Playing By Heart: The Epistemology of Musical Performance  
by J. Beth Quillian

“How do you remember all that music? I can’t believe you play by memory!” As a musician, I sometimes ask similar questions. How do we know what we know? How do musicians perform by memory? Dancers and ice skaters perform similarly; it would seem strange to see them trying to consult a written plan for the choreography as they perform. Is there any difference between playing by heart and playing by memory? Do musicians truly “recite” during recitals or is it possible that something more meaningful is taking place?

Finally, what does “epistemology” have to do with musical performance? I hesitate to use a word like epistemology in reference to music for the very same reasons that I want to use it. I associate “epistemology” with the theological study of how we know and are known by God. That type of knowledge is very intimate and personal. It is multi-dimensional with aspects that cannot be wholly explained or proven scientifically. These same qualities may be applied to knowledge of music. I am not equating “knowing” a musical piece with “knowing” God; however, music is one of the forms of communications similar to prayer by which we can know God.

Let’s return to my first question: How do we know what we know? I don’t think we will ever be able to answer conclusively because there is always something more that we can “know”. However, exploring the subject increases our ability to enlarge our capacity for knowing.

Please, try something with me. I want you to recall something from your childhood that you have not thought of in years; yet once you think of it, you know you know it – without question. Here are some possibilities: the first telephone number you memorized; the name of your first
pet; the smell of someone’s house; a memorable experience . . . a special passage of scripture, the words to a song; a skill you learned such as riding a bike, driving a manual shift, learning to swim. . .

What senses and emotions were involved in the experience or memory you are recalling? What senses and/or emotions return as you recall the memory? What visual images came to mind? What would you say you “know” about this recollection? If you are recalling a memory of facts, such as a phone number, verse of scripture, or words to a song -- how did you learn them? As you recall this, do you think it is something you will ever forget? Do you know this “by heart?”

Now -- consider your most recent exam or test. What do you remember? How did you learn? Do you know it “by heart?”

I don’t think we can discuss the epistemology of anything without stopping to consider the role and meaning of “heart” in reference to what we know. Consider common phrases we use that refer to the heart: “. . . with all your heart,” “her heart is not in it,” “I don’t have the heart to tell him;” “She lost heart and gave up;” “the heart of the matter”; “the heart of a melon is sweetest” . . .

Even scripture states in Proverbs 4:23: “Above all else, guard your heart for it is the well-spring of life.” Physically, we know the necessity of the heart. As long as the heart is still beating, a person is considered alive even if the brain is not functioning and other organs are being sustained by artificial means. However, once the heart stops, life has ended.

Emotionally, the heart fuels our experience and reaction. We sense reactions in our chests as the heart speeds up in response to excitement or fear. We are such amazingly interwoven creatures. It is a great disservice to separate the physical, intellectual, and emotional dimensions. The heart seems to literally and figuratively be the coordinating center for all of our being. It
coordinates with the brain as our body responds with tears, pain, laughter, tremors, a cold sweat, strength from adrenalin, “goose bumps” . . .

Playing by heart means more than playing merely by memory. It means knowing a piece of music in many ways. Let’s go back to those things you recalled; the things you know by heart and consider what has made them “stick.” Your first telephone number: This was probably learned in association with how the telephone works because you wanted to use the telephone. You repeated the numbers with a goal in mind. You also repeated the numbers every time you used them to call home from school, from a friend’s house. . . You also incorporated a physical action: dialing the number. How often do you remind yourself of a number by your sequence of moves on the number pad? To summarize then, you learned the phone number by purposeful repetition based on your understanding of how telephones work and why you wanted and needed to know that particular number. You also involved physical repetitions that were also informed by your purpose and your knowledge of how the telephone functioned.

Let’s consider another type of knowledge: words to a song or passage of scripture. The dimensions mentioned above: purposeful repetition and understanding are present as understanding is now applied to the text. Physical involvement takes place through verbalization or singing. The dimensions of emotional association and imagery are also at work. Perhaps the song or scripture speaks to an emotional need or desire. OR perhaps the song or verse is associated with a special experience that you always recall when you think of it. Now we have purposeful repetition, intellectual understanding, physical involvement, emotional involvement and mental imagery.

