Technical and musical timing

Musical timing is *when* you want the note to sound; technical timing is often *before* the note sounds. This aspect of playing is as important as the principles of tone production or intonation, or how to hold the violin or bow. Yet compared to these it is a ‘hidden’ subject often unrecognised; and the results of poor musical and technical timing can be heard even in the performances of otherwise high-level string players.

Placing the bow on the string

For many players the instant the hair contacts the string seems to act as a sort of trigger that makes them move the bow along it. The two things must be separated so that placing the bow on the string is one thing (technical timing) and then moving it along the string is another (musical timing). An extraordinary new feeling of control enters the playing when there are many moments of placing the bow peppered throughout the playing.

To make a simple exercise out of it, begin by placing the bow a whole beat before playing a note, and then place it later and later. Keep the third finger down throughout:

![Placing the bow on the string](image)

Finger preparation

When the tone is not clean the first thing we always blame is the bow, when actually as many (or more) impure sounds are caused by the left fingers not being ready. During descending slurs each lower finger must be placed on the string before lifting the upper finger, or placed on the new string before bowing it.

One answer lies in simple finger-preparation exercises in which you play slowly and prepare the fingers very deliberately: prepare, play; prepare, play.

![Finger preparation](image)

Like the hair’s contact with the string triggering the beginning of the stroke, the prepared finger often seems to act as a trigger which causes the previous finger to lift, or the bow to move on to the next string. The problem is that the sooner the fingers are prepared, the sooner they want to be played. Understanding the difference between technical and musical timing soon cures this completely.

An interesting example of the need to wait lies in left-hand pizzicato, where the first note is played with the bow and the second note by plucking with the previous finger:

![Left-hand pizzicato](image)

A common problem that students find here is that even though the first semiquaver A is played with the bow, the moment the finger touches the string they already want to pluck with it. Instead the feeling must be one of ‘place, pluck’ not ‘place-and-pluck’.
BASICS

Pivoting
While the bow is moving along one string it can pivot towards an adjacent string until it touches it. Clearly, the movement towards the new string (technical timing) must begin before you want to get there (musical timing). One of the secrets of smooth string-crossing comes from the simple principle that the earlier you leave the more slowly you can travel and still arrive on time; the later you leave the faster you have to travel.

Try the following pattern and notice how the timing of the bow-movement towards the G or A string is quite independent of the rhythm of the sounded notes:

Martelé
Martelé strokes are heavily accented and begin with a ‘bite’, so before starting the stroke you have to dig in slightly and catch the string. The most common mistake in martelé is in confusing the moment of gripping the string (technical timing) with the moment of moving the bow (musical timing). First grip the string; then move the bow fast–slow and heavy–light.

To get the feel of it, catch the string and pull and push it sideways; then, without releasing, make the stroke:

Thumb preparation
During descending shifts it is often useful (and instinctive) for the thumb to move back first and then for the hand to follow. Reposition the thumb while playing the note before the shift, and then use it to provide anchorage during the shift:

This does not apply to fast passages, however, when the hand and thumb often move together. And if you play without a shoulder rest, sometimes the thumb may move not before but after the shift, depending on the exact distance.

Shifting
The difference between technical and musical timing is a number-one reason for insecurity in shifting. The common mistake is that instead of arriving on the shifted-to note at exactly the right musical moment, it is at that moment that the shift is begun, like setting out from your house at the precise moment that you wish to arrive at your destination.

An exaggeration of early timing of the shift (1) or too-late (2) shows the difference clearly:

Next month: The laws of Leverage