
BASICS

Playing into the wood of the bow

One of the first things children need to learn about the use of the bow, is to play down into the springiness of the stick rather than only move the hair of the bow along the surface of the string.

- With the bow sitting stationary on the string, look at the middle of the bow and see how far away the wood is from the hair (Fig. a).
- Push the wood down until it is near to the hair. Note the distance carefully (Fig. b).
- Without allowing the distance between the wood and the hair to change, move the bow up and down along the string. Adjust the speed of bow, and the distance from the bridge, until the sound is pure.

Note that the only place to watch, when you are doing this, is the middle of the bow. It is only there that the hair will be near the wood of the bow.

The nature of a spring is that it always wants to return to its state of least effort, and all that the wood of the bow wants to do is to spring back up out of the string. You have to hold it down and resist the upward push that it exerts, meanwhile adjusting the balances of speed and soundpoint so that the tone remains pure.

You can often tell, before a student has begun to play, whether playing into the springiness of the bow is part of their approach to sound, simply by the amount they tighten the bow hair. If it is too tight, or too slack, they probably do not know how to find the enjoyable, sensuous feeling of playing deeply into the bow and into the string. Otherwise they would adjust the tension of the bow accordingly.

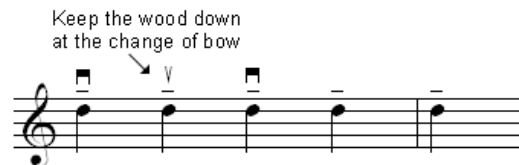
The place in the bow that children typically find the most difficult to sustain is at the change of direction from down to up or *vice versa*. The key thing is to be able to keep the distance between the wood and the hair (in the middle of the bow) constant *at the moment of changing direction*; or, if that is impossible, to hide the slight releasing at the bow change by keeping it to the absolute minimum:



(a) Note the distance between the wood and the hair

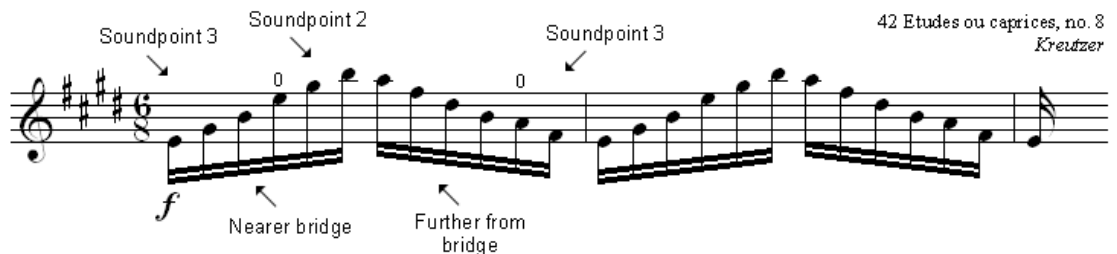


(b) Push the wood down towards the hair and hold it at that distance



Working out the proportions

Creating a bow stroke is quite simple if you take the factors that make up the stroke – speed, pressure and soundpoint – one by one. Suppose you are playing Kreutzer 8:



(Soundpoint 5: near the end of the fingerboard. Soundpoint 3: centre, between bridge and end of fingerboard. Soundpoint 1: near to the bridge.)

You get the most out of studies like these when you use a variety of different strokes. You could practise this with a *spiccato* stroke, or with a soft ‘baroque’-like stroke, or add slurs, and so on. Suppose on this occasion you are going to practise a broad *détaché* in the upper half:

Speed of bow Once you have decided where the strokes are going to begin and end, and the tempo you are going to play at, you therefore know the bow speed.

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Soundpoint Decide which soundpoint, or range of soundpoints, you will use. In this case, suppose you decide that on the D string you will play around soundpoint 3, on the A string a little nearer to soundpoint 2, and on the E string around soundpoint 2.

Pressure The only question left is how much weight. Therefore, simply sit on one note and try more pressure, less pressure – while staying on that one soundpoint, and keeping exactly the same length of bow and tempo that you have decided on – until you are certain that the string is vibrating to its maximum:

Speed: Decided by length, 10 centimetres upper half Speed: Decided by length, 15 centimetres
 Pressure: Experiment until string is vibrating at its widest Pressure: Experiment

Then find the same stroke-designs in the context of the whole phrase. Approach each question from different angles at the same time:

- If you know where to begin and end the stroke, you know how fast the bow speed will be given the tempo of the passage. This tells you how close to the bridge, and therefore how much weight to use.
- Or if you decide first that you wish to play the phrase deeply in the string near to the bridge, or lightly near the fingerboard, this will dictate the speed of bow, and therefore where to begin and end the stroke.

Watch the great players

Look at a movie of, say, David Oistrakh playing the Sibelius concerto. Watch his bow in a passage like the following:

Concerto in D minor, op. 47
 Sibelius

The question is, what are the exact amounts of speed, pressure, and distance from the bridge, that David Oistrakh is using to get the fabulous sound he makes? You can see and hear how he is playing, but you cannot immediately tell, just by looking, how heavily he is playing into the string. But you can work it out.

- You can see that he is using a lot of bow on every crotchet; and you can hear and see the tempo of the passage. Therefore the exact bow speed is an entirely measurable and known factor.
- You can see that the bow (on this occasion) is exactly one centimetre from the bridge, so the precise soundpoint is also an entirely known factor.

Therefore you can easily work out how much weight he must be using: play whole bows on soundpoint 2 with the same speed of bow as Oistrakh ($\downarrow = xxx$):

(1) Soundpoint 2 (2)
 f Repeat several times

- (1) Simply keep the bow on soundpoint 2, and keep playing whole bows.

Then, all you have to do is adjust the weight until you sound like Oistrakh.

At that point, add vibrato.

- (2) You can also add the rhythm of the passage. Afterwards, when you play the actual notes of the passage, make sure the speed/pressure/soundpoint design is the same as when you played on one note.

Next month's BASICS looks at speeding up the left finger action