Now – consider a skill such as riding a bike, driving a stick shift, or swimming. How is this different from the other things you know by heart? The temporal dimension is now significant.
Skills happen in time; therefore, they call for a different type of awareness as they are performed. This is an awareness allied with physical actions that must respond IN THE MOMENT to the unique factors of that moment. The amazing aspect is that there is a familiarity we learn intuitively and internally that carries us from moment to moment. Once we blaze the connective trail that controls that skill within us, our being never forgets it. There are dimensions of this kind of awareness and knowledge that defy verbal description. In fact, over-involvement of the intellect or verbal dimension in our mind may interfere with the accuracy of moment. By the same token, ignoring or denying the knowledge we gain from those dimensions would be deadly.

Consider a familiar track you have ridden on your bike repeatedly. One day, you are on the track and a sign appears warning of a hole in the pavement. It is through your sense of sight and your intellect that your body receives the information to be alert to adjust for this hole. Or – someone yells, “Look out!” You process the verbal warning and the intuition is on high alert to respond quickly. This tells me that the deepest kinds of learning involve our intuition and that the optimal “performance” will be the product of capitalizing on integrating every aspect of learning with that intuitive part of us that fully “wills” us in one direction or another.

Training oneself through connecting with the intuition, “will”, or perhaps most accurately – the heart – can be an elusive, difficult task. In most cases, the other types of learning I mentioned are more familiar. Repetition is the simplest method to employ. It is more of a challenge to make sure the repetitions have purpose and meaning, but the intellect can rise to that call through analysis so that repetitions also involve understanding. Physical motions can also be analyzed and repeated. Even emotional and imagery associations can be determined both by the intellect and other associations with which the performer is familiar. However, I think the
biggest challenge comes in finding the connection that will tie each dimension intuitively to the “heart”.

I believe that the “heart” may be quite selective because it only grasps deeply that with which it can truly identify. That identification cuts across the wholeness of who we are. The identification can be positive or the absence of identification can be negative as the heart is left out of the process or discouraged by the process. Making positive types of identifications or connections requires a significant acquaintance with our intuition. The more we know about what holds the attention of our heart, the better we can study anything. Too often we resort to basic repetition because it usually provides some benefit eventually. Please consider your area of expertise and try to find a parallel. Vocally, perhaps this could involve a melismatic passage where it is difficult to determine where to breathe. In other academic settings, perhaps it is a complex idea or formula. Here is a typical scenario for pianists: we determine a particular fingering for a passage. Logically, the fingering pattern makes sense, so we drill it 10-15 times. Then, we put it back into the larger passage and try to play the whole section. For some reason, we still stumble when we get to that set of notes. So, we stop and drill it again. We put it back in context and the same thing happens. By this time we are usually in an adversarial attitude with the piece, the passage, and our fingers. Typical reactions may include irritably going back through the same ritual, closing the book and “hoping” that somehow it will get better by tomorrow, or deciding to go back to the beginning and play through the whole piece and just ignore what happens there. I know these reactions because I have done each one of them. By this time, we are impatient with ourselves and may question why we call ourselves pianists. OR – the feeling grows deep inside that someday, someone is going to find out - - - - that I don’t know what I am doing and really don’t know how to play the piano after all.
While ALL is not lost in this practice session, it lacked much in variety of approach or appeal to the heart. Working this way will not help the pianist learn the music in a way that gives him or her greater understanding of the music and what reaches the heart. In fact, very little that is positive has been learned emotionally. What will tend to have been taken into our heart is the dread of the passage and the fatalism that it will never be fixed.

Our hearts are very impressionable and sensitive. Emotional and mental contexts of how and what we learn tend to brand themselves into the heart as much or more than the technical solution we are trying to achieve. Much of our practice time can be adversarial as our attitude is one of making our wayward fingers do “what they are supposed to do.”

Personally, I struggle with practicing consistently because of vivid memories of practicing extremely long hours and still walking through a mental war zone during the performance. After my audition for graduate school, I called my undergraduate teacher to tell her that I had been accepted into a graduate program with a prestigious teacher, but there was no joy in my heart. All I could think of was the long road ahead of hour upon hour of drill with about a 75-80% return on 110-125% of personal investment. No financial guru would encourage spending resources in such a way. Once again, I was so afraid that someone would find out that I didn’t know what I was doing. I tried to compensate by longer hours of practice and drill. By then, I was up to about 150% of personal investment with some improvement on the return – an occasional 85-90%. I seriously wondered if I could handle teaching in this field. Did I really want to inflict this turmoil onto other students - - and how long could I keep up the poised façade behind which I fought my battles during practice sessions and performances?

