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Letter from the Editor

Welcome to this issue of The Feldenkrais Journal. This is my first Journal since taking over the editorship from Gay Sweet Scott, whom I would like to thank for her years of dedicated work on the Journal. Both she and Elizabeth Beringer are standing in the wings, loudly whispering advice, so I hope to be able to profit from their experience and move the Journal forward. I invite you as readers and writers (and perhaps volunteers?) to join me.

In this issue of the Journal we hear from Martin Weiner, who died this April, and who will be sorely missed by the Feldenkrais community. We are reprinting a posting that he made in the Feldy Forum in which he addresses what he considered to be “the heart of the work.” After reading this posting, I decided to revisit what Marty had written in previous issues of the Feldenkrais Journal. When I finally made it back to his first article in 1986, I was impressed by how consistent his message has been: that the Feldenkrais Method of somatic education is not just a very sophisticated form of gymnastics or therapy, but something very different. Perhaps after reading what he has to say in this issue, you will be interested to read his other articles (in issues #2, 7, 14, 19).

As I was flipping through Journals past, I was thoroughly impressed by the evolution of the Journal and by the quality of the articles it has consistently offered. There have been twenty-three Journals—thumbing through them started to look like it was going to take twenty-three days, or even weeks, as I kept getting hooked by one interesting article after another. I realized that I had to stop reading and return to writing this letter, or this issue would never get finished. I moved my twenty-three Journals to my living room table where I will go back through them at my leisure and be inspired, entertained, and enlightened by my colleagues once again.

In any case, I know you will be inspired, entertained, and enlightened by the writers in this issue. We have articles that deal variously with balance, psychology, autism, interpersonal neurobiology, inner and outer space (I don’t mean extraterrestrial), community change, juvenile justice. This Journal was to have been the “Balance” issue; however since only one article relates directly to balance, we dropped that name. However, Alan Questel picked up the ball on balance and, without a stumble, wrote an article describing his thoughts on and experiences in working with balance, complete with case histories. Perhaps some of you will be inspired by Alan’s article to consider your experiences in the world of balance and submit an article on it for a future issue. Linda Flanders gives us a fascinating look at the development of her MovieMaking Process, applying the Feldenkrais Method inside the juvenile justice system where the constraints of the system and her students make a typical Functional Integration or Awareness Through Movement lesson impractical if not impossible. Adam Cole, who works in the public school system, looks at the importance of unanswered questions in working with children on the autism spectrum. He explores how the idea of unanswered questions is contained in the Feldenkrais Method and the profound impact it has had on his life. Donna Ray introduces us to Interpersonal Neurobiology (IPNB), describing its connections to the Feldenkrais Method, and demonstrating, in a case study, how she combines IPNB and the Method in her practice. We are including an excerpt from a book by Jader
Tolja, which, unless you are fluent in Italian, you will only be able to read here. He demonstrates how the experience of bodily expression can modify our points of view and our mode of being. Familiar ideas to us Feldenkrais practitioners, but as a doctor, psychotherapist, and professor of design, he gives it a slightly different slant.

We also have two book reviews for you. Carl Ginsburg has ambitiously tackled not one, but three books on phenomenology. If you are not sure what that is (and even if you are quite conversant with it), you have come to the right place, as Carl uses the writings and ideas of these writers, who take a very broad view about the relationship of moving ourselves to experiencing and understanding, to help clarify what we are doing in our work when we attend to our sensations and awareness. Then Dennis Leri turns around and reviews a book by . . . Carl Ginsburg and Lucia Schuette Ginsburg! After reading Dennis’s review, you will appreciate even more deeply the importance of Carl and Lucia’s book to understanding what it is that we, as Feldenkrais practitioners, do and how we are connected and supported by other traditions of science, especially neuroscience and cognitive science. And then you will run out and get the book.

The focus of the next issue of the Journal will be Humor/Play. I don’t think a day went by during the Amherst training that Moshe wasn’t encouraging us to lighten up, to smile, to laugh, to play:

While you learn, would you please make your faces not so serious that you would think you’re mourning over someone. There is nothing more pleasant, more important, more interesting than learning. . . . . We are learning—and . . . being serious means not learning, but rather trying to learn, not understanding what’s being taught and writing it down so you can study it to satisfy the teacher. (Moshe Feldenkrais, Amherst 6/9/80)

Perhaps you use humor in your ATM classes to great advantage. Perhaps you work with children and have a story or two, demonstrating the importance of play in your interactions. Perhaps you have a fantastic Feldenkrais joke or humorous reminiscence. Whatever the case, please send in your articles—we are smiling already.

And finally, I wish to thank everyone who worked on this Journal. We had a number of challenges with deadlines, and the tireless and talented editorial board, production team, and writers came through with flying colors. Kudos especially for the Assistant Editor Judy Windt who held down the fort until I could take my post, and whose hard work, suggestions, comments, and support have been invaluable.

Sincerely,

Katrin Smithback
The Heart of Our Work

On April 16, 2011, the Feldenkrais community lost an articulate, thoughtful, and respected colleague, Marty Weiner. A philosopher and artist as well as a Feldenkrais practitioner, Marty was known for his sensitivity, presence, and clarity of thought. The following are comments he posted on the Feldy Forum in 2007.

I think it is extremely important to remember the tradition within which we work. Moshe tried to awaken us, his students, from the cultural trance we are in in which we see people as “having” conditions, diseases, syndromes, etc. As long as we see the world from this trance we will do more or less what other people do and treat the diagnosed problem. Our treatment might be different and even more effective but it will be treating a “category,” a mental construct that we have learned to accept as a reality within the trance. Moshe said this was the hardest thing for him to overcome—to see the person as an individual and their possibilities for experiencing themselves differently, rather than being limited by the labels our culture slaps on things and what that same culture says it is possible to do for someone who “has” that label.

In our tradition we interact with a unique human being and explore what is possible for them. We are successful because we don’t work in the same conceptual reality as others. That is what is at the heart of our work and that is the teaching I think we were spreading. To repeat a story I have told before, when Moshe was asked by a woman if he could do anything for the arthritis she had in her shoulder, he asked her, “Who told you had arthritis?” When she said “her doctor” he told her to go back to him for help. “He gave you the arthritis maybe he can take it away.” I think this answer speaks volumes about how he thought. How many of those of us who practice in his name would give the same kind of answer?

Let me give an example from my own experience. A few days ago I had an opportunity to work with someone who said she had a hiatal hernia for ten years and was taking drugs for her discomfort. She was in serious pain and continued to eat poorly. She had been advised to have surgery at some point in the future. If I had thought I was treating a hernia, rather than exploring what she was doing and how she was creating her experience, I would have been limited in my possibilities as well. Instead, I began feeling her chest and her arms and abdomen and back and how she put herself together. After the session she felt great and when I spoke to her today she said she has continued to feel wonderful. If someone came tomorrow and said they “had” a hiatal hernia I wouldn’t ask myself what did I do with the other woman that is useful here that has to do with hernias.
What did I learn to do that I can apply to the next person who “has” a hiatal hernia? The answer is—nothing. What I learned or deepened was the capacity to be present with another person and find out “who” they are and what that individual needs from me to help them function better. Developing that kind of a relation with what is happening in the moment is very different than treating a hernia.

We need to realize that we are not treating a disease. What we do is see the world clearly enough without preconceptions and old models and categories to actually be of value and service in the world of another individual. We have a very powerful “non-method” that works miracles and we have to learn to appreciate the essence and power of our own way.

—Marty Weiner
1943–2011
I was working with Donny, an African American teenager locked up in the Department of Corrections. He is a young man of one-word conversations. He’d been locked up for a long time. We were recording a song he wrote about his life, as part of a media arts program. He wanted me to help him sound like an obscure rapper I had never heard of. I’m not a musician, singer, or rapper, but I am a Feldenkrais practitioner, so I smiled and said, “Sure.” I trusted the process. First I asked Donny to record the song his own way, similar to a body scan, so we would have a documented baseline. Next Donny practiced the song paying attention only to the movement of his jaw and tongue, over-enunciating the words. For the next approximation, I asked him to pay attention to the emotion of what he was saying, “Make me feel what this story really means to you.” The fourth time around, I asked him to pay attention to the emphasis of certain words and how the meaning of what he was saying changed with the emphasis on different words. I had him perform the song again, paying close attention to the timing and pacing of the word phrases and finally, I asked him to try it lowering his voice as low as he could go, from throat to gut. Now we recorded the final version. His smile lit up the room like a summer’s day. “Yeah, that’s it!” That statement was also one of his longer sentences.

During a career in law enforcement I stumbled upon the Feldenkrais Method of somatic education because of chronic pain. While I entered a professional Feldenkrais training program for personal reasons, it became very clear to me that the potential for this work, especially in the field of juvenile justice, was dramatic. I left law enforcement to discover a more holistic and effective way to keep victims from becoming offenders, and to work with offenders to prevent recidivism. To design a prevention program using the principles of the Feldenkrais Method took ten years of continuous study, research and development. It became known as “The MovieMaking Process” and specifically uses the media arts, rather than a table or floor. I take a functional goal, individual or more universal, and apply the creative and scientific skills I learned in my training program, helping to solve larger community problems. To me, a functional goal is something we learn that will make our daily life better: walking without pain, reaching up higher to get the cereal off the top self, or streamlining our running to win a race. I use my work to apply this idea on a larger scale.

The concept of flexible minds, not merely flexible bodies, is essential to Dr. Moshe Feldenkrais’s work. It was also essential for my work with children’s atypical behavior. I didn’t care if a student could run better or throw a ball better. I was interested in helping my students think in terms of options so they could cease being victims or offenders, become better citizens, and get out of, or avoid the criminal justice system. The Movie-Making Process was designed as a concrete way to apply what I had learned in my Feldenkrais training program inside the juvenile justice system, an arena that prohibited me from touching my students, and did not offer me students who were willing to lie on the floor and follow directions.

In 1995 I began working with children whose atypical behavior would likely get them incarcerated or institutionalized. I refused to believe that Feldenkrais’s work was off limits to those who could not learn it in the traditional Functional Integration (FI) or Awareness Through Movement (ATM) lesson format. I began to develop ATM lessons for these atypical children, using acting as a tool; the functional goal was to offer options for new behavior instead of the dysfunctional or dangerous behavior they were exhibiting,
preventing incarceration or institutionalization. I tried to discover the children’s motivation for the aberrant behavior, generate new options of behavior, and differentiate the new options from the old. Play-acting allowed me to do this. As Johnny Depp so aptly said, “I get to dress up in funny clothes and pretend I’m a pirate.”

