

# MAKER'S BENCH

## Designing a Personal Model — Old Masters, New Expressions

### Part I: The Head

by Roger Zabinski

When a bow maker sets himself about the task of developing a new model, he is placing himself into the stream of a long history of aesthetic culture and practice. The bow of course is a useful object, a tool, in a sense, to help the musician express the beauty of their art; but the bow, too, in its own way is an expression of beauty. For over 200 years bow makers have been making these useful little objects, but always incorporating an inherent and inextricable aspect of art. A fine bow must be a beautiful bow.

When you survey this aesthetic history of bow making, you are astonished at the wide variety of shapes and visual impressions a bow can present. You notice, too, that each epoch of bow making history seems to possess its own character; we can identify the combination of shapes and sculptural movements as belonging to one period of time or another; not rigidly so, but we do see strong inclinations at one time period or another. We speak of the Pajeot school, the Voirin school, and the like. Regardless of the school, a fine head presents to us a certain “stillness in motion;” while many contrasting or complementary shapes contribute to the overall effect, the whole must be visually at rest.

So that the bow maker's new model flows in the continuum of this aesthetic history, he must be deeply immersed and informed by it; the eye, the hand, the heart must be attuned to all the sculptural details and how these particulars articulate with the others. This is accomplished only by years of study, self-discipline and practice; the bow maker has to be able to copy several master bows so perfectly that even a connoisseur may have difficulty discerning the original from the copy.

Personally, I have always been attracted by the bows of the early to mid 19<sup>th</sup> century. This, for two reasons. One, my first teacher, Martin Beilke, used these early models almost exclusively; seeing his talent, he was encouraged in that direction by figures like Rembert Wurlitzer of New York and

Kenneth Warren of Chicago. Secondly, musicians have always coveted the tonal and playing characteristics of the early 19<sup>th</sup> century bows. The best among those bows have a strong flexibility that musicians so much desire; their superior tonal capabilities are legendary. They can be more difficult to play, but the experienced bow arm can easily overcome the obstacles; the effort is well worth it in superior expressiveness and tone color.

In discussing the head of a bow, we will consider the following constituents: the back of the head, the head plate, the point, the forward ridge and the chamfer. We will be using examples of Etienne Pajeot, Francois Tourte, and Alfred Lamy for our comparison study.

#### Back of the Head

The back of the head (inside curve where the head joints the shaft) is the foundation and starting point of any design: How much curve does it have? Is the movement more vertical, forward-thrust, or backward-thrust? How does the shape move as it approaches the under side of the shaft? All these factors will strongly affect successful sculpting of the other components.

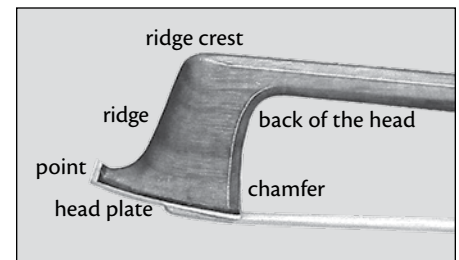
Look, for example at the Pajeot head. You will see that is gently scooped out, radiused, with a slightly backward moment. Consider then the Tourte head; the back of it is a bit stiffer, slightly more vertical. The difference is slight, but these small differences will make big differences in the overall expression.

Compare these two with the Lamy: a rather vertical movement, with a tight radius at the underside of the head. Lastly, consider the back of the head of my model, and compare it with the Tourte and Pajeot; note the slightly more swept back angle, the tighter radius at the underside of the shaft. I have gently accentuated these movements so that the shape is still much reminiscent to the Tourte and Pajeot, yet distinct enough to be a new expression.

#### Head Plate

Next we will consider the head plate (i.e. the ivory). Note that the head plate of both Pajeot and Tourte the are rather flat, and lay out at a fairly flat angle; but note the Tourte has a bit more upward thrust than the Pajeot. This was necessary to balance and counteract the flatter, slightly more vertical movement the back of the head.

Next, consider the head plate of my model. You will notice the same rather flat expression, but it lays at an even flatter angle than either the Tourte or Pajeot. This flatter angle pushes the limits of what one



Parts of the bow head

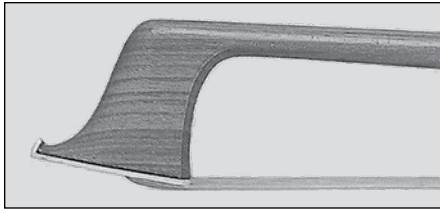
can do with a head plate; I did it to create a sense of drama in the overall execution, but there is a definite limit.