One of the major frustrations was that I could not seem to find the place spiritually that would help me get past the performance traumas. As the daughter of a protestant hospital chaplain, I
was raised with all the right instructions: to trust God, to honor Him with my performances, to leave it all is His hands. I had also diligently maintained a quiet time and scripture reading, so I also was well aware of the passages that anyone would use to encourage me spiritually.

Ultimately, though, I think it was what I had absorbed “by heart” that caused me the most turmoil. Despite my extensive knowledge of God and the grace offered us through Christ, I couldn’t accept myself for who I might be. I say “might” because the ideas of how I should be and the perfection I desired were always extremely high. If I thought of anything less, I feared that I would become lazy, so I had no desire to find out who I was apart from my ideals. Sheer determination was something I could always tap into to get myself through anything.

Much of what we know by heart consists of ideals we may willfully impose on ourselves, but there is also a very truthful part of our heart that knows us for who we really are. Eventually, that part will not let us ignore it anymore. As that aspect of myself began to emerge, I thought I was falling apart. I was burning out and had difficulty tapping into that sheer determination. I could no longer maintain a quiet time or daily scripture reading. I practiced less and less. Yet, God didn’t turn on me. He didn’t take away my ability to play and He didn’t remove His presence from me; however, He did not seem to answer or reveal very much. Even so, it was such a relief to know that I was still ‘ok’ when I could no longer “perform” spiritually or pianistically at the level I expected of myself.

Despite the traumas, I still loved the piano and tried to keep playing. I began to hope for the best rather than perfection. My undergraduate professor referred me to Sheila Paige, a pianist/specialist based in New Jersey who traveled to Dallas once a month during the academic year to work with pianists and teachers who suffer from pain when they play. My conscious reason for studying with her was to be able to help students who hurt when they play. I had
ignored my own shoulder pain for so long that I hardly acknowledged it. Through studying with Sheila Paige, I learned more about the human anatomy as well as certain scientific concepts related to momentum, body weight, and leverage in relation to piano technique. At the same time, she taught me to trust my body and my musical instincts rather than forcing my fingers and the piano to “do it right and accurately!” I had to face my greatest fear: if I just play and listen in order to respond in the moment, I am reduced to whatever kind of pianist and musician I am – instinctively. I felt very vulnerable. Surprisingly, some of the most beautiful and inspired playing occurred in those sessions with Sheila. In the inspired moments, I was usually strangely silent inside, just listening as I played. I couldn’t sustain it for a whole piece because I wasn’t sure where the control was coming from and when my concentration would shift to trying to find it - - rather than listening, I would lose the focus. It was as though I was a recipient and participant of the music much like the audience. I felt as though I was a conduit for the music to flow through, yet at the same time, I knew it had a sound that was mine and no one else’s. Sheila used this to affirm the intuitive musician inside of me. She explained that finding the most comfortable physical technique for me was a strategic factor in releasing the musicality. I felt confused and didn’t know how to practice. She encouraged me to practice the mental focus and balance as well as the awareness of the efficiency of my motions. I would have had to use the intuition to gage speed and dynamics, because I was no longer playing with the muscle tension and resistance that had previously been my guide. Now there were new reasons to learn the music carefully. I wanted to be free to let the inspiration of the music communicate through me. I needed to practice allowing my heart and spirit to listen for beauty and trust my body to respond. This was different from drilling for the purpose of muscle memory or mere mental recall.
I am still very much in the process of integrating what I am learning. My eyes have been opened to the interrelatedness of all that we attempt to learn and do. That interrelatedness even cuts across our imaginary lines of sacred and secular. My performance issues were interrelated with spiritual and physical dimensions. Looking for exclusively spiritual answers had not met my needs. I needed physical, technical guidance from someone who understood the connectedness of the spiritual, emotional and physical for pianists. As I began to accept myself as a pianist, I began to accept myself in other ways as well. My spiritual life has become more concrete and real as I have gotten to know my own heart better. As each of you study and practice, I want to encourage you to explore your subjects and your music with a sensitivity to your heart. Look for ways to enjoy what you are doing.

