Precise tuning

Square and extended finger shapes

In the lower positions on the violin, the fingers are more ‘square’ or more ‘extended’ (Galamian’s terms), or ‘higher’ or ‘lower’ (Suzuki) depending on what note they are playing.

Playing first finger $B$ on the A string, the finger is square (Fig. 0a). Playing $B^\flat$, the finger is extended (Fig. 0b). Second finger $C$ is square, $C^\natural$ is extended, third finger $D$ is square, $D^\natural$ is extended.

The fourth finger is never really square, but less extended when playing $E^\flat$ in 1st position on the A string, more extended when playing $E$ or $E^\natural$.

It is common to see players putting their hand out of position by using the wrong finger shape, e.g. playing first finger $B$ on the A string with the finger square, or third finger $D$ with the finger extended.

Example 1

Playing a natural on one string, and then using the same finger on the next string to play a sharp or a flat, is a common reason for a note being out of tune. The finger must change sufficiently from square to extended, or vice versa.

Example 2

When you are working on tuning a phrase, and thinking about how the notes and fingers relate to each other, always keep in mind the shape a finger was in when you last used it — even if the current note the finger is playing, and the last note it played, appear to have no relation to each other.

Here, the E in 3rd position on the A string should be played with a slightly straighter finger than if it played an $E^\flat$. It may easily be too flat after the square finger playing the G in 1st position on the E string two notes earlier.

- Try playing the passage with an $E^\flat$ and then repeat with an E, as written. Feel the difference in the shape of the finger.
- Practise going from one finger shape to the other.
Shifting with one finger (i.e. 1–1, 2–2, 3–3, 4–4) from square to extended, or from extended to square, but not adjusting the shape of the finger during the shift, is a common fault found in players of all levels.

The result is that the hand arrives very slightly not quite in the right position; or else the finger has to sit in an uncomfortable shape when it arrives on the end-note of the shift.

(1) Shifting from a square finger to another square, the shape of the finger does not change during the shift (at least, not in the large sense of changing from square to extended).

(2) Shifting from a square to an extended finger, change the shape of the finger during the shift.

**Shifting up:** if you keep the square shape that you had on the D as you shift up into 3rd position, and play the F♯ with a square finger, the entire hand will be positioned a little higher up the neck than true 3rd position. Any notes that follow could easily be out of tune.

**Shifting down:** if you keep the extended shape that you had on the F as you shift down into 1st position, and play the D with an extended finger, the entire hand will be positioned a little lower down the neck than true 1st position. The notes that follow could be out of tune.

Instead, change the shape of the finger during the shift so that you arrive in the most comfortable shape for the finger as well as the correct position of the hand.

**Semitones**

As children we learn that in playing a whole tone the fingers have a space between them, and playing a semitone the fingers are placed next to each other. But even in 1st position, if you put the fingers ‘next to each other’ they will often still be too far apart.

Look at the too-wide space between the contact point of the second finger with the string, and the contact point of the third finger (Fig. 0a). It is too wide for a semitone. Instead, the third finger must often move in more closely (Fig. 0b).

The thing to avoid is that the spacing of a semitone is influenced by the thickness of a particular finger:

In (1) the semitone may be too narrow if your little finger is particularly narrow at the tip; in (2) it may be too wide if the tip of the finger is particularly broad.

The three notes should sound the same whatever the fingering, and be tuned according to the music, not according to the shape of the finger.

Players with large hands often feel that they are at a disadvantage in high positions, where the notes are closer together. In fact there is little difference whether you have large hands or small, since with the thinnest fingertips you still cannot leave a finger down in a high position and place the next finger very close to it on the string, a semitone higher or lower, in tune. You still have to ‘skip’ the fingers out of the way to make room for the next finger, in exactly the same way that players with large hands, or wide fingertips, have to do.

The Israeli violinist Itzhak Perlman is an example of a player with very large hands and fat, wide fingertips. His full-size violin looks small in his hands, yet he can play immaculately in tune in high positions. Some of the best players have had small hands, and some have had large hands – so the level of your intonation must depend not on your physique but on other qualities of technique or musicianship.