

Helga, Part I: Using Eurhythmics-Based Movement Games to Eliminate Spasticity in a Stroke Recovery Patient

A Cognitive Eurhythmics Case Study

by Eric Barnhill

My first lesson with Helga was in April of 2004. Helga had suffered a stroke, which debilitated her left side. She was kept at the Florence Nightingale Center for nearly a year before she was released, at which institution she suffered numerous additional problems including getting her stroke-affected hand jammed in the spokes of her wheelchair, for hours in the hall, while nobody helped her.

When I met Helga her left hand, arm, and leg functioned minimally. Further, the rest of her body was beginning to assume the shape of the wheelchair. We began work with a series of coordination and differentiation exercises designed to restore sensitivity to the wide variety of movements possible in the spine, to ensure that her torso didn't gradually sink into becoming a wheelchair-shaped lump. Classic Feldenkrais exercises were used that require independent functioning of eyes, cervical spine, thoracic spine, lumbar, and hips.

To my good fortune Helga had just the right attitude to enhance her recovery. Helga is an earthy German immigrant who lacks pretension and handles life with strength and solidity. When people are initially given exercises involving multilayered or rhythmic movement as a tool for therapy and recovery, they often balk at it as frivolous or childish. Conventional wisdom dictates that machines, contraptions and discomfort are the tools of serious treatment and therapy, not games involving shuffling hips or turning the head to a beat. When they discover that these simple-looking exercises are actually a challenge requiring intense focus and complex coordination, they often balk further, feeling inadequate, especially when they are older. Some pain in the physical therapist's office is more tolerable for many people than feeling confused by a seemingly childlike exercise.

Helga, however, engaged with every exercise I gave her, found nothing too frivolous, and didn't mind finding herself confused. She never grew judgmental or frustrated about her situation and always kept her earthy humor. Not surprisingly, progress was rapid. Helga quickly improved at differentiation games and her posture became more balanced and erect. I felt confident proceeding to work on her stroke-affected arm.

When beginning work on the arm I found myself in an unusual predicament for a Feldenkrais practitioner. Feldenkrais typically improves a movement by changing the client's organization of that movement: it enhances the clarity of the kinesthetic self-image to eliminate parasitic movements and improve the distribution of muscular effort so that the larger, more centrally located muscle groups carry the bulk of the effort. However, Helga's problem did not seem to be any lack of organization. Range of movement was ample in every direction, but her arm was held up for every inch of this trajectory by spasticity. The movement would stop and start unpredictably, and range and power would vary greatly among iterations of the same movement. Something regarding quality had to be changed, that was not going to be changed through reorganization.

I thought to bring rhythmic movement into the process. In my work with other types of disabilities, I had found that putting a given movement into a rhythmic framework was a powerful

way to improve its quality. While the simple performance of a movement was open to judgment regarding quality, making the movement task revolve around rhythm requires the client to think in terms of nothing but quality. Rather than evaluate range or power, the music of the movement, so to speak, is evaluated. A movement may get the job done, but the music of its movement can be unsightly. Enhance the quality of the movement's music, and better functionality quickly follows.

When brain damage reduces motor capacity, acts so simple we ordinarily don't even notice them become complex phenomena that require attention and effort. Helga's simply opening and closing her hand was an unpredictable and inconsistent venture, lacking power and consistency. Sometimes the hand would unfurl smoothly out to its maximum range. Other times, it would only go halfway, with no ability by Helga to take it further. Inconsistencies in movement abounded.

We began to explore the same hand movements, this time guided by rhythm. I would instruct "Open your hand in 5 counts. 1-2-3-4-5," keeping the counts even and rhythmic. Helga immediately sensed the widely varying quality of her movement, and given that the movement was divided into counts, we had ability to measure and discuss different segments of the movement. Range and power were no longer a worry, as Helga's conscious efforts were directed to maintaining movement of a certain quality. Aiming for rhythmically sound movement required a different sort of effort, and produced a different type of result.

The main variable I altered in the game was the length of count, which brought about corresponding changes in quality: a longer count, say eight, required very slow movement, and a very fast count, two or one, required quick movement. (I held the tempo of the counting steady.) We would also hone in on a portion of the movement that was particularly sketchy, concentrating the use of rhythmic quality on just that portion of the movement. While the extremes were difficult for Helga to do, rehearsing the extremes of quality created dramatic improvement in the middle range of her activity. The rhythmic variations evidently allowed her to navigate more easily the bumps in the movement that would be there during her everyday acts with the hand.

Helga showed open-mindedness and a willingness to practice the exercises every day. Soon her everyday movements that used her hand began to gain in quality, clarity, and energy. After rhythmic work I began to ask her to perform tasks with her hand that were previously non-starters – changing the channel using the remote, for instance, or using her “grabber” – and she began to be able to handle the tasks.

I began to apply the rhythmically counted movement to neighboring structures – rotation of the forearm, contraction of the bicep, swinging of the upper arm. Each had areas of smoothness and areas of spasticity and difficulty. We would hone in on the areas of spasticity using counts of different lengths and trajectories of different lengths. Gradually the areas of spasticity would diminish, and the quality of her entire movement would improve.

In working with brain damage, recovery is necessarily incremental, so one loses sight of the cumulative amount of change in performance. Therefore a visit by some of Helga's family was a welcome reminder of how far we had come. Helga was able to lift and swing her arm with some degree of vigor, and close and open her hand with modest speed but enough energy to handle various small objects around the house. The relatives were ecstatic. I had nearly forgotten that a few short months ago, Helga's arm and hand sat curled in her lap, a virtually immobile, useless spastic lump.