

CARDING FOR COLOR, PART IV: SPINNING FOR COLORWORK KNITTING

by Deb Gerish

My color-blending journey began with a specific goal of designing and spinning colors for Fair Isle knitting. Once I learned a little color theory and understood how to blend fiber colors (see [Carding for Color, Part I](#) and [Part II](#)), it was time to tackle a real project. I planned a cowl based on one of Ann Feitelson's designs, and the yarn itself was simple. I would spin a 2-ply sportweight with a woolen draft, then slightly felt the skeins in the finishing process. That was the easy part! The colorways would be more challenging: I would need 10 colors in 2 sequences that followed Fair Isle color rules.

If you print this PDF, print in color—photos won't be legible in black and white.



MATERIALS & EQUIPMENT

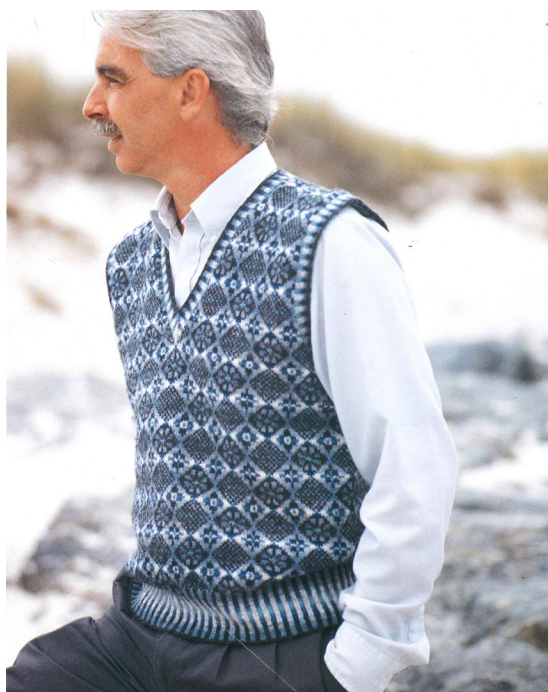
- Fiber of your choice in colors of your choice—I dyed mystery batts and blended them
- Schacht hand carders in your choice of psi
- spinning wheel—I used my Matchless

CHOOSING AN INSPIRATION PHOTO

Like Stephanie, I find it easiest to work from photos (see [Carding for Color, Part III](#)). In this case, since I was adapting a pattern from Ann Feitelson's *The Art of Fair Isle Knitting*, I could use her photos and color notes to blend my colors.



handspun yarn



My reference image for yarn colors. Once I spun the yarn, I would repeat the motif on a simple cowl.



Find out more at schachtspindle.com
Schacht Spindle Company 6101 Ben Place Boulder, CO 80301
p. 303.442.3212

FIGURING OUT THE COLOR SEQUENCES

Fair Isle colorways typically follow 3 rules (see Janine Bajus's *The Joy of Color* for more details):

1. Designs use two sequences of color, one for the background and one for the pattern. Within each sequence, colors gradate in value from light to dark or dark to light.
2. Elements of the pattern—the two color sequences and the pattern motif—proceed to a turning point and then reverse themselves. The knitter works through the color sequences in one direction (say, light to dark), introduces a pop of color on the center row, then goes back through the values in the other direction (dark to light). Pattern motifs also turn around after the center row for a pleasing symmetry. Janine refers to this rule as mirroring.
3. Value contrast between the pattern colors and background colors helps the pattern motif stand out. One color sequence needs to be darker than the other so the pattern motif doesn't get lost.

Ann's helpful note about her color choices showed how she applied these rules. Both color sequences ran from dark to light, then back to dark after the center row. The pattern sequence had darker values than the background sequence. Finally, Ann staggered the two sequences so they changed values at different points in the motif.

Now that I'd deciphered Ann's color sequences, I could figure out how to blend my own. This step was really fun! I added a greyscale filter to my reference photo so I could see the values more easily. I listed all 10 colors with Ann's names (she used commercial yarns) and labeled each one in terms of color family, value, and saturation. I created simple "codes" for each color that I could mark on a knitting chart. Best of all, I could see relationships **within** each color sequence and **between** the sequences.



A grayscale filter helps us see values.

Pattern Sequence				
Ann's Color Name	Color Family	Value	Saturation	My Code
black	neutral	very dark	NA	B
very dark navy	blue	very dark	medium	N1
dark navy	blue	dark	medium	N2
medium navy	blue	medium-dark	medium	N3
denim heather	blue	medium	medium	N4
Background Sequence				
Ann's Color Name	Color Family	Value	Saturation	My Code
turquoise	turquoise	medium	bright	T
medium blue-gray heather	blue + neutral	medium-light	muted	G1
light blue-gray heather	blue + neutral	light	muted	G2
light gray	neutral	very light	muted	G3
white	neutral	very light	NA	W

PLANNING MY COLORS

My handy-dandy analysis table also helped me figure out color sequences with confidence. I could blend all 10 colors from just a few "base colors":

- black
- undyed white
- blue in a medium value and medium saturation
- turquoise in a medium value and high saturation

Pattern Sequence				
Color Family	Value	Saturation	My Code	Blending
neutral	very dark	NA	B	solid black, unblended
blue	very dark	medium	N1	blue + 25% black (heathered)
blue	dark	medium	N2	blue + 5% black (just enough to heather)
blue	medium-dark	medium	N3	blue + 5% white (just enough to heather)
blue	medium	medium	N4	blue + 15% white (heathered)
Background Sequence				
Color Family	Value	Saturation	My Code	Blending
turquoise	medium	bright	T	solid turquoise, unblended
blue + neutral	medium-light	muted	G1	25% blue + 75% gray (heathered)
blue + neutral	light	muted	G2	40% blue + 60% gray (heathered)
neutral	very light	muted	G3	90% white + 10% black (heathered)
neutral	very light	NA	W	solid white, unblended

I dyed my own fiber from mystery batts, though I could also have used commercially dyed top. I worked by eye, instead of weighing out colors, so the proportions given in this table are guesstimates.

