

BASICS

Forearm rotation

Forearm rotation (the forearm movement of turning a key) is something that many players do naturally, without knowing or ever thinking about it. Others do not automatically have it as part of their bow arm, or sometimes get into a habit of blocking it; but if so it is an easy and simple process to add forearm rotation back in to the playing. If it is not part of your bow arm, and then you begin to allow it – or if you play repetitive exercises to encourage it – an immense new feeling of freedom immediately comes into your bow arm.

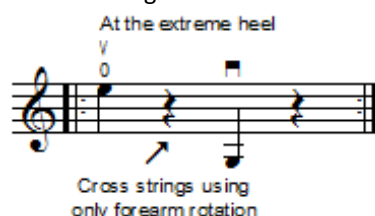


(1) Just before playing the up-bow open E string. Note the angle of the forearm.



(2) Before playing the down-bow open G. Note how the forearm has turned.

My first encounter with the idea of forearm rotation was in Carl Flesch's Six Fundamental Bowing Types. The following exercise is No. 4, and is shown in Figs. 1 and 2:



Passages like the following are obviously easier if you do not use the upper arm on its own, but use a degree of forearm rotation as well.



This turning movement is used not only in string crossing. It is something that happens all the time, in a multitude of different types of strokes, including simple strokes along the string. It had never been an issue for me, and so I did not identify the lack of it in my very earliest teaching – until the first time I worked with someone on the Chausson Poème and realised why the student, a very tall girl with long arms, looked uncomfortable during the following string-crossing passage: she was crossing to each double stop (shown as +) using her upper arm, with the arm all in one piece, instead of just (or mainly) turning the forearm:



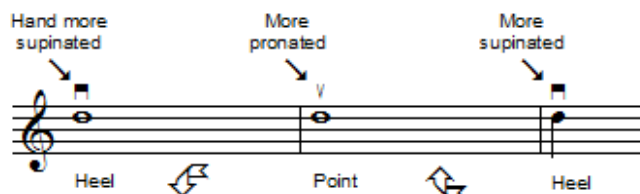
Simplified and reduced to open strings, the string-crossing pattern is like this. ↻ means to rotate the forearm clockwise; ↺ means anticlockwise:



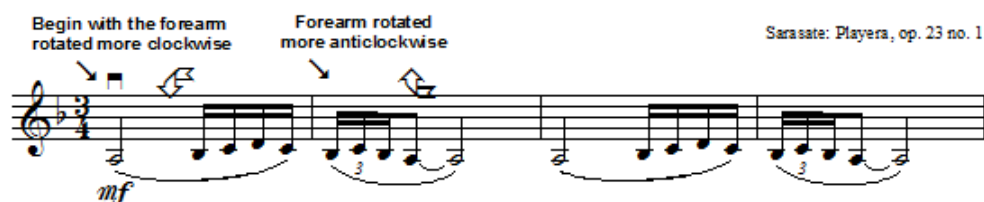
Try doing it both ways – with the whole arm, or mainly with a neat rotation of the forearm while keeping the bow arm basically on the same level – and feel the difference in ease and efficiency.

BASICS

You can see forearm rotation even in the simple operation of drawing the bow from the heel – where the hand is more upright (supinated) – to the point, where the hand is more tilted (pronated). Place the bow on the string at the heel and note the rotational angle of the right forearm to the floor. Then draw the bow to the point and see what the angle is now. The forearm should have turned:



You can see this rotation in just about anything you play:



Obviously the amount of the movement may be so slight as to be imperceptible:



Lifted strokes

Forearm rotation is also a key part of lifted or springing strokes. The actual amount may be so little you cannot see it. Exaggerate the movement once or twice, so that afterwards an imperceptible amount happens naturally, on its own, without your being aware of it.

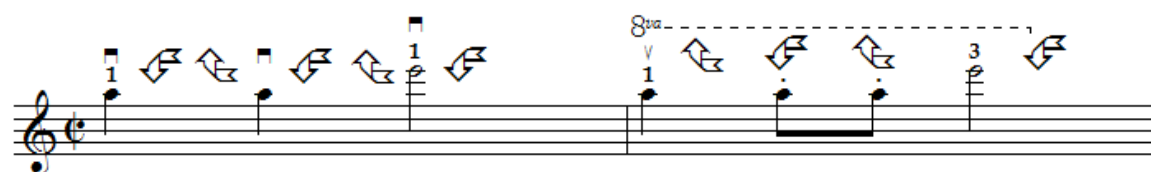
The *spiccato* movement into and out of the string is curved: follow that curve invisibly with forearm rotation:



Attacks from the air and retakes

In the following typical example imagine that there is a 'B string' to the right of the E string. To retake the bow for the second note, the clockwise forearm rotation that ends the first note can move the bow a little more towards the imaginary B string, i.e. beyond the E string level.

Lalo: *Symphonie espagnole, mvt. 1*



Many students perform such strokes without any forearm rotation at all, doing it all with the whole arm, and the effect is one of the bowing being cramped. Exaggerate the curves and not only a new freedom but a new elegance enters all the playing.