

Covert Motor Routines

or “How to Play Faster Without Practicing”

There is speculation that two sets of commands occur when we play guitar. The brain runs a series of commands to begin operations that we can't see, (the "covert motor routine", or schema), which in turn, fires a bunch of synapses that control observable motions, (an "overt motor routine", or schemata), such as a series of free-strokes on an open string. Think of an officer giving voice commands to his soldiers, who then carry their orders.

When free-strokes are played ever more quietly, the synapses fire fewer muscle fibers. Muscle fibers are either on or off. So it stands to reason that if you reduce the number of fibers to zero and eliminate the "overt motor routine" (silence, no motion whatsoever), all that remains is the commanding covert motor routine. Players who have great mechanics but cannot play fast often cannot "run the covert motor routine" any faster than they can play. It is as if they are "sub-vocalizing" the music and can only play as fast as they can think/audiate/aurally image (like slow readers that sub-vocalize as they read).

I find that some of my students can develop the sensation of playing faster by running just the covert motor routine (play quieter and quieter until you don't even twitch your fingers). After all, automatic muscle motor memory is a "feeling or a sensation of doing it right" that lies just outside our conscious control. I have begun to suspect that this feeling is somehow connected to the "covert motor routine", but I'm no neuro-scientist.

I have found that some students can significantly increase their speed in a section within just a few minutes of practicing only the "covert motor routine" more quickly than they can play. Sometimes I have them sing the offending section faster, and sometimes I just have them audiate (hear it in their head). They then play the same section at the faster tempo *as quietly as possible*, gradually increasing in volume. It's sort of an uncomfortable Zen-like experience...

"Imagine yourself playing this spot faster, and you will play it faster".

It hasn't worked every time I've tried it but it has worked for some, and very well, too.

Here's more on the subject. <http://www.mechnerfoundation.org/Performa.doc>

Oohhmmmm...
Larry McDonald

www.LarryMcDonaldGuitar.com