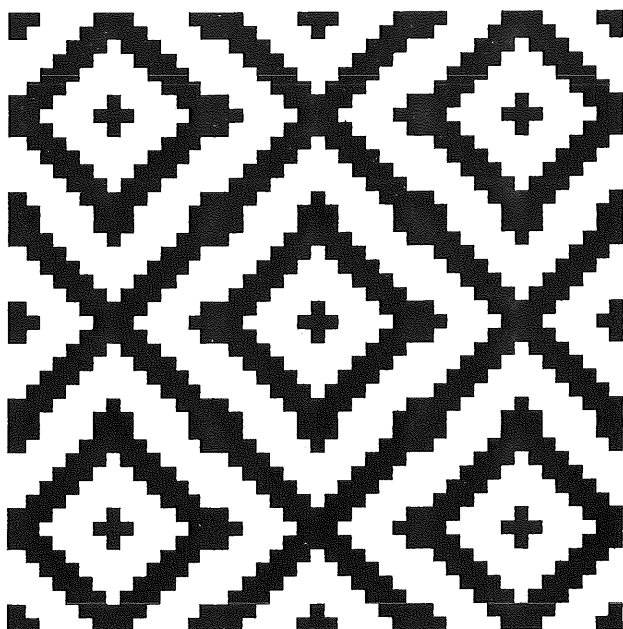


Figure 4: Draft #1, Ruder med en Krantz (Square with Wreath). First draft, first row, left-hand page. Eight-shaft tie-up from manuscript.

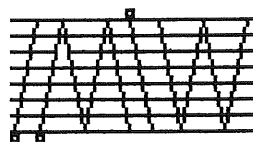
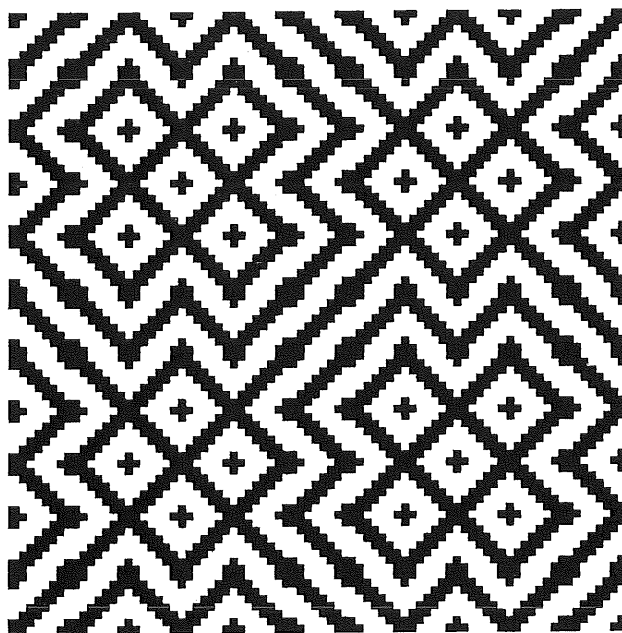


Figure 5: Draft #2, Valknut. Second draft, first row, left-hand page. Eight-shaft tie-up from manuscript.

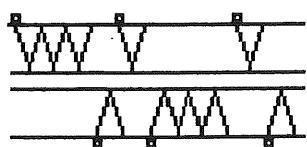
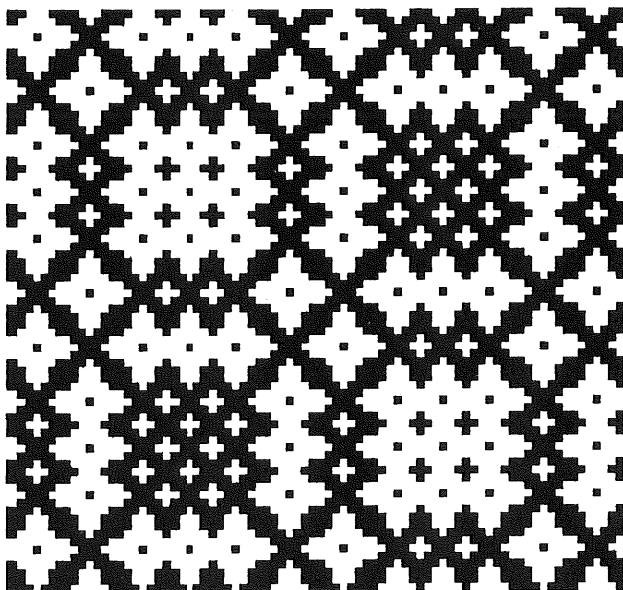


Figure 6: Draft #6. First draft, bottom row, left-hand page. Eight-shaft tie-up from manuscript.

