

Garrick Ohlsson on technique: Mastering the paradoxical element of control

by Kathleen Riley with John Chong

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Garrick Ohlsson

This past summer, Dr. John Chong and I had the pleasure of meeting with Garrick Ohlsson. The purpose of our meeting was to obtain quantitative measurements of his playing. Through the use of ProformaVision software that was developed specifically for my work with musicians, we were able to measure Garrick's muscle tension and biomechanical movement while he played on a Yamaha Disklavier, which generated correlating MIDI data on the music itself. Not only was his playing fantastic, but we also spent the entire afternoon discussing piano.

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Interview Excerpts

KR: Do you have a definition of technique?

No, I don't. I used to have one when I was young. I thought it was playing scales, octaves, thirds and all those things. I think technique is the ability to play the right note at the right time in coordination with all the other notes, and in a musical relationship. You need musicality to be a part of it. It's not like now I'm practicing technique, now I'm doing calisthenics, and now I'm going to play. I think a lot of students get caught into practicing in a very dull, mechanical way. But you really want to practice with musical phrasing. To me, technique and musical phrasing really are indivisible.



Garrick Ohlsson

KR: I define technique as a vocabulary of sound at your fingertips.

Exactly, and then we have to be open enough to respond to the demands of Brahms or Chopin or whatever is being played, whether the passage is demanding, physically complex, or very delicate. Looking at it this way, no one can ever really be good enough, because every aspect, every nuance, can always be a little better—a little more gorgeous or exciting. That's when practicing becomes truly creative, when you get to think about how much spice you're putting in or not putting in, or how you connect the phrases with each other.

KR: There's an interesting quote by John Sloboda, who wrote a book on music perception called *The Musical Mind*. He said that you cannot play what you do not hear. You need to learn how to listen and what to listen for. A lot of students get caught up in the physicality of playing, and they begin to perceive their sound through physical movements, as opposed to really listening intently.

Exactly! Exactly! You have to be listening for how you want the next notes to sound. When I give master classes at Juilliard and Curtis, sometimes I discover that these young wizards can certainly play lots of notes, but they haven't thought about how they want the notes to sound. It's really important that the ear is the guide.

KR: Of course just listening intently and knowing what you want to hear doesn't mean that it will magically come out that way technically.

A trick I've been telling students in my master classes, although I'm sure other people have also invented this, is to practice very difficult technical passages with your eyes closed. I encourage students not just to practice slowly, feeling their way, but also to see if they can actually play some of the leaps and jumps with their eyes closed. You get a sixth sense of where things are. It can sharpen your physiological sense as well as your ear. When you're not so concerned with looking, you're actually hearing the sound. Of course, you'll crash and burn a lot practicing like this, but it helps the fingers to develop "eyes."

JC: Garrick, are there any special suggestions you have for warming up before a concert?

Well, before a performance you should breathe out to relax, and then actually tell three parts of your body to relax: the ankles, mid-section, and neck and shoulders.

I don't have a regular warm up routine, but I definitely don't start out "full force." When I'm backstage before a concert, I never practice anything I'm going to play in the program. I never worry about a particular passage, because I feel it's too late. I've noticed that when I've practiced a difficult spot over and over, I'll usually miss it in the concert, because I've overfocused on it. The music is much bigger than playing a few wrong notes. As far as practicing, I don't do any exercises. I start right in the music, but slowly and gently. I ease into the difficult passages. Perhaps a better way to say this is that I let them ease into me. There is a paradoxical aspect of control—you can't muscle it. For example, let's take the opening of Beethoven's Fourth Piano Concerto. Most students are worried about control and not the music. You must play the first chord on the exhale, like a singer. If you start with your belly muscles clenched, you'll never get through the next twenty minutes. Practice breathing in the practice room. You can recover much better from a bad ending than a bad beginning.

Arrau said that there's a dynamic relationship between tension and relaxation. It's not that you are one or the other. For example, the heart is a very intense organ. It gives a tremendous thrust to pump the blood through the body, but if it were to stay shut we would have a heart attack. It's a matter of degrees. Olga Barabini, Arrau's student, got me out of a technical problem when I was eighteen. She said that the idea that you can get rid of all tension is false. We have to be aware so we can get "out of it" when we're "in it." And we have to move it into larger muscles—that's where we get strength from, starting with the back.

KR: It's all related.

It's all *intimately* related.


KR: So many of our students today aren't aware of these things, especially the larger muscles and conditioning the body. We're really doing athletic feats with fine motor control, for hours at a time.

Yes, there was a study done at the Minnesota Orchestra, where, just to give the board members an idea of what the musicians were doing, each board member was given a violin and a bow and instructed to just hold them in position for one minute. At the end of the minute, each board member was exhausted—they

just couldn't do it. People tend to forget what an amazing amount of conditioning we need in order to be able to play music.

[ProformaVision with Garrick Ohlsson Chopin Nocturne Op 15 No 1 section A](#) 

Quicktime Movie, 13.3MB.

[ProformaVision Dr. Kathleen Riley discussion with Garrick Ohlsson after his performance of Chopin Nocturne Op 15 No 1](#) 

Quicktime Movie, 9.2MB.

KR: Well, let's begin to hook you up for the Surface Electromyography (SEMG). SEMG is a device that measures the amount of electrical activity your muscles release when they are contracting, more commonly known as muscle tension. It is similar in function to an EKG, which measures heart muscle activity.