My atypical students became engaged in learning, but it was the use of a video camera to record them that changed everything. The very first movie was just a fun summer camp project. I had seven children with thirteen psychiatric diagnoses among them. We filmed a simple version of The Wizard of Oz. Each one of my kids did exactly what they were asked, and each one waited patiently for their turn to act. There wasn’t a behavior issue among them. This gave me an idea. Could I take a “functional goal” in daily life and film the steps needed to create a higher level of awareness and skill for these children?

So I began. Parents or therapists gave me a functional goal. I broke the goal down into steps and taught those steps through specifically designed ATM lessons. I filmed children doing their different steps and I edited the steps together so they appeared seamless. The children taught us all that they loved watching themselves in a movie. They wanted to watch themselves over and over. What spontaneously occurred was the children began exhibiting in daily life the new or improved behavior that they had only done previously for the movie. They used movement and imagination to develop improved behavior.

I expanded small pilot projects into schools, day-treatment programs, and probation and correctional facilities. Now I also work with whole communities. Community members give me a functional goal to improve their community: preventing bullying and harassment, showing the dangers of binge drinking or the effects of distracted driving. I research the elements that create each dysfunctional system of behavior and make a community movie about it with community members as the stars. The community promotes and distributes their movie, educating large numbers and raising awareness on the issue, causing a shift into healthier behavior faster than anyone believed was possible.

In Donny’s case, his song, “Why Should I Care?” became the Department of Corrections very first music video. We filmed his song, which included a verse about his dream of being the first in his family to graduate from high school and going on to college. We showed him putting on a suit and straightening his tie. We dressed him in a cap and gown and asked the Warden to give him a diploma. We showed him tossing his cap into the air with the exuberance that comes from finally accomplishing the huge goal of graduation. During this entire process, Donny was happier than anyone had ever seen him during the nine months he had been there. He wore a cap and gown. He physically received a diploma and joyously tossed his cap in the air as all graduates do. The possibility is now in his imagination and he made the first physical movement towards his goal.

THE FOUNDATION OF THE MOVIEMAKING PROCESS

When I began my work with atypical behavior, I knew I had to find a way to apply Feldenkrais’s work in my specific situations: unruly children, regulations against touching, and the larger context of a community. Because I was often working with destructive or dangerous behavior, I needed more information about my students than movement alone showed me. I needed to know their motivation for the behavior, their emotional and developmental stage, and their best learning style. I couldn’t ask the kids themselves and get an accurate answer; they didn’t have that much self-awareness. I couldn’t trust parents to give me an objective assessment because they often were at their wit’s end and
left out essential information that I saw as crucial clues. I’ve had parents forget to mention a child’s head injury at age 3, or leave out that their child had killed puppies and stabbed a teacher when he was 5. I could use my own observations of movement, breathing, etc., but these children were so complex in their movements and behaviors, that what I alone could notice wasn’t enough. I searched for more assessment tools:

- human development
- a child’s individual interest
- perceptual difficulties

**EARLY CHILDHOOD DEVELOPMENT** Feldenkrais talks a lot about early childhood development and was influenced by Jean Piaget’s work. In my work, developmental stages are often missed, and I have to move backwards, from the exhibited behavior to the developmental stage that was missed. I found more current information. It offered me an in-depth developmental assessment of the stages of early childhood every human being must navigate to mature emotionally, describing the stages of development, the age range of each stage, and the dysfunctional behaviors parents and practitioners will encounter if these stages are not successfully navigated. (Greenspan, S. 1992) As an example: From age 4-8 months, an infant learns two-way non-verbal communication from a caregiver: gestures and expressions and the beginnings of self-identity and behavioral parameters. If this developmental level is missed, it will show up in later years as difficulty in expressing oneself, trouble with behavioral constraints, and lack of impulse control. I also found that Jack Heggie had developed specific ATM lessons for these same developmental milestones, which I used quite often.

**INDIVIDUAL LEARNING STYLES** Feldenkrais’s work focuses on learning awareness through movement because we are active, moving beings and that is how we develop. In the broadest sense, movement might be the most optimal way for kids to learn, but it often was not their interest or their strongest personal learning style. I had to learn other ways to connect first: visually, logically, verbally, musically, and then introduce movement. (Gardner, H. 1993) As an example: I adapted a learning assessment into conversation. “Do you read a lot or do you like movies? What kind of books or movies? Are you a visual artist or do you play any musical instrument? Do you enjoy time alone to think or are you really social?”

**SPECIAL EDUCATION AND PERCEPTUAL DIFFICULTIES** I found that many children struggled in school, especially with reading and writing. Many of them would act out behaviorally rather than let anyone find out they couldn’t read or write. (Davis, R. 1994) An example was a middle schooler named Trevor. Right before any test, he would throw something at another student, or verbally get into an argument with the teacher. He’d get sent to the principal’s office and miss the test. I used a simple assessment that had been developed for dyslexic children, asking them to imagine a favorite piece of cake sitting in their hand. Some children can “imagine” it, but others can literally “see” the piece of cake. Still other children can move their mind’s eye to look at the cake from above, and some children can move their mind’s eye all the way around an object. Einstein could do this. So could Trevor. However, Trevor did not have any control over this gift, nor did he realize his mind was doing it. He saw words as pictures. If he could picture the word, he understood. But if the word was abstract, the word did not register. He could picture a brown cow. He’d seen one. Words like trust, loyalty, or love were abstract and had to be concretely defined. Otherwise, their meaning was personalized based on past, but distorted, experience.
Trevor was heading for the criminal justice system. He had educational deficits, and they were resulting in criminal behavior.

A vast majority of juveniles in the criminal justice system have some sort of learning difficulty. Because I am very interested in stopping any cycle of abuse, I worked with my local juvenile probation department and developed a class called “The Ability To Reason.” I researched the concept of reason and simplified it into five abstract concepts: To think, to reflect, to make decisions (from a variety of options), to work towards your decision, and to have choice. To have real choice, it is essential to have at least three options. (Feldenkrais, M. 1985; Sapolsky, R. 1996; E. Burger and M. Starbird, 2003) I developed this into a clay- and art-based class and taught it to juvenile offenders for over four and a half years. Using this approach, we averaged an 89 percent non-recidivism rate over the four and a half years.

An example of how I used Feldenkrais’s work in this class was an adaptation of the Pelvic Clock lesson. I had my class create a clock out of clay, including all twelve numbers. They made a clay representation of themselves and put that in the center of the clock. We then used the clay person to move repeatedly toward the 12, which represented compulsive behavior. When the clay person was moved between the 12 and the 6, it showed one more option of behavior, but still limited to concrete action: do it or don’t do it. By moving their clay person throughout the entire clock face, they could begin to learn how to differentiate their behavior, adjusting it to the circumstances, rather than compulsively acting or adversely reacting.

I have used several assessment tools over the years: developmental, best learning style, “seeing in pictures,” moving in different ways, and adapting all these into specialized ATM lessons. What I found, however, was that I could incorporate many elements of all these assessments into “the movies.” That’s how The MovieMaking Process was born.

**HOW I USE PRINCIPLES OF THE FELDENKRAIS METHOD IN FILMMAKING FOR COMMUNITY ACTIVISM**

The place to start for prevention of any unhealthy or harmful behavior is with basic education. This means simply raising awareness about the issue. This is one of the greatest gifts of Feldenkrais’s work: awareness. Creating awareness on a large scale requires information to be offered in a variety of styles; not everyone learns best in the same way. While, as humans, we are all bodily-kinesthetic learners, that does not mean everyone “prefers” to learn that way. Some have no interest in being touched while lying on a table, nor would they be willing to get down on the floor and follow verbal directions. In my work with atypical children, the juvenile justice system, or in working with communities, I found another way. Moviemaking offered me a new way to use Feldenkrais’s work and the opportunity to reach a larger audience. I raise awareness on a topic visually, verbally, musically, logically, kinesthetically, plus create new opportunities for interpersonal experiences. In this way, I believe I can educate the largest number of people in the shortest amount of time. The finished movie is far different from the original experience of creating the parts, allowing the audience to internalize the information in its own way.

**USING A SYSTEMATIC APPROACH** In a traditional Fi lesson, we look at the way a student moves, breathes, or does a particular action. We help them become aware of parts of themselves that are not participating in that action. With our hands, we help guide all the parts to cooperate, engage with one another, and work together as a whole unit towards the student’s functional goal.
In a community project, the functional goal is to help educate the whole community to raise awareness on a social issue: violence prevention, substance abuse, or some other dangerous behavior. First I research and discover the elements that create or perpetuate the behavior. I address all of those elements to educate and raise the audience’s awareness of them, plus show how those elements work together, negatively or positively. Next comes the challenge of getting different involved agencies to cooperate and work together towards the functional goal. As an example, I have recently been asked to create a project at Juvenile Corrections to help educate communities, raise awareness about gang violence, and come up with an action plan for communities to address the problem. If I look at this from a functional standpoint, I first identify the different elements that go into gang violence. I see the community as my student. I know their functional goal: to prevent indoctrination into gang life. Now I need to research and discover what elements make up the dysfunctional behavior, and become aware of what elements are working together well and what areas are not participating. If I can get more of the community working towards the goal than before, there should be a major improvement. Much like a student getting up from the table or the floor and suddenly finding that they can do something more easily, getting more of a community working together will get them closer to the goal than ever before.

When I began community movie making, I couldn’t imagine the political or territorial challenges I would run into. Many agencies have no idea what other agencies do. They don’t talk to one another. They often don’t communicate within their own agencies; supervisors and direct service personnel often do not pass along information, even when offices are right down the hall. A community movie-making project allows me to get under the radar of resistance and get agencies working together.