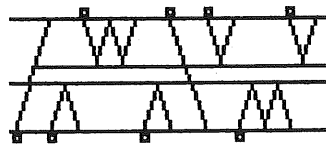
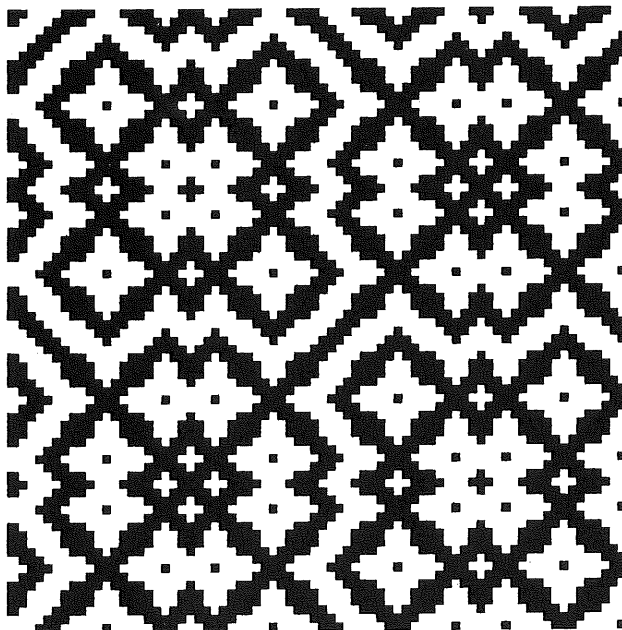


Figure 7: Draft #7. Second draft, bottom row, left-hand page. Eight-shaft tie-up from manuscript.

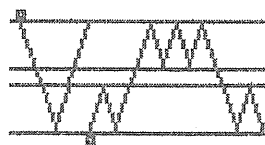
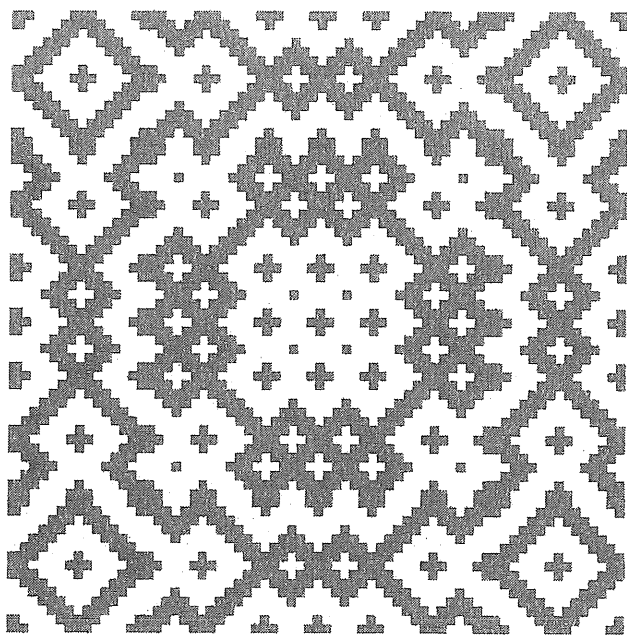


Figure 8: Draft #8. Third draft, bottom row, left-hand page. Eight-shaft tie-up from manuscript.

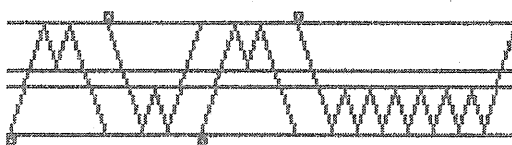
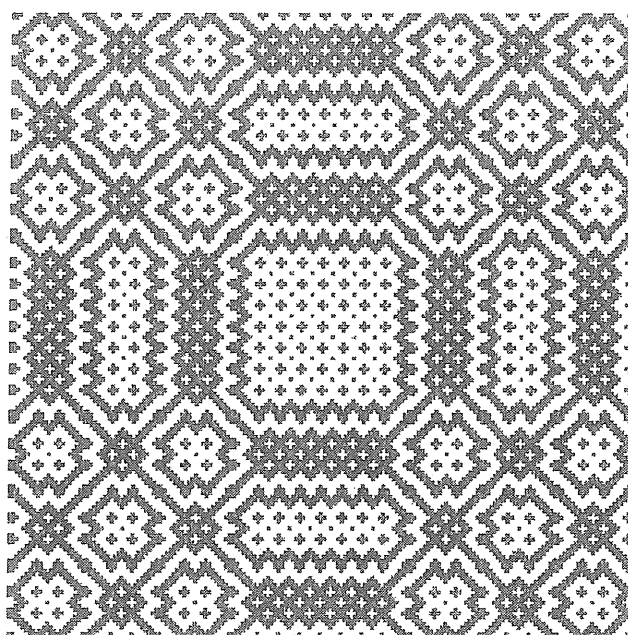


