Tone: point-of-contact

In earlier centuries most violinists would also play the viola. The German musicologist Hans Keller used to point out that on the violin the difference in finger spacing between 1st position and 5th position is greater than the difference in spacing between playing in 1st position on the violin and in 1st position on the viola; so therefore if it is necessary to have a dedicated profession called ‘violinist’, and another called ‘violist’, then it should equally be necessary to have a dedicated profession called ‘1st position violinist’, and another called ‘5th position violinist’.

He should have added that there is more difference between playing the A string on the violin and the G string on the violin, than there is between playing the A string on the violin and the A string on the viola.

The way the strings on the violin get thicker as you descend, so that the E string is the thinnest and the G string the thickest, is mirrored in the string section as a whole, where the violin has the thinnest strings and the double bass the thickest.

The thicker the string, the further from the bridge you may have to play; but wherever the bow is in relation to the bridge, there is always a speed and weight that ‘adds up’ and creates a pure tone.

One of the most common faults in string playing is that of bowing too far from the bridge all the time (Fig. 1). Of course you have to use every point of contact, from the fingerboard to ‘hugging the bridge’, in making all the varied colours in a piece of music. It is not a question of playing only close to the bridge; but equally you must not play everything only near the fingerboard either.

Not following the line of least resistance

Water always flows downhill. It can never flow uphill unless another element of force acts upon it, because natural forces always follow the line of least resistance. There are four main reasons why the player, following this line, allows the bow to slide over to the fingerboard and stay there:

1. Unless the violin is held with the scroll up, the strings slope down from the bridge. The bow naturally wants to ‘slip downhill’ away from the bridge towards the fingerboard.
2. The nearer the bridge, the greater the tension of the string and the ‘harder’ the string feels under the bow. Playing further from the bridge requires much less weight and energy, so following the line of least resistance the bow moves to the fingerboard.
3. The nearer the bow is to the bridge, the deeper into the string you have to play; but all that the wood of the bow wants to do, once it is pressed down towards the string, is to spring back up again. The bow naturally wants to move away from the bridge to a place where it can play more ‘along the surface of the string’ rather than playing deep down into the string.
4. The deeper the bow plays into the string, the more the string is ‘bent’ down. The more bent down the string is, the greater the tension and the more it wants to spring up again. Following the line of least resistance, the bow moves away from the bridge to an area where it can play ‘along the surface’.

To avoid following the line of least resistance, cellists need to spend a lot of time pushing in towards the bridge; violinists need to pull in towards the bridge.

- If you generally bow too far from the bridge, practise for a while bowing only as near to the bridge as possible. The first thing you may find is a lot of scratching and whistling in the tone, and what you have to avoid is immediate despair and a return to the fingerboard.
- Instead, stay there near the bridge, experimenting with greater weight in the bow and possibly less length of bow, until you learn how to sink deeply into the string with a pure, full tone.

Next month’s Basics looks at intonation