

EXPLORE TAPESTRY WEAVE-ALONG

BY JANE PATRICK

The last time I wove tapestry was back in the 70s when I first started weaving. Everyone was weaving wall hangings—much like many of the new weavers are weaving today (but they have better colors and materials). We wanted to develop the Arras loom to help meet the needs of new weavers who were transitioning from wall hangings to more serious tapestry weaving. Of course, as the Arras developed, I yearned to try tapestry again. Though I've been weaving for over 40 years, tapestry just wasn't in my toolbox. This is a bit strange because I have always appreciated the pure colors of weft-faced fabrics. You don't have warp and weft visually interacting, which affects the color, and, of course, the design. I have had quite a bit of experience with weft-faced weaving though—which I explored in my book *The Weavers' Idea Book*.

This is also probably why I find the warp-faced fabric in an inkle band equally appealing. You only see the warp colors and the weft is obscured except where it turns around at the selvages. You can see weft-faced tapestry and warp-faced inkle weaving put together in my tapestry sampler bag at www.schachtspindle.com/tapestrysampler/.



JANE'S FINISHED SAMPLER

WELCOME

Thanks for joining me on this tapestry exploration! I hope you'll share your progress and ideas on Instagram, Facebook and Ravelry as we go along. Above all else, I hope you'll have fun and try to play (though I know this is hard) as much as possible. Patience and practice, too, are important as you work towards learning something new. It will feel awkward at first and the results may be a bit wobbly, but you will make progress. At the end of your sampler, you'll see how your selvages have improved, how your fingers now know what to do, and how enjoyable it is to see the emerging design row by row.

Let's get started!

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Schacht Spindle Company 6101 Ben Place Boulder, CO 80301
p. 303.442.3212

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LESSON 1—WARPING & GETTING READY TO WEAVE

EQUIPMENT & MATERIALS

Loom: I'll be using our new Arras Tapestry Loom, which accommodates a 45" warp length. You could also use a frame loom such as our Easel Weaver or Lilli Loom, or even a rigid heddle loom, but you won't be able to achieve as high a tension as I'll be using on the Arras. Tension is important because it will be easier to weave and your tapestry will hold its shape, as well as helping your selvages stay put. If you will be using a frame loom, you might consider warping the loom for each lesson, for a series of samples.

Warp yarn: I'm using #18 seine twine. You can use a 12/18 cotton seine twine if you are setting your yarn at 5 or 6 ends per inch. If you will be weaving at 8 ends per inch, you'll need a little smaller yarn, like a #12/12 cotton seine twine. You may need to make do with something from your stash, something that is the closest size possible in a non-stretchy, strong cotton or wool rug warp. You could also use 2 ends as one of cotton carpet warp if you don't have anything else. When substituting yarn, check the size by winding 1/2" on a ruler. If the yarn yields 6 wraps in 1/2", then you'll thread that yarn for an EPI (ends per inch) of 6. If your yarn yields, for example, 8 wraps in 1/2", you should set that yarn at 8 EPI.

I suggest you try as close as possible to 6 EPI, as a wider sett just makes it easier for your fingers to learn what to do.

Warping: You can learn how to warp the Arras by watching the video. Also, if you happen to have one of our original Tapestry Looms, the process is the same as warping the Arras Loom.

Warping details: 36 ends at 6 EPI = 6" wide warp. If you are going to be using another sett, choose a number divisible by 3, as we will be dividing the warp into 3 sections for part of our sampler.



Arras Tapestry Loom



Cricket Loom



Lilli Loom

TYPES OF LOOMS: TAPESTRY, RIGID HEDDLE, FRAME



CHECKING ENDS PER INCH (EPI)



Watch the video
https://youtu.be/KUs_1v56E7M

Schacht's YouTube channel includes all videos mentioned in this document in the playlist **Tapestry Weaving Techniques**.

If you're reading this PDF on a computer or device, you can go directly to any video on YouTube by clicking on its link.

Weft yarn: I like to use a firmly spun weft yarn without a lot of stretch. Since this is a sampler, you can again use yarns from your stash. You can mix and match sizes, but your goal is for the yarn or yarn bundle to be the size of the space between the warp yarns. For this sampler, I used Jamieson's Shetland Spindrift, 3 ends together in the tapestry areas and 2 ends for the soumak.

Choosing a palette: I like to work with a palette. As I was cleaning out my piles of ripped out magazine pages, I found these colors that I thought were fresh and fun for spring. Cheerful seemed good. You'll find that working with a palette will help you to make color choices as you go; your sampler will be more cohesive colorwise, too. This is optional, of course, but if you haven't tried this before, you might want to experiment with this for your sampler.

Creating a base: Use the warp yarn to work a row of twining as a base for your weaving. This will also reinforce your warp sett. Measure a length that is 3 times the width of your weaving. Fold the yarn in half around a selvedge edge. I'm right-handed, so I find it easiest to begin at the left selvedge and work towards the right.

You can avoid a knot at the edge by stopping the twining 4-5 warp threads from the edge, dropping one of the yarns, continuing with the over and turning around at the selvedge, to complete the twining. Check that the twining is straight across the warp by measuring from the bottom beam to the twining on each side of the weaving. You can also measure and mark the distance with a magic marker prior to working the twining.

I look forward to starting to weave in the next lesson, when we'll be exploring weft-faced weaving, the important technique of bubbling, and selvedge management. Happy warping!

Jane



JANE'S WEFT YARN



JANE'S PALETTE



Watch the video

<https://youtu.be/FspYl9pa4JE>

BONUS LESSON

WARPING THE LILLI LOOM

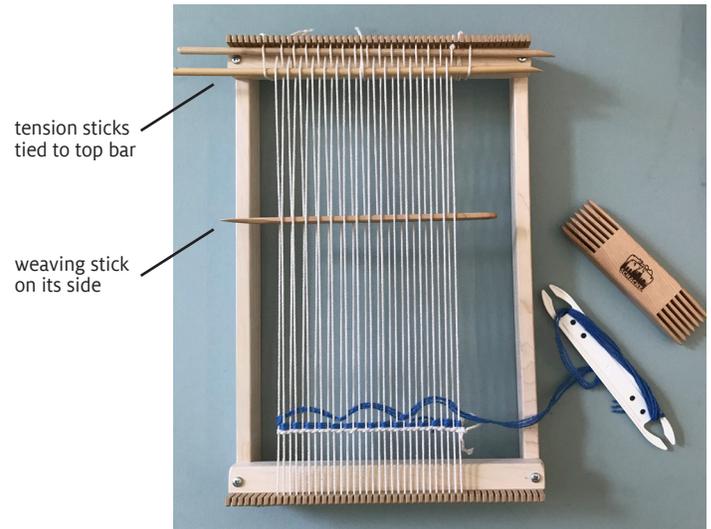
If you will be using a frame loom, try to warp up the loom with as much tension as you can. Then to further tighten the tension, insert 2 small sticks in opposite sheds (first row over, under; second row under, over). To keep them as snug to the top of the loom as possible, tie them to the top bar with warp yarn on the right, middle and left side.

