

Made in North Carolina: Skill Versus Scale in a Modern Jeans Workshop

Victor Lytvinenko

Victor Lytvinenko is co-founder (with his wife, Sarah) and designer at Raleigh Denim, a small jeans manufacturer located in North Carolina. Founded in 2008, the company has gotten considerable attention in both the fashion and crafts press for its historically inspired production methods. Victor would like to thank Sarah for her extensive contributions to this article.

Abstract

This article presents the story of the founding of North Carolina “jeansmiths” Raleigh Denim and the company’s subsequent development, using historic methods and machinery and adhering strongly to principles of sustainability, high craft values, and individual input over automation. The article highlights Raleigh’s specific production dynamics, the loss of skilled garment-making businesses in the region, the great age of top-quality, craft-informed American industry in the earlier 1900s, and the challenge of maintaining small-business and hand-made ideals within the larger world of modern industry.

Keywords: Raleigh Denim, jeans, jeans-making, denim, North Carolina, Cone Denim, selvage denim, sustainability.

When my wife, Sarah, and I started Raleigh Denim (Figures 1 and 2) we had no children, didn’t own a house, drove old paid-for cars, and really had very little to lose in terms of quantifiable assets—the perfect time to start a business. For “start up capital” I sold a video camera and my mountain bike, which brought in enough cash to buy our first three



Fig 1 Raleigh Denim jeans. Photograph by Nick Pironio.

sewing machines from a liquidator. I set them up in our living room, in lieu of a sofa and chairs. I had been making a pair of jeans each day for about a month, learning about construction through deconstructing and reconstructing, while Sarah adjusted our patterns after each iteration. We had fallen in love with denim, as a material, with jeans, as an American wardrobe staple, and with jeans-making, as a craft. Fortunately, for people interested in textiles and sewing methods, North Carolina still has a wealth of resources nearby.

I visited small towns near the mountains, which once hosted some of the biggest jeans manufacturers in the world. Most of the factories have shut down, and the ones that

haven't are now running on skeleton crews. In many southern towns, the best place to inquire about goings-on is at the local diner, so that's where I'd head to ask about retired factory workers and mechanics. Most people were happy to point me in the right direction and I found myself many an afternoon in someone's garage learning how to set up and repair old sewing machines, or different techniques for assembling the fly and pocket bags. One man's three-car garage was filled to the brim with machines and machine parts and thread. Literally, sergers stacked next to and on top of each other according to serial number, industrial file cabinets chock-full of manuals and parts catalogs, hundreds of tiny hardware organizers, each



Fig 2 Victor and Sarah Lytvinenko. Photograph by Nick Pironio.

with little labeled drawers for needles, bobbins, folders, screws, presser feet . . . you name it, he had it, and if he didn't, he'd get it. Being with him in that space was like being inside an encyclopedia. We talked all day long that day and frequently on the phone afterwards.

The two sample-makers at the nearby Cone Denim Mill, Wanda and Evon, have been especially instrumental in our development. When Sarah and I were producing our first order, we didn't have the extra-special antique hemming machine that we do now. Instead, we took one needle out of the double-needle waistband machine and handfolded the hems (three-eighths of an inch at a time), feeding them through manually. Wanda and Evon got wind of our tedious task and called us over to Greensboro to use their hemmer. We stuffed our little Nissan Altima full of boxed-up jeans and sped over to Cone, where they saved the day. They've talked us through some tricky parts of construction over the phone when we didn't have time to visit them in Greensboro to learn in person. (After a while, I became proficient enough to tune up their machines when we'd visit, as a small thank you.)

Even as we were beginning our label, we were reluctant to consider ourselves part of the "Fashion Industry" because we felt like much of it is superficial and disposable. Our desire to be the exact opposite of that drives our mission and our decisions as we grow. We'd encountered so much history and met so many people who lost their livelihoods as a result of giant factories caring only about the bottom line, we decided to take a much more idealistic approach. Our first mission statement read like this:

We are on a mission—
to build the ideal pair of jeans in principle
and form,
to embrace quality before quantity and
the humanness inherent in that idea,
to be a part of the revitalization of the
textile industry in North Carolina and
America,
and to be socially, environmentally, and
economically sustainable.

