

# ON THE MAKE

Students at North Bennet Street School talk about making their first instruments

By David Templeton

**R**hea Burdick, a classical composer and violinist who majored in composition at New England Conservatory, was working in a Washington, D.C., music store, caring for and cleaning the shop's stock of rental instruments when she started wondering about the objects' origins.

"I started getting curious about how the whole instrument comes together, how it's actually made," she says, "and I got this idea in my head that I could build a banjo. My dad was a machinist, and my grandad was a woodworker, so there were all these tools lying around, so I started building a banjo—and I quickly realized you need some actual training to build an instrument."

Skipping ahead a bit, Burdick is is now, at press time, in the second half of her second year as a student in the acclaimed violin making program at Boston's North Bennet Street School. She recently completed construction of her second violin, has just started a third, and will soon begin making her first viola. She'll start her fourth violin by the end of the semester.

"It's been an exciting journey," says Burdick. "With that first violin, I went in thinking it was going to be hard, and it turned out to be every bit as hard as I thought it would. It's very time consuming—that's the first thing you learn. There are just so many steps, so many details, so many parts."

The good news is that with every additional instrument she's made, the process has gotten faster and gone more smoothly.

"The last instrument took half the time the first one did," she says. "On that first one, the hardest thing was finding the patience to really get everything right. That was the hardest for me." That, and finishing the nut—the small wooden piece next to the fingerboard and right below the peg box required to hold the strings the proper

Rhea Burdick



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distance from the fingerboard. "Doing the nut was so hard," she says. "It looks pretty simple, but it has to have a very specific shape. I kept thinking, 'Why is this not done yet?'"

Burdick has found that some of her earlier pursuits and pastimes are proving to be valuable training for making violins. Working in a music store gave her perspective on the durability and structure of violins, while composing for orchestras taught her how to maintain focus and attention to detail.

Some of her most valuable lessons, however, came from delivering packages. "I was responsible for putting together all of these delivery routes," she says. "So, I would make between 50 and 70 deliveries a day. Doing that, there is a large amount of organizing your time in an efficient way. I learned that driving fast does not get you anywhere faster, but not stopping does. The more times you stop to take a bathroom break or grab a snack, the longer it's going to take you finish your delivery. That's very relevant in making a violin. You

need to learn to stack time, and stack your processes to be as efficient as possible.

"That," she says, "is one of the most important things I've learned so far."

And is she satisfied with how that first instrument turned out? "Right now, I am," Burdick says. "But I am given to understand most people are happy with the results of their first violin, and then they see it ten years later and go, 'Yuck!' But for now, I'm pretty happy with it."

For Burdick, the best moment of building that violin was when the neck went on. "It was this very emotional moment," she says. "As someone who's been playing my entire life, it was so cool, that moment when I could look at this instrument and say, 'This is so cool. I can't believe I made that.'"

Founded in 1881 by the social-reforming philanthropist Pauline Agassiz Shaw—originally as North Bennet Street Industrial School—the institution was created as a way for incoming immigrants to America to acquire skills that would lead to steady jobs in the industries of pottery and printing,

metalworking and watchmaking, printing and engraving. Over the years, the school added bookbinding, cabinetmaking, carpentry, locksmithing, and jewelry repair.

The school was over 100 years old when it added violin making and repair in 1983.

Today, the violin department is headed by Roman Barnas, who began making violins at age 14 in Poland. In the intensive three-year program, students build a total of seven instruments: six violins and one viola, which they may keep or sell. Along the way, they are taught everything needed to acquire a job making, stringing, repairing, and restoring stringed musical instruments.

Eric Rodriguez is a first-year student at North Bennet Street, currently in his second semester in the violin making program. Originally from the Dominican Republic, he moved to the Boston area from New Orleans, where he had been working as a freelance violinist for the last 12 years. In addition to his years of familiarity with how a violin functions, he also brings some basic wood-working skills to his training as a violin

maker. Though Rodriguez is still putting the finishing touches on his very first violin—"I plan on keeping it and playing it for many years," he says—he has already begun making some elements of the second violin and says he is enjoying the process.

"I have always been fascinated with the violin's construction and its sophisticated mechanics to produce sound," says Rodriguez, who's been playing the instrument since he was five years old. "A well-made violin can be used to create an incredible range of sound colors and textures. I also really enjoy working with my hands."

Seeing the different parts of the violin emerge slowly from solid blocks of wood has been very rewarding, Rodriguez notes. "While building my first instrument, I have had the opportunity to practice a variety of skills as well as learn many historical aspects regarding the design and the construction of a violin," he says. "The experience has been incredibly rich, fun, and humbling."