The warp is 6" wide and with a sett of about 5 epi, you'll have a total of 30 warp threads. The warp yarn is the same as the yarn used on the Arras, a #18 seine twine.

I will be finishing the sampler with a Damascus edge. If you want to do this, you'll need at least 2" (3" is better) to work the finish. Work a row of twining at this 2" mark, and you're ready to weave.

Later, as you weave and get closer to the top of the loom, the tension will become tighter, you can just remove the tension sticks to loosen the tension.

To make the shed, I'm using the Schacht Weaving Stick which is the perfect size for this loom because it makes a very narrow shed. Depending on how much you weave, you may need to warp your frame loom a couple of times.



WEAVING ON THE LILLI LOOM

WARPING THE CRICKET LOOM

For this project I measured 30 ends, 2 yards long on the warping board. I'm using a 5-dent heddle and #18 seine twine. The warp width is 6".

The warp is pretty narrow for the 15" Cricket loom. To prevent the apron bar from bending, I removed the 2 outside apron cords and then reattached one Texsolv cord, through a hole in the remaining apron cord. I then slipped a loop onto the left side of the apron bar, adding stability to the apron bar. It takes a bit of trial and error to get the correct length, but once you have it right, your apron bar should be stable.

Because an even tension is so important for tapestry weaving, I tied 1" warp bundles and attached the groups to the apron bar with lashing.

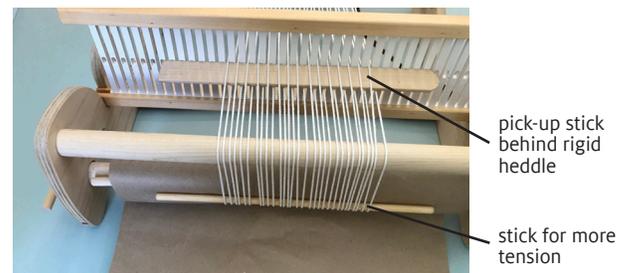
If you need additional tension, you can slide a rod or stick under the warp threads along the warp beam.

Because the tension will be very tight, it'll be very difficult, if not impossible, to raise and lower the heddle. You can get around this by inserting a pick-up stick, behind the rigid heddle, under all the slot threads. Leave this pick-up stick in place and turn it on edge to make this shed. For the hole threads, lift up slightly on the heddle and slide another pick-up stick under the raised threads in front of the heddle. Remove the pick-up stick when you've finished weaving this row.

Weave as close to the front beam as possible and advance the warp every 2 or 3 inches.



WARPING THE CRICKET LOOM



WEAVING ON THE CRICKET LOOM

LESSON 2—TAPESTRY TOOLS & TECHNIQUES

Now that you have your loom warped and ready to weave, let's get started! I would say that what weavers new to weft-faced weaving (and tapestry) have the most trouble with is the weaving drawing in, managing the selvages, and consistency. That's why in this first lesson we are going to focus on keeping your selvages nice and straight with no draw-in or bulging and learning the importance of bubbling. As we progress with these basics, we'll explore weft-faced color effects and color blending—which are fun and basic techniques you can use in your future tapestry weaving.

TOOLS & MATERIALS

- **Short stick shuttles:** Use them if you have them, or you can make butterflies—this is a pretty narrow warp, so carrying the weft across by hand is easy.
- **Beater:** I'm using the Schacht single-ended tapestry beater, but you can also use a fork. Taping a little weight on the back of it will give it more umph. Any hand beater will work. You don't need to beat very hard, which can wear out body parts. If you find that you are struggling to cover the warp, either your warps are drawing in or are too close, your weft is too big, or you don't have enough tension.
- **Loom:** I'm using the new Arras Tapestry Loom, but you can weave along on just about any loom you have. Just try to crank up the tension as much as you can.
- **Weaving stick:** I find this handy for bubbling, but you can use your fingers, the point of a knitting needle, tapestry bobbin, or bodkin.
- **Yarn:** Wool yarn will probably be the easiest to work with. I'm using Jamieson's Shetland Spindrift which is a 2-ply woolen yarn, 3 ends as one. A readily available singles is Lamb's Pride from Brown Sheep. To determine the correct size of yarn, hold it (or a few strands, if its fine) up between two warp threads. If it fills the space, this is a good candidate for your tapestry sampler. You can mix and match sizes. If you are using knitting worsted which has a lot of spring in it, you'll just want to be careful when placing it in the shed to not pull on the yarn too much—this will prevent draw in.



TOOLS FOR TAPESTRY

From top: weaving stick; ruler; stick shuttle; tapestry needle & scissors; single-ended beater; double-ended beater.

SELVEDGES

New weavers often tend to leave a bubble of weft at the selvedge because they are afraid of the weaving pulling in. First, bulging at the selvedge isn't providing a clean line—and it is the first thing the eye notices—all the waviness and wobbling distract from everything going on in between. My technique is to turn the corner at the selvedge with the weft yarn snug up against the edge, not pulling in, not popping out, but just right. When I insert the weft into the shed, I give the weft a little tug to take out any slack, but I do this while giving a slight counter tug to the selvedge thread. I keep a constant eye on the selvedge to see that I have it right, and if it isn't, I redo it.



SELVEDGE TECHNIQUE

Pull the weft snug against the selvedge edge and hold onto the selvedge thread and the weft yarn. Give a slight counter tug to prevent the selvedge thread from pulling in.