Figure 9: Draft #9. First draft, top row, right-hand page. Eight-shaft tie-up from manuscript.

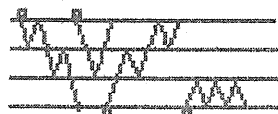
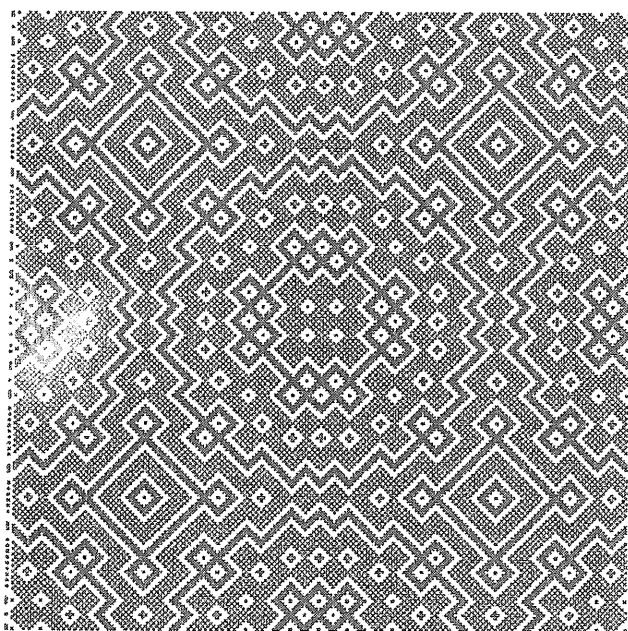
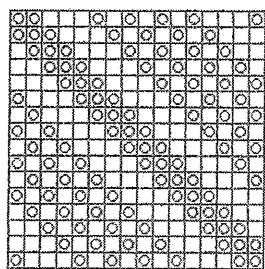


Figure 10: Draft #4, Den Minder Lauelder Blomme (The Smaller Lavender Blossom). Next to 6-shaft draft, left-hand page.



16-shaft tie-up, Lins manuscript.

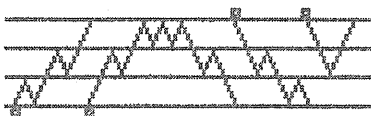
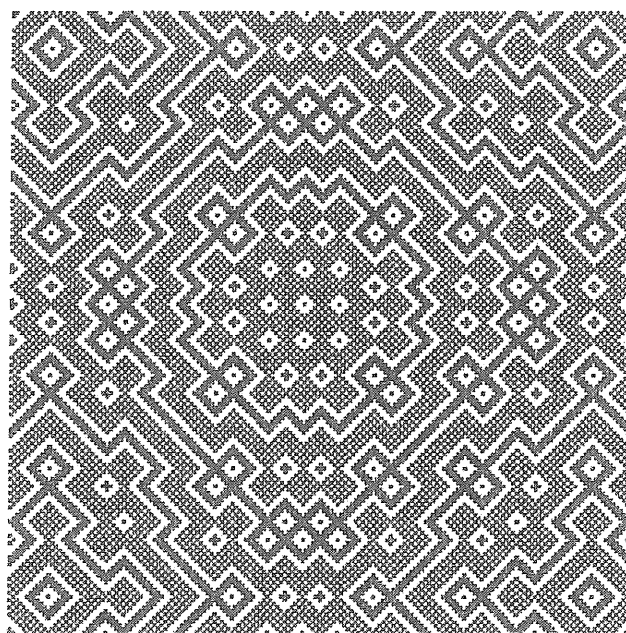


Figure 11: Draft #11. First draft, middle row, right-hand page. Sixteen-shaft tie-up from Lins manuscript.

