Soundpoints (2)

Divide the area between the bridge and the fingerboard into five soundpoints:

- **Soundpoint 5**  Near the fingerboard (light, fast strokes)
- **Soundpoint 4**  Between the fingerboard and the middle
- **Soundpoint 3**  Middle, between the fingerboard and the bridge
- **Soundpoint 2**  Between the middle and the bridge
- **Soundpoint 1**  Near the bridge (slow, heavy strokes)

The physical properties of the strings

Which soundpoint to use naturally depends on the musical context, and the exact colour of any note or phrase depends on individual taste. However, as well as musical factors there are also the physical properties of the string to consider. In first position the G string feels too hard under the bow if you play too near to the bridge. The E string feels too soft if you play too near to the fingerboard, unless the very lightest *flautando* is required.

Leaving aside musical consideration the optimum places to bow the open strings are (approximately) as follows:

![Example](image1.png)

The same basic proportions then apply to stopped notes on each string. In a simple scale like the following, played *sempre f*, the bow needs to start further from the bridge and move in towards the bridge while ascending:

![Example](image2.png)

![Example](image3.png)

If the four-string chord is played on soundpoint 2 the bottom two strings may easily be scratched, while if it is played on soundpoint 4 the upper two strings may easily be crushed. The solution is to move towards the bridge while pivoting across the strings, i.e. play the bottom strings on soundpoint 4, and the top strings on soundpoint 2:
Moving in to the bridge in high positions

To keep the right proportions of bow speed, pressure and distance from the bridge, as the left hand plays higher up the fingerboard the bow should usually move closer to the bridge.

Long shifts (i.e. big changes of string length from long to short) often require a visibly obvious movement of the bow towards the bridge. The distance from the bridge then remains proportionately the same relative to the length of the string.

It is important to remember that the shorter the string length the less weight the string can take from the bow. Therefore, although the rule is that the nearer the bow is to the bridge the more weight it must inject into the string, when playing high notes the bow must play lightly near the bridge, even when playing $f$.

- Exaggerate the change of point of contact by beginning nearer to the fingerboard, and moving closer to the bridge, than you need do ordinarily.
- Begin with longer-value notes than written, and gradually shorten them closer to the correct length.
- Play $p$ near the fingerboard since the string is too soft to take much bow weight:

The left hand fingers are sometimes blamed for intonation difficulties that are actually the fault of the bow. Too much bow pressure, too far from the bridge, causes the pitch of a note to go flat. In this example, the G marked ‘+’ can sound as an F if played heavily on the centre point, between the bridge and the fingerboard, even though the left finger is in tune.

- Play the $p$ near the fingerboard, the $f$ near the bridge:
- Hold the bow deep in the string near the bridge, sustaining the note extra-long. Listen carefully to the pitch of the note, and see how lightly you can sustain the bow while still playing $f$.
- Gradually shorten the sustained note.