

Retuning Mind and Body: Exploring Music's Potential in Enhancing Post-Stroke Rehabilitation

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Abstract

Although stroke is the second leading cause of death worldwide, most episodes are not fatal. Four million stroke survivors live in the United States alone. I am one of them. During the early hours of October 11, 2009, I experienced a massive right-brain stroke. The event resulted in cognitive dysfunction, near total left-side paralysis, and aphasia. The brain damage was significant, but I was lucky; I was a musician.

In the days following the event, as I regained cognitive function, partial speech and limited left-side movement, I began to discover how, when systematically employed, applying basic strategies for learning and performing music could play a role in my physical recovery. The recovery process, guided in large part by the regular practice of various bi-lateral rhythmic exercises, continues today.

Much more gradually, I also began to recognize the subtle ways in which my physicality and emotionality were deeply integrated. It was not by coincidence that listening to music no longer stirred my emotions. Music—its timbres and melodies, harmonies and rhythms, and even the memories they invoked—no longer *moved* me. The emotional inner experience of music's physicality, previously deeply embodied in my dominant left side, had vanished. Might it be recovered? Through the construction of exercises involving emotive, thought-infused movement, I endeavored to find out.

In developing this paper I follow Leventhal (1984), who, when presenting his perceptual-motor theory of emotion, argued for the primacy of subjective experience. I also draw from the theory of embodied cognition, which contends that cognitive processes develop in close accord with environmental conditions. I find additional traction in a wide variety of research demonstrating the brain's plasticity when an individual engages in mentally focused, emotionally engaged, and repetitive activities (Doidge 2007, Levitin 2006, Sacks 2007).

I organize this paper along two distinct, yet intertwined, lines—the cognitive/physical and the physical/emotional. In regards to the cognitive/physical, I describe the simple musical exercises that have informed my journey from near total left-side negligence, to limited awareness, and towards the goal of balanced lateral integration. For at least some stroke patients undergoing physical rehabilitation, the regular and methodical

application of these simple techniques may offer a therapeutic tool of considerable efficacy. My discussion on the physical/emotional axis details the musical strategies I employ to reembody my cognitive processes as I seek to live fully in the world and reinvolve myself in the broadest range of emotional experience. Here my thinking is less developed and I cannot currently offer practicable patient-focused rehabilitation methodologies. Nonetheless, I believe this an avenue rich with potential for advancing understanding in the area of music and medicine. The author can be reached at scornel@bu.edu