

Elisabeth Hill

Designing Fabric

Complex Weavers

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Coffee in a Pretty Cup

My Grandmother remembers her mother (a hardworking Swedish immigrant) telling her, if she ever felt blue, to sit down and drink coffee from a pretty cup. This is both a practical remedy for women of a generation and class who didn't have the time, money or freedom for bigger indulgences, but it also illustrates a very important element of design. The objects we live with not only decorate, but change and influence our lives.

I would argue that in designing fabric we have a pretty good start. Think of the impact fabric can have on peoples' lives: the loved-to-a-raveling baby blanket, the jeans patched until there is nothing to sew to, the wedding dress, grandmothers' quilt, Dad's tweed jacket - all can have intense meaning and impact.

So how do we as hand weavers get from the impulse to weave to the creation of something that (we hope) will change or influence those that come in contact with it? Interestingly, there are a couple of things that work against hand weavers in this regard. One is that we are most often weavers first and designers only by necessity. I mean that many of us started by wanting to weave rather than wanting to "design" and have arrived at design through the desire to "think up" things to weave. Immediately, this distinguishes us from most designers who are primarily interested in the "product" rather

than the process. I imagine that for most designers the vision comes first, and the challenge (and what makes a much better designer) is understanding and mastering the process - whatever it might be. In contrast, we hand weavers are looking for ways to go deeper and deeper into the process - which is what engaged us in the first place - and the challenge for us is to give the product as much attention as we give the process. I have often had the experience of having woven something that has some design impact, but was a fairly simple weaving effort. I will get many, many comments and compliments from non-weavers, but very muted responses from my weaving community. In contrast, I have woven pieces that have been highly admired by my weaving community because they showed some interesting ingenuity or technical skill in the weaving, but they are completely uninteresting to the general public. So, how do we hand weavers bring these two worlds together and create designs that both challenge and engage us technically, while having a high impact design-wise?

Visual design is often the polar opposite of engineering: trading hard edges for subjective decisions based on gut feelings and personal experiences. It's messy, unpredictable, and notoriously hard to measure. The apparently erratic behavior of artists drives engineers bananas. Their decisions seem arbitrary and risk everything with no guaranteed benefit.

Scott Stevenson

In my mind, one of the first steps is thinking hard about the distinction between solving technical problems and solving design problems. This can be difficult because design ideas often demand technical solutions, and technical obstacles often demand design adaptation. But we must realize that while we are deep in the process of making

the threads do something new, interesting or difficult, we need to stand back and look and decide whether that particular technical feat improves the overall textile.

Another important step is recognizing that we are engaged in an aesthetic endeavor. We can embrace the very wide spectrum of aesthetic preferences, and we can enjoy the often puzzle-like engagement of designing cloth, but we do have to admit that at the end of the day we are trying to please the eye. So as simple as it seems, we need to look. We need to make sure that our final judgement is not of the amazing complexity of the threading we designed, or the way we simplified the tie-up, but in the appeal of the textile itself - its appearance, its texture and its functionality.

Design is easy. All you do is stare at the screen until drops of blood form on your forehead.

Marty Neumeier

So how can we approach design? Great question, and I don't really know the answer, but I will try to define some steps using a recent design experience of mine.

Set a Goal

One's goal can be determined in a myriad of ways: a contest, a need for a gift, a commission, a study group, etc. But I believe that the more specific you can be, the more success you will have. For example, *a baby blanket for my new niece* is less good than *a washable, soft, baby blanket that isn't too big for a stroller*. In my example case, I was required to weave a rya piece that was at least 500 inches square to fulfill one of the requirements for my Master Weaver certification. I made this goal a little more specific for myself by eliminating rugs and wall-hangings as possible projects. (I

had been traumatized by the flat, mangy rya rugs and dusty wall hangings from my childhood in the 60's & 70's.)