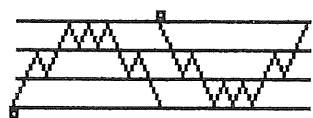
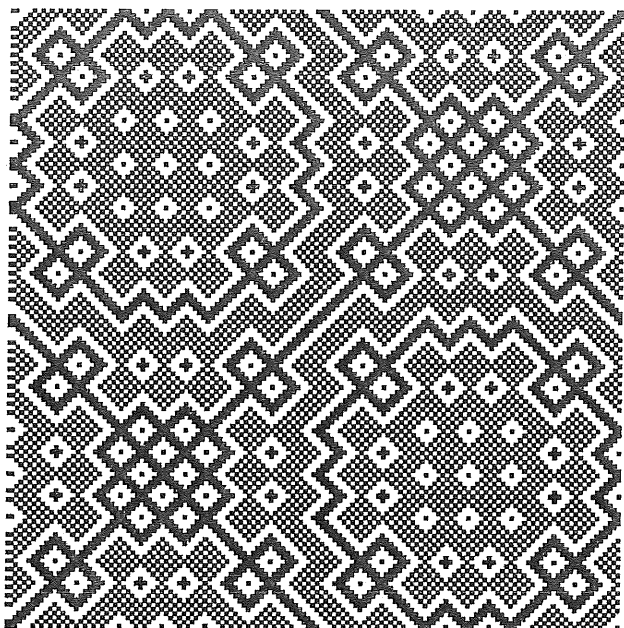


Figure 12: Draft #12. Second draft, middle row, right-hand page. Sixteen-shaft tie-up from Lins manuscript.

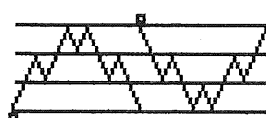
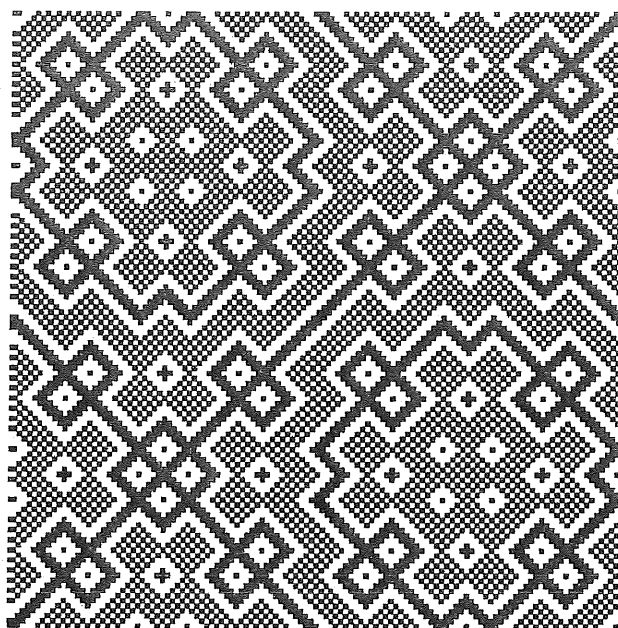


Figure 13: Draft #13. Third draft, middle row, right-hand page. Sixteen-shaft tie-up from Lins manuscript.

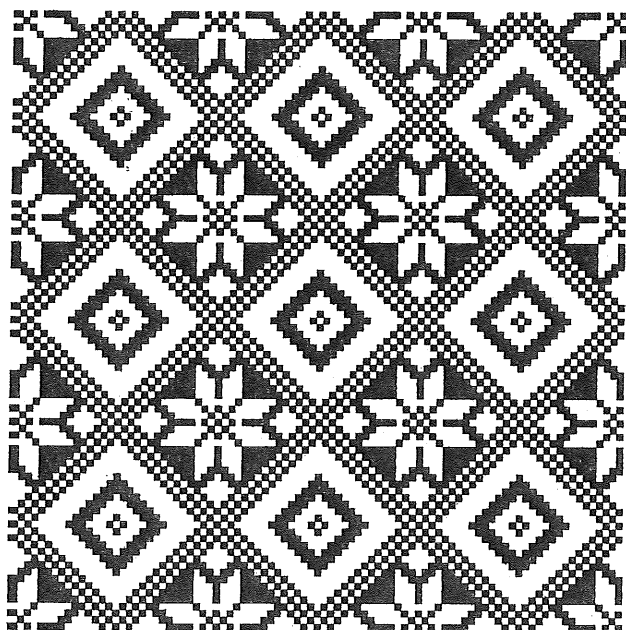


Figure 14: Draft #14. Rutten ved Stiern (Square with Star). Bottom of right-hand page. Sixteen-shaft hin und wieder tie-up.

