
BASICS

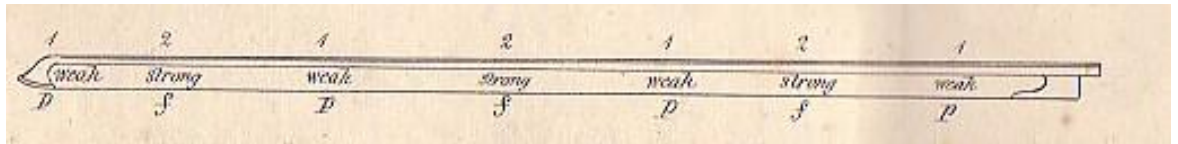
Bow pressure

This exercise consists simply of alternating heavy and light bow pressure within one long bow stroke. It is one of the very best in the entire repertoire of technical exercises, and dates back to the earliest times.

Mozart's father, Leopold, was already teaching it in 1756, the year of Wolfgang's birth. Since Leopold taught his son the violin, it is likely that Mozart himself practised the pressure exercise at one time:¹

This example of...loudness, alternating with softness, can obviously be performed four, five, and six times; yes, often even more in one stroke. One learns through practice of this...to apply strength and weakness in all parts of the bow; consequently it is of great use...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.

It was taught by Campagnoli, a famous player, composer and teacher at the end of the Eighteenth Century. This is how the pressure exercise is represented in the Campagnoli Violin School, circa 1800:



Violinist Lucien Capet, quartet player in nineteenth century Paris and an expert on tone production and use of the bow, taught it to Ivan Galamian who in turn taught it to Dorothy DeLay. Dr D.C. Dounis was another famous teacher who taught the pressure exercise, and so did the great cellist Pablo Casals, who described it as a 'strength-inflection' exercise:

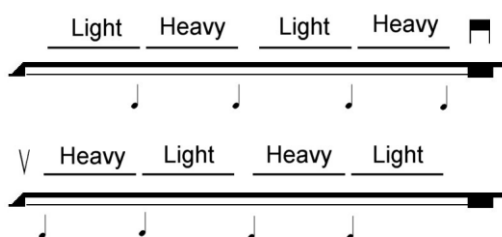
I believe in daily technical exercise. I practice scales, repeated notes, trills in different rhythms; and as to the bow I use special exercises for the point, frog and middle, as well as exercises in strength-inflection, to accustom the bow-hand to finely marked differences of strength and pressure.²

The aim of the pressure exercise is to explore how deeply you can sink the bow into the string, and then immediately how lightly you can 'float' the bow along the surface of the string, while keeping the tone absolutely pure, even and unforced.

- Begin with one heavy–light on the \blacksquare , one on the \blacktriangledown :



- Two heavy–lights on the \blacksquare , two on the \blacktriangledown :



¹ Leopold Mozart: *A Treatise On The Fundamental Principles Of Violin Playing* (Augsburg, 1756; Eng. Trans. Editha Knocker, Oxford, 1948), 99

² Martens: *String mastery: Talks with master violinists, viola players and violoncellists* (New York, 1923), 233

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- The whole sequence, up to 8 heavy-lights in one bow, could be represented as follows:

The image shows five staves of musical notation in treble clef, 2/4 time. The first staff starts at measure 165 and contains two measures. The first measure has a square bowing symbol (■) and a dynamic marking of *f*. The second measure has a 'V' bowing symbol and a dynamic marking of *p*. The second staff continues with two measures, each with a square bowing symbol and a dynamic marking of *f*, and a 'V' bowing symbol and a dynamic marking of *p*. The third staff continues with two measures, each with a square bowing symbol and a dynamic marking of *f*, and a 'V' bowing symbol and a dynamic marking of *p*. The fourth staff continues with two measures, each with a square bowing symbol and a dynamic marking of *f*, and a 'V' bowing symbol and a dynamic marking of *p*. The fifth staff continues with two measures, each with a square bowing symbol and a dynamic marking of *f*, and a 'V' bowing symbol and a dynamic marking of *p*. The notation includes various articulation marks such as slurs and accents, and dynamic markings like *f*, *p*, *fp*, and *simile*.

8 heavy-lights in one bow is often enough for general purposes (and for younger players), but there are great benefits to be had in taking it much further:

- Play 9 heavy-lights in one bow (three groups of 3); 12 (three groups of 4); 16 (four groups of 4).
- Then play five groups of 4, six, seven, eight, nine and ten groups of 4 (i.e. 40 heavy-lights in one bow).

PRESSURE AND SPEED

To maximise the effects of the exercise, do as much as you can with pressure alone. Try to make any changes in the bow speed as slight as possible.

However, if you use no extra speed at all, in the heavy part of the stroke, it is impossible to play without scratching. Simply use as little extra speed as possible, and see how far you can go without the tone breaking, rather than making the exercise 'too easy' by being too free with extra bow speed.

The differences in speed get less and less as you increase the number of patterns in one single bow, since the overall bow speed gets slower and slower.

BOW DIVISION

These exercises are clearly very good at improving bow division. When you are playing 2 heavy-light patterns in one bow, begin the second pattern in the middle of the bow. Playing 3 patterns, divide the bow into three equal thirds; divide into four equal quarters to play 4; and so on.

When they do the exercise for the first time, many players make the mistake of using too much bow at the beginning of the ■ or V; it is not so common to see someone use too little bow.

- As an interesting variation, perform the entire exercise in the lower half only; in the upper half only; and in the middle of the bow only.