

LOOKING BACK AS A LIFELONG PURSUIT

Luthier Timothy Johnson makes ancient instruments for the contemporary player

By Sarah Freiberg

rom childhood, Timothy Johnson was fascinated by history. He grew up in Connecticut, across the street from one of those places that could claim "George Washington slept here." A self-proclaimed introvert, Johnson admits, "I was an odd kid. I was really into the Revolutionary War, old cultural artifacts, Shakespeare, and I liked classical music."

Curiosity led him to his first instrumentmaking endeavor. "In my family," he says, "if you wanted something, you made it. I made my first 'lute' in eighth grade, after seeing a reproduction of a Renaissance still life of musical instruments. It wasn't a real lute, but it made sound and looked like one. Let's put it this way—it would have made a good theater prop for a Shakespeare play, which satisfied me. Anyway, it was enough to turn me onto a lifetime of building."

By his senior year of high school, with the aid of his shop teacher and a book titled Making Musical Instruments, Johnson made his first serviceable lute—one that he used to study on while in college. He went on to make a couple more lutes in the following college years, and it became his secondary instrument at the Longy School of Music. At the time, Johnson was a Renaissance wind specialist, playing primarily oboe, traverse, and shawm.

It was at Indiana University that Johnson found his calling. "I kind of fell into the violin-making program, as my wife was working on a doctorate in early music there." He realized it was a perfect fit. "I would rather perfect something in the shop and send it out into the world and let someone else make it sound its best. And I realized I could make a living doing this—after all I thought I'd do something safe like performance, and there aren't a whole lot of jobs for Baroque oboe."

ohnson feels that "most early musicians are drawn not just to the music but by the whole thing—the culture, history everything about earlier time periods." He certainly was. When his wife and a colleague formed a medieval ensemble called Altramar, Johnson got busy making sets of instruments for the ensuing seven recording projects. The recordings were far-reaching, with music stretching from Iberia to Ireland, and Johnson learned a lot—often relying on iconography to inform his building techniques, as there were no physical examples of the instruments to go on.

Unlike his first lute, these instruments were quite playable. "

For Altramar's Celtic trilogy, I made a crwth, a cruit, and a brass strung clarsach," he says. "We played one program in Galway, and found to my surprise that the wirestrung harp was a bit of a novelty to the Irish harp player I met, as it really hadn't been rediscovered over there yet."

The majority of Johnson's output since then has been violins, violas, and cellos-Renaissance, Baroque, and modern, with some violas da gamba thrown in as well. Even when working on modern instruments, his study of historical instruments instructs him.

"I have been doing a lot of work with Dr. Kathryn Steely, president of the American Viola Society, on ergonomic 'post-modern' violas, which incorporate new materials and construction techniques into new designs using 16th-century geometry. The new construction techniques are informed by my work with the Oberlin Acoustics Workshop and traditional Baroque lamination techniques to decrease weight and maximize the acoustical response."

Given his interest in earlier time periods, it should not be surprising that Johnson uses mainly traditional hand tools to make his instruments. He is a strong believer in what he terms "16th-century geometry" as a way to design and construct instruments. François Denis' seminal book Traite de lutherie, published in 2006, has revolutionized stringed-instrument making by looking back at a much earlier form of measurement.

Johnson describes it this way: "Denis cracked the code of design that the Amati family used—it goes back to the ancient Greek design of temples. It's basically a recipe using compasses, arcs, and proportions—it is geometric and harmonic." An example would be taking an index measure of something like a door of a temple, and using that as a basis for all of the rest of the building—so the ceiling might be seven doors high and the floor 12 doors long. "The Amatis used this

proportional geography, generating a form based on an initial measurement. I'm still trying to copy what Andrea Amati came up with—harmonic proportions. It is holistic thinking about visual and musical harmony."

ohnson enjoys the variety that constructing early instruments offers him. "Modern players often have a particular sound in mind, one that is big and bright and will fill a hall. Baroque players tend to want a

more variable color palette—color that they can manipulate." Johnson travels to various festivals and workshops in the summer, which is an ideal time to meet prospective clients.

"When I get commissions, I try to meet the players. I'll ask what groups they are in, what time period they like, and try to match the instrument to what they do."

Johnson feels this interaction is essential to happy customers. "Early-music specialists have a great sense of sound and a clear idea of what they want in an instrument. I can usually produce an instrument that they feel they have known forever, because they are part of the process."

Over the years, Johnson has seen a lot of transformation in the making of Baroque instruments and is excited about what he is learning. "I've spent 25 years doing this, wading through the urban legends of the early years—back then we were wanting to make 'Baroque' instruments more different from modern than they really are. We were grabbing onto examples that hadn't been changed—but hadn't been changed because they hadn't been functional. I suppose you have to suffer for your art."

Some of those instruments had big thick necks and "wacky" shapes. In fact, Johnson knows now that the shape of the neck is not actually very different than modern designs.

Currently, luthiers have much more to go on, explains Johnson. "Now we do have some examples of early instruments that were really played, such as those at the Ashmolean Museum. We are at a time when we are not just scratching the surface. We are making headway with historical varnishes, pigments, and surface preparation."

The work is challenging though, as the materials are not easy to work with, and, sadly, the instructions are long gone. "In the preindustrial era, makers had great ways of using what was available to them. These weren't secrets—they just got lost over time. I love the mystery hunt—trying to find 17th-century artists' materials, and trying to put together how things work." And the quest is ever challenging: "I'm being informed by players, and some of the things I'm figuring out are informing the players.

"There is still so much to be discovered and enjoyed."