Find Inspiration

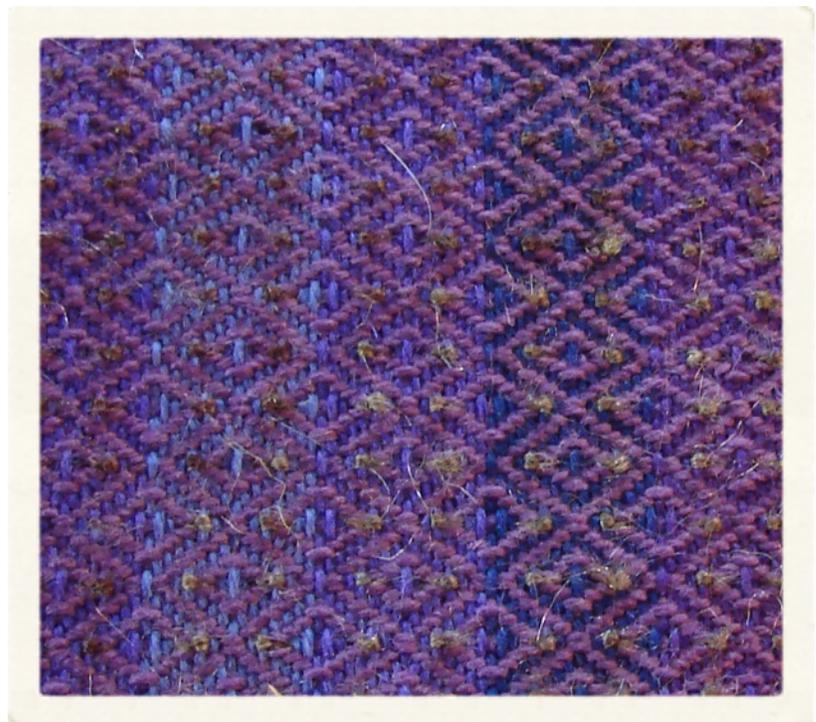
I had seen a book by Katherine Larsen called *Woven Coverlets of Norway*, and I was in love with the crazy-looking blankets with rya knots on one side and a sometimes colorful pattern weave on the other. I loved the spirit of those rya blankets because they seemed to me to embody the essence of good design, i.e. they solved a real problem - extreme cold - with a solution that not only dealt with the physical cold, but addressed the other woes of a long, bleak winter - darkness, monotony and melancholy - by introducing some color, whimsy and beauty to a practical item. I was also attracted by the challenge of making a large rya piece that would be light, soft and warm.

Understand How Your Technical Obstacles will Impact Design

The first obstacle that popped into my mind was weight. The large blankets shown in the book were often used on ships in the icy seas around Norway, so a heavy, dense blanket was probably a plus for them. We have the benefit of central heating so I wanted a light, soft version of what I imagined the blankets in the book were. I have long been a fan of mohair (soft, caress-able steel), so it immediately sprang to mind as a possible solution. If I used mohair in the rya knots, the blanket would be warm and light, but more importantly (for a 56" x 80" throw) I could space the knots a little less densely than I could if I were simply using wool and the mohair would fluff out to fill in the gaps. This would decrease the weight of the final product and save me some knotting.

My next design/technical decision was what structure to use for the foundation of the knots. My design idea, which was inspired by the rya blankets in Katherine Larsen's book, was to use a pattern weave as the fabric onto which I would be knotting. I loved the contrast between the fuzzy pelt side and the colorful pattern side. In deciding on a pattern weave for the foundation fabric, I had to assess my constraints. I have two 60" wide looms. One is a 16-shaft, and one is a 4-shaft. I wanted to use my 4-shaft because it has a weighted beater that would help me maintain my ppi even against the resistance of the knots. So I knew that I needed a 4-shaft structure. It had to be rhythmic and easy to follow, so that I

wouldn't lose track of the treadling when I was tying the scads of knots between weft shots, and it had to be dense enough to support all the knots while producing a soft, flexible fabric. Rosepath came to mind. It is a very simple but lovely structure that would lend itself to placing knots uniformly, keeping track of the treadling and not being



too busy. I liked the idea of a little diamond with a knot at its center. There are a few examples of this structure used in the Larsen book, which also appealed to me in the sense that there was some historical continuity.

