

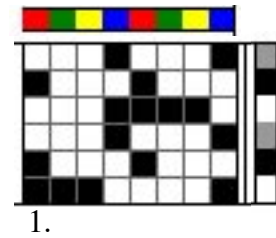
# Jacquard Tapestry Weaves on a Dobby Loom ----- Pat Williams

During the last several years, I've drafted a large number of jacquard tapestry weaves in order to achieve different color and textural effects, testing them by weaving the resulting weave blankets on mill jacquard looms. A couple years ago, I began wondering to what extent such weaves could be used on a doobby loom, and started experimenting with some basic tapestry weaves, first in Weavemaker and then on my Baby Wolf loom. I put a 4-color warp on my Baby Wolf, and threaded it in a straight draw. I found that it is possible to achieve quite a nice variety of color effects, even with an 8-shaft limitation. Of course, expanding to 24 or 32 shafts, and using blocks or network drafting with these weaves, would allow for many rich color and texture juxtapositions.

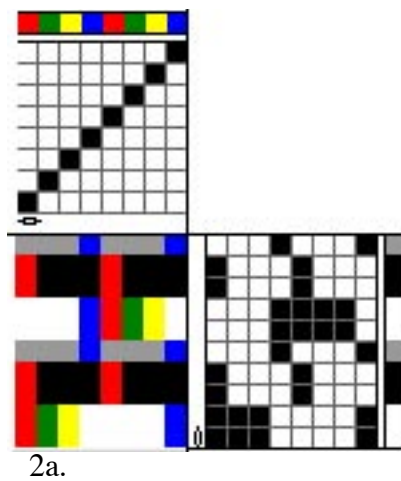
Warp and weft tapestry weaves, such as those shown on page 204 of William Watson's *Advanced Textile Design*, are really just another type of color-and-weave effect weave. The examples in this article are all based on the single weave shown in Figure 1. As you can see, this weave lifts primarily the red and the blue warp ends in the red-green-yellow-blue color sequence. The other warp ends are lifted only once in this weave, and the lifted ends are grouped so the weft moves underneath them, to the back of the fabric, when they are raised.

In order to achieve the correct color effects when woven, the grey weft needs to be much smaller in diameter than the other two wefts. It is often called a binding weft, for it provides structural assistance to the fabric, no matter what the other wefts are doing. To simulate the size differences between the grey weft and the other two wefts, I doubled the height of the other two wefts wherever they appeared in the pegplan for this weave, as shown in Illustrations 2a, 3a and 4a.

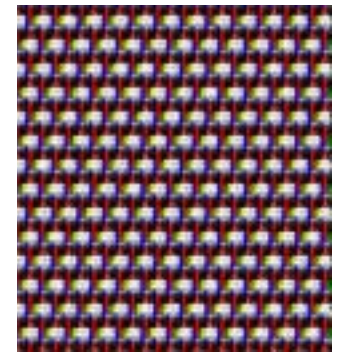
Thus, Figure 2a shows the weave in Figure 1 more accurately (as long as you remember that the thicker wefts are just thicker, not woven twice in each position). Figure 2b



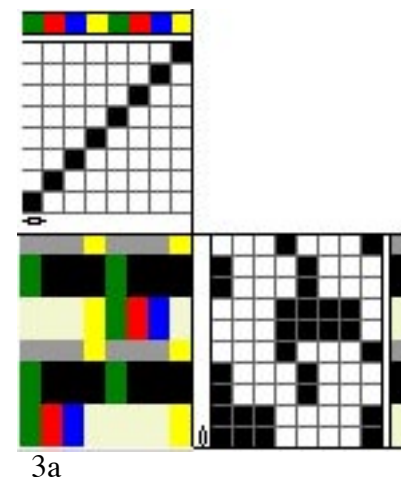
1.



2a.



2b



3a



3b

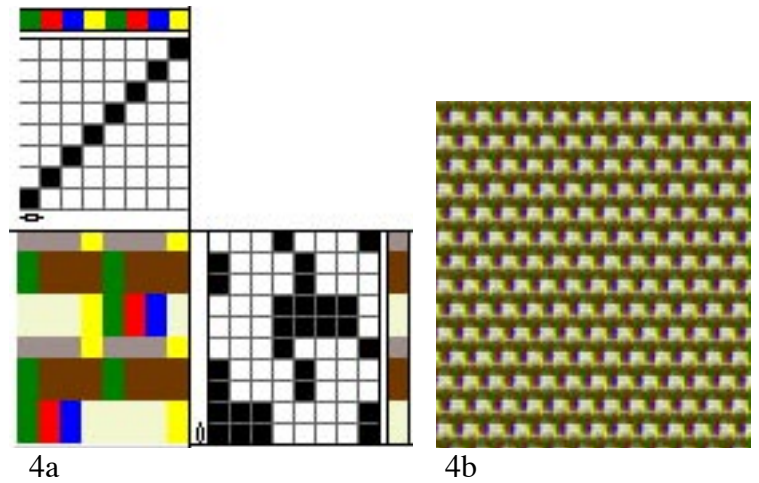
shows the Weavemaker-simulated woven fabric for that weave.

If I put a different warp color sequence on the loom, the color of the resulting fabric will differ when using the same weave. Thus, because the warp sequence in Figure 3a is green-red-blue-yellow instead of the red-green-yellow-blue in Figure 2a, the color of the fabric in Figure 3b is different from that in Figure 2b, even though the weave is the same as in Figure 2a.

If I had instead changed the position of the raised ends by rolling the weave horizontally to the left or right, I could have achieved that same color change while still using the original warp color sequence of red-green-yellow-blue in Figure 2a. Rolling the weave horizontally in order to raise different warp ends is the method that was used to develop the weaves shown in Figure 5, as woven on a narrow warp on the Baby Wolf.

Lastly, if I leave the warp sequence the same but change the weft colors, the color effect will change again. Notice that the warp sequence and the weave in Figure 4a are both the same as in Figure 3a. Only the weft colors differ, resulting in the different color effect simulated by Weavemaker in Figure 4b. Changing the wefts from the black and white used in Figure 5 to dark and light gray, and using the same weaves as in Figure 5, resulted in the weaves shown in Figure 6, woven on a narrow warp on the Baby Wolf.

In summary, one can achieve quite a few variations in color and weave effects while using just one basic jacquard tapestry weave structure, both by rolling the weave horizontally to raise different warp colors, and by changing the hue of the thicker light and dark wefts. I suspect an even more subtle effect can be achieved by changing the color of the thin binder weft dramatically, but I have not yet experimented with that variation in woven fabric. And, even on a Baby Wolf, working with pickup sticks would allow one to weave a more complex fabric having more interest than that provided by differently colored horizontal stripes.



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