That may have been a bit naive, but we believe it's exactly that thoughtfulness that's missing in many of the goods we consume, so we might as well aim for it. Immediately, the issues of skill and scale arise. How does one make garments in quantities that allow us to take advantage of economies of scale, without sacrificing craftsmanship or, better yet, while highlighting craft? We decided the best way to do this was to actually make the garments ourselves, traditionally (without the use of automated machines). The in-house balance between craft and manufacturing would allow us to have more control over the design and quality of the final products.

Initially, Sarah and I were the entire production team—cutting, sewing, finishing, packing, everything. Sarah's father put in the rivets for our first order of 114 pairs (which took us nearly five months to produce), and our mothers brought us dinner at work and ironed out seams for weeks before shipping. While that allowed us to learn about producing more than a few pairs at a time, relying on family and making six pairs per week wasn't sustainable. Not to mention it leaves no time for designing or marketing or development or much else at all. We needed to be more efficient, and we needed to find some teammates.

We intended to hire some of the workers who had been displaced from factory closings as more and more manufacturing moved overseas, but that proved to be more difficult than we anticipated because those factories were often located well outside the city and commuting was a challenge. We ended up hiring people who had enough sewing experience to be comfortable on an industrial machine, but, more importantly, had good dexterity and a penchant for detail (Figures 3–5). We teach them our methods and order of operations, passing along the old-world skill set we've learned from the generation before ours. This has worked out really well. While there is a lot of training involved before someone is “up

to speed,” only people who are dedicated and interested put in the time and go through such training, so we have cultivated a small, nimble, hard-working team. Every person, even those who ultimately have nothing to do with operations, spends time working in production so we all have a solid grasp of the jeans-making process from start to finish. We call ourselves “jeansmiths” to get that point across. Because everyone has a comprehensive understanding of what is happening on the production floor, we catch mistakes early and all take pride in being masters of a trade.

To keep our focus on being high quality rather than seeming high quality, we don't pay our employees by the piece; we pay



Fig 3 Hem and seam detail. Photograph by Nick Pironio.



Fig 4 Coin pocket detail. Photograph by Nick Pironio.

salary or by the hour. That way people are not shy about catching mistakes and redoing steps if need be. And there is very little pressure to go faster, only to do things well.

Finding, fixing, and funding the tools and machines was another tremendous challenge. With more people working with us, we needed more machines to be working as well. We used antique machines (between forty and eighty years old) in the beginning solely for economic reasons—they were cheap. I would buy two or three of them, and rebuild one with parts from the other—an ongoing task. We went through a stretch where at least one machine would break and need repair every day and I spent a season reading service manuals and calling long-time mechanics. We fashioned all sorts of small

jigs and creative solutions to parts problems to keep the production going. It wasn't incredibly efficient, but it got us through one order and on to the next. Every time we got paid we would reinvest into more materials and better machines, making the production smoother each season.

After using old machines for a while, they started to inspire our work. Even though they were a bit worn and fickle, it really is wonderful to work with classic, simple machines, many of which were made in America during a golden era of manufacturing, when “made in the USA” implied quality and craftsmanship. Here we are almost a hundred years later manufacturing with the same machines with a similar commitment to craft and



Fig 5 Each leather waistband patch shows the edition number for that specific pair: Photograph by Nick Pironio.

quality. I think about the people who made the machines and their attention to their craft, proven by the fact that they are still in working order—the quality of the steel and the fabrication of the parts. The machines make me want to make better things (Figure 6).

Another of our most difficult problems was meeting minimum orders from our suppliers. Cone Mills is one of the oldest, best mills in the United States and, arguably, the world. They have been making denim in the same building in Greensboro North Carolina, an hour and a half away from our shop, since 1905. The fabric woven on their antique shuttle looms is darker and stronger,

and fades over time as the indigo chips off to reveal the white thread core. The weave of selvaige material is tighter and the small inconsistencies in the slub of the weft yarn give the denim a distinct and coveted character. It's these characteristics that allow denim to break in, and it's the breaking in that we love about denim. Cone Mills is the only place in America with the tools and knowledge to weave selvaige denim, and it was not easy to acquire. Cone is one of the biggest mills in the country and understandably didn't have much interest selling a few hundred yards to us.