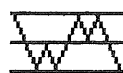
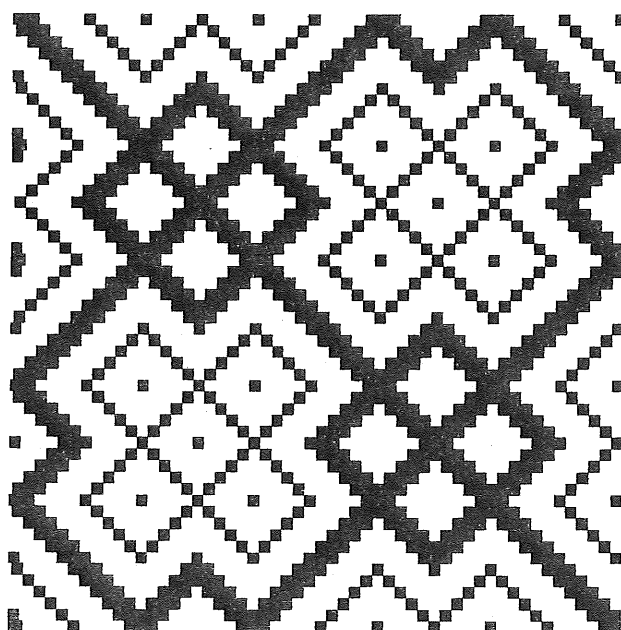
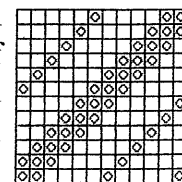


Figure 15: Draw-down based on photograph of linen with embroidered date of 1618 in Danish National Museum.

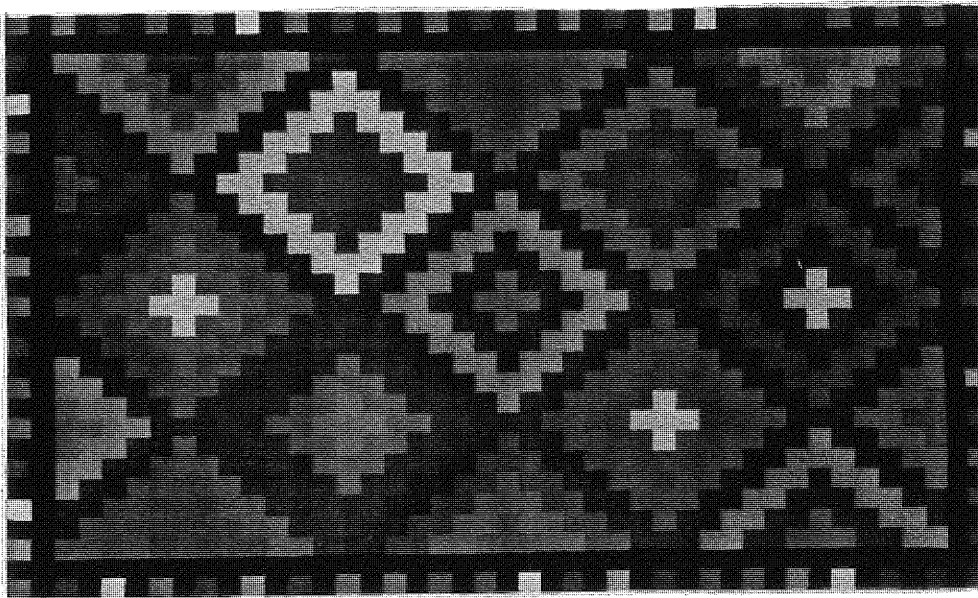


Fiber Workshops at Vesterheim – 2003

- Oct. 23-24,26 **Rep Weave** with Kelly Marshall. \$135 / \$100 Vesterheim members
Oct. 26 **Nålbinding** with Kate Martinson. \$70 / \$50 members
Oct. 26 **Two-Color Knitting** with Laura Demuth. \$70 / \$50 members
Oct. 26 **Viking “Knit” Silver Chain** with Liz Bucheit & Kary Kilmer. \$70 / \$50 members
Nov. 6-10 **Intermediate Tapestry** with Nancy Jackson. \$285 / \$250 members
Nov. 13-17 **Intermediate Tapestry** with Nancy Jackson. \$285 / \$250 members
For more on classes, see www.vesterheim.org or contact Angie, 563-382-9681, classes@vesterheim.org

