

Stewart, Part I: Eliminating the need for Orthotics using Music and Movement Games

A Cognitive Eurhythmics Case Study

by Eric Barnhill

Stewart is a four-year-old boy who came to me in the fall of 2005. Stewart shows a strong underlying intelligence, social friendliness, and imagination, but it was besieged by some obvious lags. Most particularly, his attention lags, and his response to any request or command will happen an indeterminate amount of time from the request. Sometimes he doesn't respond at all, appearing completely "gone", and other times he is very easily distracted into losing the thread of a game or exercise. His muscle tone is low, his movement range limited and his curiosity for new explorations in movement is often low. However, over the longer term of a lesson, he retains very well what he has done and remembers its details acutely.

Stewart's mother gave me a lengthy evaluation of Stewart from a variety of doctors and therapists. Among the many issues raised in this evaluation, one jumped out at me right away: "Stewart habitually carries his weight on the insides of his feet. We recommend orthotics to correct this."

Of the many suggestions in the evaluation, this appeared to be the one for which action was immediately and concretely prescribed. I immediately called the mother and told her not to rush into getting orthotics for her child. Fortunately she has a healthy degree of skepticism regarding the advice of experts, and was reserving judgment on the matter. In two lessons, I was able to eliminate the problem that supposedly required orthotics for Jimmy, using games of music and movement.

If an MD were to tell us we would need to walk on crutches for life, it would give us pause: surely crutches are a temporary solution, and we expect to discard them and return to full functionality. However, we accept many other medical crutches that are intended as permanent, our situation simply getting slightly worse each year, and our crutch made a little more drastic each year accordingly. Orthotics are one example of this: by simply forcing the feet into place, rather than dealing with the overall issues of distribution of weight and effort through the skeleton, the small foreground symptom of abnormal gait is temporarily shored up, but the larger background issues that created the need for orthotics in the first place are ignored. The orthotics then reinforce the bad habits which they support; the root problems continue apace, the situation continues to deteriorate, stronger new orthotic solutions replace the old, and so on through life.

Four-year-old Stewart was on the verge of being put on such a regimen with his orthotics, but one glance at his movement showed that his weight distribution on his feet was the end result of a broader skeletal tendency. His natural movement was almost entirely bursts of running with sudden stops. "Does he ever walk slowly?" I asked his mother. "Not really," she said. Stewart's weight was perpetually pitched forward beyond his control. In learning to walk he had not learned to coordinate his weight so that it passed downward through the skeleton along a central axis. Consequently when he moved, his weight tipped out of his control. He compensated by pitching himself forward, and taking his legs wide apart to create a larger base of support. With his legs at wider angles to create the larger base of support, Stewart's feet were further out, and his weight fell towards the insides of his feet. Yet surely the more important question was, why could Stewart not balance with his legs directly under his skeleton? To solve that would solve the problems with the feet.

As with so many young children, simply present them with a range of possible behaviors and they will spontaneously adopt the most efficient solution. Stewart and I began games of funny walks, each named after an animal: duck-walks with the heels close together but toes apart; pigeon walks with the heels apart but the toes together; and Stewart's own invention, penguin walks, inspired by *March of the Penguins*, in which both feet are laid straight, but brought in so close they pressed against each other as he went. Stewart had enormous troubles at first: his duck walk could only succeed, not surprisingly, with feet wide apart and tilted out, not with the heels together; the pigeon walk was nearly impossible. However, he clearly grasped the concept and threw himself into improvisation and experimentation. I knew from there that Stewart would begin to find his way.

We also worked with control of weight distribution, using the model of a train. We would pull slowly out of the station, get faster, slow down, and then pull into another station, all while keeping our feet on a straight "train track". Stewart found the train image quite engaging and was quickly thrown up against his inability to do a slow start and gradual stop. For the lesson, I aided him by supporting him from behind by his hips, holding his weight back to keep him from pitching forward, so that he could have the sensation of his goal prior to independent attainment. Once he was given the sensation of a gradual start and stop, with weight upright, he was immediately able, with minimal trial and error, to begin replicating it on his own.

I emphasize that the approach was not one of drills and exercises to "train" his posture or feet. The games were to provide Stewart with a sense of expanded possibility. Once the nervous system feels an expansion of possibility, it is quick to spontaneously choose the solution it deems most appropriate for an activity. While this may sound instinctively less "serious" than methods of drilling, stretching, and forcing, it is the most powerful path to genuine change. Every aspect of a movement links to every other: when we force or drill, we usually force one result without regard for the impact on the larger system, and often end up worse than when we started. When the nervous system is educated to make better choices, and chooses an option with the ease of spontaneity, the change implants itself much more deeply and thoroughly in the student's habits.

Stewart and his mother practiced their walks all week, and when he returned he walked, stood, and gestured entirely differently. He stood utterly upright, noticeably taller, his shoulders and chest enviably relaxed. He started and stopped a slow, easy walk with complete control. His penguin and duck walks showed the results of practice and experimentation, with much more control and clarity of movement. And his weight, quite naturally, now sat evenly distributed throughout his feet. The need for orthotics was eliminated. Address the root problem through education of the nervous system, and the many small problems we myopically struggle over will be swept up in a process of joyful, spontaneous personal education and development.