

# Vanessa, Part I: Eliminating Difficulties With “Personal Boundaries” Through Enhancing Spatial and Rhythmic-Spatial Processing

## A Cognitive Eurhythmics Case Study

by Eric Barnhill

Many special-needs students are thought to have difficulties with “personal boundaries”. For example, such a student may run up and touch the clothing or hair of another child, without respect for the other child’s personal space, or pull uncomfortably close to talk with another child. Such issues of “boundaries” are usually treated as complex psychological phenomena, involving a switch from, to use Piaget’s terms, egocentric to sociocentric thinking. Such accounts make massive tacit assumptions about the underlying functionality of the central nervous system that may be unwarranted, and may cover up a more powerful approach to the problem. What if invading other children’s personal space was simply a matter of poor processing of space?

Vanessa is a girl of seven who has been diagnosed with “gaps” in her cognitive development that include issues of “personal boundaries”. Vanessa is among the most exuberant, enthusiastic, and exploratory students I’ve had. She also shows enthusiasm for other children and is taken by attractive colors, patterns and clothing. In her enthusiasm she rushes to touch what interests her, even if the item in question is held tightly by another child. The manner in which she does this is striking: she rushes up to another child’s shirt or bag as if she will careen into the child, stopping short to take in the item that interested her. This leaves the other child surprised and uncomfortable, though Vanessa doesn’t notice. A similar situation arises when Vanessa wants to talk to a new child: she will eagerly pull up very, very close to them to talk, which takes the other child aback.

Vanessa’s mother’s response, as she was taught by her various therapists, is to address the matter verbally with Vanessa. “Remember how we talked about no touching?” In Vanessa’s therapy the problem has been seen as a psycho-social problem: in this model Vanessa lacks an understanding of the social boundaries other children prefer, and when she violates these boundaries her mother calls her attention to the matter and calls her back. Unfortunately this solution is nothing more than a band-aid, and Vanessa’s inability to see these social boundaries for herself is attributed to her “developmental gaps”.

An early clue that there may be more to this picture arose during one of our Cognitive Eurhythmics sessions. Vanessa had already presented a behavioral difficulty that seemed psychological in nature: she clung to the back wall and was reluctant to leave it for any of our activities. Such behavior might be initially analyzed as shyness. I thought it might also be connected to her difficulties with balance. It turned out to be something quite different.

I was across a large room from Vanessa, and made a sudden movement to sit down. Vanessa, across the room, flinched. I had no objects near me, and could do nothing that could possibly impact her over there. The only possible explanation for her flinch was that, in some way, she had no idea how far away I was.

I emphasize “in some way” because there are so many different elements that go into basic spatial and movement processing that development specialists take for granted, or quickly shunt into one preferred category. It could be she couldn’t process the distance. It could be she didn’t understand physical distance. It could be she processed my distance but had absolutely no way to

gauge what was happening with my movement. Perhaps she had a sense of the movement but lacked a way to predict how far it would extend.

As movement pioneer Moshe Feldenkrais pointed out, humans generally learn only sufficient spatial and motor processing skills to get by. An average adult knows right from left, but with a few simple movement puzzles they are quickly entangled. We sense space well enough to walk through our apartment or drive our car, but cannot accurately draw the size of a quarter from memory, or guess the dimensions of a room. Specialists transcend these limitations: an artist can render a quarter from memory, a real estate agent can eyeball a room, and a basketball player can sail through games of left and right. But the overwhelming majority of our functionality sits on the low end of the spectrum.

Unfortunately many specialists in development assume that things such as spatial or linguistic processing are transparent media, stymied only by a student's "psychological difficulties". They don't see how a slight shift in very early development of spatial processing can turn what we perceive as a sphere of predictability and constancy into a sea of uncertainty and guesswork. I have found that most special needs children have gaps in these capacities, and that even 'average' kids can have a lot of their issues explained by them. Give a child some basic movement and spatial games, and it's amazing what turns up, that no one ever noticed. Fix the underlying issues, and the "psychological" problem will often become a ghost of its former self.

