Flexibility

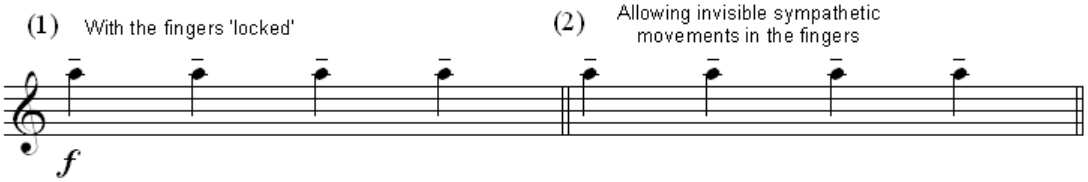
Flexibility in the right hand and fingers, which you can maintain even when playing fortissimo or with real accent or attack, is one of the secrets of tone production and mastery of the bow. A soft or 'springy' right hand creates a soft, sweet, warm tone, even when it is large, rather than the smaller and harder-edged tone that a 'harder' hand creates.

Even when you think that your bow hand is free of any tightness or blockage, and you think it is completely springy, there is always another degree of springiness, softness and buoyancy that you can achieve.

Noticing the difference

The first step is to appreciate fully the difference invisible flexibility makes to the sound. In the following experiment, do not try to 'fake' the result of harshness or edginess with tight fingers, and sweetness with flexible fingers. Try to play as well as you can in both cases, and note the often subtle difference in the sound.

- Play repeated whole bows, first with stiff fingers holding the bow, and then with lighter fingers which have an invisible degree of 'sympathetic movement' or give:

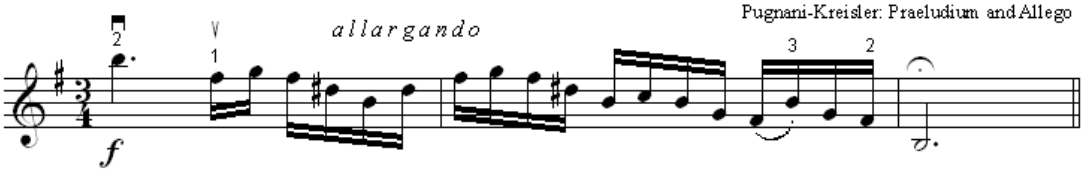


(1) Note how there is a 'click' at each bow change when the fingers are locked, and the tone may be harsh or have a hard edge

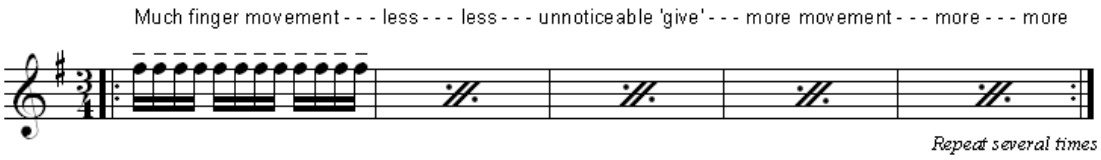
(2) Note the smoothness and sweetness of tone when the fingers give.

Exaggerating the give

Experiment with loosening and tightening the 'springs' in the fingers:



- Begin with 'floppy' fingers: exaggerate by deliberately flexing slightly just before each down-bow, and straightening slightly just before each up-bow.
- Repeat with less and less finger movement each time.
- Finish with an unnoticeable 'give' in the fingers that is an identical, but invisible, version of the flexing and straightening that you used in the beginning.
- Make an exercise out of it by going round and round between the two extremes:



BASICS

The bow 'moving within the hand'

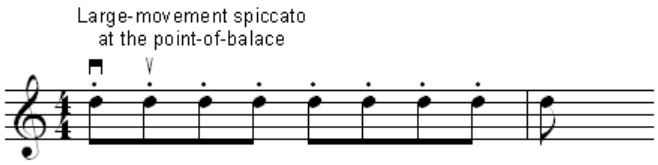
Imagine a see-saw. The pivot is at the centre point. One end of the see-saw goes up a certain distance; the other end goes down by the same amount.

Imagine moving the pivot away from the centre, to a place closer to one end than the other. Most of the see saw is one side of the pivot, a small amount is the other side. Now a tiny movement on the short end produces a much bigger movement at the long end.

The bow works in the same way. Think of the string as the pivot, and notice how a tiny movement of the bow at the heel produces a much bigger movement at the point.

The fingers contacting the bow must be sensitive to these impulses in the bow, both allowing them and sometimes encouraging them. The first finger must often remain very light on the stick, even coming away from the top of the stick at times, particularly during lifted strokes like *spiccato*.

You can particularly feel the bow moving within the hand during spiccato. Look at the little dipping movements at the point of the bow, and feel the effect of these movements in the movements of the bow within your fingers:



The shake test

You have to be able to hold the bow, and remain flexible, at the same time. A good test is for someone to grip your forearm, and shake your hand up and down vigourously, without you dropping the bow.

The student

- Stand without the violin, holding the bow parallel to the floor, using your normal bow hold.
- Point the bow somewhat towards your left shoulder, as it does when playing.
- Balance the bow in your hand, rather than 'gripping' it between your fingers.

The teacher or assistant

- Take hold of the student's forearm just before the wrist, while they hold the bow.
- Gently shake their arm in an up-and-down direction – not so much that you can see the forearm actually move up and down more than a centimetre, but enough that the impulse causes the hand to move up and down a little.

The student should be able to hold the bow sufficiently firmly that it does not fall from their hand, yet not in such a way that their wrist becomes stiff and you cannot shake their hand easily.

The push–and–pull test

Without the violin, hold the bow in playing position.

- With your left hand, pull the bow to the left in the direction of a ⊓, and push it to the right in the direction of an ∨.
- As you pull the bow, allow the right hand fingers to flex slightly; as you push, allow the fingers to straighten slightly.
- Make the bow, pulled or pushed by the left hand, move the right hand fingers, rather than moving them themselves.