

## **A Primer on the mind-hands relationship in classical guitar technique, or (to paraphrase Yogi Berra), 90% of guitar technique is half mental.**

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**Few pursuits in life are as technically precise or demanding as performing virtuoso music on classical guitar.** Most aspiring guitarists spend years trying to develop a strong reliable technique, with thousands of hours of repetitive practice. And unfortunately, many of those only partially succeed, able to eek out a passable performance of some repertoire, but frustrated with their inability to tackle many of the masterpieces for our instrument. Recent generations of young students have certainly displayed a remarkable rise in the overall level of classical guitar technical ability and musical refinement, and this is very encouraging to we teachers-of-a-certain-age. However, mastery of the classical guitar still remains stubbornly out of reach for many of those people eager to invest the considerable time and effort required. The most common pitfall, by far, is the technical difficulty of simply negotiating the demands of the concert repertoire.

Playing the classical guitar, like any complex skill activity, is primarily a neuromuscular phenomenon. As such, it's very important to understand that the brain largely controls this activity, and the hands simply follow the quite complex instructions of our central nervous system. This means that technique training is essentially a brain-development process, not a 'hands-development' process, despite the fact that we develop this technique through hours of practice with our hands on the instrument. We generally perceive our technical development as an increase in accuracy and fluency in our hands, but it is largely the result of acquiring several layers of inter-dependent habits, each built upon the ones previously acquired. And habits are built, and stored, in the brain.

One might ask what the significance of labeling technique as brain-centered rather than hand-centered is. There are a few important consequences of this orientation, in my opinion. One is that it can help to bridge the perceived gulf between 'musical' and 'technical' development on the guitar. Traditionally in applied music instruction there has been a perceptual divide constructed between 'technique' and 'musicality', with each aspect of development being defined rather narrowly. Yet, most advanced music educators would agree that the music-making process itself is a constantly integrated activity that includes musical thought, expressive intent, intellectual challenge, and neuromuscular coordination, all happening simultaneously in pursuit of a common goal. The best technical development, in my opinion, invariably includes the exercise of multiple aspects of the music-making process. It's easier to combine these activities, at least perceptually, when one accepts the reality that even the most 'physical' of practice is primarily 'mental' in nature. Another important consequence of understanding that technical development is largely a brain-centered activity is the acceptance that other aspects of music training and

development have a profound influence on technical development. Music reading skills, familiarity and understanding of the fingerboard, keen perception of rhythm and timbre, and even general state of mind when practicing, all directly influence the development of our hands' ability to move efficiently and perform reliably. A good example of the complex influence the mind has on our hands is tension, typically increasing in a performing situation. It's very easy for anyone to understand how a state of mind, specifically anxiety, can drastically impede the control and fluency of our hands, to the point of shaking uncontrollably in extreme circumstances. Tension is clearly a product of the mind, although it's primarily experienced in the body's response. This is merely the 'tip of the iceberg'; given the brain's complexity and ability to function on both conscious and sub-conscious levels simultaneously, it becomes very difficult to argue against the idea that our brain has similar influence on our hands even when we are not experiencing strong emotions associated with performance or other stressful situations. Clear, confident habits of thought and detailed familiarity with musical material will exert positive influence on our hands, and facilitate efficient and relaxed habits of movement. In fact, this has become one of the foundations of my approach to teaching classical guitar. Although I have a fairly detailed understanding of how our hands should be positioned and how they best function in classical guitar, it rarely occurs to me to spend much time on isolating these movements and positioning concepts from musical training, including reading skills, fingering concepts, rhythmic awareness, tone development, and especially concentration skills. This is true for beginners as well as remedial students that must develop better basic habits in order to improve their playing. I believe that a common mistake in guitar training is to too-narrowly define 'musical' concepts as interpretive or expressive in larger musical structures. Rather, the foundation of training musical concepts on the guitar lies in the development of high quality musical 'ingredients' such as accurate rhythm, consistent tone, and the ability to connect single notes into melodic intervals, and eventually, melodic phrases. Each of these skills is simultaneously 'technical' and 'musical', and requires a variety of mental processes, which I believe facilitates students' ability to seamlessly blend technical and musical development, to the benefit of both.

When I was asked to submit something for this issue of *Soundboard*, I thought that I would like to include both a brief article and an etude that might illustrate some of the concepts in my article, and serve to offset some of the rather dry discussion of guitar technique. So I composed the following arpeggio study that combines some good challenges for the development of both right and left hand technique, some fingering problems that I've kindly left to the performer to solve, some (hopefully) interesting harmonies, and some implied counterpoint and melodic movement. The title, *Rooster Comb*, refers to a smallish mountain in the Adirondack High Peaks region of upstate NY. This past summer (2013) I began teaching a guitar composition class in this region, and one of the assignments for the class was to compose an arpeggio study. I didn't want the students to have all the fun, so I also began work on this etude, and we even climbed up the mountain together. Enjoy!  
***(This etude is found on the Compositions page)***