Playing by memory, as opposed to playing “by heart,” implies that you are relaying bits of information much like a tape recorder . . . or like Dory in Finding Nemo who kept reciting, “P. Sherman, 42 Wallaby Way, Sydney,” When Nemo’s dad asks what it means she just says, “I don’t know, but I don’t care! I remembered it: P. Sherman, 42 Wallaby Way, Sydney; P. Sherman, 42 Wallaby Way, Sydney; P. Sherman, 42 Wallaby Way, Sydney . . .” Avoid repeating without a focus or you will find yourself performing without focus.

In contrast, playing “by heart” implies intimate knowledge of a comprehensive nature. In the outtakes of a movie about the life of Vladimir Horowitz, Horowitz say, “I know the music ups and down.”¹ A performer on the level of Horowitz communicates a piece much like a storyteller tells a story. As the story unfolds the listener’s attention is consciously captured by the storyline. The storyteller is totally involved and the story comes alive. The storyteller must be very aware in each moment of the story. The listener may even feel that they are getting to know the author.

in a way they have never seen him before. Consider a story by Mark Twain. There will be a turn of a phrase or a humorous comment that is so typical of Mark Twain and reminds you of him. If a storyteller has told his story by heart – from his whole being, the listener will receive such a rich communication of the story itself and the author’s personality. The listeners may even see sides of the storyteller that might never have been seen, but something about sharing the different characters brings out aspects of the storyteller’s own personality.

That is our goal in playing by heart. As a performer, we must integrate into our being – into our heart - all the ways we have studied a piece – physically, intellectually, emotionally – and the integration occurs when we listen carefully on the inside as we study each aspect. When working out fingering, play it sensitively focusing upon how it feels in your hand. If you play it again with different fingering, does the sound change? As you play it one time, be very aware of how it feels physically. The next time, consider the intellectual facts of the fingers used. The next time, consider the emotion or imagery of this passage – what shade of that feeling can you associate with this physical sensation?

Let’s take an intellectual concept through all dimensions. Consider the harmonic analysis of a phrase. As you play the phrase, what physical shapes do your hands create? How does that shape correlate with the harmonic tension and release of the phrase. Which chord has the most tension? What fingers are involved at that point? From a generic standpoint, what type of emotion would you associate with the harmonic progression of the phrase? Does this phrase reflect that or does it do something unexpected? Does the phrase bring to mind any mental picture?

With each of these questions, you don’t necessarily need to study your answer to the point of being able to “recite” your answer. Let your body and soul take in the information as you
uncover it. It will be much like studying a multi-faceted gem. As you look at it from many angles, you may see many, many things. Your comprehension will rest on having seen those many, many things. Absorbing the individual details will inform your appreciation of the whole. In the moment that you show someone else, there may be only one “glimpse” that you decide to point out to them before referring to the whole - - - and it will be the glint that catches your eye and your heart in the moment. Practicing a piece of music may be similar. Study the various facets, “stare” at a chord progression as you take in the voice leadings. Vocalists, gain an appreciation for the accompaniments to your songs. How does the accompaniment underline or explain your text? All of that informs your performance in a moment in time. It would be counter-productive to try to focus on every one of those things in a single performance, but the fact that you know they are there will enrich your overall performance.

Exploration of integrating all the ways we learn is an exhilarating way to approach practicing. Enjoy the process and privilege you have of taking masterpieces apart and putting them back together again. At the same time, realize that this work is also draining. Wholly integrated practice sessions will involve study and focus upon what and how to think as much or more than drilling of physical motions. Our culture is dominated by a desire to do things quickly. There is little that encourages increasing our length of sustained concentration. Technology has increased the speed of finding and receiving answers. Immediacy is at a premium. Yet, we are still human. Our brains are incredibly quick at grasping ideas, but when we are seeking answers from inside ourselves or we are hoping to absorb complex passages of music emotionally, time is needed for the heart to ponder and find points of association – to absorb. In the long run, shorter thought-filled practice sessions will likely produce more profitable results than drilling passages feverishly for longer periods of time. Experiment with going to the most problematic passages
early in your practice time, trying different possible solutions. Sometimes it may take several sessions to find the answer for your hands and heart or your voice and your heart.

