

Transcript for “Stitching the Earth”

By Kate Leroux

NACIS, October 11, 2023

Thank you.

We all had pandemic hobbies and mine turned out to be embroidery. This is my first piece. I bought it basically at random from Amazon. It was a kit which came with needle, thread, fabric, everything needed to create this. I lucked out though, because this particular pattern contains 11 different embroidery stitches, a really good variety, and I learned a lot from this first piece. However, the hobby may or may not have stuck.

[next slide]

Here’s my second piece, quickly bought from Amazon just for practice. I probably chose it because it wasn't more flowers.

Then the 2020 election happened, which dragged on for days without a result. I learned that stabbing something repeatedly with a sharp object was therapeutic. I finished this project during that long week and it became a habit.

[next slide]

I began to seek out more advanced designs. Things with lots of different stitches and textures. This particular pattern is by someone named Sarah Benning, who sells a variety of patterns that are more advanced. This one has some interesting stitches in it like tufting, which is what makes the carpet, where you make a bunch of loops and actually cut them all open to make that carpet texture. The blanket has a chain stitch. The person’s sweater has a weave, and it's the first time where I outlined with a finer thread stitch, like the books all outlined with a dark line.

To give you a sense of scale, I'm working with hoops that are 7 to 10 inches in diameter.

[next slide]

Eventually I started to think “I'm a map person. I should be doing more mappy embroidery, combine both of my interests.”

I still wasn't up for designing my own patterns. So I went looking for more geography-ish designs. I didn't find any maps, but I found a few in the neighborhood. On the left is the skyline of Detroit. I picked this from a handful of available cities because I thought it was intricate and well balanced. On the right is something that feels kind of topographic to me. For the first time I chose the colors and I experimented with creating a gradient.

[next slide]

Speaking of gradients, these are the threads that I have accumulated since mid-2020. I always want to use just the right color for each project. And so despite all these, I usually buy new colors for every new project.

[next slide]

I finally found this intricate garden pattern which was a really fun challenge to embroider. It's more like what I wanted to do with my embroidery. I found the overhead view really appealing. And I liked all the different textures and colors and different stitches that it used.

This is the point where every project started to take months rather than weeks.

[next slide]

Then NASA launched a social media campaign encouraging people to make crafts based on their LandSat imagery. It gave me the idea that I could make my own embroidery without someone else's pattern by using aerial imagery.

[next slide]

I'm taking a trip to Patagonia next year, so this gorgeous imagery came right to mind. This is Ushuaia, which is the gateway to Tierra del Fuego and the Antarctic.

[next slide]

And also this, the Patagonian ice field. As beautiful as this is, I struggled to think about how I might represent this mountainous terrain using thread. So I started to look for something flatter.

[next slide]

Here's some other LandSat images I considered. For each one, I considered what embroidery stitches I could use to accurately render the terrain, and how the composition would look once framed.

[next slide]

Finally I found this LandSat image taken just northwest of Christchurch, New Zealand. I love the intricate detail and the flat farmland I could recreate with thread.

[next slide]

Here's the result. I'm pretty happy with how it turned out. Getting started on the project was easy. I use something called water soluble stabilizer, which is stuff that comes in sheets. You put it in your home printer, print a picture on it. Cut it out, stick it on the fabric (it's adhesive), and then embroider through it. When you're done with the piece, you just rinse the fabric and the pattern dissolves. I definitely recommend using this.

Once I started embroidering, the process was not as straightforward as I wanted it to be. I used the image on the left for reference. But every time I needed to sew the next little green polygon, I had to

squint at the picture and decide which of the green threads was the best green to use. It was too much active brain thinking for an activity I was using to relax.

[next slide]

When looking for my next project, this area caught my eye. It's a region called Jaén in the southeast of Spain. I like how it looks pixelated or like half-tone printing. It's the largest producer of olive oil in the world with 20% of the world's production. And so it has cool-looking olive Groves making dots all over it.

[next slide]

I took a ton of screenshots in different locations and zoom levels, and finally settled on this area. It has a good mix of olive oil groves and other landscape. And this has dramatic ridge line going diagonally across it, which makes an interesting composition.

[next slide]

In order to make the very process less mentally taxing, I decided to modify the image before applying it to the fabric. I tried a variety of techniques in Illustrator and Photoshop, like Image Tracing (on the left) and blurring (on the right). I realized after this that I really need the full detail in order to embroider it. So, these approaches didn't work.

[next slide]

What did work was reducing number of colors in the image. I did that by changing the mode to Indexed Color and set the number of colors (after some experimentation) to six.

[next slide]

On the left is the image and on the right is the reduced color image. As you can see, it's not wildly different, and it's still quite detailed. The six colors in the image are shown at the top. The numbers are the thread colors that I chose to match them. At this point, it still wasn't easy enough to embroider, because there are a lot of browns.

[next slide]

So I opened the Color Table for the image and I manually replaced each natural color with a bright color, ones that were easy to distinguish from each other. This is one place where a gaudy rainbow color scheme is actually helpful.

[next slide]

I was able to refer to this colorized image to help me figure out which brownish thread color went where, and what the average color of an area was. And it was overall more paint-by-number. As I went, I just needed to think about textures rather than color decisions. I printed these three images and carried around with my embroidery hoop.

[next slide]

And here's the result, months later. My preparation steps made the process much easier, as I hoped. I'm relatively happy with how it turned out overall. It contains thousands and thousands of little French knots, which are the little dots. Each one is embroidered individually. My favorite part is the trees at the bottom. I found that part of the of the embroidery very realistic.

I'm satisfied enough with my first foray into to mountainous terrain, but I'm looking for ways to improve. I improved on it during the course of this project. If you look at the the ravines that I did early in the project (which are those kind of snaky dark things in the center), I find those a little too high contrast. And then if you look at the hills that come down from the white road that goes along the diagonal ridge line, those have better color blending and I think look more realistic.

[next slide]

Now that this is finished, I'm looking for my next location to embroider. I'm hoping to find something that lets me make a piece like the garden piece, that contain lots of different stitches and textures. If you have any ideas of a place like that, hit me up. Most of the embroidery pieces I showed are with me today, so if you'd like to see them in person, you're welcome to.

Any questions?