Vesterheim Calendar of Events - 2003

- Sept. 27 – Jan. 4 **Exhibit** - “Incarnations” A retrospective exhibition of tapestry by Nancy Jackson
Museum open 9-5 daily until November 1, when winter hours are 10-4 Tues-Sun.
- October 25 **Event** - Iowa Federation of Handspinners and Weavers Gathering hosted by Oneota Weavers & Spinners Guild. Speaker: Kelly Marshall on “Rep Weave Technique” and “Weaving a Hobby into a Profession”. Register at the door. \$17.00. 9:30 – 2:30
- November 8 **Event and lecture** – 5th Annual Weavers Banquet. Dinner and program. 5-8 p.m.
“Restraining the Creative Impulse” by Nancy Jackson. \$16.50. Reserve by Nov. 3.
- November 9 **Lecture** - “A Place for Tapestry in the Art World” by Nancy Jackson. 7-9 p.m.
- November 16 **Lecture** - “Spirituality in Art” by Nancy Jackson. 9:45 a.m. Decorah Lutheran Church.
- For more information on events or to reserve banquet tickets, contact Laurann Gilbertson, Textile Curator, 563-382 9681, textiles@vesterheim.org.



Priscilla Lynch, Gold Medal weaver, Saugatuck MI, “Rutavev Revisited.” Best of Show 2003.

22nd National Exhibition of Weaving in the Norwegian Tradition

Vesterheim Norwegian-American Museum's annual exhibition of weaving was on view from July 18 to 26, 2003. The exhibition's goals are to identify and reward excellence in weaving, to educate the public on handweaving techniques, and to foster both the preservation and creative advancement of the Norwegian weaving tradition.

The number of entries was very small this year, so judges combined the entries into a single category rather than separating them into traditional and contemporary categories. The judges were: *Laura Demuth, Decorah, IA, Gold Medal weaver; *Betty Johannesen, South Bend, IN, Gold Medal weaver; and Linda Elkins, professor at Luther College and fiber artist, Decorah, IA.

Blue Ribbon – Karen Homann, Hudson, IA, Room divider in lace weave technique

Red Ribbon – none awarded

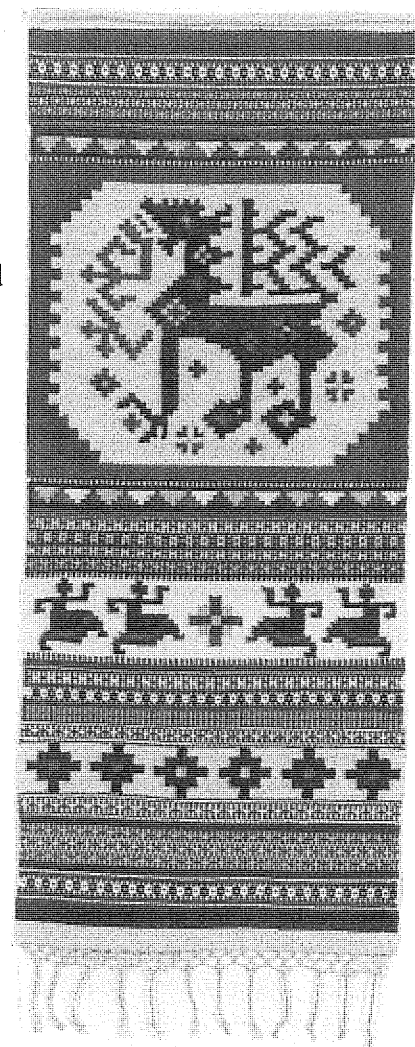
White Ribbon – none awarded

Honorable Mention – *Ann Haushild, St. Paul, MN, "Yo! Hagrid. Here Come the Weavers" Wall hanging in rutev, pick and pick, and supplemental weft techniques



*Right: Ann Haushild's
"Yo! Hagrid" hanging*

*Left: Rosemary Roehl's
Vestfoldsmett hanging*



Best of Show – Priscilla Lynch, Gold Medal weaver, Saugatuck, MI, "Rutavev Revisited" Wall hanging in rutavev technique

People's Choice – *Rosemary Roehl, Gold Medal weaver, St. Cloud, MN, Wall hanging in Vestfoldsmett technique

Ribbons carry points toward a Gold Medal. Weavers receive 3 points for each Blue ribbon, 2 points for a Red ribbon, and 1 point for a White Ribbon. Honorable Mention, Best of Show, and People's Choice awards do not carry points. Once a weaver accumulates 8 points, she or he receives a Gold Medal and in future exhibitions can only compete for Best of Show and People's Choice.