STARTING WEFTS

Generally, I like to fold the weft into the weaving. To do this, insert the weft into the shed and weave across. Change sheds and then weave the tail into the next shed over just a couple of warps. Leave the tail hanging (here I'm putting all of the weft ends towards the back of the loom). If you are making all of your changes on the same selvedge, it is going to build up. That is why I like to change sides when adding in new wefts. When ending and starting the same color, I try to do this within the weaving, again overlapping just a few warps.

However, if I am just weaving a single row of a color, I will divide the bundle of yarns a few warps before the selvedge, dropping 1 end of the 3 and then overlapping 3 and 1 respectively when I fold the yarn around the selvedge.

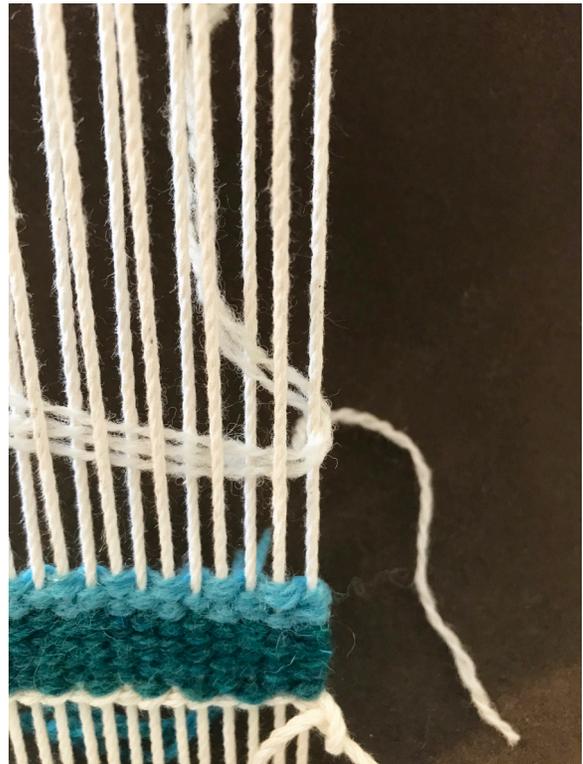
BUBBLING

This is critical for tapestry weaving. If you have been weaving for a bit, you know that the distance across the weaving is not a straight line—rather, the weft travels over and under the warp threads and you need to allow enough weft in the shed for this to happen. Bubbling is the magic in tapestry weaving that allows enough weft in the shed to keep the fabric from drawing in. Also, you'll find that if you have too much weft in the shed, your weaving will be uneven and bulging out. Our selvedge to selvedge weaving will allow you to practice.

Successful bubbling:

- The bubbles are consistent across the weaving.
- You vary the place where the bubble dips down to the fell.
- You check that the spaces between the warps are consistent, with no wider or thinner spaces developing. If you discover problems, fix it by bubbling less and changing where the dip falls. If the warps seem to be drawing in, and the selvedges are drawing in, bubble more.
- Change sheds before beating, or simply beat on a closed shed.
- And, of course, keep an eye on your selvedges.
- Measure the width of your weaving often to be sure you are maintaining the same width throughout.

There's a lot going on with just this simple technique, which is why I want you to practice for a few inches before moving on to the next step.



STARTING WEFT FOR 1 ROW OF A COLOR

To minimize bulk when weaving a single row of a color, I have dropped an end of white weft about 3 ends before the selvedge. I fold the remaining ends around the selvedge and overlap a few threads, leaving the tail to hang out the back of the work.



BUBBLING

Bubbling allows more weft in the shed so that the weaving doesn't draw in.

WEAVING

To beat, change sheds and use a hand beater to press down the weft. You don't have to beat heavily, just enough to cover the warp. Also, as you work, you'll notice that after 5 or so rows, the earlier wefts are beaten in tighter just from the beating of the subsequent rows.

When I'm weaving selvedge to selvedge, I usually use a shuttle, but for this narrow warp, you can just use butterflies to carry the weft.

How to make a butterfly:

1. With the palm of your hand turned upward and fingers spread wide, wind between your little finger and thumb, holding the tail between your thumb and palm.
2. Wind back and forth between your little finger and thumb in a figure eight, winding enough yarn to make a comfortable butterfly. Too small and you have to change wefts too often; too large, the butterfly becomes unwieldy.
3. Remove the butterfly from your hand and snugly wrap the working tail around the center a couple of times, tucking the end under the last wrap to secure it.

—*The Weaver's Idea Book*

WEFT-FACED COLOR-AND-WEAVE

I have referred to this next weaving technique as weft-faced color-and-weave, even though we usually think about color-and-weave when we refer to log cabin where the interaction of the colors in the warp and the colors in the weft create a pattern. In weft-faced weaving, the interaction of the colors appears only on the surface of the weft-faced fabric.

At its most elemental level, think of weaving as binary. Either the warp is up or down. It is this phenomenon that creates color-and-weave effects. In a weft-faced fabric, the weft yarn only shows when it travels over a warp thread. For example, you can create a vertical line by alternating colors or a wavy line by alternating colors every two rows. Or dots, by surrounding one row of a color with at least 2 other rows of another color.

I want you to explore this color patterning now as you continue to practice bubbling and selvedge management. Try out a few different patterns, as shown in the sampler. Later on, you might find some of these techniques helpful when you're weaving a tapestry design.

To do: Weave an inch or so of plainweave, practicing bubbling the yarn and managing the selvedges. Measure often. Weave until you are comfortable with this step.

Start exploring weft-faced color patterning.

- **Vertical lines:** Weave 3 rows of color A and then alternate color A and B for an inch or so and end with 3 rows of color A. You will note when alternating wefts, that sometimes the selvedge thread isn't caught. This is handled by simply placing the new weft under the exiting weft as shown here.
- **Waves:** Alternate 2 rows of color A and 2 rows of color B.
- **One-row dots:** Weave several rows of color A, 1 row of color B, followed by several rows of color A.