My exploration with Vanessa continued. Picking up the game where we left off, I asked her to scoot towards me on her rear. No problems. I then asked her to scoot backwards, physically an easier movement. She wouldn't at first, then would only do so with constant craning of her neck backwards to look over her shoulder. It was clear that she had no sense of what was behind her, or when she was going to reach the wall behind her that was far away. So I asked her, "Vanessa, is that wall close to you or far away?" A moment to think. "Far away!" she said. I asked her to scoot back again, but again she would not do so without constantly turning her head around to check where she was in relation to the wall. Despite her conceptual grasp of the situation, something in the substratum of her distance processing was not what it should be.

When working on issues of movement and space, scarves are the place to start, just as they are for beginning jugglers. Scarves are utterly safe, are easy to catch, and trace a clear, consistent path through space, but with speed and force greatly reduced.

Vanessa and I lined up on a wall. I tossed the scarf in the air in front of us, and asked her to go catch it. Initially, the movement gave her no information she could use. She waited until it hit the floor, then pounced on it.

After just a few tries, a slight shift in performance occurred that showed we were on the right track. Vanessa followed the scarf with her eyes, and jumped towards it a little before it hit the ground. The trouble was, coordinating her jump was an effort for her, and it required lowering her eyes to her feet to organize the movement. She would jump to just the right spot, showing she was processing the distance, but never got a good look at the scarf again, and couldn't catch it.

For a Feldenkrais teacher, it was a simple problem. Bunny hops with the head right, down, left, and up; large jumps with the same head conditions; run after the scarf, held in the air by me, with the head up; jump after the scarf, held in the air by me, with the head held up. Nothing, of course, that the child would feel was anything different than a silly game. With the head differentiated from the jumping movement, Vanessa was ready to go. By the end of the lesson, Vanessa was catching the scarves.

For a little more action, we turned to a game that couldn't have been simpler. We bounced the ball off of the wall and tried to catch it. Vanessa, who according to her mother had never voluntarily played ball in her life, was completely absorbed. It was time for the teacher to sit back and let trial and error be the primary force in the lesson. When I wanted to see something new, or take her into something I thought she would find challenging, I would suggest a twist on the ball bouncing. For the most part, I monitored.

Vanessa's mother later told me that when Vanessa got home, for the first time in her life she picked up a ball and played by bouncing it against the wall. Not only that, she played ball for almost two hours straight, every day, for about two weeks. Deep changes were clearly happening.

It was not until I had gotten home that I thought of the connection between Vanessa's spatial processing issues and her issues of "personal space". Vanessa and her mother were about to leave on a vacation, which would put her in contact with countless new people, places, and social situations. I left a message for Vanessa's mother to keep an eye peeled, to see if anything was different in terms of Vanessa's interaction with others and her sense of their "physical boundaries".

Sure enough, after only two weeks of working on this problem, Vanessa's social sense had changed radically, and her traditional space invasions had diminished to almost nothing.

I had some fortunate circumstances in being able to accomplish so much so quickly with Vanessa. Vanessa is not only eager and curious, but highly intelligent and conceptually able to grasp everything we do. Because her higher-level functioning is so strong, I consider myself basically "cognitive mop-up": I take situations she understands conceptually and then give her puzzles that challenge her to translate her problems into movement and action. To parallel language I often use with Cognitive Eurhythmics, I turn her cognitive and motor problems into concrete games and puzzles she can sense and understand, which, in the spirit of children everywhere, she then quickly and eagerly masters. I am helped by a child sophisticated enough to want to do movement exercises in the abstract, as many children Vanessa's age would only be motivated if I couched the lessons in animal stories or musical songs. When she senses a problem, even presented as pure movement, she attacks it eagerly, and for that reason, Vanessa will mop up her cognitive problems.