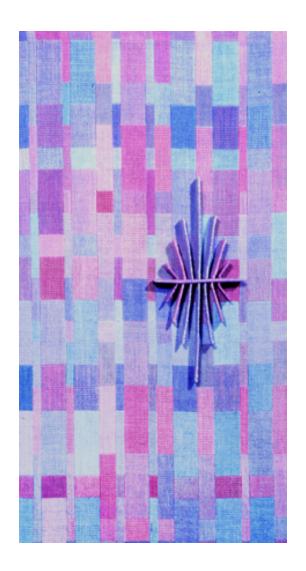


CROSS FOR JEAN • 1992

14" x 28" x 3" linen—painted warp pickup (3 pieces assembled)

Northern Star • 1992

 $\label{thm:checkerboard} The \ background \ is \ again \ a \ Land is \ checkerboard. \ The \ star form \\ is \ woven \ separately \ and \ sewn \ onto \ the \ background.$



Northern Star • 1992 3'x5'x3" linen (2 pieces assembled)

COLUMN • 1993

 $\label{eq:def:Double-width sections} Double-width sections are woven between other double-width sections.$



COLUMN • 1993
12" x 32" x 2" linen—painted warp

Purple Rain • 1983

A triple weave with painted warp.



Purple Rain • 1983 14" x 36" linen—painted warp

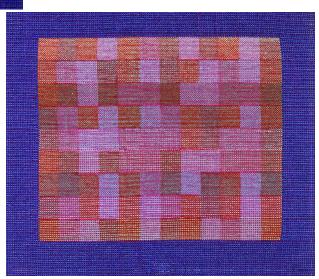
SQUARES • 1996

Two Paintings, Minneapolis Institute of Arts, are the inspiration for weaving a number of small square designs.

Woven with pickup. Notice that the weaving is mounted between two matboards with rectangular openings so that both sides of the weaving can be seen.



FRONT



BACK

SQUARES • 1996
10" x 7" cotton covered sewing thread

SPIRAL • 1994

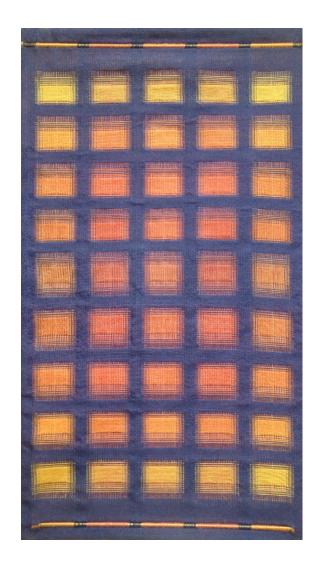
Supplementary warps and wefts as well as pickup techniques are used for the first time to add design to a weaving. The supplementary warps and wefts are woven between the two layers of double weave until they are brought to the top layer.



SPIRAL • 1994 6" x 12" cotton covered sewing thread

NETWORKED WINDOWS • 1994

Transitions in the threading and in the treadling order can create the shadowy edges for a window design following the rules of network drafting.

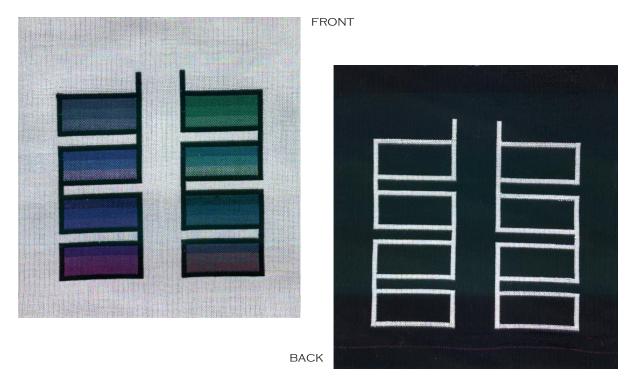


NETWORKED WINDOWS • 1994 12" x 24" cotton covered sewing thread

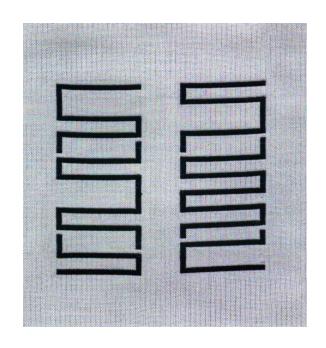
LINES I • 1998

LINES II AND III • 1998

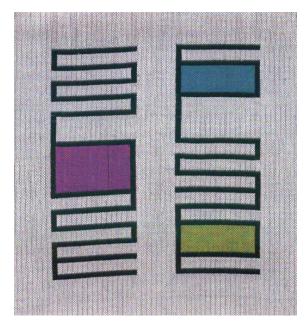
Lines rather than squares act as the fundamental design unit. Supplementary warps and wefts allow the introduction of color.