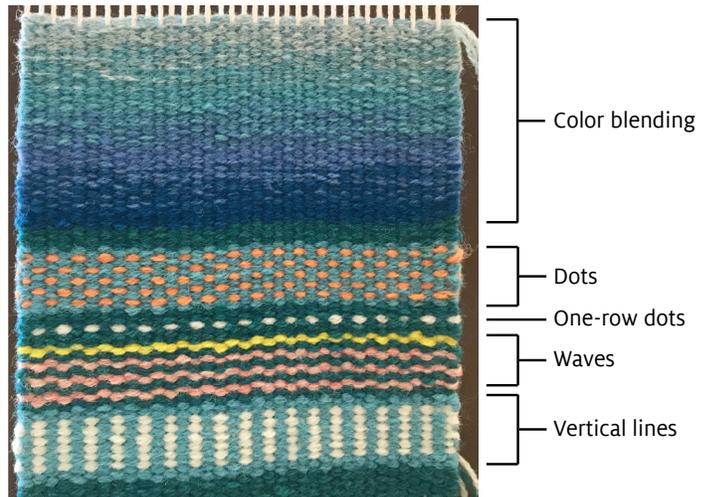
STEP 1



STEP 2



STEP 3



WEFT-FACED COLOR-AND-WEAVE



CATCHING WEFT AT THE SELVEDGE—
CORRECT



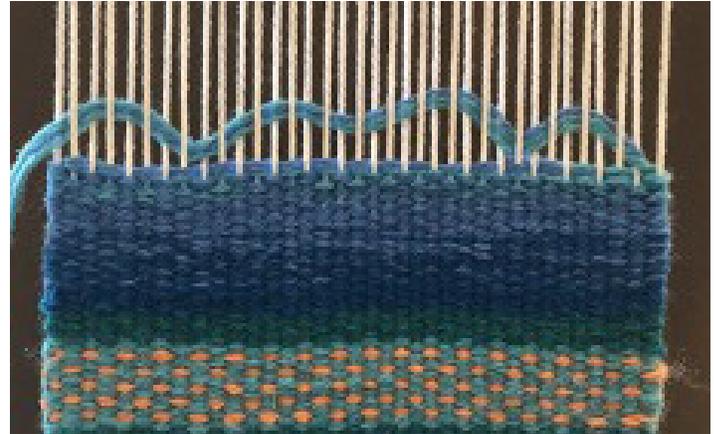
NOT CATCHING WEFT—INCORRECT

- **Dots:** weave 2 rows of color A, 1 row of color B, repeat, ending with 2 rows of color A.
- **Color blending:** I think this is so fun and easy to do too. Using three yarns together makes blending easy. Hint: I changed colors about 2 inches away from the selvedge, ending each end at a different place and overlapping with the new yarns. When I changed out the color combinations, I found it easier to cut off the first bundle and then replace with the next color combination. Here's how I worked using 4 shades of blue:

1. With 3 ends of Color A, weave for 5 rows.
2. Change out 1 thread of color A and add in 1 end of color B (you have 2 ends of color A and 1 end of color B). Weave 5 rows.
3. Drop 1 more color A and add another end of color B (you now have 1 end of color A and 2 ends of color B). Weave 5 rows.
4. Drop the last end of color A. You'll now have 3 ends of color B. Weave 5 rows. Add in color C and weave as before. Then color D in the same fashion.

I hope you have fun trying out this lesson's explorations! I would love to see how you are progressing. Happy Weaving!

Jane



COLOR BLENDING

Bibliography

Here is a list of books that I've found useful:

Glasbrook, Kirsten. *Tapestry Weaving*. Search Press, 2004. The author teaches tapestry through samplers. Her clear photos and cheerful colors make you want to give tapestry weaving a try. (We sell this book on the Schacht website.)

Harvey, Nancy. *Tapestry Weaving: A Comprehensive Study Guide*. Echo Point Books & Media, 2015. This book was first published in 1991, but the material is still excellent after all these years. The author's clear writing and knowledgeable instruction are encouraging. (We sell this book on the Schacht website.)

Kathe Todd-Hooker has written four thorough books on tapestry weaving. These self-published books are available from the author at www.betweenandetc.com. Titles are:

- *So Warped: Warping a Loom for Weaving Tapestry* (written with Pat Spark)
- *Line in Tapestry*
- *Weaving 101*—if you're going to buy just one, this is a good resource for beginners.
- *Shaped Tapestry*, 2nd edition.

For lighter reading, check out these titles, also available on the Schacht website:

- *DIY Woven Art* by Rachel Denbow
- *On the Loom: A Modern Weaver's Guide* by Maryanne Moodie
- *The Weaving Explorer* by Deborah Jarchow and Gwen W. Steege
- *Weaving Within Reach* by Anne Weil
- *Woven Art—15 Modern Weaving Projects for You and Your Home* by Elena Vilar

LESSON 3—SLIT & INTERLOCK TAPESTRY TECHNIQUES, WEAVING A SHAPE

I hope you enjoyed getting the feel of bubbling, beating, and watching your weft-faced weaving develop! In this lesson, I want to focus on learning how to do slit tapestry and interlock joins.



SLIT TAPESTRY

We'll begin by dividing your warp into 3 equal sections, 12 warp threads each. You'll be using 3 colors, a butterfly for each color. I'm starting from the right. All your butterflies will travel in the same direction, right to left on the first pass.

Insert the butterfly into the shed, leaving a tail that you will weave back into the shed on the next pass. Insert the other 2 butterflies in the same fashion. Bubble! Change sheds and beat. Now return each butterfly to where you started, bubble and beat. Slit tapestry makes a nice, clean line, is faster to weave than interlock. The down side is that very long slits will either need to be sewn later or woven together with a fine yarn every so often to stabilize the area.

Watch the video and then follow the steps in each image.



STEP 1: MAKING A SLIT

Insert the butterflies into the shed from right to left. Leave a tail.



STEP 2: MAKING A SLIT

Change sheds and weave the tail in just over 1 warp thread.



STEP 3: MAKING A SLIT

Bubble the weft.



STEP 4: MAKING A SLIT

Check the slit. Is it nice and straight and not pulling in or poching out?



STEP 5: MAKING A SLIT

When ending a weft yarn, fold it back into the weaving in the same shed. Here, I went under 2 warps and then over 1 warp, leaving the tail hang off the back. Note: be sure your weft tail is in the same shed as the previous row and that it overlaps just 1 warp.



STEP 6: MAKING A SLIT

Setting up for weft interlock, showing detail on the right. All the butterflies are weaving in the same direction. The tails will be folded in on the return shed.