In preparation to present this paper, I realized that I was not alone in the performance traumas I experienced. Dylan Savage is a professor at Henderson State University who has done research on relating sports practice techniques to piano practice. He explores the inner turmoil that many pianists experience in regard to performing.² He stresses the point of focusing more on the process of learning than on a specific result does not mean that we lower our standards, but we realize the wonderful privilege we have in getting acquainted with pieces of music.³ Madeline Bruser explores this dimension in her book, *The Art of Practicing: A Guide to Making Music from the Heart*. According to Bruser, our practice sessions offer us the privilege of discovering beautiful inner lines or lingering on a particularly rich harmony.⁴ In a sense, it is like getting to sample the cookie dough or cake mix before it goes into the oven. If we find fulfillment and reward in the growth and process of learning, the success of the actual performance is less threatening to our sense of who we are. Our investment of 125% will continue to compound long after the performance is over. Even if we get an 80-90% return in the moment of the performance, the ultimate benefit we gained from engaging with the music and ENJOYING our preparation experience will show a profit in ways we will continue to realize for years. Even for those who do not plan to perform any more extensively than the dreaded Friday Recital or semester jury, the preparation is what can be enjoyed and used to help you learn about yourself and the music.

³ Ibid., p. 110.
Becoming more comfortable with uncertainty is difficult for those of us who like to feel in control of situations. However, if we consider how many circumstances are really beyond our control, it can be humbling. There is no way to guarantee the outcome of any performance, regardless of how well we are prepared. The best we can do in any given moment - - is the best we can do. Sometimes there are “shorts” in our performances. Sometimes those shorts may occur where they have never occurred before. Perhaps our emotional system overloads with a surge of adrenalin. There are many situations that we can never understand – musically and in all of life. But just as those situations are unpredictable, so are their recurrences. We can hope in the fact that what went wrong once may never happen again. We can also look to performances as opportunities to take risks. One day there will be a performance that will be our last, but we can not know when that will be so using each performance to learn as much about ourselves and the music can become an additional part of our process of learning and not merely the final product.

Finally, I would like to comment on the concept of not comparing ourselves with each other for comparisons almost always hurt our hearts. We are all truly unique and truly unique musically. Savage underlined this point in his article. Comparing ourselves with each other leaves us feeling either greedy for more if we think we are better than the object of our comparison or hollow and empty if we think we are not as good as the object of our comparison. In 2 Corinthians 10:12, the Apostle Paul cautioned against comparisons as he wrote, “We do not dare to classify or compare ourselves with some who commend themselves. When they measure themselves by themselves and compare themselves with themselves, they are not wise.” (NIV)

As you listen to professional recordings, keep in mind the editing that has taken place. The recording industry has done us a bit of a disservice with its priority of accuracy in recording.
Pianists feel such pressure to perform with note accuracy. I recently read where a pianist and conductor listened to the final recording of a concerto and the producer looked at the pianist and said, “Don’t you wish it really sounded that good?” Pianists value accuracy, yet we often only value note accuracy rather than the comprehensive accuracy of the expression and entire nature of the work.\(^5\) Listen for the best and the most in your own playing and that of your peers. Listen for more than note accuracy. Listen with your heart for understanding and continuity. This is not an excuse for sloppy performing, rather it is a call to listen to yourself and others for more than correct pitches. A piano professor at the University of Houston pointed out that general audiences often recognize whether the heart is engaged beyond correct notes and dynamics. After attending a virtually note-perfect performance, she commented, “There is something dreadfully wrong [with the communication of the playing] when a pianist can play that accurately and not receive a standing ovation.”

In conclusion, I think it is important for us to consider why we perform and what role music plays for us as Christians. Performing should not be done for the accolades from those who come to listen. They will never satisfy. Performing comes from a deep desire to share beauty and to celebrate the skill one has the privilege to develop. The more I look at pianists who have played publicly for a significant portion of their lives, the more I am aware that they are sharing what they know by heart with those who listen. Those that leave the most lasting impression are those who seem to risk all in sharing from their heart. In some performances, a listener has the same sense of involvement as when an ice skater attempts spins and leaps. We hold our breath during the suspenseful moments as the pianist negotiates the difficult passages with the abandon of the skater.

As we conclude, I would like for us to listen to a recording of Horowitz when he came out of retirement in 1965 and played in Carnegie Hall after twelve years away from the stage. As he began to consider returning, he mentioned it to his wife, but she made no comment at the time. “‘An artist must want to play. He must feel he has to play,’ she [later] said. ‘It is no use to talk. So I said nothing.’”⁶ This recording is live and unedited. You will hear wrong notes, but I ask you to step back from that type of “perfection” and listen to the heart of a pianist who knew his music “ups and down” and took risks in order to communicate his own heart and that of the music.