**MOVEMENT** To film a scene, I have just a few tries to get the action footage I need to tell the story. These are not professional actors; these are just community folk volunteering to help out. On the first run-through, I give them free rein. I do this to get a baseline of their performance level. The second time through I ask them to do the same action, but to bring their awareness to their faces and focus on using facial expressions, emphasizing non-verbal communication. The third time through, I have them pay attention to body movements and what actions would best show the motivation, such as hunched over in depression, or with their head up and strutting around with confidence. I also have my students act the scene paying attention to their motivation and their feelings: angry, sad, happy, etc. All of these actions take them out of their habitual comfort zone. The final time through, I simply ask them to spontaneously do the scene again for the camera. The change from the first take to the final take is often dramatically improved, yet it takes a very short amount of time. I do not force a specific way upon them; I simply give them constraints and focus their attention. Internally, there is a shift and an improvement.

**ATTENTION TO PROCESS** To help my actors (often impulsive children or teens) learn more awareness and control, I teach them to “freeze” for the camera. While this allows me to quickly change camera angles, it is designed to teach my students an internal sense of self-awareness and self-control. I explain the simple action for the scene: *Come into the room as if you are very sad and sit down at the table.* I will have them practice that simple action. When I am ready to film, they do the same action, but every 5 seconds I will call out “freeze.” Everyone in the scene must freeze like a statue. To do this requires internal control. This is how I help them learn self-control. I quickly change camera angles and call “action.” They must remember what they are supposed to do and continue on with
the action as if they had not stopped. Five more seconds and I call out “freeze” once again, change camera angles, and so on. To my actors, it is a fun game, but it is also a way to help them develop the self-control and self-awareness needed for emotional maturity.

I expand the time I have them freeze, and often ask them to follow me around with their eyes. (A simple differentiation of eyes and body) This way they can see what I’m doing, which gives them a secure feeling, but it also begins to break up that habitual movement pattern of eyes, head, and body all moving in the same direction at the same time. Most of my students feel this is very fun. Others become aware that they cannot do it at all, while those around them can. In spite of being told by parents or teachers to calm down or sit down, this is often the very first time that they gained any true sense of self-awareness. They realized that they literally could not control themselves and freeze; yet they really wanted to and were actively trying. Once they gained the awareness that everyone was holding still but them, their behavior spontaneously changed. It took awareness, focus and attending to the present moment for them to gain self-control.

I had an opportunity a few years ago to do a video project at a day treatment center for children who suffered from emotional behavior disorders. There were about 20 students who were supposed to come noisily into the room and sit down at their respective desks. As they all filed in I called “freeze.” Everyone froze like statues and there was instant quiet, except for one student. He just kept bouncing to his desk chatting aloud. Suddenly he stopped and looked around. His classmates were frozen like statues. He looked at me and said, “What happened? Why couldn’t I do that?” He woke up. He gained awareness. During the subsequent two days of filming, he never again failed to “freeze” when so directed.

**Novelty**  Novelty captures attention. (J. Schwartz, and S. Begley, 2002; N. Doidge, 2007) In the world of prevention, it’s hard for communities to compete with video games, cell phones, iPads, etc. A community meeting or a brochure in a backpack is not going to register on young people’s radar. It’s not novel. It’s not going to capture their attention or make an impact. A community making a movie about a topic for prevention is novel. How I film is novel. The use of the finished movie project within the community offers an opportunity for information to be distributed in a novel way. My goal when I edit is to make each scene novel so that I retain the audience’s attention throughout. I do this with local locations, local community members as the stars and the primary narrator, and with action sequences, sound effects, and music.

**Pacing**  I use pacing in the editing of the movie. I space out the words of the narration. I have an action sequence. I give a rest. I move on to another area of information or another type of action, and then I have the audience rest. Just as many of you who give ATM classes know, when giving verbal movement instructions to your students, you have them move for a few minutes, then rest their minds and bodies. You don’t have a set amount of time or number of movement repetitions in mind; you gauge your audience and watch to see when a rest is needed. I do the same in editing a community prevention movie. I have a lot of information to impart in a short amount of time (approximately 5-8 minutes). If I bombard the audience with action and information, it becomes too much, they won’t remember it. Have you ever been to a Hollywood action movie where the action is constant with no down time for the audience to catch its breath? We can become numb to all the noise and zone out. My goal is that the information becomes functionally integrated within the audience’s mind. They can watch their movie, learn, remember it, and be able to immediately use the new knowledge in their lives within the community.
GETTING OUT OF HABITUAL BEHAVIOR  We’re all beginners in each new movie project. Everyone participates in only a scene or two. Most agencies don’t participate in filming the whole movie, just their own agency’s scene. Yet all the agencies, plus youth and their parents, must be actively involved in changing behavior if this is to work as a prevention program on a large scale. Similar to a Fi lesson where we would look at all parts of the body involved in walking for walking to become more integrated and effortless, in my media projects the first thing I work on with all the agencies is their functional goal. What is it they want to accomplish for, and with, their community? No one agency can improve the community on its own. The police must do their part. Social services, community leaders, the press, kids, and their parents must also do their part. I engage each agency or group, and get all moving in the same direction, towards the goal they have set.

Acting is a way to easily get someone to behave in a different way. I’ve had school bullies act the part of the victim, and victims act confident and stand up for themselves. I’ve also had a room full of teenage boys don tuxedos and act like gentlemen. While it may only be for a scene in the movie, it is often the first time ever they have acted, looked, or moved in a more cooperative way, thinking of the end result. What I have found over the years is that new action and behavior, originally done “only for the movie,” began to spontaneously appear in daily life. A new option was placed in their imagination and now awareness is developed and more choice is available.

IMAGINATION  For time efficiency, movie scenes are filmed very much out of order. This makes imagining what the finished movie will look like difficult for the actors. I also don’t have to film every moment of the story, as one does in a documentary. I teach the steps one needs to know to film a specific movement sequence: 1) having a young child walk
over and get on a golf cart, 2) stepping on the gas pedal, 3) driving the golf cart across a large flat field (in reality coasting to a stop) 4) putting her foot from the gas to the brake, then getting off the golf cart. Each of these sequences I break down into an adapted ATM lesson so a child can easily learn each step. I film each sequence and move on to the next. Once the sequences are edited together, the magic of editing shows the student “doing” the new skill (or behavior), and doing it seamlessly. The actual picture is now in their imagination. They see themselves doing it. They see themselves literally mastering a new skill or exhibiting new behavior. This does require that a student, or community members, watch the movie several times.

Donny’s song at corrections asked, “Why should I care”? His early life experiences showed no one really cared for him or tended to his needs. A line in his first verse was, “So why show love when it’s somethin’ I don’t know?” He grew up not caring about anyone or anything. Yet to look in his eyes, those were not blank, cold eyes, they were eyes filled with hurt and pain. I drew out a basic sketch of the body to show him how neurons connect and strengthen, and how early habits get formed: physically, neurologically, emotionally, etc. He came to understand that thinking a new way could bring about the possibility of new experience. The second verse of his song was an answer to his question. My colleague and I wrote the verse and had another resident perform it. It’s about what happens with habits and patterns when one obsesses on the past and refuses to move forward. “Well yesterday’s unhappy, so think about letting go, you’re young and have a future, you’re smart and you can grow.” It’s also about the need to raise oneself when all else and everyone else fails you. “Become your own man.” As he writes he begins the third verse with “I see college in my future . . . I want to live my life, to the fullest, that’s that.” His mood was elevated for days and his caseworker said he’d never appeared happier. He began to imagine a new possibility and experienced the first physical approximation. When he watched his finished video for the first time, that incredible smile was back. He presented his project to the warden and ten other staff members. He introduced it and talked about the process. And, he spoke in sentences.

All students have shown me they loved watching a movie of themselves over and over. I have, however, had the challenge of parents or community leaders drop the ball on actually using the movie in this way, as a tool for actively engaging the imagination. One parent punished her child for something completely unrelated by taking away the video and not allowing her child to watch it. I have had community agency personnel watch the movie once, then put it on a shelf and forget to even show it to the students who created it. I’ve had one county agency “take” the movie and keep it from other agencies and the students over a territorial dispute. All of these things undermine the process. I have learned over the years to place “constraints” on county agency personnel to make sure these things never happen again. All of us have worked with difficult students before; it’s just part of the process.

A week after the presentation of the music video to the warden and staff, I filmed an interview with Donny about his experience. He said he learned a lot about caring during the process because of seeing so many people help him get it accomplished: the donation of the suit and tie, other residents washing and ironing his shirt, volunteer staff who stayed late for filming, the warden rearranging his schedule, and another resident participating as “a peer mentor.”

My current projects require a more flexible application of Feldenkrais’s work because of the strict constraints I work within. When successful, my projects show how the work
can expand learning awareness to a high level. Feldenkrais's basic tenets about awareness, imagination, and movement simply have no limits in application. All of us can make his work our own, through our particular interests, our own specific clients, and our own functional goals. My personal functional goal is to have a significant positive influence on the juvenile justice system, both in prevention and recidivism. That’s my group, but it’s Feldenkrais’s work. My method is an adaptation of his work. I love making movies, music videos, and public service announcements to raise community awareness. That’s my venue for a fast-paced world that wants to see information, experience possibilities, and imagine oneself in new and enhanced ways.

During Donny’s interview he also said, “I saw myself in that suit and tie and thought I looked mature and handsome. (He smiles broadly.) Getting that diploma, I thought . . . that’s me someday. I can see it now . . . I learned with my music that if I try different ways of doing it, I might find a sound I liked better than what was in my head. And I learned, just like my music, if I get out of my comfort zone, I might find something in life that I like better too.”

NOTES

1 In the acting world, this approach is closest to Stanislavski’s Method: act as if. Enter the room “acting as if you are mad . . . as if you are afraid . . . as if you are joyous, etc.” He helped them find their motivation. Stanislavski, K, 2008.

2 Jack Heggie developed an audiocassette series of ATM’s specifically designed for runners: Running With the Whole Body. In three of these lessons he covers early human development. 1) Reptilian movement from side to side. 2) Mammalian movement, arching and swaying the spine, and 3) Advanced evolution of counter rotation around the spine.

REFERENCES


Social Stories, The Feldenkrais Method and the Unanswered Question

Adam Cole

As both a Guild Certified Feldenkrais Practitioner and a public school educator, I am in a unique position to bring what I have learned through my work with the Feldenkrais Method of somatic education directly into the lives of children. I also have the opportunity to inform my Feldenkrais work by what I learn in my continuing education as a teacher.