LINES I • 1998 4" x 7" cotton covered sewing thread



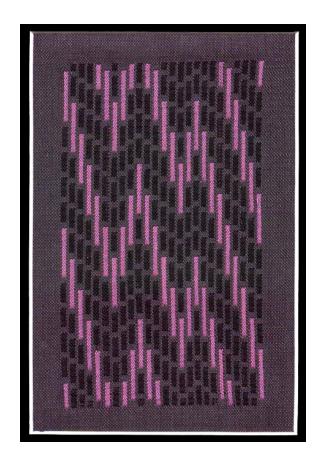
LINES II • 1998 4" x 7" cotton covered sewing thread

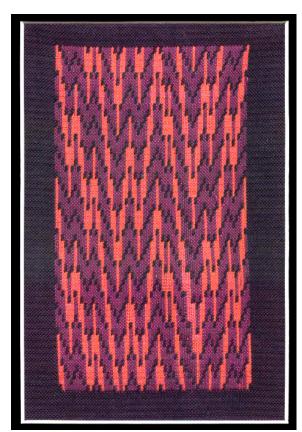


LINES III • 1998 4" x 7" cotton covered sewing thread

TWILL LINES I AND II • 1998

Pickup techniques.

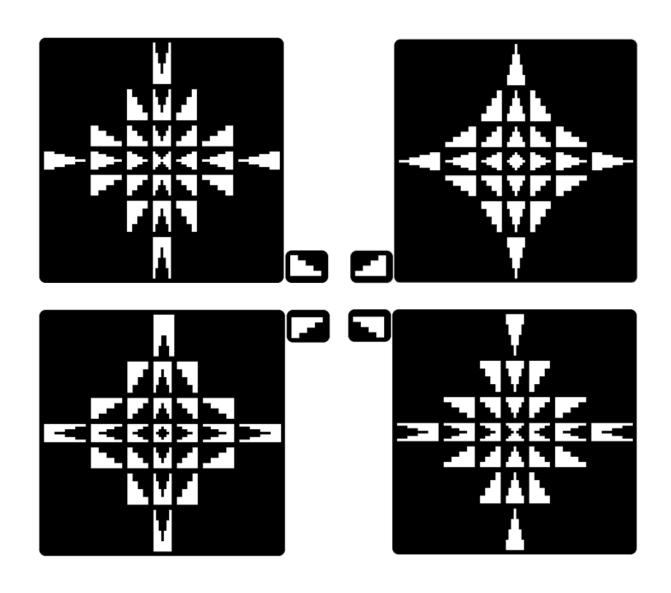




TWILL LINES I AND II • 1998 each weaving 7" x 12" cotton covered sewing thread

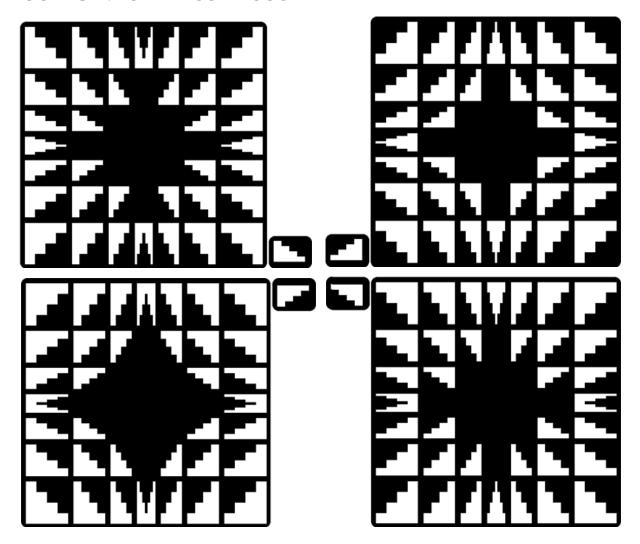
COMPUTER GRAPHICS • 1999

The designs shown on the following pages show how the centers or the corners of a grid are erased to create the design and are woven using pickup techniques. A supplementary warp and weft are required to weave *Red Center*.