Dr. John Chong placed surface electrodes on Garrick's left and right shoulder (trapezius muscle) and forearm (extensor carpi radialis). We then had Garrick squeeze two golf balls and tense his shoulders as hard as he could for thirty seconds. This test indicates the condition of the muscles. If the lines representing the tension levels stay constant for the duration, without dropping, the muscles are in good condition. Garrick passed the test! Although, at the end he laughed and said that the Brahms 2nd isn't as bad as that!



John Chong connects electrodes to monitor Garrick Ohlsson's muscle tension.

observe the resting levels of tension in his shoulders and forearms.

We began measuring Garrick's trapezius and extensor muscles with SEMG while he warmed up on the Yamaha Disklavier with the main theme from the finale of Beethoven's Op. 109 and Chopin's Nocturne, Op. 9, No. 1. All playing was recorded and synchronized with video of the muscle tension and camera views of the hands and body.

John asked Garrick if he had any existing injuries or any complaints (important to know about your students!). He said no. He does do shoulder stretches and feels that they are very important, especially as we get older. Garrick commented on how we spend all of our time at the piano in a position that rotates our arms and shoulders forward. We need to stretch them in the opposite direction to relieve some of the tension and avoid the overuse of certain muscle groups. We were so pleased to hear this from Garrick.

Next we asked Garrick to relax his arms at his side and breathe so we could

Garrick played the Chopin Ballade in G minor, and he could see his muscle tension and hand position on the computer screen in front of him.

[Garrick]: It's really interesting how someone can look relaxed and not be.

KR: Yes and that is why I started to work with measuring muscle tension. I found it difficult to get students to understand that they were holding tension they were unaware of. To them, this level of tension was normal. (Garrick's resting tension in both the shoulder and forearm are very low—a perfect example of what we want to see.) When I hook students up, the first thing I have them do is sit just as you are to measure their resting tension. Many of them have a bit of tension, so the lines are higher on the screen. When the lines lower, I have them lift their hands to the keyboard, keeping the tension levels as low as possible. You do this perfectly!

Being musical means being emotional and that's not wrong—it's a good thing. But it can take over.

KR: Right, you have to be in control of it (which manifests physiologically as muscle tension) and know how to release it. [Here Garrick "emotes" with his shoulders and then releases them. There is a big jump in tension.]

Garrick plays the Chopin Nocturne, Opus 15, No 1. It's so irresistible to watch this! And it's not that the lines don't move (and they should), but that they go down with the release. I tried something specific at one point—I struck the key pulling backwards and nothing happened on the screen. Irma Wolpe said that it was only about applying energy to the key, this way or that way, whichever way that works. I wish she were alive to see this— she would freak!! She would say "that's exactly what I meant!" She always said that you can get a lot of piano playing for free (tension or pain free), or at least a lot less expensive!



Pianist Carol Leone with (L to R) Gail Berenson and Kathleen Riley. The graphs illustrate differences in measured tension between a 7/8 keyboard and a conventional keyboard.

KR: And this is so malleable especially because you're doing it in real time. When you play it back you're seeing and hearing all of this. And it all has to be reconnected to the sound because you have to go away with the aesthetic! I began my research with feedback about fifteen years ago. I realized that many of my students did not know how to listen to music attentively. They had not grown up listening to classical music, and they had no understanding of the style of many of the great composers. So when I would begin a student on Chopin, I was having a difficult time explaining the fine nuances in interpretation, what a rubato is, and so on. Not only did they not listen to classical music, but they didn't know how to listen attentively, because they listen to music everywhere—it's on all the time. But, their visual skills are amazing!

That's right, but of course!

KR: Yes, thanks to computers and video games. So I decided to go in the back door, through the eye to "jump start" the ear! And now, with this whole system, I can get students to become aware of what's going on inside!

Yes, and the eye is the pathway.

JC: Yes it is!

KR: It's great, because after an hour of using this feedback, the students understand it. And they retain it, because they come back the next week with less tension.

There comes a point where it not only sounds good, but it feels good—it's a Zen moment!

JC: Yes!

This is just incredible. I don't know anyone else who does this. This gives you instant feedback. I think this can work at any level, even at a very early age, if the students are studying with some seriousness. And, it's not about stealing a student or saying that the teacher doesn't know this or that...

KR: This is proof of what is going on. I want to know that the student is doing it right. Thank you so much for today. John and I look forward to sharing this with the piano pedagogy community! _

***Kathleen Riley**, Ph.D. is known nationally as a lecturer and clinician on piano technique and injury prevention. Her work has been published in many peer-reviewed journals and she is an active performer. At New York University she teaches piano and keyboard classes and conducts research in piano pedagogy and technique. Her primary areas of research are piano pedagogy and technique, injury prevention, and improving students' listening skills, especially at the grade school level. Her work has been published in Medical Problems of Performing Artists, American Music Teacher, and the Journal of Technology in Music Learning, along with articles in The New York Times and Scientific American. She has private practices in New York City and New Jersey. She can be reached at krileyphd@ureach.com or (201) 220-6851.*

*Dr. **John Chong**, Medical Director of the Musicians' Clinics of Canada, began piano studies at age three and moved on to composition and electronic music after an injury to his right arm. He then continued on in electrical engineering, medicine, epidemiology, occupational health, and community and preventive medicine. Recently certified in medical psychotherapy, he is bringing surface EMG and neurofeedback methods to the diagnosis and treatment of performance related injuries. He can be reached at john.chong@sympatico.ca*

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