For the pattern sequence blues (N1 through N4), I blended blue with black or white to change the value. I started in the middle of these values, then went darker and lighter.

Then I created the background sequence, this time starting with the lightest values. Once I liked the lightest gray (G3), I made more of it and blended it with blue for G1 and G2.

I took photos of each sequence separately and together, then applied a grayscale filter to judge the values. If the values within a sequence were close together, that would be just fine, but the pattern sequence had to be darker than the background sequence, or the pattern motif wouldn't show up.



blended colors



blended colors with a grayscale filter

CARDING, SPINNING, AND SAMPLING

To begin, I blended a test run with my Schacht hand carders. I spun about 15 yards of each color—this was enough for a knitted swatch and a little extra so I could easily replicate the colors. I spun singles on my Matchless, set up with the medium whorl and Scotch tension. A woolen drafting method and fairly strong take-up created fluffy singles with lowish twist. After I plied the singles into a 2-ply yarn, I used a felted finish: the skeins soaked in hot water, with a little wool wash, for about 20 minutes. Then I moved the skeins into an ice water bath for a few seconds, then back to a hot bath, where I agitated them for a few seconds. A lightly felted finish helps any woolen-drafted yarn hold together and the fuzziness helps secure floats and cut ends.

With my test batch, I knitted one complete repeat of the pattern motif. Some colors were too similar the first time around, so I changed my proportions slightly, spun more yarn, and knitted another swatch.

When I was satisfied with a swatch, I replicated its colors in larger amounts and made the cowl. I dyed about 50% more fiber than I thought the cowl would require, just so I could experiment and adjust.

ANALYZING MY FIRST PROJECT

In the final analysis, I was pleased with the yarns, especially the heathered colors. Because I made my own yarn, I could create heathers that aren't available commercially. (Ann used only 3 heathered colors, where I had 7 available). Looking back, I don't think the pattern motif stands out enough; I should have aimed for more value contrast between the two sequences.

Now I'm ready to blend colors for bigger projects! I want to plan a Fair Isle knitting project from multiple color families, since everything in my cowl was blue or neutral. I also want to spin for woven plaids, where the rules are similar to Fair Isle guidelines.

Writing for this series and designing colors for a Fair Isle pattern has taught me some valuable lessons:

- You don't need an art degree to handle colors confidently. Analyze colors from inspiration photos to build your confidence.
- Optical mixing (see [Carding for Color, Part II](#)) is your friend. It produces complex, nuanced colors with richness and depth. Whenever you comb/card together fibers of different colors, optical mixing will kick in.
- A blending library is your next best friend. Stash small amounts of fiber in different colors. You can dye them, buy grab bags of colors, or save up leftover bits of color from other blending projects.
- If your project requires color sequences, or a range of values, pay attention to the relationships **within** and **between** these sequences.

- It's good to calculate proportions of different colors before you blend, and to keep records after you blend, especially if you want to replicate that color. But it's tough: once you start combining colors on the carders, you can't weigh them separately. I found it easier to work by eye, blending in colors until I liked the result, and then take a close-up photo of the rolag/batt. The combination of notes and photos works best for my brain; use whatever system suits your needs.
- Don't worry about "wasting" fiber or a color you've created. You can often salvage a rolag or batt by adding more colors. It's also fine, and sometimes necessary for sanity, to reject a blended color and start over. That rejected color can be added to your blending library. Color is never wasted—somehow, somewhere, it finds a way to be useful.

RESOURCES

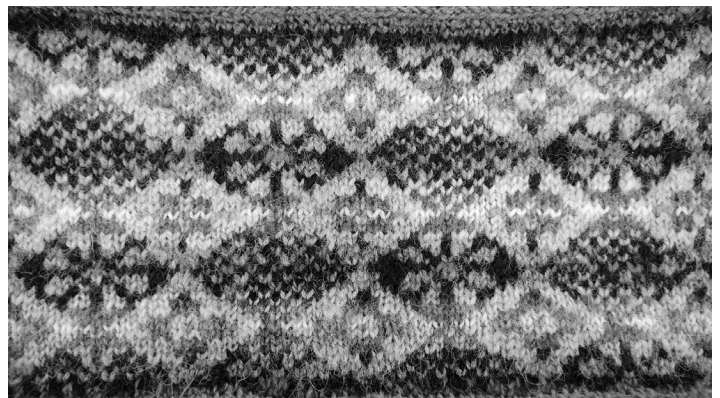
I relied upon these two books for this project; their bibliographies will lead you to many other resources for Fair Isle knitting.

Bajus, Janine. *The Joy of Color*. Willa Jane Press, 2016. Available at her blog, feralknitter.com

Feitelson, Ann. *The Art of Fair Isle Knitting*. Interweave Press, 1996.



Cowl fabric in color



Cowl fabric with a grayscale filter