Poetry in Motion: Benoît Rolland on the Making of Bows 1500 and 1515

STRINGS JUNE 2, 2016



Award-winning, Parisian-born bow maker **Benoît Rolland** studied both piano and violin, graduating from the Paris and Versailles conservatoires. He trained as a bow maker in Mirecourt, France, (1971–75) with master maker Bernard Ouchard, and opened his first studio in Paris in 1976. His bows have been played by Yehudi Menuhin, Mstislav Rostropovich, Yo-Yo Ma, Anne-Sophie Mutter, Kim Kashkashian, Lisa Batiashvili, and many other professional musicians. He moved permanently to Boston in 2001, and was awarded a MacArthur Fellowship in 2012.

Rolland's career is multifaceted: traditional bow making entwined with contemporary art, innovation, and education. In 2016 he is drafting an educational initiative called the Heritage Project. With it, Rolland aims to communicate his bow-making knowledge and celebrate the heritage of the French School of bow making, while also supporting continued innovation. Rolland penned this feature to commemorate the making of his 1,500th and 1,515th signed bows. The process, though exacting, is revealed to be as much poetry as it is motion.

December 2014

I am about to make my 1,500th signed bow. This is a moving moment, after 45 years making bows nearly every day. I've built 1,850 pieces actually, starting with 350 bows for apprenticeship. And I've tested 20,000 bows over the years. As numbers grow, so does my fascination with performing music—its complexity, and the commitment and energy it demands. I postpone the making of Bow 1500. The time is not right; I am absorbed by the commissioned list and wish to reserve a special moment for this artwork, dedicated to musicians.

May 2015

I reach Bow 1515, which I skip—along with 1500. The two bows will be twinned, and I intensify my work at the bench to reach the point where the hand flows with intention while the mind navigates between music and bow making.

Summer and Fall 2015

Moving to a new studio. It's flooded by a particular incidence of the Northern light that I have been looking for since Mirecourt. The first bow I make here is for violinist Leonidas Kavakos. The concept for 1500/1515 is taking shape. I am obsessed with it, but shall wait some more as I concentrate on the next bow, for Yo-Yo Ma. Designing bows that respond to musicians' complex intentions pushed my understanding far beyond my perception as a violinist. How should lifelong listening crystallize in two bows? It will be a joy to try pieces in my stock that I have, until now, refrained from using: Fine woods are natural wonders that invite respect and restraint.

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November 13, 2015

A tragic link in the long chain of violence around the world, the attack of the Bataclan in Paris targets a popular music venue in existence since 1865. Violence is never acceptable, and I have stood against it since early in my life. I feel that each of us can act toward a more peaceful and just world.

I decide to give Bow 1515 to Community Music Works, a committed nonprofit that brings string music to young people living in severely disadvantaged contexts. Perseverance, artistic dedication, and sharing music link our paths. Bow 1515, like bow 1500, will be gold mounted with conflict-free diamonds and a novel inlay. Community Music Works will sell this bow to a musician or a patron willing to support its work. Then, in its owner's hand or care, the bow will move on to be played on professional stages. So the bow can mark a continuity between children discovering music in unlikely contexts and the finest soloists. Music offers the chance of a link.



Rolland shaping the stick of Bow 1500

December 2015

I choose the various materials and a piece of pernambuco with rich sound potential for Bow 1500. In 1984, I was attracted by its volume, density, and weight in the hand, and I cut slightly curved "blanks" in the 80-year-old plank. Pliant, resilient, this wood has a sensual presence; it sounds under the lightest touch, gives a clear G note to a finger tap. Rubbing and tapping give different kinds of information. I am curious to observe how these sounds will evolve as the bow shapes. Much is to be discovered as I go down to its core.

Early January 2016

A first shaving reveals a deep, dark orange. Under the plane, I seek how the vibration travels, identifying strong and weak points—like sight-reading a score. It is a wildly reactive wood: The bows should be thrilling to play, exuding a palette of overtones, but will be nerve-wracking to build. There is a risk that they may warp over the flame or even break in the course of the making. I memorize the wood patterns, constantly correlating playability and sound to ultimately obtain a warm, rich timbre and response to the lightest contact with the string.

Each few millimeters will have a slightly different profile. Making a lean, muscle-like bow requires taking risks. We love this emotion when the musician gets "under our skin"—in terms of carving bows, it means routinely working to a precision of 1/50th of a millimeter, leaving no point thicker than it really needs. At playing, I'd like a bow that the hand forgets.