STEP 6 DETAIL

WEFT INTERLOCK

Weft interlock is a good technique to use if you are going to be weaving a vertical line when a slit isn't desirable, such as when you're weaving a border, a rug, or need more stability. Instead of a clean, vertical line like you have with slit tapestry, weft interlock makes a serrated join.

Here, I'm weaving weft interlock in the same direction. Because you will be interlocking each join, it is necessary to weave an entire row, rather than a section at a time like you might do in weaving slit tapestry. I'm using an even number of warps, in this case 12 per section. You will be making an interlock every other row. I'm working from the front, but you may find that you get a cleaner join by working from the back.

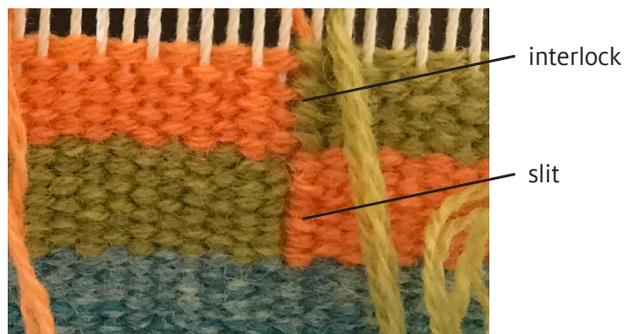
Insert three butterflies from right to left. Use your slit tapestry line as a guide, and bring the butterflies out of the shed at this point. Change sheds and beat. On the next pass, left to right, you'll do the interlock. Starting at the left, pass the first butterfly through. Bring it out of the shed. Then, take the next butterfly and pass it around the first weft and then into the shed, pulling against the up warp. Bring this end out at the next join and wrap the third weft around this one and into the shed. Bubble as you go. Change yarns and beat. Practice this until it feels like you've got it.

Tip: I'm using a dark piece of craft foam (you could use stiff paper, too) behind my weaving to hide the warp threads that are visible on a continuous warp like what is used on the Arras. It helps me focus on the area I'm working on and also is a nice contrast to my white warp yarns.



INTERLOCK

On the first row, weave right to left (no interlock). On the second row, start at the left and weave over to the first join and pass the orange weft over the blue weft. Then pass the green weft over the orange weft to create the first row of interlock.



SERRATED JOINS IN INTERLOCK

Notice the difference between the clean line of the slit tapestry as compared to the serrated join of the interlock.



Tapestry Weaving: Interlock

Watch the video

<https://youtu.be/i2qNFV3YWJg>

WEAVING A SHAPE

Let's start learning how to weave a shape. For this example, I'm going to weave a triangle and the wefts will be traveling in opposite directions. I'm going to use slit tapestry technique. A few things to keep in mind:

- When weaving a shape, you need to work the decreasing shape first.
- The diagonal line will be stepped—more stepped with a wide sett of 6 epi than, for example, than with a finer sett of 12 epi. (Something to keep in mind when weaving future projects.)
- If you want the top of the triangle to come to a point, you'll need a single warp end at the top. Therefore, you'll need to start with an uneven number of warp threads for your triangle.
- I have an even number of warp threads (36), and I want a single warp end at the top of my triangle. I set up my triangle with one extra background warp thread on the right side. This means that my triangle won't be absolutely in the center of my weaving. Again, more obvious with a wider sett.
- Placing a yarn marker at the edge of the triangle is helpful when you start weaving.
- Fewer repeats of each section will decrease the pitch of the diagonal line. It will make a squattier triangle.
- If you want to weave a specific triangle shape, mark the warp with a washable magic marker and follow the lines as you weave.



JANE'S COMPLETED SHAPE



SHAPES: MARKING SHAPE EDGES

To weave this triangle, I marked the edges with a yellow marker string. You can pull it out later when you don't need it.



SHAPES: FILLING IN BACKGROUND

Getting ready to weave the green background. Weave 6 rows. You can also see that I've set up for the first decrease (in pink).

I wove 3 repeats of each section, or 6 rows. I decreased by one warp thread on each side of the triangle after each 6 rows. After 2 decreases, I decided to shade the triangle, as we did in the last lesson (adding and subtracting colors), changing colors at each decrease. If weaving the triangle is enough challenge, just weave it in a single color.

In the beginning, when I was weaving the background edges, I didn't change sheds before pressing the weft into place with my fingers. I realized later that this affected my selvages. Changing the shed before beating helped the puffiness at the selvages.

To help keep track of what I was doing, I first wove a section of the triangle and then filled in the outsides, always weaving section by section.

When I reached the top and had just a single warp end left, I simply wrapped the yarn around the warp. I found I needed to add a couple of extra wraps. To secure the end, I made a half hitch and pushed the weft end to the back of the weaving.

Now, we are really weaving tapestry! I hope you'll have as much fun as I've had with this lesson. Feel free to experiment. How would you weave a diamond? (Hint: always weave the descending areas first. It will help to mark your warp or draw a picture to help visualize where to begin weaving.)

See you in the next lesson!

Jane



SHAPES
Two sections completed



SHADING
On the third section, I added 1 orange and dropped a pink, on the fourth section I added another orange for a total of 2 and dropped another pink. For the next section, I have dropped the last pink and am now weaving with 3 orange. Continue in this manner until you reach the tip.



STARTING ANOTHER COLOR

Tip: It is helpful to use a tapestry needle to separate the ends to spread them out for starting another color which will be added in the same fashion.



SECURING THE WEFT

Use a half hitch to secure the last weft round around a single warp end.

LESSON 4—ECCENTRIC WEAVING, HATCHING & SOUMAK

I couldn't wait to start this lesson, as I had so much fun weaving joins and shapes in the last one. I'm eager to delve into more tapestry techniques. I also have been realizing how much there is to learn about tapestry. It can be almost overwhelming. Have you felt that way? As I often say, step by step.

Eccentric, or distorted, wefts will feel a lot more loosey goosey than the straight lines we were weaving last time. In eccentric weaving, areas are built up randomly by weaving back and forth in an area. Lozenge-like shapes can build on one another with no outline or outlined with plainweave or soumak, which provides a strong, raised outline. The hard part of all this freeform weaving is trying to keep your selvages from wobbling too much, as well as the surface from bulging. In the first section, I wove some big and small lozenges without outlining. In the next section, I wove shapes in a similar fashion and outlined them with soumak. I love the raised line soumak adds to the flat, woven surface.