In my classes are a number of students on the autism spectrum. I joined the Autism Team at my school in order to better serve them. As a member of that team, I took the opportunity to attend a one-day conference on autism spectrum disorders (ASD). I was curious to see whether my Feldenkrais training would give me a special insight into the subject of autism. What I did not expect was that the presentations on autism would give me more insight into how the Method had impacted me!

This article reflects my discoveries. It is designed to bring those familiar with the Feldenkrais Method into awareness about a central aspect of the work that they might themselves be using subconsciously: How through the course of a session we answer questions, unanswered and often unasked, which manifest themselves in the client’s organization.

THE INVENTION OF SOCIAL STORIES

The lead speaker at the convention I attended was Carol Gray, a public school teacher who, while working with students on the autism spectrum, developed Social Stories as a means to help them recognize the impact of their behavior. Prior to Social Stories the options for teachers wanting to work with these children were limited because of the variety and nature of the manifestations of the disorder, including peculiarities in communication styles, selective attention and interest, and other barriers to their effective social interaction.

Ms. Gray told us that Social Stories were inspired by her work with a particular student. She had been involved with this young man with ASD for ten years. He was notorious among his teachers for disrupting class by speaking out at any time and for any length of time.

One day during an all-school assembly, a public speaker started to give a talk about economics. Ms. Gray’s student interrupted almost immediately, engaging the startled speaker about all kinds of topics, much to the audible amusement of the rest of the young audience. This would have become just another episode in the student’s history, except that it was videotaped.

Ms. Gray, who had for years been unable to make the student aware of his behavior, seized upon the video as a means by which he could see himself engaging in his hypersocial behavior. Video was a relatively new tool at the time, and there had never been footage to work with. Perhaps if the student saw what he was doing, he would recognize his impact on the social structure of the group.

Unfortunately this was not the case. The student, seeing himself talking to the speaker, failed to connect his behavior to the speaker’s discomfort. Pressing onward, Ms. Gray began to have a conversation with the student about the video they were watching. She described the event to him as though it were a story about a third person. A speaker was presenting his topic; the student was interrupting; the other students were laughing because . . . She created an informative, bias-free narrative of the event based on the video.
At this point, the student made an unexpected comment. As he listened to his behavior described as a story, he was able to understand that his habit of interrupting had negatively affected the assembly. Recognizing the impact his behavior had made on his community, he said “I can change that.” His simple, matter-of-fact utterance was not a promise to Ms. Gray designed to win her approval. Rather, it was a statement of self-awareness.

The next day, the student came to one of his classes with a piece of poster board and asked to sit in a different chair, one by the wall. When the suspicious teacher asked why, he replied that he wanted to write down the rules of the classroom and place them by his desk where he could see them. His behavior changed dramatically from that point forward.

**COMPARING SOCIAL STORIES TO THE FELDENKRAIS METHOD**

Stories provide a context by which we understand our world and communicate what we know. Social Stories are very special stories with particular characteristics useful to the ASD community.

The website of the Gray Center defines a Social Story to be a narrative which “describes a situation, skill, or concept in terms of relevant social cues, perspectives, and common responses in a specifically defined style and format. The goal of a Social Story is to share accurate social information in a patient and reassuring manner that is easily understood by its audience. Half of all Social Stories developed should affirm something that an individual does well. Although the goal of a Story should never be to change the individual’s behavior, that individual’s improved understanding of events and expectations may lead to more effective responses.”

The above emphases are mine. Much of this description could, with slight changes, be referring to the Feldenkrais Method. As Feldenkrais practitioners we offer accurate information through touch and movement, usually in a patient and reassuring way. When we bring someone’s attention to themselves, we strive to make our observation easily understood by the client. We often start by going with our client’s pattern, in other words reinforcing something that our client is doing well. Finally, it is our hope that by increasing the client’s self-awareness, they may experience more effective responses to stimuli.

Can this analogy really be sustained? At the outset, the two methods seem very different! Social Stories are designed for children with ASD. The Feldenkrais Method is a general approach meant for anyone, at any age and any level of ability. Social Stories are specifically designed to provide social cues to people who have difficulty reading them. The Feldenkrais Method has ostensibly little to do with social cues, bringing people to look inward at themselves. Finally, Social Stories utilize language nearly exclusively, while the Method is designed to circumvent language in favor of a direct touch or movement experience.

Despite the differences in approach and intended audience, I believe these two methods, when seen from the perspective of “answering questions,” have a great deal in common and, in fact, illuminate each other profoundly. By better understanding the aspect of Social Stories that deals with a child’s unanswered questions, I discovered a new way to look at how the Feldenkrais Method affects people like myself who are not on the autism spectrum.

**RECOGNIZING A CHILD WITH A QUESTION**

Throughout her presentation, Carol Gray sought to emphasize not only how children on the autism spectrum are different from us, but how we are like them. She points out that the need for story is a common human characteristic through time and across cultures.
Like children on the autism spectrum, we use stories for more than entertainment. They answer our questions about life, both stated and unstated.

Our desire to answer our own questions often drives us to greater self-understanding. Feldenkrais practitioners might very well see a child’s first attempt to roll over as a kind of inquiry about his ability to move: “Can I get off my back?” The process that follows may be frustrating, and a child may display great displeasure until the “question” is answered by the first successful reversible roll.

Ms. Gray has found that a child on the autism spectrum who is exhibiting challenging behavior is often a child with a question. Ms. Gray gave two examples in her presentation. One involved a child who came over to her house and, after looking around, asked her “Why did you change your dog’s name to ‘Popcorn’?” Ms. Gray had not, in fact, changed her dog’s name at all. Nonetheless, the question remained.

Ms. Gray recognized that arguing her own perception of reality with the child’s would have been futile. Upon investigation, Ms. Gray noticed that she had replaced the dog’s normal food bowl with a temporary bowl that said “popcorn” on the side. Now she understood the child’s question and was able to answer it.

An even more compelling story involved that of a two and a half-year-old boy diagnosed with ASD whose exhibited behaviors baffled his parents. Among these were a desire to wrap himself around stop signs, a tendency to spin around, and a disquieting habit of throwing intense tantrums any time someone brought a lollipop into his house.

One day Ms. Gray witnessed an episode in which his sister, upon coming home from school with a lollipop in her pocket, forgot her brother’s reactions to them and put it on the table. The child quickly flew into a rage. Later, while driving home, Ms. Gray found herself contemplating the idea that this tantrum represented an unanswered question. As she paused at a stop sign, she suddenly had a revelation. She immediately called the parents, asking them to bring the child to the place where she had parked.

When they arrived, Ms. Gray and the child dug in the dirt around the base of the sign. She showed him that the metal stem is buried deep in the ground and has cement to hold it in place. She then accompanied the child back to his home. Taking the lollipop out where he could see it, she placed it in a lump of play-dough so that it would stand upright by itself. Immediately, the child began spinning in delight.

Have you figured out what the child’s question was? “Stop signs look like lollipops. Why do stop signs stand up by themselves when lollipops don’t?” The child was enraged at the inability of the people around him to recognize his question and to answer it. When the question was addressed, the rage vanished.

How different are we as “fully functional” adults from that child? Is our perception of reality of an entirely different order from his? Do we experience the same level of frustration with our own unanswered, unanswerable questions? How do we manifest the rage?

MY UNANSWERED QUESTION

As a child, and well into my young adulthood, I found it enormously difficult to make sense of my world. Ostensibly there was nothing wrong with me. Except for nearsightedness, my ability to see, to hear, to smell, to touch, and to taste was “normal.” No one would have diagnosed me with any kind of disorder. And yet the symptoms of my inability to relate fully to my environment can be seen all throughout the story of my life.

I paid far more attention to details in life than to the overall picture. My piano teacher was never able to help me progress in the perfection of a piece of music because I was
always fussing over, and never improving, minute aspects of the work. My painting instructors were always telling me to back away from the canvas instead of making tiny little marks with the paintbrush. Even in my early writing one can see my obsession with detail to the detriment of a storyline.

I also had difficulty forming friends and maintaining social relationships. Aside from two or three long-term friendships, I was never able to maintain my place in a community of friends. Instead I bounced from group to group or kept to myself. Many social cues eluded me, and my relationships with other people were often contrived and fell apart at the point at which they should have deepened.

None of these things appear catastrophic to the casual observer. They are the kinds of things many of us experience as children to one degree or another. Yet even as I should have matured, these tendencies remained. They dogged me in my college work, preventing me from thinking or expressing myself clearly. By the time I was in my twenties, I found myself living alone in an apartment with no full-time employment and no real social network. My way of dealing with the world had not changed since I was a child, and yet I was no longer protected by the organization of school life.

I myself had remained a child with a question: “How do I put the details of my life into a bigger picture?” By living my life as a dysfunctional adult, I was asking the question, but no one was able to hear it. If they had, how could they have answered it? It might have been a question that could only have been recognized and addressed by a Feldenkrais practitioner.

THE FELDENKRAIS METHOD FUNCTIONS LIKE A SOCIAL STORY

Feldenkrais practitioners create contexts for their clients by providing a somatic description of a person’s present state. This description can answer questions for a client that the client is unable to ask. For both a child on the autism spectrum and a “healthy adult,” these questions always go beyond the physical and touch on the mental and emotional as well. Is it possible that a child on the autism spectrum dealing with “ordinary awareness” is having an equivalent experience to an adult faced with an overwhelming leap to a new level of self-comprehension? While we cannot make a clinical claim that this is true without significant research, the possibility of such a parallel may still be helpful.

In the Feldenkrais Method, one begins to recognize, and can work with, the explicit connection between the physical, the emotional, and the intellectual. In talk therapy, one most often works with the emotional and, to a lesser extent, the intellectual. We are occasionally surprised upon experiencing a breakthrough or a catharsis at the end of a talk session to find that something has changed physically in us as well. We may carry ourselves differently or feel lighter. Sometimes these experiences are “explained” as a release of long-held tension. Our work with the Method suggests otherwise.

In fact, Dr. Moshe Feldenkrais suggests that by working mainly with the physical, that is, our functionality in movement, we can experience a profound shift in our mental and emotional capacities.

A fundamental change in the motor basis within any single integration pattern will break up the cohesion of the whole and thereby leave thought and feeling without anchorage in the patterns of their established routines. In this condition, it is much easier to effect changes in thinking and feeling, for the muscular part through which thinking and feeling reach our awareness has changed and no longer expresses the patterns previously familiar to us.