The numerical data I record on bows represents but a fragment of the complexity of this object. Each new bow offers potential for multiple combinations that I must comprehend and order before touching the bench. Music accompanies this process, like Debussy's *Des pas sur la neige* for Bow 1000. Preparing Bows 1500 and 1515, I increasingly listen to André Previn's *Song*, alternating with Schubert's Piano Sonata D960. They outline a quality of silence around them, a calm that guides the mind.

January-February 2016

Looking for a jewel quality to the frogs, I solicit my wife, painter Christine Arveil, for a design. I will hand-inlay gold parts that look like brush strokes, rather than resort to computerized technology. It will be challenging, given the hard ebony and the curved, hollowed frog. I build minuscule tools to carve the narrow grooves, and practice setting gemstones flush in gold, a technique that I find is quite difficult.

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After a month exploring options, we adopt a design that I first execute over an ebony blade, noting a few minor changes. Next, I make an ebony-and-silver frog to further verify how lines and volumes play together. I later prepare the gold pieces. The calligraphic line with a diamond spark evokes a bow stroke. Christine has expressed the music dynamics while extending the black canvas of the frog to integrate ferrule and button.

February 26–29, 2016

I begin the rough out—the most physical phase in making a bow, and a decisive one: all that follows will be a perfecting of this base. By segments of 30–45 minutes, uninterrupted fast movements define the shape. Between them, the progression is controlled visually and by muscular perception, flexing the stick with both hands. Following the teachings of the French School, I don't allow the bow to leave my hand, which is serving as a vice; the gesture is ample, never chipping the wood, never changing tools. I feel the evolution of the vibration through my body, and listen to the sound of the plane as I shave this particularly hard wood. Adrenaline rush, focused energy: Every element that appears under the plane is analyzed in real-time against stores of memorized data. A good bow harmonizes contradictions (agile and athletic, yet soft and sensuous). A fast decision process selects, balances, and defines the multiple components of these opposites as wood is removed. There is no going back. Because I cut my blanks slim, no meaningless removal of wood should distract the attention: The rough-out will play on about 20 grams of wood dust. Once Bow 1500 reaches a satisfactory profile, I go on reproducing the concept into 1515. I cannot simply repeat my work, because each piece of wood is different. I need to stay alert.



Rolland sets the diamond in the frog of Bow 1500

Early March 2016

I set aside 1515 and continue shaping 1500. A rewarding phase, where experience is delightful: The bow evolves toward playing. Shaping with a knife and a file alternates with cambering over a flame—actions that repeat themselves until the stick is homogeneous. It feels almost like modeling clay while I enhance the bow's musical capacity. First octagonal, the shaft becomes round. With now only a few grams to play with, I must maintain a tightrope walker's attention and move softly. The work spreads over several days to refresh control. The precision of the craftsmanship is focused on the musical outcome. Fortunately, the wood is flawless and takes the camber well.

It will not break and I can enjoy sculpting the head once the gold tip is in place. I look for balanced lines and an intimate harmony of angles and curves, somewhat daring. Then, the light drastically shifts from unusually bright to grey, interfering with my sight. I pause on profiling the stick and move to crafting the metal pieces (ferrules, linings, eyelets, screws). For the gold parts, I use 18K strips that an old French goldsmith has prepared to my color specification. Forming the ebony and gold button, I slightly modify my usual proportions to complement the frog inlays.

Mid-March 2016

While I continue returning to the sticks with minute detailing, the work now centers on the frogs. The art design is reserved for the musician's side, while a diamond eye and ring will face the audience. With great emotion, I am looking at two exquisite ebony pieces, gifts from Bernard Ouchard that I dared not use yet. A

magnificent black, the old wood is smooth and polishes in a whisper. It is very hard, too, and I launch into inlaying with nerves like rubber bands on a sling! I get both frogs fitted. The ensemble is complete with pearl slides from seashells that I had harvested and prepared while living on the French island of Bréhat.

Late-March 2016

With the frog adjusted, I can immerse myself in finishing Bow 1500. Setting the hair is a most important aspect of bow making. What follows is sanding, polishing, and fine tuning the camber—with each step repeated several times. I verify the bow's unity and "evidence"—a French notion that hardly translates. I hope it will be easy to play, docile.

March 31, 2016

Today I sign bow 1500 and set the diamonds, sparks of light that we wish forever conflict-free. Keeping the continuity, I resume shaping Bow 1515. Again, the ancestral gestures will integrate sensation and experience, balancing emotion and technique in split seconds. Composing with and against the wood, with a sound in mind, is captivating, but in the end, the bow will be just a fluid conduit for the musician's creative energy.

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