ECCENTRIC WEAVING IN PROGRESS

SOUMAK

I'd like to start with soumak because you'll need it for outlining. There are many forms of soumak and I recently learned this locked soumak technique from David Johnson, a tapestry teacher here in Colorado. This is an excellent version of soumak to use for tapestry because it provides good structure and is also super flexible. I love the raised surface it creates. And the little chevrons look like knitting on the surface. You could weave an entire tapestry in soumak, like David does. Check out his weavings on his facebook page: <https://www.facebook.com/davidjohnson1897/>

I've woven a few different forms of soumak over the years (in my books *Time to Weave* and *The Weaver's Idea Book*), but I'd never done my teacher David's version. I was curious about it so looked it up in Peter Collingwood's *The Techniques of Rug Weaving*. He calls this type of soumak Bushongo, which can be seen in the raffia cloths from the Bushongo tribe in central Africa where it was embroidered on the finished cloth, rather than woven. However, Collingwood also noted that "this soumak variation can be carried out when weaving and was extensively used in Shiant rugs, designed by Jean Milne and woven in the Scottish islands."

Note: For this soumak, I'm doubling my yarn, which translates to 4 ends when the soumak is worked.

A couple of notes:

- Work soumak on a closed shed.
- When using a singles, you may find that the yarn untwists, and you'll need to add twist as you work. Likewise, when using plied yarn, you may need to take out twist.
- Shorten the length of yarn by making a butterfly after you have attached the yarn to the starting warp.

Working Bushongo Soumak, left to right:

1. Fold the doubled ends in half. On the left selvedge warp, place the fold under the selvedge warp and extend it out so it is a loop.
2. Insert the two tails into the loop.
3. Pull tight.
4. Hold the weft yarn in your right hand. Lift up the next warp yarn with your left hand.
5. Insert the weft yarn to the left, under the warp thread and then pull out a loop and slip the butterfly or weft ends through the loop.
6. Pull down to tighten the knot.
7. Repeat all the way across the warp, advancing one warp thread at a time.

Returning, right to left: The process is the same as when working left to right, except now you are holding the weft yarn in the left hand and lifting up the warp yarn to be encircled with the right.

Finishing: When you're finished working soumak, weave the ends in a plainweave shed, gradually dropping ends as you go over about an inch. These ends will butt up against the soumak and won't be visible in the subsequent weaving.



Watch the video

<https://youtu.be/jHrfaUFy118>

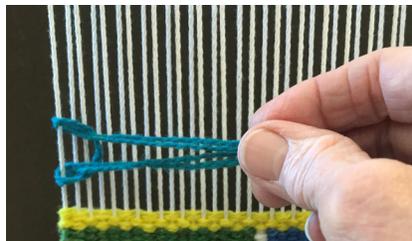


Watch the video

<https://youtu.be/C72yKrz6OYI>



STEP 1: BUSHONGO SOUMAK
Insert the loop under the selvedge warp thread.



STEP 2: BUSHONGO SOUMAK
Insert the tails through the loop.



STEP 3: BUSHONGO SOUMAK
Pull tight.



STEP 4: BUSHONGO SOUMAK
Working left to right, work with your right hand.



STEP 5: BUSHONGO SOUMAK
Bring the tails or butterfly through the loop and pull tight.



STEP 6: BUSHONGO SOUMAK
To end, weave the ends into a plainweave shed.

ECENTRIC WEAVING

In eccentric weaving, you build up small areas, lozenge shapes, that aren't straight across like we've been weaving. Instead the wefts often travel at a diagonal to the warp threads, creating wavy lines in the weaving. This technique is fun for creating organic shapes that build on each other or are separated by wavy rows of background like in our first example. Eccentric weaving feels free without constraints, but there are a few things to keep in mind.

One of the problems new tapestry weavers have is being in the wrong shed. What I mean is you are weaving along and realize that the section you are weaving in is in the same shed as the last row. There are ways to fix this (like weaving an extra row in the opposite shed to correct the problem). Keeping this little rule in mind will help you along the way. I credit Rebecca Mezoff with this little hint, which isn't so little at all.

That is: Always complete the sequence. In tapestry weaving you have two plainweave sheds. I call these A and B. If you start from the right in shed A, you need to finish from the left in shed B. If you don't, then in the next section you weave, you'll find that you are doubling a shed somewhere along the way. This only becomes more complicated the more butterflies you have going across the warp. Remember: "Always finish the sequence." It'll get you out of so much trouble.

- Weave simple shapes, such as lozenges and triangles.
- Shapes can be outlined in a contrasting color or encased in a background.
- Wefts will not necessarily be perpendicular to the warp.
- Outlining will travel in a diagonal line.
- Outline shapes as you weave.
- Eccentric weaving can cause bulging of the surface and draw-in.
- More weft is needed when inserting the weft at a diagonal, rather than a straight line.
- Soumak outlining can help stabilize the structure and also keeps the warps spaced evenly.

Weaving a shape, step-by-step

Weave the background following the shapes woven. You may need to add extra rows in an area to fill in. If you always finish the sequence, all your shapes should be in the correct shed for the final background.



STEP 1: WEAVING A SHAPE
Tie on with an overhand knot.



STEP 2: WEAVING A SHAPE
Push the tail to the back of the weaving.



STEP 3: WEAVING A SHAPE
Increase by 1 warp thread each row.



STEP 4: WEAVING A SHAPE
Allow the weft to bubble slightly.



STEP 5: WEAVING A SHAPE
Change sheds each row.



STEP 6: WEAVING A SHAPE
Use your fingers to push down each row.



STEP 7: WEAVING A SHAPE
The last increase.



STEP 8: WEAVING A SHAPE
Continued.



STEP 9: WEAVING A SHAPE
Start decreasing by 1 each row.



STEP 10: WEAVING A SHAPE
The shape is almost complete.



STEP 11: WEAVING A SHAPE
The last warp.



STEP 12: WEAVING A SHAPE
On the last warp, tie an overhand knot.



STEP 13: WEAVING A SHAPE
Clip the end and push the tail to the back.



STEP 14: WEAVING A SHAPE
Weave background.