No new weaver had accumulated enough points in 2003 for a Gold Medal.

*Norwegian Textile Guild members

spaces, and 3-division drafts were written with three spaces. The Deichman manuscript had examples of both kinds, but the 2-division drafts had an extra space that was not usually included.

Professional weavers preferred to weave *gebrochene* drafts with more than eight shafts in order to make larger, richer patterns, and most surviving weaving books and manuscripts have several 12-shaft and 16-shaft tie-ups for these drafts. In *gebrochene* patterns, the draft provides the basic shape, and the tie-up provides the weave structure. For this reason, weavers could use many different tie-ups with the same draft, and vice versa. Unfortunately, the Deichman manuscript contained no 12 or 16-shaft tie-ups suitable for the *gebrochene* drafts, and we may conjecture that they were on a page that has been lost. Since the 2-division drafts could be woven on eight shafts, I chose to do draw-downs for them using the 8-shaft tie-up included at the beginning of the manuscript. There was a historical precedent for this since Marx Ziegler showed some 2-division, 8-shaft drafts. Figures 4-9 show draw-downs for the 2-division drafts.

In preparing draw-downs for the 3-division drafts, I could not use the 8-shaft tie-up from the Deichman manuscript because there is no historical evidence that 3-division drafts were ever woven on as few as eight shafts. Instead, I borrowed a 16-shaft tie-up from Thoman Lins' manuscript since his was the earliest securely dated source. In weaving 3-division *gebrochene* drafts on sixteen shafts, German weavers overlapped the divisions by one shaft: the first division contained shafts 1 - 6; the second, shafts 6 - 11; and the last, 11 - 16.²¹ Apparently, the matter of overlapping or not overlapping the sets of shafts forming the divisions was important to the writer of the Deichman manuscript. It was undoubtedly for this reason that he took special pains to indicate non-overlapping subsets in his 2-division drafts by leaving an open space

CONCLUSION

The weaving manuscript in the Deichman collection is a fascinating historical document. Though the patterns are of the type woven throughout Europe in the seventeenth century, the manuscript was certainly written by a Scandinavian, and the Danish\Norwegian names beneath the drafts – Valknut in particular -- show that its author viewed the patterns from a Scandinavian perspective. If the manuscript is indeed from the first third of the seventeenth century, it provides significant evidence of an early Scandinavian tradition of multi-shaft pattern weaving. It would also suggest that some of the surviving treadle-loom linens from the period, as well as the drell mentioned in sixteenth and seventeenth-century Danish inventories, may have been woven in Scandinavia.

between the two middle staff lines to show that the reversal points did not fall on the same shaft. Figures 10-13 show draw-downs for the 3-division *gebrochene* patterns.

TRANSLATORS NEEDED

We are looking for individuals who have the time and skill to translate material from Norwegian to English. The Textile Letter is dependant upon Norwegian sources to provide information of interest to our members. At the current time we have only 2 translators. If you can help please contact Betty Johannesen.

²¹ Because of space limitations, I have not provided draw-downs of the "Large Lavender Blossom for Tablecloths" or the second draft at the top of the right-hand page, both of which have very large pattern repeats.



THE 2003 TEXTILE TOUR TO NORWAY

The group (27 plus driver) is posed in front of Vestfold Fylkesmuseum in Tønsberg. Watch for a detailed travelogue in the November issue of the Norwegian Textile Letter.



Incarnations

A Retrospective
Exhibition of Tapestries
by Nancy Jackson
September 27, 2003
to January 4, 2004

For a schedule of events
check www.vesterheim.org
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Nancy Jackson, *Battle of the Horse and Bull*, 1991;
wool and cotton; woven; 41" x 58". Donated to Vesterheim
by Betty and Gaylord Jerde in honor of their son James.

Vesterheim Norwegian-American Museum

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