
BASICS

Shifting

The more delicate, the closer to the fingers

The size of an action determines the part of the arm or hand you use. Shifting is led from the fingertip, rather than from the forearm or upper arm. Vibrato is led from the fingertip also, regardless of whether it is a hand or an arm vibrato. Naturally, this is only a perception rather than a physical fact: no physical action occurs at the fingertip to make the shift or the vibrato. The actual 'motor' that pushes the fingertip up the string is not situated in the fingertip. It is easiest to illustrate the principle by looking first at bowing.

- Sometimes there is a feeling of playing into the string from the fingers; sometimes from the hand; sometimes from the upper arm.
- The smaller or the more delicate the action in the bow arm, the closer to the hand or fingers the action originates; the bigger or the more powerful the action, the closer to the upper arm the action originates.

Imagine holding a pen in your fingers, but writing with it by moving only the upper arm; imagine trying to polish a large mirror by moving the cloth only with the hand.

- The softest, most subtle changes of tone may require only a slight change of contact of the fingers on the bow; playing heavy, three-string chords may require a powerful movement of the upper arm. Between the two extremes many strokes use some degree of 'playing into the string from the hand'.



- (1) Creating a delicate, expressive nuance in the middle of a long bow, you might use only the slightest, most subtle movement in the fingers to create the effect.
- (2) Playing *spiccato*, the feeling of playing may be more in the fingers and the hand.
- (3) Playing accents or *martelé*, the feeling of playing is higher up the arm in the hand and forearm.
- (4) Playing heavy chords, much of the feeling of weight comes directly from the upper arm.

Think of the action of the fingertip gliding up the string, looking for its new place of contact, as something subtle and intimate between the fingertip and the new place on the string. How can such a delicate and close operation be controlled or directed from such a far-off place as the part of the forearm near to the elbow?

Ask children to imagine a 'smiley' on their fingertip (Fig. 1). Explain that it is the fingertip that senses where to go, and listens and looks closely up the string as it searches for its new place of arrival, and pulls the hand and arm along with it – rather than thinking of the arm pushing the hand which in turn pushes the fingertip.



Fig. 1: The finger leads the hand and arm [068]

Lightening the bow

Playing slurred shifts during a *legato*, sustained passage, you often have to create an illusion of sustaining during the shift, while actually lightening – and slowing – the bow slightly. Galamian was very clear about this:

A certain complication arises when the fingering during a slur involves a substantial change of position...It involves a slight slowing down of the bow stroke and a gentle lifting of the pressure during the motion of the left hand. If this is done, it has to be carefully effected so that the gain in camouflaging the slide is not more than offset by a too audible disruption of the *legato* flow.

You can make a little exercise on each shift by starting from an extreme of lightening and slowing, and then gradually reducing it:

BASICS

Exercise 1

(1) Sustain fully until the diminuendo. Shift slowly over one whole beat. Much lightening and slowing the bow during the shift. *f* *f* *Subito f*

(2) Less time for shift. Less diminuendo. *f* *f*

(3) Less time for shift. Less diminuendo. *f* *f*

Create an illusion of sustaining during shifting. *f*

(1) In the first bar, sustain the first note solidly. Then, just before shifting to the D, and during the shift, greatly lighten and slow the bow.

Having arrived on the first finger D, immediately play deeply into the string again like a *subito f*.

(2) Repeat several times, sustaining the first note longer each time. Lighten and slow the bow less, and later, before the shift.

(3) Finally, slow and lighten the bow so little that it is inaudible. Create an illusion of a perfect *legato* during the shift.

Exercise 2

Another helpful exercise or practice method approaches the question from the other extreme: while shifting the finger on one string, bow another (open) string while sustaining the bow solidly.

- Do not allow the smooth, even, solid, sustained bow stroke to change in any way as the finger moves along the string.

Silently finger on the A string, bow the D string

f Sustain solidly

Afterwards, playing and fingering normally on one string again, keep the same feeling of sustaining in the bow – even if you do instinctively lighten and slow the bow an infinitesimal degree during the shift.

Hearing notes in advance

Pre-hearing the note before you move to it – rather than thinking about the shift itself – is the first essential element of shifting. A simple exercise quickly engrains the habit:

- Playing in an octave that suits the range of your voice, play a sequence of shifts and pause on the first note of each.
- During the pause sing the arrival note of the shift – or pitch it clearly in your mind – and only then shift to it:

(Sing)

pfc.