(Awareness Through Movement, p. 39)
In reality there is no isolation of the physical. When we move, we think either overtly or subconsciously about what we are doing and how we are doing it. Depending on the familiarity or sense of risk in the movement, we may also experience profound feelings that can assist or interfere with the task at hand. Dr. Feldenkrais made no claims for an isolated physical approach. The Feldenkrais Method is not a form of physical therapy.

But one can disconnect a movement from the thoughts and feelings that habitually accompany it, if one is encouraged to go slow and pay attention. If one removes the item one is reaching for, one can examine the act of reaching by itself, differentiate the elements of the reach, and see what one might have to alter in one’s entire organization in order to improve it. When one returns to the full function of truly reaching for something one needs, one finds it a different experience, physically, mentally, and emotionally.

My own physical impairment was poor depth perception. An imbalance between the acuity of my two eyes, corrected with thick glasses, long contributed to a distorted visual image of the world. Glasses, especially those with thick lenses to correct severe nearsightedness, have the effect of flattening the image the viewer sees. When my vision was corrected by laser surgery in my late twenties, I could at last see with two balanced, unassisted eyes. But the habits of seeing that I accumulated over the years persisted and, without realizing, I was not taking advantage of my restored capacity to perceive depth. I did not realize the extent of my poor depth perception until I began my training in the Feldenkrais Method. As my overall organization improved, so did my ability to truly see. As my world began changing, I discovered that my physical limitation had carried with it some mental and emotional implications with which I had been struggling for a long time. My visual limitations were connected to questions I had long had about the world that had always gone unanswered.

LIVING IN DEPTH

You are most likely reading this article now on a page in a magazine or book, or perhaps a computer screen. The page is probably buckled and curved, or the screen is at some kind of an angle to your face, so that each word is at a slightly different distance from your eyes. I doubt you noticed that until now. Most likely you are engrossed in what you are reading and have automatically condensed the depth so that all the words seem the same distance away.

This condensing habit is useful in reading, and in other situations as well. It is enormously helpful to be able to condense spatial information into a flat picture so as to make comprehension of the image quicker. When watching a baseball game, depth is less important than the position of the players on the field.

But imagine if you always condensed what you saw, discounting depth completely. If someone was walking towards you in the hall you would perceive them as getting larger! It would be very confusing.

What if you compressed different kinds of distances, metaphorical as well as physical? Pretend that you’re considering something that may happen far into the future but you automatically compress the “distance.” Instead of anticipating the event, you believe it’s happening right now. As an even worse side effect, every event in your past, every mistake, every embarrassment, no matter how long ago it was, still seems present to you and never becomes just a memory but is always occurring with the same intensity. Very emotionally difficult.

What if you were arguing with someone? Some of the things they are saying would be more important (closer) and some less important (further away), but you would be unable
to make the distinction. You would treat everything the person says as equally important, from little insults to essential facts about how they’re feeling. Wouldn’t that be confusing for both of you?

The person we are imagining is me. My tendency to focus on details without relating them within a larger framework, my difficulties negotiating the finer aspects of relationships, even my tendency not to use dynamic shifts in my own musical compositions, all were extraphysical manifestations of my tendency to compress the world.

As I began to explore the idea of “depth” in a Feldenkrais environment, I gradually came to recognize the central importance of this aspect of myself. I began to recognize how I flattened everything in my life, physical, mental, emotional, and temporal. I found that I had always been impaired in my ability to distinguish between deep interpersonal relationships and shallow ones, between consequential activities and trivial ones, between the past and the present. It was only after I began to see in three dimensions, then to think in three dimensions, that I could mature, experience real relationships in my life, and gain some true perspective on my past and my future.

In order to have real relationships with people, relationships with depth, I must recognize that not every hurtful thing the other person says in a fight is equally meaningful. I discover that I have more choices in my reaction to another, that there are more options than simply advancing in a relationship or losing ground. I gain a whole world of movement in which new directions become possible: left and right, up and down, spinning.

Because my questions about the ways in which people can connect to one another have been answered through my new organization, I am able to give up parasitic and neurotic ways of relating to others that have only partially served me. Suddenly the person across from me is not a flat image, but a true person who can be engaged in conversation, touched, embraced. Then we two individuals, with the benefit of our depth perception, can dance.

ANSWERING THE QUESTION

How did the Method make this possible? By creating an awareness in me that I am a three-dimensional person, the practitioners with whom I worked helped me to answer a question I didn’t know I had. Together we mapped my ribcage, and I felt its shape change as I breathed. In order to roll on the floor easily and reverse the movement, I had to experience both my body and the space in which I was moving as something more than an intellectual abstraction. Finally, as I began to think of myself as a solid, three-dimensional being, I could begin to see in three dimensions again. With my perception improved, I could then imagine a three-dimensional world in which I could move, with others in it.

Through the techniques of touch, movement, and dance, I was given a context in which to place myself. This context was much like the social context provided by a Social Story. Determining my physical presence in three-dimensional space is equivalent to an ASD child finding a temporal presence between the past and the future, events and consequences. In both cases our deficits prevent us from being able to ask, or even realize that we are asking, a question whose answer will provide the key to the kinds of mastery we see in others.

For a child with ASD, a Social Story, a clear description of a moment in time free of bias and extraneous information, enables them to see themselves in relation to others. With such knowledge, they can recognize the effect they have on the world in which they live and can make changes to it. This knowledge may provide the answers to their hidden questions.
In our work, it is necessary to recognize the “question” the client is asking, no matter how it is manifested, and to find the appropriate context so that they can begin to answer it. The context must be given in a way that provides meaning and a sense of self. We must share accurate information, free of judgment, which connects to the client’s own areas of comfort or competence. We want the client to end the lesson saying, “I can change that.”

Whether the “story” of a client is told through timeless touch, or bias-free language, the need of the client is the same: to be able to examine him- or herself with the help of another set of eyes. If we take our cue from the successes that Social Stories™ have had with children on the autism spectrum, we can understand that people can make profound changes in their lives when we compassionately and intelligently provide accurate information and then give them a context to make sense of it. We must listen out for our clients’ unanswered questions so that we can offer the information they will need to move toward the answers, and beyond them.

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REFERENCE

Balance
What we know...what others don't know...and what we can do about it
Alan S. Questel

Balance is fascinating...it’s up there with gravity...self-image...creativity...self-organization. All are explanatory principles. They describe phenomena but are actually intangible. We can’t place our hands on them yet we know they exist. One of Dr. Moshe Feldenkrais’s biggest claims to fame was how he could make the abstract seem concrete. When we help someone improve his or her balance we are making the abstract concrete. Our work is based in action. We explore something that is intangible (like an explanatory principle) in a physical way. While we include thinking, sensing, and feeling, it is in movement where we mostly reside. Reversibility and increasing the level of challenge are two significant ideas we employ that directly affect balance. Our understanding of how these ideas can be utilized as tools can help us inform others and assist them to improve their balance.

IS IT ABOUT BALANCE OR ABOUT FEELING UNBALANCED?

How do we know we have balance? The answer (almost always) is, we don’t...until we lose it! There are a variety of ways and degrees that loss of balance can present itself. At its most extreme is Norman Doidge’s description in The Brain That Changes Itself of Cheryl, who feels she is perpetually falling. On the other end of this spectrum, someone may simply feel ungrounded.

People are not coming for a lesson because of their balance. It’s their difficulties around balance they are interested in working with. For the vast majority of the people we see, balance isn’t even an issue; at least not one they are aware of. Unless they are in a profession or have a hobby where balance is essential, like a circus performer, gymnast, skier, or roller blader, it is something that is only considered when it becomes compromised. When someone experiences a diminished sense of balance they feel unsure, become more fearful, raise their center of gravity, and usually attempt in some way to move further away from the ground (which of course, only makes their balance worse). They don’t trust themselves, refrain from certain activities, become more dependent on others, look down more, stumble or fall, hold onto things, feel old, have a loss of control, and other things as well.

Balance is influenced by and can be understood through a number of things: our intention, the environment, and our structure, for example. When we lose or regain our balance, however, it is mostly recognized through how we move. We move as a result of our intentions. When we are unable to fulfill our intentions, it may show up in relation to or as a loss of balance. Negotiating an environment is also included in our experience of balance. The environment we inhabit determines how we act in the world. How someone uses themselves in relation to their structure and what they are doing can be seen in how they maintain or lose their balance. To understand how and what each individual would need to utilize to improve their balance we need to consider all these points of view. What a person wants to be able to do, what their unique structure allows, the environment they might do it in, and how they finally are able to do it are part of the complexity we are faced with.

This all relates directly to one’s self image, a person’s sense of his or her self in the world. In our model of thinking, feeling, sensing, and moving we can also see a loss of balance reflected in one’s emotional or psychological state. If a change in one of these aspects of...
the self potentiates a change in the others, then we access, influence, and affect more of the whole person we are working with, not only their ability to move.

Hubert L. Dreyfus writes in his article “The Current Relevance of Merleau-Ponty’s Phenomenology of Embodiment,”2 “As an account of skillful action, maximum grip [i.e., finding the best way to fulfill our intention through perception and manipulation] means that we always tend to reduce a sense of disequilibrium. What is experienced as disequilibrium and equilibrium depends, of course, on what skills have been acquired.” This is a description of skill acquisition, yet we can see how well it describes a relationship to feeling balanced. When learning something new one often feels clumsy, again a description that is somewhere on the continuum between balanced and unbalanced. If someone is able to do something well then he or she may feel more in balance with the world.

APPROACHING BALANCE ISSUES

Generally, we are faced with two considerations. One, likely more obvious, is how can balance be regained once it is lost or compromised? And two, can something be done about it before it becomes a problem? Both are on the same continuum; it just depends where the exploration begins. It is important to consider both in the same field, as this can bring greater flexibility in our approach.