Outlining Shapes

In the first exercise, I didn't outline the shapes, but rather wove a background between sections of shapes. In this example, every shape is outlined with soumak. This creates a strong line and works well when worked on the diagonal, though some of the passes will necessarily be a little longer, given the greater distance when working on the diagonal vs perpendicular to the warp. I worked just one row of soumak and always worked right to left so that the diagonal of the soumak would all slant in the same direction.

1. The first shape on the right was woven and then outlined with soumak. The second shape has been woven and is ready for outlining.
2. More shapes have been added. You may find that in order for the outline to appear to connect to the last outline, you may need to work a warp thread beyond where the shape ends, like I've done on the top left shape here and not done at the right hand side.
3. I gradated the blue as I worked towards the top.
4. The final section is woven both straight across and eccentrically where dips appear. I started weaving on the left side because it was lowest and then built up and worked over to the righthand side. I started and ended this section with 2 rows of soumak.



Watch the video

https://youtu.be/Xzo_03BN_4Y



STEP 1: OUTLINING



STEP 2: OUTLINING



STEP 3: OUTLINING



STEP 4: OUTLINING

HATCHING

Hatching is a way to blend colors from one area to the next, or to create shading within a shape. For this example, I'm using two colors and blending them across a diamond shape I marked on my warp with a washable marker.

In hatching, the wefts will be traveling in opposite directions, meet and then separate. To create the shading, you will first bring one color across the shape to the marked warp, change sheds, then return. Then on the next pass, you will bring the second color across to the other side of the diamond to the marked warp on this side, change sheds, and return. You'll be alternating one color across the shape and then the other.

I followed the marks on the warp as closely as possible when working to the widest point of the diamond. On the return, still following the marked warps, I referenced the warps I had used when I worked up. This helped me keep the diamond as symmetrical as possible.

You'll want to use some color contrast so that you can see the shading. With 6 epi, the shading is not as subtle as it would be when weaving at, for example, 12 epi.

I cut a diamond shape out of paper and taped it on the warp with blue painter's tape and then marked the warps with a washable magic marker. I removed the tape at each point as I worked around the shape.

Setting up: You will start the wefts in the same shed but from different directions. The tails will be woven in on the next shed.

Starting to weave the diamond: Alternate which color meets the outside of the diamond and which color weaves across the diamond.

Here you can start seeing the diamond develop and the colors blending on the inside of the diamond. Note that the left side background is solid blue and the right background is solid green.

Whew! That's it for this lesson. I hope you enjoy learning all these new techniques. I can't wait to see your work in progress!

Jane



STEP 1: HATCHING
Make a pattern and tape to warp.



STEP 2: HATCHING
Mark around the pattern on the weft.



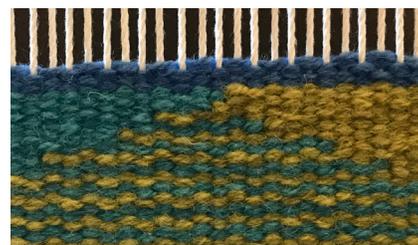
STEP 3: HATCHING
Set up wefts in same shed but different directions.



STEP 4: HATCHING
Start weaving the shape.



STEP 5: HATCHING
Alternate which color meets the outside of the diamond and which color weaves across the diamond.



STEP 6: HATCHING
The finished diamond, with solid blue background on the left and solid green on the right.

LESSON 5—GHIORDES KNOTS OR RYA, DAMASCUS EDGE & FINISHING

We're ending our weave-along with my favorite technique, rya or ghiordes knots. I love the freedom of creating a design with this technique and the cut pile surface it creates.

Ghiordes knots is a knotting technique. It does not have discontinuous wefts so is not considered tapestry. So, why am I including this in our explore tapestry weave-along? Simply put, it is a technique that I love and I want to share it with you. Also, it is a weft-faced technique that seems compatible with tapestry.

Cut pile dates back to 500 B.C. We know this from a rug discovered in a tomb in the Altai Mountains of Siberia, preserved there by ice for centuries. The ghiordes knot we'll explore here was used to make this rug. If you find you love making knots and want to learn more, Peter Collingwood explores this further in his book *The Techniques of Rug Weaving*. I also have a section on ghiordes knot in my book *The Weaver's Idea Book*.

The ghiordes knot is probably the most-used knot for pile rugs because it is highly secure. It doesn't ravel or come undone. It can be tied from a continuous strand or from cut pieces. Because every knot is tied individually, you have infinite design options.

There are two basic elements to a cut-pile fabric: the plainweave ground and the pile (knots). A row of knots is followed by 2 or more rows of plainweave, depending on the use and length of pile. The knot is tied over two warp ends.

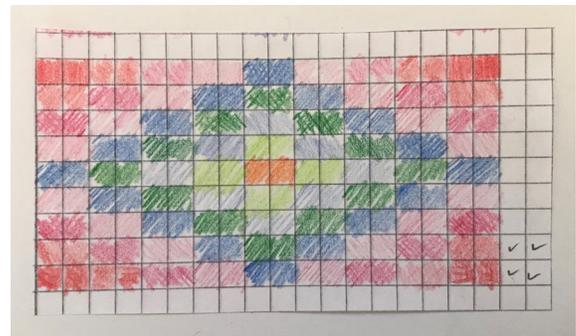
It is traditional to leave the 2 selvedge warps free of knots (you fill in the selvedge areas with rows of plainweave) which prevents the textile from curling. Here, because we are just weaving a small amount, I've made knots all the way to the selvedges.

Often ghiordes knots and rya are used interchangeably. Traditionally, though, rya is a Scandinavian rug made with ghiordes knots with a pile as long as 6".

GETTING STARTED

Start by designing on graph paper. For this example, we have 36 warp ends which translates to 18 knots, because each knot is worked over two warp threads. I began by numbering the squares on my graph paper and then marking the center line. You'll have 9 knots on each side of center.

I began drawing a symmetrical design on graph paper. If you want each knot to be a square of color, you may find that you need to repeat each row more than one time. The knots as I tie them are about 1" long. Later, I trimmed the fringe to about 1/4". I'm using 4 weft ends together as one and weaving two rows of plain weave between each row of knots with the same yarn tripled, as I've been doing in the tapestry areas.