In the very beginning we had to buy one-off rolls of fabric, the leftovers, which made

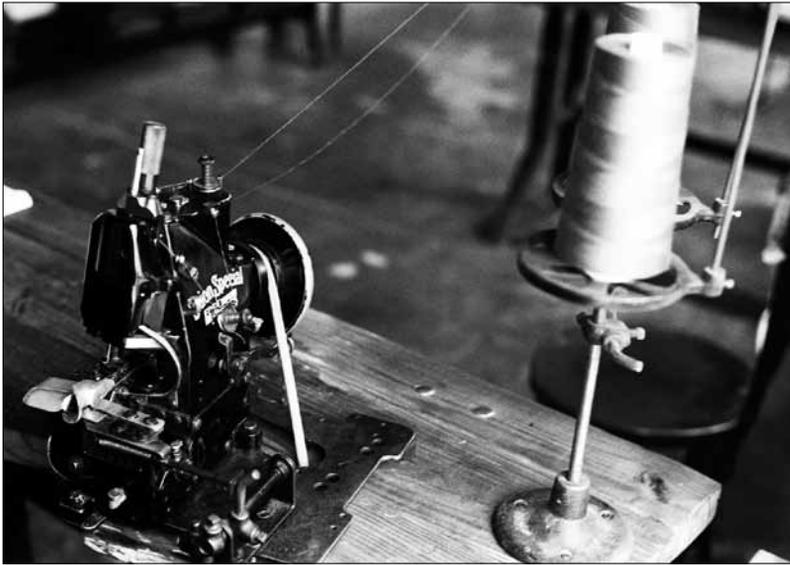


Fig 6 A Union Special leg-hemming machine dating from 1921. Victor Lytvinenko estimates that only thirty or forty of these machines still exist; the one at Raleigh Denim is used every production day. Photograph by Nick Pironio.



Fig 7 Raleigh Denim pattern-maker Christel Ellsberg—aged 76. Ellsberg was one of the first pattern-makers Levi's ever hired and has been making jeans patterns since the 1960s. Photograph by Nick Pironio.



Fig 8 A worker cuts through many layers of denim, using a paper pattern as a guide. A metal mesh glove is worn to protect the hand. Photograph by Nick Pironio.

it really hard to design new styles, plan our production, and to balance cash flow to stay afloat. We had to buy all the fabric we could find up front, which meant carrying the costs for nearly a year before we were paid for the jeans that fabric yielded. That made for some stressful beginning seasons, but our business slowly grew. We paid our bills on time and built a great relationship with the mill. Now our production is large enough to warrant thousands of yards instead of hundreds, and we are able to meet most of the minimums suppliers require. We're even able to develop some very special denims that Cone Mills makes exclusively for us. We love denim most when the indigo leans toward blue-green shades, or blue-black shades. By working with Cone, choosing shades, weave structures, fill weight, etc., our design process has become much more deliberate, and

the final product is more special for our customers.

Our company has grown to a size that is literally sustainable: a "sweet spot" for small manufacturing, where we fit in to the bigger industrial pipeline but are able to stay true to our ideals. We have survived the steep learning curve of setting up our own production facility. We have patterns properly adjusted for our particular process and we finally have at least one of each of the many machines necessary to make a proper pair of jeans (Figures 7, 8, 9). We've had time to train our team and everyone is working effectively. We've grown organically, but steadily, educating our clients along the way about what sets our garments apart, and we have a group of loyal champions helping to spread the word. We have been fortunate to have clients and customers that



Fig 9 Sewing the leather tab on to each pair of jeans is one of many processes requiring specialized equipment. Photograph by Nick Pironio.

understand our goals and limitations. We don't need to sell a tremendous amount more than we are, so we pick and choose the most fitting stores to represent Raleigh Denim—places that understand Process is as important as Product.

We recently moved into a bigger, brighter shop with large windows in the arts district of Downtown Raleigh. When we moved in,

we put the North Carolina state motto—"to be rather than to seem"—on the front wall because it sums up what we're aiming for.

I think we've found a good balance, and from here will push ourselves to learn more, and create more. We hope to use the brand trust we have built in the denim market to expand into full collections for men and women.