Testing the Ideas

I started sampling to choose fiber, color, sett for the base fabric; and fibers, color and knot density for the pile. I had to experiment quite a bit, and I could never tell if the knot density was right until I got the sample off the loom and hefted it. Even then, I really had to use my imagination to determine if the weight of an 81 square inch sample would be too heavy at 4500 square inches. I finally chose to use one strand of 8/2 wool with one strand of (1000yds/lb) mohair for the knots. This combination gave the knots a varied texture and offered a color mixing opportunity that I loved. I also had to experiment with the yarn for the base fabric. As I mentioned before, I didn't want something too heavy or dense, but I also couldn't have a flimsy fabric to support all the knots. I wanted to use wool, because it is the traditional material, but I needed to experiment with various weights. I finally decided on an 8/3 wool for the base fabric warp and weft.

Flexibility of Vision

Working on color was exciting, but I found that many of my initial ideas had to be scrapped once sampled. I wanted a bright, lively design that was inspired by the traditional but brought something new. However, when I sampled using bright colors for the knots the results were fun but Muppetish fabrics that weren't sophisticated. I switched my knots to browns and grays



for a more natural look, but then had trouble with the foundation fabric color. I first used a series of reds/fuchsias and oranges (a palette I am very fond of), but despite the mohair's excellent coverage the bright background would show through, giving a disturbing balding-creature look. I finally tried several purples and blues which created the bright surprise underside I was looking for while not being in such contrast to the brown that it looked mangy.

Putting Your Stamp on the Design

I still needed to come up with a motif for the rya. Again, I was so entranced by the strange, whimsical motifs that the Norwegian weavers used that I wanted to use something whimsical too. So, keeping the peltish quality of the mohair and wool rya knots in mind, I designed a series of concentric circles over the surface of the throw. I drafted my design and placed the knots. (Sadly, in order to get my density just right I had to place my knots at the two points of the diamonds instead of in their centers.) I was happy with my design. I felt that I would have a useful, well-crafted textile that had a connection to the history of weaving while being something that was uniquely mine.

Executing

Because I had sampled and tested and graphed all my knots, I ran into very few problems weaving the blanket. I had a beautiful rya jig made for me by the husband of a friend, and the weaving was very meditative and enjoyable.

Critique



The critique process was a constant throughout the project: thinking hard about the original idea, trying to imagine the finished textile at every stage, critiquing the samples as they came off the loom, trying to separate the “original or inspirational notion” from the actual textile appearing before you. This last is always difficult. When you have an inspiring idea that drives you, it is never easy to let go of what doesn’t work.

This is an ongoing process and should be happening until the piece is complete. This is the “look” part and the “keep looking” part.

Evaluation

After getting the rya blanket off the loom and spraying it with water to finish, I had some things I

wish I had done differently. I wish that I had made the spots more organic and less uniform. I wish I had chosen a more natural palette for the foundation fabric.

This is where I could not let go of the **idea** of the colorful back as a surprise contrast to the natural fur look of the pile side. On the other hand, I would also be very sorry to give up the name my daughter gave the blanket the first time she saw it - Jabberwocky Pelt -



which I am sure was inspired by the purple “skin” under the fur. I also had to let go of the border of purple rose path and fringe at the edges. Instead of a pleasant surprise, they looked disconnected to me, and fortunately I could easily change those aspects of the design by hemming at the end.

What I did and do like is the hand, weight and softness of this blanket. I like the way there is ghost patterning of the knots showing on the flat side, and I like the way it has worked as a whimsical modern interpretation of the woven coverlets of Norway that I found so inspiring. The ultimate test of whether a design is successful or not may be in how it is used. The Jabberwocky Pelt has become a winter favorite for all the humans and animals in the house because it is soft, light and very, very warm.