GHIORDES KNOTS CARTOON

GHIORDES KNOTS

- Are tied over 2 warp threads.
- Are made on a closed shed.
- Require a plainweave ground between each row of knots.
- The pile can be trimmed on the loom, or after the weaving has been removed from the loom
- It is a good idea to vacuum the pile to suck up little bits of trimmings.
- Small sharp sewing scissors are helpful to clip the knot threads as you tie them.
- Large sewing scissors or appliqué scissors are helpful in trimming the pile.

Steps for making ghiordes knots



STEP 1: GHIORDES KNOTS

Insert the working end (short end) of the yarn between two warp threads.



STEP 2: GHIORDES KNOTS

Bring the working end of the yarn over the top of the two warp threads.



STEP 3: GHIORDES KNOTS

Bring the working end up through the center between the two warp threads.



STEP 4: GHIORDES KNOTS

Hold onto the working end and pull out the slack with the long tail. Pull down to tighten.



STEP 5: GHIORDES KNOTS

Trim the knot.



STEP 6: GHIORDES KNOTS

Trim the pile on the loom and finish after the weaving has been removed from the loom.



Watch the video

<https://youtu.be/ea2qlQOYGIE>

GRAND FINALE (EXTRA CREDIT!)

After I finished the ghiordes knots, I still had some warp left, so I decided to try making a cartoon and weave many of the techniques we've learned over these past five lessons, a review of sorts.

Having barely used a cartoon before, I decided to draw a simple design which I attached to the cartoon holder on my Arras loom. I then traced the design onto the warps with a washable marker. Right away I realized that scale is so important when working with a cartoon. The subtle curves just weren't as defined or cute as my drawing and I wished for a warp sett of 8 or even 12. (Is that considered sett envy?)

All in all, though, I got the hang of using the marked warps, as well as referring to the cartoon as I worked. What I intended as an abstract botanical, ended up looking like some sort of alien with 6 arms shaking pompoms. Live and learn.

The techniques I used were hatching, slit tapestry, soumak outlining, and little ghiordes knots. It's a silly design, but it was worthwhile trying out different techniques and making all the little decisions along the way.

- How should I fill in between objects? (Use separate butterflies to weave little sections, such as between the arms.)
- How do I create an outline? (Outline after the shape was woven.)
- How do I keep in the right shed? (Always finish my sequence.)
- How do I define the point where the petals meet? (Use hatching.)

After the final pompoms, I wove 2-1/2" of plainweave selvedge to selvedge, enough at the top to make a hemmed edge. I completed the weaving with a row of soumak, which acts as a weft protector once I cut the warp from the loom.



JANE'S CARTOON



THE WOVEN CARTOON



STEP 1: GRAND FINALE

Work the decreasing shape first. In this case I wove the background before the center petals.



STEP 2: GRAND FINALE

I used hatching where the 2 sides of the petals meet. When I had finished weaving the petals, I outlined them with soumak using just a single end of yarn.



STEP 3: GRAND FINALE

The second set of leaves are complete and now I'm beginning to fill in the background in blue.



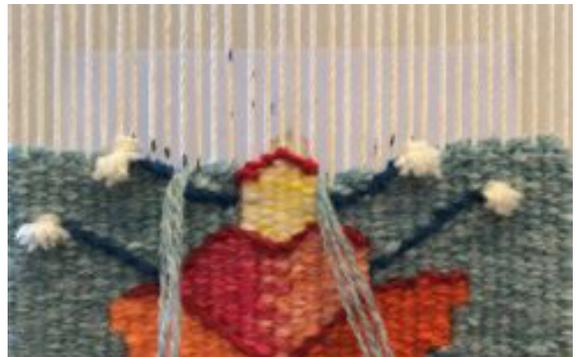
STEP 4: GRAND FINALE

The background has been filled in and the "arm" worked in soumak, punctuated with a single ghiordes knot at the end.



STEP 5: GRAND FINALE

The top shape has been woven and outlined in soumak.



STEP 6: GRAND FINALE

Filling in the background.

FINISHING TECHNIQUES

Damascus Edge Finish

The first step is to cut the warp from the loom. Leaving at least 4" will make it easier to work the Damascus edge finish.

Secure the weft. You don't want your weaving to ravel. At the bottom of the weaving, I left the twining and then worked a Damascus edge. Place your sampler face down. It is helpful to use a weight so the weaving doesn't move around while you are working. (I have a flannel-wrapped brick I use for this purpose.) For this sampler, I decided to leave fringe at the bottom. For the top edge that will be hemmed, I still made a Damascus edge to further secure my weft. Then I clipped the ends short and made a turned hem which I handstitched in place.



STEP 1: TWINING FOR DAMASCUS EDGE



STEP 2: TWINING FOR DAMASCUS EDGE



TWINING KNOTS



TWINING COMPLETED

Sewing in the Ends

Except for any ends hanging at the selvage, you could choose to leave the ends on the back hanging (this is a sampler after all). I have a little problem with messiness, so I opted to sew in the ends. Half way through, I did wonder about this decision... I sewed in each strand of my tripled weft separately up or down a warp thread so that only one weft followed the same path along the warp.

Hint: Choose a tapestry needle that is as big as possible because you will be threading it many, many times. It'll be easier with a large eye. You just don't want the needle so large that it is difficult to slip up the warps.

You may notice that after removing your weaving from the loom it relaxes a bit (shrinks). That is natural. It may shrink a little bit during the next step which is to steam your sampler with a hot steam iron and a press cloth. If you find that one end is a little narrower than the other, you can coax out the weaving when it is warm and wet—similar to blocking a sweater.



SEWING IN ENDS



Hemming

1. Trim the warp ends to about 1/4", and using a press cloth and a lot of pressure, steam the edge with a hot iron.
2. Turn under the edge and using a press cloth, pressure, an iron, steam the fold. Sew the hem by hand. If you want to hang your sampler, you can sew Velcro to hem tape and then stitch the tape on the hem edge.

Now you are finished! I hope you had as much fun as I did with these lessons. I so enjoyed seeing the work you shared. I was learning right along with you and now I am looking forward to trying the next warp, adventuring into 8 epi and more of a planned weaving, exploring more of the vast field tapestry has to offer. I would love to hear your thoughts and ideas about the weave along. What you liked, what you didn't.

Happy weaving and good health!

Jane



STEP 1: HEMMING



STEP 2: HEMMING

Thanks for joining us!

You'll find more great projects and tutorials on our website
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