



## WARP VARIATIONS ON THE FRAME LOOM

by Mary Skoy

Fabric texture, pattern, and visual depth can be achieved by variations of warp arrangement on the frame loom. The weaver sometimes comes to realize that a monotone balanced weave or a two or three color plaid does not create the excitement or dynamic effect which the yarns, unwoven, suggest. Spacing the warp threads, increasing the number of warp threads per slot and hole, and varying the color and texture of the warp threads can bring a "hidden" life to the woven fibers.

### Designing/Sampling

Experimenting with color and thread arrangement will be well worth the time. An experimental narrow warp of five to eight inches in width can be threaded on the loom, then woven off with a variety of weft arrangements as well.

Weaving with paper strips is an easy, very visual representation of a pattern, particularly the log cabin type of dark/light yarn variation. Quarter inch strips on construction paper can be taped to a table (for stability) or pinned to a macrame board in the order to be threaded on the loom. Other strips can be woven "over, under" then "under, over" to create a total visual effect.

Wrapping a strip of cardboard with the various colored and textured yarns under consideration will create a visual as well as textual sampler. This is a good way to experiment with color proportion and placement--how much of which yarn to put where in a varied color warp. A wrapped cardboard sample can even be woven to determine the effect of introducing the weft color. A long, large-eyed needle will easily carry the weft through the wrapped warp.

Ideas for design, in addition to experimentation, can be found in existing fabrics--from those designed for commercial use, to traditional Tartan plaids, to those found in historical fiber collections.

A particular yarn can also define and determine a design which will accommodate and enhance its special qualities.

### Color

Often the use of a single colored yarn results in a visually flat fabric. If this is not the intended result, a combination of yarns which differ slightly in value, intensity or hue from the original will, in random combination, produce a rich visual depth in the fabric.

For example, "white on white". Highly textured yarns combined with plainer ones, or whites used in any of the techniques mentioned below, are a particularly effective use of "color". Or combine navy blue with royal blue, aqua, and baby blue; combine red with red-orange, magenta, and hot pink. Looking through your left-over lengths of yarn might yield a color or texture which can be added to the other yarns in a warp.

Plaids may also benefit from the addition of an "accent" color. For example, the squares of a two-inch square plaid in two or

three colors might be bordered in both warp and weft with two threads of a darker color. The resulting "shadow" effect can be subtle, yet interesting.

Proportion, balance, and the unity of the effect are important considerations in color choice. Sampling can be useful here.

### Yarns

The strongest warp threads are smooth and plied. However, with caution, looped and slubbed yarns may be used in the warp. If the slub on a particular yarn is too big to thread through the hole in the heddle, it may slip through the slot. A 7/2 weaving wool or "Maypole" yarn might be threaded through the hole, combined with a slubbed or looped yarn threaded through the slot.

A thick and thin yarn like "Apollo," "Sheepscoat," or "American Harvest" can be added to the slots in the warp to form vertical ribs. These same yarns are very effective when used as weft with a random spaced warp.

If necessary, instead of using the heddle to beat the weft, thus avoiding the constant wear on the warp yarns, the heddle can be used to form the shed and a pickup stick can be inserted into the shed after each weft shot and used to beat the weft into place.

When combining yarns for warp, care should be taken to use yarns with compatible elasticity. A very stretchy yarn should not be paired with a non-stretchy one.

### Texture/Techniques

While color can create visual depth and texture, warp spacing can create a tangible depth and texture. Leaving open a hole or slot in a warp can create a lacy effect, if the yarns for warp and weft are fine and of a similar weight. A more nubby effect is achieved when the spaces left by the finer warp are filled with a thicker weft yarn, or a thick and thin weft yarn, or a novelty yarn. Holes and slots can be left open randomly or in an ordered sequence. In either case, mark on the heddle the total width of the warp to be threaded so that the warp can be threaded within those limited.

Adding additional warp threads will create vertical ribs. A thick rib will be created if warp is added to two adjoining slots with the intervening hole left open. A "windowpane" effect is created when, in the weft, several rows are woven in the same shed, criss-crossing horizontally with the vertical warp ribs. A nice outlined effect is created if the ribs are one color, in both warp and weft, and the plain weave in between is another. In addition, the ribbed effect adds a new dimension to a piece of one color as well as a plaid.

To thread a random colored warp, the warp can be wound color by color and then cut and threaded through random holes and slots, eventually filling the whole width desired. Rather than the pair of threads being looped over the teeth on the warp beam, the warp threads must be fastened in other ways. They can be tied in groups or they can be wound in and out of the adjoining dents. If single threads are added to a warp, loop the end of each to fasten it over the appropriate tooth.

If it becomes difficult to get a clean shed, placing a dowel in each shed behind the heddle can help.

### Books for Reference

Vera Miles' book, Weaving Patterns for the Two-Way Loom, offers an extensive discussion with pictures, of the log cabin-type two color patterns mentioned above. Patterns on a Plain Weave by Nell Steedsman, Two Harness Weaving by Harriett Tidball, and Weaving on the Kircher Loom are also good sources of warping ideas. The multi-colored striated warp is beautifully explored in Malin Selander's colorful series of swatch illustrated books.