Marcia: Using Rhythm and Music to Create Initiative in a Stroke Recovery Patient

A Cognitive Eurhythmics Case Study

by Eric Barnhill

Marcia suffered stroke damage in the occipital lobe. The local damage had caused her to have double vision, requiring one eye to be covered. She had muscular atrophy to some degree, and difficulty standing and walking; while she could take a few steps on her own, it was unrealistic to expect her to get across a room without help. Her posture had been heavily compromised and she sat slumped in couch or wheelchair, chin tipped down most of the way towards the chest.

The primary quality of her stroke was what one therapist called her "loss of initiation". Marcia, formerly an academic at the front of her field, and a voracious and engaged intellectual, now took the path of least resistance to anything put before her. If asked a question that could in any way be answered with a yes or no, Marcia did not speak; she merely nodded or shook her head. If asked a more specific question, a long pause would ensue, and then Marcia would pick up her head, and in a calm adult voice, answer exactly what you were asking about, and no more.

Physical actions, too, proceeded as requested of her, only after a long delay. This isn't to say she sat cataleptically; on my arrival she was always reading the newspaper, or the latest Harry Potter. She was cognitively all there; she was just as passive as life allowed her to be. If I asked her to reach for the glass in front of her, after a few seconds she would reach to get it, and immediately slump back down in her seat.

These extremely long delays immediately made me curious how she would respond to rhythm. "Suppose I gave you a rhythm like this," I said, snapping a couple of beats, intending to follow up by asking her to reach for her water glass in five beats. Immediately a whole new type of movement happened. Marcia's head began to circle gently, exactly in line with the beat. To see if this was a coincidence, I stopped before continuing, and changed the beat. Her head again matched it exactly. I knew I was in for another adventure in the jungle of the brain.

Marcia was a dancer in her past, and then took to writing about dance academically. I quickly found that her highly refined sense of movement had not gone away, but was no longer called upon. I asked her to reach for her water glass in five beats, ten, one. It was always perfectly controlled. I even asked her once to reach for something in a time frame that was impossible. I watched as there was a slight delay, and then her arm suddenly snapped across her body at a blazing clip. It was reminiscent of the patients catching tennis balls in Awakenings. Fine differentiation was available in her shoulders, spine, and pelvis, as several exploratory Feldenkrais lessons revealed.

Impressed by the full range of movement still available to her, albeit never tapped through any sort of initiation, I began to lead movement lessons with music. To give a verbal request in the manner of a Feldenkrais lesson can reach a high level of anatomical subtlety, but guiding the lesson through improvised piano music yields so much more. One can slightly shift the texture of the sound, the tempo, the harmonic mood, and see spontaneous, expressive change in the client that reveals so much about the underlying cognitive situation; people's choices for spontaneous expression clearly show which actions are available to them and which are not. To a dancer in particular, struck with an affliction that greatly limits her ability to communicate, the ability to express through movement must be a welcome venue. I was not surprised that Marcia wanted me to come again.

Beyond all the joys of movement and expression, the exercises responding to music yielded something even deeper: initiation. I began with some intermediate eurhythmics games, in which the hands might tap on the lap one pattern, say a quarter note, and the feet might step something else, say a half note. I would play music that reflected this with quarter notes in the treble and half notes in the bass. I would then switch the music, and see if Marcia could reflect the change in pattern in her body.

This line of inquiry showed dramatic improvement over just a few sessions. The first day, every shift in the pattern would lose her. If I would stop to mention that I had just changed something, she would change in response to my verbal command – and then never switch back. Only when I punctuated the situation with a verbal command did Marcia take the initiative to switch what she was doing.

Over a few sessions, though, she grew more and more alert to changes in the music, until these switches between quarter and half note were picked up quickly. I would see the shift in her body as she heard the change happen, and then almost watch the signal as it went down to her hands and feet and, after several measures of music, while she sorted it out, the change in her movement would occur. I am at a loss to guess what faculty was "improved" in this work. She was, especially given her dance background, surely quite aware of the structure of the music I was improvising. I am reminded of Dalcroze's statement that he believed his method of learning to express musical structures in bodily movements harmonized the nervous system's "capacities for action and inhibition", put a person "in possession of their natural rhythms" and created "an absolute freedom of control of action"*. All the elements were there: the musical ear, the bodily movements; some sort of harmonizing was taking place, and the musical parameters she could harmonize with grew more sophisticated as the lessons went on.

Marcia further began to initiate improvisations of movement, and they were the only acts of initiation I saw in this client who supposedly suffered from "loss of initiation". She altered her movements not just to show what I asked for, but added twists to show changes in meter, voicing, dynamics, and other aspects of quality. What the rest of life did not seem to be bringing out in her, the music did. The second day of this, she began improvising immediately on top of what I was asking for, shifting hand and leg positions to capture musical groupings, picking up on phrase patterns. She especially liked rubato leading into cadences, which she could spot a mile away, pulling back and coming to a triumphant final gesture on the move from dominant to tonic.

As I watched this improvisation grow, my musical games became freer. I had been guiding her on the harpsichord, which I discovered was absolutely the perfect instrument for simple rehabilitative movement: its soft, refined, blossoming tone encourages just the sort of light, easy, kind movement one would want to see from someone learning how to use a limb again. To encourage this creative improvisation though, I moved to the piano when the expressive range was (sorry, Baroque purists) so much larger.

I began the next lesson by having her start with her head and arms folded up, extending outward like a blossoming flower as chromatic chords moved up the scale to a resolution. The chords then came back down, and she folded back up. I altered pacing, harmony, register, and she constantly came up with new movements to reflect these changes. I moved into a plaintive improvisation in the style of Rachmaninoff. Her hands traced sinewy patterns as her head lolled from side to side. I switched to a Prokofiev-style march loaded with ironic mediant harmonies. Her movements became sharp and quick. We proceeded this way through a variety of styles, until she fatigued.

Starting with the next lesson I dispensed with verbal instruction altogether. "I'll play you some music; you sort it out in your movement" was all I said. She nodded. We cavorted through a variety of romantic, classical, impressionistic, and atonal improvisations. I could tell she was fatigued, and it was time to stop, only when her movements became less imaginative. Every now and then, I would take the game up a notch by restricting one freedom or another: if the harmony is expectant, lean forward, and when it resolves, come back to neutral. This would add a third layer of torso improvisation to the activity of hands and feet. Or, if I felt a musical element was not sufficiently expressed, I would drop out the remaining textures so she had to deal with it, and then gradually add them back in, in a process similar to how a composer might get you to listen, in a development section, to some aspect of the main theme you hadn't previously noticed.

At the end of our short run of lessons together, I thought back to the concept of "initiation" that another therapist had spoken of. In what context were they exploring the phenomenon of initiation? Was it dry, mechanical activity? Perhaps the hope for Marcia gaining further capacities of initiation on a practical timetable lies in taking a scientific look at improvisational art and play. Perhaps games of music and movement are not simply a "nice" activities to make patients in rehabilitation feel better and occupy their time; perhaps they can get to the heart of cognitive and neurological issues far better than the sterile, often unidimensional batteries and tasks that have the veneer of the medical and objective. If it is improvisational play that opens up the brain, then that too is entitled to claim the mantle of science.