Command response

'Command-response' refers to the process of the mind issuing a command and the muscles responding. Every technical stumble in a passage can be traced back to a delay either in sending the command, or a delay in responding.

To play a passage completely fluently the mental picture (of the musical intention and the whole act of playing) must be clear; and the hands have to be set up on the instrument so that every muscle is in a state of balance and freedom, and capable of instantaneous response to the mental command.

Improving a piece is a matter of discovering the weak or blank areas in your mental directives, or of speeding up the physical responses if they are too slow for the passage.

Mind not muscles

The single most important thing to understand about practising is that it is all about training your mind, not your muscles. In *Principals of Violin Playing and Teaching* the great Armenian-American teacher Ivan Galamian called command-response 'correlation' and states that it is the cornerstone of all technique:

It is the improvement of this correlation which provides the key to technical mastery and technical control and not, as apparently is commonly believed and taught, the training and building of the muscles. What counts is not the strength of the muscles, but their responsiveness to the mental directive. The better the correlation, the greater the facility, accuracy, and reliability of the technique.

The first thing is to be absolutely clear, musically and technically, how you want to play the beginning, middle and end of each note; then you have to think a little ahead of whatever you are playing (the faster the passage, the further ahead you have to be of the actual notes you are playing); and you have to concentrate. Dorothy DeLay used to say that the moment you make any sort of error, the question to ask is: what was I thinking about a fraction of a second before I made the mistake? Where was my mind?

Self test

The amount of hesitation, before seeing something in your mind's eye or being able to do it, is the crucial thing to measure. It is easy to discover how clear and easy your mental conceptions of individual notes are:

- Without the violin, first picture a note that feels entirely comfortable, secure and familiar say, 3rd finger D in 1st position on the A string.
- Then picture, say, 2nd finger F[#] in 5th position on the G string.

Can you 'see' and 'feel' it in your mind just as clearly?

The answer lies in the amount of detail the picture contains, as well as in how long it takes you to see it.

Suppose you are playing a passage of double stops, or a series of chords where you have to put each finger in a different place on a different string in rapid succession: when you know the passage fluently there is absolutely no hesitation before going straight to the new notes.

Alternating clockwise-anticlockwise

A challenge for many players lies in rapid string-crossing passages where you have to alternate moving the bow in one direction and then in the other:



BASICS

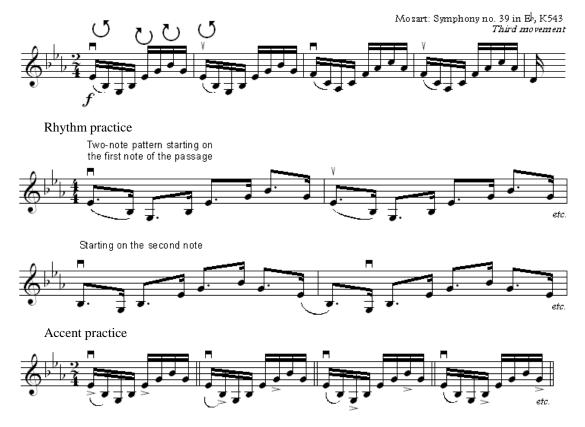
The movement from the A to the E string is clockwise; from the A to the D string anticlockwise. This causes a command-response problem. It is easy to move the bow fast one way, or fast the other, but the brain may seem to seize up when it has to do one and then the other. The arrows depict the direction of the movement:



Accent and rhythm practice

One of the chief ways of speeding up the mind-muscle unit is to increase the complexity of the task with accent and rhythm practice.

There are endless combinations and variations of rhythms you can use, but for normal practice purposes it is rarely necessary to go beyond simple two-note, three-note and four-note dotted patterns.



The Ultimate Practice Method

Whenever a passage seems really impossible to get clearly into your mind or your fingers, you can always fall back on the Ultimate Practice Method:

- Learn how to play note number one. Then learn how to play note number two, note number three, and so on.
- Then learn how to play note one followed by note two; then two followed by three, etc.
- Then note one followed by two, followed by three; two, three, and four, etc.

After gradually stitching it all together, you can then do speeding-up work with the metronome on the whole phrase or passage.