A class at North Bennet Street is very much a hands-on experience, he points

out. But with a student's first instrument, half of the work is done by the instructor while the student carefully watches, then repeats the skill being learned themselves before moving on to another element.

"We learn through a series of demonstrations and thorough explanations that are often complemented with pictures, lectures, and anecdotes," he says, adding that, though he is only just starting out, he feels that he's already getting the hang of it. "I have surprised myself with the level of precision I have been able to achieve when it comes to measuring and shaping during certain steps of the violin making process. Oftentimes these tasks require very fine motions, steady hands, and a high level of focus for extended periods of time."

Asked about any key lesson or lessons he's learned so far, specifically any skills or tricks that are already proving to be valuable, Rodriguez names three.

"To always have sharp tools, a curious mind, and lots of patience," he says.

Emmeline Nguyen is now in her third semester at North Bennet Street, having essentially completed one violin—"I'm nearly done with the varnishing, and after that is the setup"—and has pulled together "bits and pieces" for the next one. "Those pieces will hopefully get more attention once I'm not always in the varnishing room at odd hours," she says with a laugh.

Nguyen was raised in Roanoke, Virginia, where she grew up playing the violin but switched to the viola in high school. An honors-track student, she admits she'd never had the inclination or encouragement to take art or woodshop classes, so her eventual interest in violin making came as a surprise to everyone, including herself, especially since it began with making miniature dollhouse furniture.

"I guess it's kind of an odd entry," she says, "but during lockdown, when I was taking a break from college, I got very into making dollhouse furniture. I'd never done any woodworking, really, or anything where I worked with my hands, but suddenly I was making this dollhouse furniture, working with craft store wood and other hands-on materials, and I was really enjoying it."

The jump from miniatures to violins came about when she took her younger brother's violin bow to a shop in Charlottesville to



Eric Rodriguez

have it rehired; while there she struck up a conversation with the luthier. “I was curious about the tools he was using, because I was suddenly interested in tools,” she recalls. “That’s when I started thinking about the path to violin making, which had never occurred to me. I guess I assumed that making violins was just a family trade or possibly through some apprenticeship-to-master situation.”

It was only then that Nguyen learned that “regular people” could choose to attend schools where instructors taught them to become violin makers, as opposed to some mysterious process in which one’s untapped violin making aptitude is magically identi-

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fied by ancient, shadowy talent scouts—something like having an owl deliver an invitation to attend Hogwarts.

“I always thought violin making was something that is somehow bestowed upon you, not something that you could just decide to pursue on your own,” she says. The luthier who rehired her brother’s bow gave her a list of three schools, including North Bennet Street, and by the next morning, having done some deep-dive investigation, she’d applied online to two of them. “I guess I didn’t do super-extensive research, but I suddenly knew *this* is what I wanted to do.”

Emmeline Ngyuen



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She was accepted to both schools and ultimately chose North Bennet for its small classes and collaborative work environment. Now that Nguyen is nearly done with the first of seven instruments, she is certain this is the path for her. “There is something about learning to make a violin that is both formulaic and artistic,” she explains. “There is a lot of historical precedent to everything you do, which is nice. We are very guided by tradition. But there are plenty of openings for creativity—there are things you can tweak and new problems to solve. For someone like me, who requires a lot of mental stimulation, it’s a really good place to be in terms of a job.”

Nguyen’s first violin, she points out, was a collaborative process. “Fortunately, a violin has two sides, so Roman pretty much did one side while I watched, and then I did the other side while he watched,” she says. “With the next one, it will be a lot more me, a little more self-paced, but still under Roman’s watchful eye.”

Asked what she plans to do with her first violin, Nguyen demonstrates a strong sense

of practicality. “Honestly, I’m not very sentimental,” she says. “If somebody wants to buy it, I’ll gladly sell it.”

Given that she plays the viola, of course, she’s looking forward to the time, in a couple of years, when she is required to make one herself. She will have had quite a bit of experience by then, and the viola is the last instrument students make before moving on to their “graduation violin,” the culmination of everything they’ve learned.

A jury of expert luthiers is brought together to examine the graduation violin, grade it, and pronounce the student ready to graduate. Though that day is still some time in the future, Nguyen is already thinking about what she’ll do with her violin making skills. “I know I don’t want a shop of my own; that’s not happening,” she says. “I don’t want to be the one who has to pay the bills and keep the lights on, but I’ll join somebody else’s shop, definitely. Maybe I’ll do restoration work. I’m not sure. But whatever it is, I think I’m going to love it.”