A variety of causes can disrupt balance. Musculo-skeletal injuries, neurological diseases or disruptions, ataxia, vertigo, surgeries, fear, and aging all can be represented in someone’s diminishment of balance, even though the underlying causes may vary. While a specific diagnosis may be interesting and sometimes useful, it is what the person is actually doing or not doing that determines what we do and how we work. Many years ago, in the very first year of my practice, a woman with all kinds of strange symptoms came to see me for lessons. She was a silk-screen artist and worked with a variety of toxic materials. To me, her symptoms seemed to represent classic symptoms for multiple sclerosis. Should I tell her this? As a Feldenkrais practitioner I do not make diagnoses. I decided not to say anything at the time; however, if nothing changed in the course of our work together I would recommend that she visit her doctor to see if a medical diagnosis might indicate another way to proceed. My focus with her, as in most of my lessons, included transmission of force skeletally, deconstructing muscular habits, and creating new and more efficient connections throughout her. Within ten lessons all of her symptoms disappeared. I felt I made the right choice in working with what showed up rather than a diagnosis.

The same can be true when we get overly focused on improving someone’s balance: it is not that different from the way a diagnosis can influence our thinking when someone comes for lessons. We can become trapped in a kind of thinking that probably has not worked for our client. When balance is taken out of the initial equation our attention can broaden. We can consider a wider perspective of how we might approach a person with these considerations. The person’s need for better balance has to remain someplace in the background, because putting it in the foreground often can take us off balance in what we do.

In the Amherst training (June 16, 1980) Feldenkrais said, “We never destroy the old pattern and the old habit. We only learn one, which in the long run becomes . . . begins to feel safer, easier, more comfortable, so that we use this one and relegate the old one, just like the sucking we did, into the memory which when necessary we will need it again . . . we use it again. But we don’t destroy the old pattern at all. We learn a new one which will
feel so much safer, so much better, so much an expression of our own desire of what we are, will fit our self so nicely that it will affect our action outside and inside for a better connection with the outside world and ourselves—our action on it and reaction. Otherwise it's futile. . . . " We need to provide someone with a new habit that feels more dependable than the existing one.

OBSERVING BALANCE

Going up and down stairs can be quite revealing when observing a balance-challenged person's habits. In both directions there is the inclination to look down and round oneself forward. It makes going up stairs difficult and going down downright perilous. To do something other than this feels undeniably unnatural, unless we can help someone feel that it is safer to act in a new way.

While going up stairs most people tend to pull themselves up with the forward leg. Think about that…it means the leg in front has to pull the mass of the rest of the self, both forward and upward, quite a demand. But if one simply places the front leg on the next step and then pushes up through the back leg (kind of like ice skating) the whole action feels lighter and easier. Their head becomes free to orient around them and when they move more through their skeleton the muscular work is more efficient. Most people who experience this can easily appreciate the difference.

Going down stairs is not so easy. Rounding and looking down is almost inviting a fall, but then what does one need to do that is safer? To go down the stairs more safely one needs to lean back and let the forward leg’s hip joint open in front, actually lengthen the whole front of ourselves, to ease our way down. Of course holding the banister helps tremendously with this. Then one also needs to learn to differentiate their eyes in relation to their head so as to not bend their neck as much to look down. When someone finally finds this they gain a sense of security they hadn’t known before.

REVERSIBILITY

I have had an interest in falling for a long time and in my investigations I could only find one thing that made falling different from moving: falling is irreversible. Most people think of reversibility as moving back and forth through the same trajectory. They get up from a chair and return to the chair in the exact same path. It’s true, this is the most literal sense of understanding this, but it is useful to look at reversibility as Feldenkrais refers to it.

During an Awareness Through Movement (ATM) lesson in the Amherst training (June 30, 1980) Feldenkrais said “And if it is properly done, it’s reversible. You can stop at any moment and change." Later on in the lesson he says, “There are already a large number of people who roll on the side with that peculiar reversible human way where they could stop anywhere . . .” And on June 15, 1981 he said, “You see it’s absolutely reversible. That means it’s a voluntary, consciously controlled movement. You can stop at any place on the way, continue, go back, or change it into something else . . ." When a movement is reversible it is a demonstration of how well we actually know what we are doing. Reversibility is amazingly significant to all of our actions.

Certain movements are sometimes considered to be exceptions to this idea. When we jump or spin, or sometimes in running we will likely find that our movement is irreversible. Because the initial action is usually something that one does out of choice, however, one doesn’t consider the irreversible aspect of it. This is why we don’t refer to jumping as
falling, even though I fall through space when I jump down. And while running (or walking for that matter) is sometimes called controlled falling, we generally don’t think of it that way. We recognize the act of falling in the moment that we realize we cannot reverse it.

It is also important to understand that when one really reverses an action they need to stop to change the direction. But it is possible to alter our path without needing to stop. We can do this through more circular movements, redirecting ourselves in another direction. This can become the moment where we regain control over our actions. Our stumble or fall becomes a skip or a roll. To do this one has to be able to move in one direction and then shift it. This feels counter-intuitive to most people. In martial arts one needs to override some of the spontaneous impulses when falling in order for an action to remain within their control. Feldenkrais’s description of a well-organized action, to be able to move in at least the six cardinal directions without any prior reorganization, speaks to this idea. If I can change directions at any moment, without any extra work, in the exact opposite direction (really reversing it) or in another direction, this is still related to reversibility.

**IMPROVING FALLING**

Of the nine different workshops I have recorded for the public, a third of them (*Falling . . ., Reversibility . . . ytilibisreveR, and Balance*) revolve around this issue. In *Falling . . .* I am not teaching people how to fall. On the contrary, I am showing them how not to fall by learning to increase the range of reversibility in an action. All of us have the ability to do this. If creating more reversibility is our intention in a lesson it gives us an entirely different focus than improving balance. Increasing someone’s range of reversibility is something that they can appreciate and this offers an understanding and ability that they can pursue on their own.

I had a client at one time who had severe ataxia. No one knew the cause and he even had surgery on his cervical spine, but nothing seemed to make a difference. He was able to walk in a fashion, but he would reel around the room clearly looking, and feeling, out of control. I tried various strategies: giving him a more skeletal sense of himself . . . didn’t help; working with the relationship of his eyes and head in space . . . nothing changed; smaller and slower movements . . . to no avail.

One day as I watched him stagger into my office I realized that he looked drunk in how he moved. I asked him if it felt like this to him. He replied that it did, but without any of the pleasure he had previously experienced while under the influence. He also told me that people often thought he was drunk and would move out of his way. Now, I have a background in acting and one of the things I learned was for a character to appear drunk, he can’t just stagger around. That’s what most people think and it doesn’t work. To really appear drunk one has to show that they are inhibiting their stumbling and weaving; that’s when someone really looks drunk. In my conversations with my client, I asked him if he was also trying to inhibit his movement so as to not appear drunk and, of course, he was. This led us into a whole different realm of movement.

At first it felt scary to him to not inhibit the stumbling, as he was afraid he would fall. We began with small movements in side lying, rolling and gradually increasing the range until he felt the moment where he wanted to hold on and inhibit what was happening. Understanding how he might inhibit his inhibition was a major theme for quite a while. We worked very slowly and gently. I would evoke more of a sense of connection throughout him in the action of rolling. If he felt his head beginning to drop, I helped him distribute his attention to his head’s relationship to his neck . . . to his chest . . . to his pelvis, eventually developing his ability to sense this in relation to the table. We explored the movements
he could control and practiced “reversing” them so the feeling of reversibility became more and more familiar. Over time, in the safety of my office, we looked for this feeling in movements where he felt more out of control, again seeking a sense of connection and relationship with the ground. His movements became more circular, more spiraling, until he could more intentionally allow his movements to just happen and he regained volition over them.

It started to look more like some odd dance as he moved in this fashion. One could tell that something was a bit strange in how he moved, but not so odd that people would cross the street when seeing him. He was just fine with that because now when he moved he felt less fearful, worried, and concerned. It gave him a freedom in movement that he had not experienced for a long, long time.

Obviously, this strategy doesn’t work for everyone. It may be too difficult to go with what they are doing and for some it is even unsafe. Still, working with inhibiting some of their inhibitions gives them a more neutral starting place to learn to move from. It’s not all that different from the pattern of protection someone may engage in around pain. By protecting themselves they frequently stay connected to their pain. Often, to not have pain, they need to disengage from something before they can learn something new. As I stated earlier, we need more dependable self-use before we can let go of our old ways of doing things.

CHALLENGE

What if the challenge to someone’s balance is represented in a different way or is more severe? What are the circumstances that might help him or her improve? The answer lies in the first sentence here . . . in the challenge. I wrote a case study in the 1991 issue of The
called “But Do You Think You Can Help Me?” It’s about Freda R., whose right side had been affected after a stroke some seven years before she came to see me.

Freda’s daughter was getting married and Freda wanted to wear high heels to the wedding. I understood her desire but couldn’t imagine how she would ever be able to do this. She needed a brace on her right leg, and without it she didn’t have a great deal of control over her foot and leg. I certainly didn’t want to discourage her dream so I described the kind of heel she should get—low and as wide as possible—and we would begin to practice. She came in the next week with two-inch spikes! Later she brought another pair but I figured, what the hell, let’s start with these. It was impossible. Before this she was unable to stand on her leg, and now it was simply ridiculous. I worked, or attempted to work, for some time and eventually gave up. But that was when something really interesting happened. When I took the shoe off her foot, her leg stood on its own for the first time! I was amazed. Although I had previously understood the concept of **increasing levels of challenge**, this time it was so clear that by putting a greater demand on her she was compelled toward a higher level of organization. (And a very happy Freda did wear heels to the wedding for a couple of hours and later switched to flats . . . her own idea!)

This became a constant theme in our work. Because of how much more clearly I understood this idea, I began to explore it in as many ways as I could. In addition to the footboard, I used rollers to stimulate Freda’s feet in novel ways, eventually using rollers under her feet in standing. I used rollers of various sizes and densities, sometimes using different-sized rollers under each foot, placing them at different angles. I wanted to create more and more varied challenges to Freda’s organization relative to standing. This eventually led to an outcome I couldn’t have predicted. As Freda’s sense of safety and ability in the world improved, she decided to learn to drive again, and return to her job as a realtor. She was now ready to negotiate the world as she had before her stroke.

Ever since, this idea has been present in me, especially when there is a clear challenge or inability, such as balance. This is evident when we work with a person lying supine on a long, large, firm roller, legs bent and feet standing, arms on the table and slowly bringing their head off to one side of the roller and then off of the other side. Eventually letting their pelvis drop off of the roller to the opposite side from their head, lifting a leg or arm, moving on to having one or two rollers under their feet, in either direction, even rollers under their arms, creates more and more instability, necessitating an even greater need to reorganize. It almost always results in a greater sense of balance, a more stable mobility and a more mobile stability.