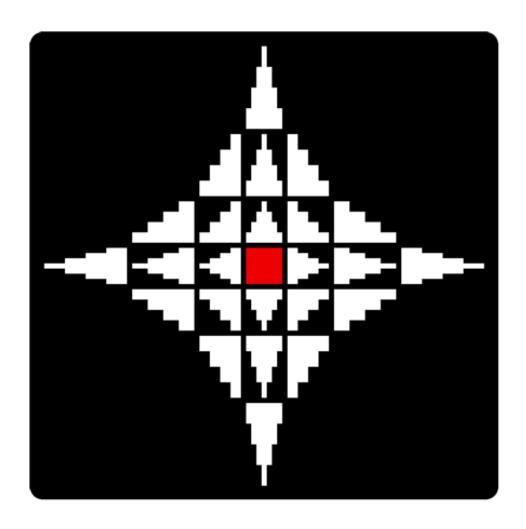
COMPUTER GRAPHICS CORNERS ERASED • 1999

COMPUTER GRAPHICS • 1999



COMPUTER GRAPHICS CENTER ERASED • 1999

RED SQUARE • 1999



DIAMOND IN COLOR • 1999



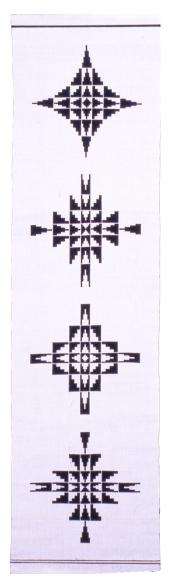
FRONT



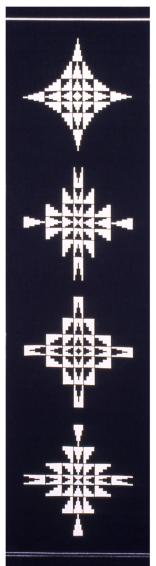
BACK

DIAMOND • 1999 14" x 32" cotton thread

CORNERS ERASED • 1999



FRONT



BACK

CORNERS ERASED • 1999

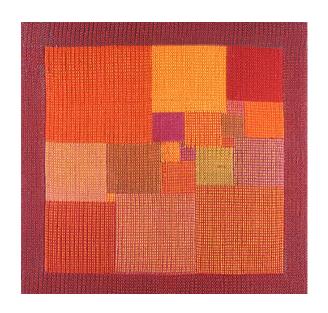
12" x 48" cotton thread

SQUARING THE SQUARE • 1998

In the early 1900's, a mathematician proved that 21 squares, each of a different size, is the minimum number of squares required to form one large square. Double weave utilizing pickup techniques is the answer for weaving this design. Also a 22nd square can be added to make a window design.

Three ways to complete the weaving come to mind. The first requires 22 different warp/weft color combinations using four colors in the warp and the same four in the weft. The second is based on the four-color map theorem.

A third possibility adds grid lines around each of the 21 squares and allows a design that would present Mondrian type grids. A moment's thought shows that this is not a viable method since mathematical lines have no thickness while woven lines do. Many of the squares become distorted into rectangles which no longer squares the square. Nonetheless grids in the style of Mondrian are possible.