Note also the movement of the camber at the top of the shaft; compare it with the angle of my head plate; it is as if the head plate is moving synchronously with the top of the shaft, extending the thrust of the camber. A drooping angle would make for a weak, disappointing statement, almost as if the head were broken or “falling off” the shaft.

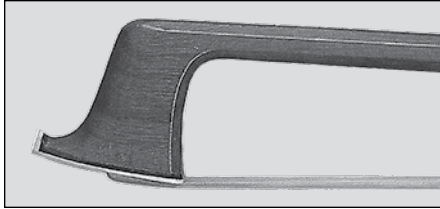
Compare these examples now with the Lamy. Note the more strongly radiused and upturned head plate of the Lamy. While not by any means exclusive to his generation and later, this detail becomes more typical of his epoch and into the 20<sup>th</sup> century. We can look to the Sartory and Ouchard schools which flow from this historic archetype.

#### Point

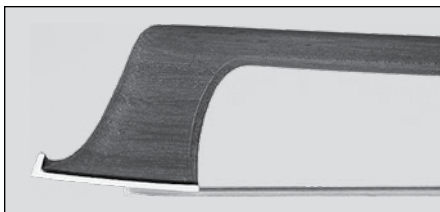
Now let us consider the point. First, study



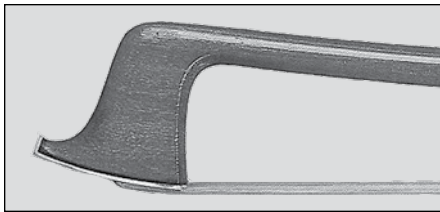
Etienne Pajeot



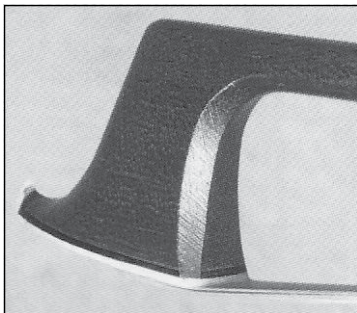
Francois Tourte



Roger Zabinski



Alfred Lamy



Pecatte chamfer

Photo credit: Paul Childs

at the Pajeot. See how the front ridge rapidly descends, dives, right to the distant end of the head; the narrowest point of the head is on the ebony liner at the end. Note too, the backward thrust of the ivory tip; this complements and reinforces the dramatic sweep of the ridge, and the slightly backward sweep of the back of the head; recall we said that the back of the head strongly influences all other movements of the head sculpting.

Compare the Pajeot with the Tourte head. Note that the narrowest point of the Tourte remains on the pernambuco; the upward movement from there is more gradual, not so dramatic as the Pajeot, giving a more vertical sense. It is remarkable how so small a detail can so strongly influence the entire model.

Now look at my model; you will note that the narrowest point is more as the Tourte; if I had chosen the more dramatic expression of the Pajeot, combined with the already accentuated back of head and head plate, would have rendered the whole sculpture exaggerated. We are looking for stillness in motion.

### Ridge

Our fourth detail is the ridge, i.e., the forward leading edge of the head. After the back of the head, head plate, and point have been defined, the maker is left with somewhat more freedom to finish this shape. Critical to the overall expression, though is the crest, where the ridge blends with the top of the shaft. Whether rounded or sculpted with a harder corner, on every fine bow I have seen, the downward descent of the crest begins about half way or farther back at the top of the head. Otherwise, the expression will likely feel severe or overly forceful.

### Chamfer

Now for the lowly chamfer (beveled edge). Arguably the most unassuming element of the head, it is nonetheless the bow maker's opportunity to exercise sheer power, delicacy, mastery of skill, sleight of hand, illusion.

Why is this so? First, almost all the other sculptural parts may be worked and reworked until perfected; the chamfer, on the other hand must be executed immediately and directly. It will take several strokes of the knife to fully cut the chamfer, but the last stroke must be one, continuous, unflinching movement. The knife must be sharp; the hand and eye, strong and certain. Any attempt to correct a false movement will render the cut as overworked, unconvincing. Secondly, the chamfer can be used to create illusion. By subtly changing the width or angle of the cut, the maker can introduce a subliminal complexity of the expression at the back of the head, thus enhancing the sculptural interest of the whole.

Look at the image of the Peccatte chamfer. Note how the chamfer is narrowest at the head plate, widens rapidly as it moves upward, then narrows again as it joins the underside of the shaft. This acceleration/deceleration subtly changes the perceived curve of the back of the head, adding interest and complexity to the whole. My model uses that same detail.

Next month, we will conclude our discussion of developing a new model and consider the camber, the frog and the button.

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