**STABILITY AND MOBILITY**

The ideas of reversibility and **increasing the level of challenge** can (and maybe even needs to) be understood through a larger context of our work. It is in the relationship between **stability** and **mobility** that we can really find the edge we need to explore when we organize toward improved balance. Too often when balance is challenged one only seeks stability without considering mobility, but these are actually understood, known, and operate in relation to each other.

Freda’s initial lesson, wearing high heels, was experienced as tremendous instability. She had no control over the movement of her leg when the challenge was brought to such a height (literally). Yet we can clearly see how this increased level of challenge created the circumstances that put a demand on her nervous system to reorganize. I really did very
little in that initial lesson. Instability became mobility (something we have more control over) and the means to further exploration and learning.

My client with ataxia learned that through inhibiting his inhibitions, he could come to understand what he was doing and eventually do more and more of what he wanted to do. The place he initially felt he had to stop became a place he could now move through. What was formerly perceived as an ending point became the beginning or the middle of something else.

Balance exists on a continuum of skill, abilities, and activities and can be understood and explored within this light. It is not a thing to be learned once and for all. We need to practice balance along the continuum of movement by becoming more reversible in our actions. Mobility can replace instability and stability can be appreciated in terms of what is still possible in our ability to move. It is between these things that our balance resides.

This is a rich place for exploration. We can see when someone is too stable or too unstable (too mobile). When thinking in these terms it can become more evident what someone is actually doing. We can see where they become irreversible and we can create circumstances that can help them to understand and shift this relationship. Most important is that we work with an individual’s specific abilities and actions in relation to their balance. Whether it’s walking, going up and down the stairs, or getting in and out of a chair, it is only through an activity that balance will improve and continue to improve.

Adaptability, utilization, resilience, and self-reliance are key to being able to make the necessary adjustments to improve. When we are willing to feel a little unsafe we may find greater safety. Regaining one’s balance isn’t only about becoming more stable; it must include both an understanding of mobility and also a sense of well-being.

May you always stand firmly on your feet . . . or on one foot . . . or on your head . . . or on all fours . . . and may you always, always, always fall well!

NOTES
The River of Integration
Introducing Interpersonal Neurobiology to Feldenkrais Practitioners
Donna Ray

MY INTRODUCTION TO THE FELDENKRAIS METHOD

“Know what you are doing, so you can do what you want.” All Feldenkrais practitioners know these words of Moshe Feldenkrais, D.Sc. They inspire us, and in our own ways we put them to use on our journey of self-discovery and our quest for knowledge.

An introduction to the Feldenkrais Method of somatic education in 1982 changed my life, opening a doorway to greater self-awareness and creating a framework for acquiring new information. When I attended my first Awareness Through Movement (atm) class, I was a psychotherapy intern who had become frustrated by what I perceived to be the limitations of “talk therapy” with my clients. The Feldenkrais Method offered something unique, more comprehensive. It engaged me immediately because it was so different from my early learning experiences.

I probably would have been diagnosed with ADHD, attention deficit hyperactivity disorder. Sitting still in classrooms was excruciating for me. I only wanted to learn what seemed practical and immediately applicable. Putting my hands on what I was learning made it come to life.

During my first three-hour introductory course in the Feldenkrais Method, I received a Functional Integration lesson (fi) from Feldenkrais trainer Mark Reese, Ph.D. When I stood up at the end of the lesson, I felt the way I had always wanted to feel, though I hadn’t known how to describe it before that moment. I felt at ease, light, open, present, alert, effortlessly at home with myself. This was my first experience of a dramatic state shift, a deep change that had taken place in my nervous system. The experience was so profound I felt compelled to enroll in the next available Feldenkrais training program.

My early study and teaching of the Feldenkrais Method guided my understanding of the nervous system. In that training I learned how the autonomic nervous system’s powerful sympathetic (fight, flight, freeze) and parasympathetic (faint) components control significant state shifts and how changes brought about by these shifts affect our behavior. I imagined the nervous system as a big, weblike structure running from the brain through the rest of the body. I could sense my clients’ nervous systems responding while I touched and moved them, and I readily observed changes in my own nervous system while practicing atm and fi lessons. The Feldenkrais Method helped me understand myself and my learning process, and my self-image changed in powerful ways. I learned to appreciate the intelligence of my nervous system and saw how I was much more capable than I had thought. I absorbed what Feldenkrais meant when he said we are “learning how to learn through movement.”

When I began to integrate the Feldenkrais Method into my psychotherapy practice, I observed how it could elicit significant change in my clients, from the reactive extremes of the autonomic system to a kind of comfortable neutral state where they became poised to respond to any novel or familiar situation in new ways. This neutral state of simultaneous calm and alertness is distinct and wonderful; my students and clients marvel at it, just as I did after my first Functional Integration lesson. This may be one of the most dramatic and important experiences the Feldenkrais Method offers. Being able to appreciate changes in a client’s nervous system within the context of learning, anxiety, depression, fear, and pain reduction has become critical to me in my therapeutic practice.
INTERPERSONAL NEUROBIOLOGY

I have always been driven by curiosity to learn more and more for self-development and to share my process with others. Ten years ago I discovered the field of interpersonal neurobiology (IPNB) and the work of Dr. Dan Siegel, who is both a neuroscientist and a psychiatrist. IPNB offers a deeper understanding of the brain and, consequently, has provided more tools to strengthen my teaching of the Feldenkrais Method.

In his book *The Developing Mind* (2001), Siegel describes practices that I had been using and client behaviors I had observed for nearly two decades. He provides new scientific explanations and reasoning behind what works in therapy. Here is a brief summary of Siegel’s description of what it means to be human and how this type of therapy works:

In the early 1990s, Daniel J. Siegel directed the training program in child and adolescent psychiatry at UCLA. Drawing on his natural tendency to synthesize and integrate, he pulled together an interdisciplinary study group on the mind and the brain in an effort to see the larger whole of human experience. The team included 40 people, representing more than a dozen branches of science, including anthropology, zoology, developmental psychology, linguistics, genetics, neuroscience, and systems theory. The result that emerged from that inspirational experience was a whole new field of science: interpersonal neurobiology, which presents an integrated view of how human development occurs within a social world (to be precise, that the neural patterns of our brains are literally affected by our relationships with other human beings). IPNB embraces a wide array of knowing that includes the sciences, contemplative practices, expressive arts, and philosophy to explore the nature of being human. Perhaps the most remarkable thing about this field is that it has created a bridge between the laboratory work of brain researchers and the mind work that happens on a therapist’s couch.

CORRELATION OF THE FELDENKRAIS METHOD AND IPNB

As a seeker of truth, a Feldenkrais practitioner, and a psychotherapist, I immediately sensed a similarity between Dr. Siegel’s view of humanity and Dr. Feldenkrais’s approach. After a thirty-year immersion in the Feldenkrais Method and a decade of exposure to Dan Siegel’s IPNB, I would venture to say that both of these visionary scientists have been on a mission to save humans from their own idiotic behaviors. They both desire to improve not just individuals but the cultures in which they live. They rigorously put to use scientific principles that focus on guiding people toward health. This represents a shift toward what Siegel refers to as “neural integration” and what Feldenkrais termed “maturity.” In his book *Body and Mature Behavior: A Study of Anxiety, Sex, Gravitation, and Learning*, Feldenkrais writes, “What I understand by maturity, is the capacity of the individual to break up total situations of previous experience into parts, to reform them into a pattern most suitable to the present circumstances, i.e., the conscious control effectively becoming the over-riding servo-mechanism of the nervous system.”

Let’s have a closer look at the correlation between the Feldenkrais Method and this emerging field of IPNB.

- Both are based on the truth of natural learning and emphasize the importance of subjectivity (the individual’s point of view), science (rigorous examination of human behavior), and relationship (how relationships shape our self-image and our lives).
- Both approach human functioning from the point of view of integration versus chaos. In Siegel’s terms, every person’s mind is hard-wired to reach for integration and connection. He and other scientists use the word neuroplasticity to describe the brain’s
response to experience, or the way connections in the brain can change or be changed. One’s experience changes the function and structure of the brain itself, transforming rigidity and chaos into integration. For Feldenkrais this assumption that the brain will be transformed is a given: “My way of looking at the mind and the body, if you want to understand it, is to help make that structure of the entire human being functionally well-integrated. To make that change you have to rewire the mind in a special way.”

- Both look at health and human functioning rather than pathology. The Feldenkrais Method is based on developing awareness and learning, not curing. Feldenkrais said “Our strengths are our weaknesses and our weaknesses are our strengths.” Similarly, IPNB shows us that inherent in a useful therapeutic process is the development of awareness.

Looking at the Feldenkrais Method in light of Dan Siegel’s nine domains of integration can reveal more clearly how the Feldenkrais Method stimulates integration in a variety of ways.

1. **INTEGRATION OF CONSCIOUSNESS**  “How we focus our attention is the key to promoting integrative changes in the brain . . . we actually build the skills to stabilize attention so that we can harness the power of awareness to create choice and change.”

   Feldenkrais’s ATM lessons direct the student’s attention to promote integrative changes in the brain. We focus attention and amplify what is happening during movement lessons. Focal attention is placed on skeletal movement, muscles, thoughts, and emotions. Our attention shifts here and there, and we acquire multiple perspectives that we then integrate into a functional, holistic action.

2. **HORIZONTAL (or bilateral) INTEGRATION**  “Our left brain and right brain have separate but complementary functions.” In the Feldenkrais Method we access right and left hemispheric functioning. For example, during ATM we accentuate right brain activity by verbally guiding attention using imagery and developing holistic thinking. We activate left brain activity during ATM as well, by using logical language, by coherently developing functional movements, and by moving the right side of the body.

3. **VERTICAL INTEGRATION**  “Our nervous system is vertically distributed, ascending from the body proper through the brainstem and limbic areas, finally arriving at the cortex . . . Vertical integration links these differentiated areas into a functional whole.”

   The Feldenkrais Method continuously integrates vertically. We attend to and alter breathing, tempo of movement, and muscular activation. We learn to reduce and redistribute muscular effort. We observe our thoughts, feelings, sensations, and actions, and discover how they are woven together.