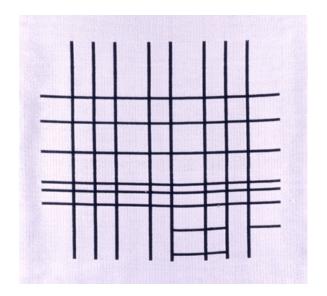
22 COLOR SOLUTION

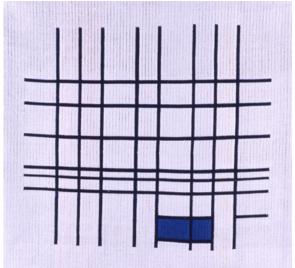
4 COLOR MAP SOLUTION

SQUARING THE SQUARE • 1998
7" x 6" cotton thread

Mondrian Grids • 1998

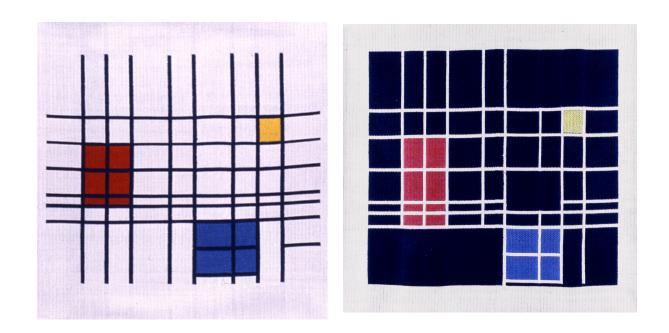
The painting by Mondrian called *Grid with Blue Rectangle* served as the inspiration for this group of weavings. Through the use of supplementary warps and wefts, color is added to a variety of the grid areas. Pickup techniques are required in many of the weavings.





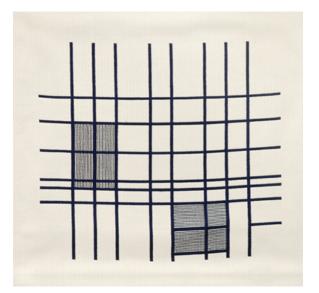
MONDRIAN GRIDS • 1998

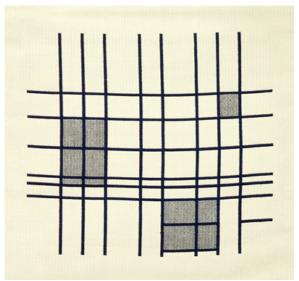
12" x 12" cotton thread



Mondrian Grids • 1998 12" x 12" cotton thread

More Mondrian Grids • 1998





MONDRIAN GRIDS • 1998
12" x 12" cotton thread





FRONT BACK

Mondrian Grids • 1998 12" x 12" cotton thread

ARIZONA CANYON I • 2000

The first of two weavings where two warps and three wefts are used. The development of a gradation of colors from yellows to reds against a background of dark blue is the basic idea for this design. In the pattern sections, two wefts in various yellow, orange, or red colors are woven in the same shed for the gradation while the dark blue weft weaves by itself for the background of the design. No pickup techniques are required.





FRONT BA

ARIZONA CANYON I • 2000 13" x 42" cotton thread

ARIZONA CANYON II • 2000

The second weaving uses the same yellow, orange, and red wefts for the pattern and the dark blue weft for the background. But now, by the use of pickup techniques, only one of the wefts weaves in the top layer in the right and left sections of the warp (and weaves with the dark blue weft in the bottom layer in the center). The second colored weft weaves in the bottom layer of right and left sections of the warp together with the dark blue third weft and then weaves by itself in the top layer in the center.





ARIZONA CANYON II • 2000 13" x 42" cotton thread

FANCY FIBERS IN DOUBLE WEAVE • 2002

The familiar window design is chosen and the fancy fibers, which appear in the window, run the gamut: metallics, braids, fuzzies, different sizes and colors. A satin treadling ties down the fancy fibers.



FANCY FIBERS IN DOUBLE WEAVE • 2002 6" x 9" cotton thread and fancy fibers









FANCY FIBERS IN DOUBLE WEAVE • 2002 6" x 9" cotton thread and fancy fibers

REFRIGERATOR ART • 2003

Color gamps are fun to weave. Wouldn't it be nice if these small squares could be arranged in a variety of ways a la Agam? Well why not cut them into small squares? And glue them on a wood backing? And glue a small magnet on the back?

The refrigerator is an ideal place to display the small woven squares with their magnets, and friends can be invited to arrange and rearrange the squares according to their inclinations.



BEADS IN DOUBLE WEAVE

BEAD SAMPLER • 2004

Double weave, with its two cloth layers, offers an easy way to incorporate beads in weaving. The beads are threaded on a "substitute weft" and used instead of the usual pattern weft shuttle when a bead row is needed for the design. The ends of this substitute weft are anchored in the bottom layer of the double weave.

Do you remember watching your mother work on an embroidery sampler? You know: the alphabet and the numbers and various trees and flowers. Here's a sampler in beads. In the original weaving the letter "Z" was reversed. No problem, through the wizardry of digital photography and help from a friend, the letter Z is "fixed."





AS WOVEN! AS WOVEN!

BEAD SAMPLER • 2004 10" x 30" cotton thread and beads

Two Rug Designs in Collingwood's Shaft Switching Technique • 1980

The design from an old Peruvian weaving, used for one of the rugs, reappears as a bead weaving.