

BOW PRESSURE CONTROL EXERCISE

Leopold Mozart was one of the first to teach this exercise, and in recent times it has been a central practice technique taught by Galamian and DeLay. It is also known by cellists as the ‘Casals exercise’. Dounis applied a variation of the exercise to pieces (see Fig. 2).

Loudness, alternating with softness, can obviously be performed four, five, and six times [and] often even more in one stroke. One learns through practice of this...to apply strength and weakness in all parts of the bow... By diligent practice of the division of the stroke one becomes dexterous in the control of the bow, and through control one achieves purity of tone.

Leopold Mozart

Alternate forte and piano during one long, sustained note, up and down bow. There is no separation between the forte and piano.

The aim is to find a full and resonant tone, and to link this with the feeling of give and resistance in the bow, bow hair and string (Fig. 1).

Begin with one *fp* in a bow, the lower half forte, the upper half piano. Then divide the bow into two, playing one *fp* in the lower half, and one in the upper. Then three *fps* in each bow, four, six, eight, nine, 12, 16, 20, 24, 28 and 32 (from 12 onwards play and count in groups on four: 3 x 4, 4 x 4, 5 x 4 etc). **Fig. 1**

Repeat each division several times, down and up bow, until the forte is full and resonant; the piano remaining clear and even.



Play the forte as deeply as possible, but never force. Listen to the pitch – the note should not flatten because of too much pressure. Divide the bow precisely into halves, quarters, eighths etc.

BOW SPEED: the bow must be slightly faster in the forte (more bow), and slower in the piano (less bow).

DISTANCE FROM THE BRIDGE: the bow should stay about a centimetre from the bridge all the time (and the equivalent on violas, cellos and basses), except in the first two stages of this exercise. There, with only one or two *fp* divisions in each stroke, play slightly closer to the bridge in the forte, and slightly further away in the piano.

SUBITO PIANO OR DIMINUENDO? In the first three or four stages of the exercise, play a deliberate subito piano after the forte. From about six divisions onwards, each *fp* becomes one action, i.e forte-release. It should then sound more like a series of ‘throbs’ within a continuous sounds, rather than actual *fps*.

FLAT OR TILTED HAIR? Up to about three divisions, play a flatter hair in the forte and a more tilted open in the piano. From then on use three-quarters of the hair throughout.

TEMPO: (Approx.) One *fp*: mm = 60 (two beats *f*, two beats *p*). Two: mm = 60 (one beat *f*, one beat *p*). Three: mm = 56 (one *fp* per beat). Four: mm = 60 (one per beat). Eight: mm = 60 (two per beat). Nine: mm = 50 (three per beat). Twelve: mm = 52 (four per beat from now on); 16 = 56; 20 = 60; 24 = 66; 28 = 72; 32 = 76.

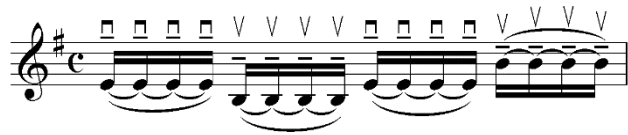
The exercise applied to general practice

Draw the bow as in the exercise, playing deep-into-the-string accents within the legato stroke. Vary the number of *fp* ‘pulses’ per note according to the time of the passage in question. Both examples should be played quite heavily and under tempo. Tone production in many different types of passage, both slow and fast, is easily improved by this kind of practice.

Fig. 2 Franck Sonata, second movement



Kreisler, Praeludium and Allegro



(slowly and heavily)

October’s BASICS will return to the left hand. November’s will feature a bow-speed exercise similar to the pressure exercise above.