4. **MEMORY INTEGRATION**  “We process and encode our experiences in layers of memory.” Implicit or embodied memory begins in the womb and continues until the hippocampus is mature enough to reflect on past, present, and future events. At this time, explicit memory begins. The Feldenkrais Method includes developmental movements, from infancy to adulthood. The process of exploring infant and toddler movements, through to the complex movements of adulthood activates implicit memory and integrates early learning into explicit, newly-formed autobiographical information.

5. **NARRATIVE INTEGRATION**  “We make sense of our lives by creating stories that weave our left hemisphere’s narrator function with the autobiographical memory storage of our right hemisphere.” Within the Feldenkrais Method we explore learning through movement. Sometimes the lessons are difficult and challenging, sometimes easy. There is often a surprise learning moment in the lesson, and the learning experiences change our personal narrative. As I said earlier, by practicing the Feldenkrais Method, I learned
that I was more capable than I had imagined. This change in what Feldenkrais called self-image is reflected in personal narrative, “making the impossible possible, the possible easy, and the easy elegant.”

6. **STATE INTEGRATION** “Each of us experiences distinct states of being that embody our fundamental drives and needs: closeness and solitude, autonomy and independence, caregiving and mastery, among others . . . With state integration, we can move beyond past patterns of adaptation and denial to become open to our needs and able to meet them in different ways at different times.”8 The Feldenkrais Method trains the student’s ability to shift from one state to another. We become aware of our patterns of behavior and see that we can shift states through movement and sensory motor learning.

7. **INTERPERSONAL INTEGRATION** “This is the ‘we’ of well-being.”9 The Feldenkrais Method offers a context for safe, trusting, intimate learning relationships that shape new ways of relating with others. These relationships promote integration both **within** the practitioner and the student and **between** the two of them.

8. **TEMPORAL INTEGRATION** “Temporal integration enables us to live with more ease and to find comforting connections in the face of uncertainty.”10 While this connection to the Feldenkrais Method may seem obscure, in my view Dr. Feldenkrais built this into his teachings. In the Amherst training, he once said “Your skeleton will outlive your soul.” He also said “Move as if your soul is doing the movement, that is, if you have one.” I think he made statements like this to provoke thinking while his students were moving in optimal ways; coupling uncomfortable thoughts with humor and feel-good, confident movements engendered an acceptance of mortality rather than a feeling of uncertainty.

9. **TRANSPIRATIONAL INTEGRATION** Siegel notes that each of us has an inherent drive toward health, what he calls “a push toward integration.” He observes that his patients develop an expanded sense of identity, an awareness of being part of a larger whole. “In
various research explorations of happiness and wisdom, this sense of interconnection seems to be at the heart of living a life of meaning and purpose. This is the promise of mindsight and integration.\textsuperscript{11} I believe that Feldenkrais intended the same outcome. During his trainings he created an atmosphere of learning that pushed his students toward integration, one that demanded the development of personal awareness, awareness of others, as well as awareness of the environment. In \textit{The Potent Self}, Feldenkrais suggests that we can become free of our cultural upbringing, becoming fully ourselves.

Developing an understanding of these domains of integration may help Feldenkrais practitioners see more clearly how the Feldenkrais Method transforms human behavior. Siegel’s precise descriptions shed light on areas of change that we as practitioners do not explicitly emphasize. Considering the Feldenkrais Method from these new perspectives has increased my awareness, and as I share them with other Feldenkrais practitioners I see their work becoming more potent.

Ultimately, I believe we join together in relationships to create self-awareness and learning. The student relies on the practitioner for guidance and direction. The feelings generated in the learning relationship shape the brain and affect self-narrative, how we talk about our lives and ourselves. The learning relationship can change self-image, how we conduct ourselves based on what we believe, thus affecting all our behaviors and relationships.

As we create kind, compassionate, accepting, loving feelings in our relationships, we are affecting the brain’s limbic area, the control center of our emotions. Neuroscience studies show a change in the brain when self-awareness is developed. What I have called the “neutral state” between the extremes of the autonomic nervous system is what Dr. Siegel refers to as "the open plane of possibilities."\textsuperscript{12} Siegel says, "Picture the sense of completely open possibility. Nothing is determined; anything is possible."\textsuperscript{13} In his words, “Wherever neural firing occurs, existing neurons can make new or enhanced synaptic connections through the process called synaptogenesis. New neurons can be stimulated to develop, as well—a process called neurogenesis."\textsuperscript{14} When we integrate feelings, thoughts, sensations and behaviors, change takes place in the brain and in the mind. Simply, through the focus of attention, we use the mind to change the brain and through sensory motor awareness we use the brain to change the mind. This process transforms new states into new traits.

Drawing inspiration from these true visionaries, Dr. Feldenkrais and Dr. Siegel, I have gained a foundation that I believe optimizes my potential to guide students with greater care and precision. As Feldenkrais Method practitioners we seek to create integration in many areas of our students’ lives. We help them regulate the flow of energy and information in a harmonious fashion, away from rigidity or chaos toward integration, wellness, and harmonious living.

This process of integration, approached by Siegel and Feldenkrais from different directions, leads us toward greater personal well-being and a better perspective on the world in which we all live. Dr. Feldenkrais had the gift of creating learning experiences that exemplified important concepts of neuroscience, learning, and human development. For example, he taught proprioception: how to sense the position, location, orientation, and movement of the body and all of its parts. He taught to then link proprioception with learning, to recognize how these changes in movement affect our self-image. ATM lessons demonstrate the process of integration: Through experiencing differentiation, linkage, and integration we fundamentally understand the process of becoming aware of our parts and reorganizing them to form functional, whole actions. Interoception—knowing our internal bodily states or what we feel, sense, and know from experience—becomes more acces-
sible with ATM and FI. Knowing that we know originates in our embodied experiences of learning via the Feldenkrais Method. Each of these experiences changes the brain. As Dr. Feldenkrais said, “I am not interested in flexible bodies; I am interested in flexible brains.”

Dr. Siegel has the gift of making the underlying neuroscience comprehensible for educators and psychotherapists as well as Feldenkrais practitioners so that we can deepen our understanding of what we do and share this information in a useful way with our students. He is a master of turning scientific principles and observations into snappy, memorable acronyms. For example, he writes that one of his goals with a patient was to SNAG his brain, that is, to Stimulate Neuronal Activation and Growth. He demonstrates in his book *Mindsight* how he focuses his client Stuart’s attention to SNAG his right hemisphere. He goes on to say that “as we focus repeatedly on specific skills, moment-to-moment neural activity can gradually become an established trait through the power of neuroplasticity.”

Perhaps such an active image might be useful for Feldenkrais practitioners: build the attunement, rapport, and trust with a student along with Functional Integration and you will be able to SNAG her brain and thus improve her life. (See how I snag my student Susie’s brain in the following case study.)

Siegel refers to the “Triangle of Well-Being.” At the points of the triangle we see the brain, the mind, and relationships; each relates to the development of Mindsight. “Mindsight is the focused attention that allows us to see the internal workings of our own minds. It helps us to be aware of our mental processes without being swept away by them, enables us to get ourselves off the autopilot of ingrained behaviors and habitual responses, and moves us beyond the reactive emotional loops we all have a tendency to get trapped in.”

He relates this to the “Window of Tolerance,” opening the space for new experience, bodily sensations, emotions, and specific memories. When we are tolerant, we remain receptive; outside of the window, we become merely reactive. Within the relationship aspect of the Triangle of Well-Being we create the open space for new experience. Through my discussions with Siegel, I have learned that when he uses the term “brain” he is always including the nervous system, and when he refers to “mind,” he is thinking body/mind or embodied mind. I think it is necessary to point this out. Our language assumptions limit our thinking, and I don’t believe that most people are expanding mind to include the body and brain to include the nervous system.

Here is a detailed case study that gives a fairly complex picture of how I combine the Feldenkrais Method and interpersonal neurobiology in my practice. As you read the case study of Susie, look for ways I open her Window of Tolerance in our relationship.

**Susie: A Case Study.** Susie is forty-five years old. She is suffering from lower back pain and anxiety. This is interfering with her ability to care for her children, perform her gym workouts, and maintain intimacy with her husband. She says, “The gym keeps me sane.” She has two children, four and six years old. Susie describes herself as very conscientious; she is driven to parent correctly. She also feels that she is not the mom she wants to be.

Susie reports, “I often feel tense and overreact to my children and their frustrations. Instead of calming them down, I match their frustration and get angry. I usually make idle threats and we all end up scared and frustrated.” She is unable to regulate her emotional responses with her children.
Regarding her back pain, I ask her when she began working out at the gym. She says she has been doing so as long as she could remember, for an hour or two a day. She was a competitive tennis player during her childhood and adolescence and was emotionally and physically abused by her coach for many years. He used to yell and hit her with his tennis racket when she messed up. “I was afraid of him,” she says. She goes on to say her parents were unaware of this, and when she tried to tell them they did not take her seriously.

We began this first session by establishing rapport and building trust. I attentively listened, attuned to Susie, and watched her breathing deepen. She spoke rapidly; I asked her to take her time and tell me all that was important to her. I scheduled extra time on the first visit so I could get to know her well. After she was finished speaking, I summarized what she had said, so she would know that I had been listening and understanding her. I asked her if I heard her correctly, and if she had more to say. She said she felt understood. She sighed with relief, her shoulders and face softened, and she asked me how this process worked.

I established the groundwork of IPNB by describing in simple terms how the mind/body and the brain function. I noted the importance of the learning relationship, stressing that the ingredients for positive change and learning are safety, respect, trust, and acceptance, as well as physical and emotional comfort. I explained how this affects the limbic area of the brain (the emotional center) and the sensory motor cortex (the movement area) and that they integrate and change emotional response and movement simultaneously, creating physical comfort and improved relationships.

I related this to the way the Feldenkrais Method gently changes behavior patterns by breaking old habits and introducing new, improved habits. The brain is in charge of the ways each person repeats her patterns of behavior, both individually and in relationships. Before giving more cognitive information I wanted Susie to sense herself and engage in the process of sensory motor learning.

I asked if she was comfortable continuing with a hands-on Functional Integration lesson. She nodded in agreement. I invited her to ask questions during the lesson and to report any feelings or sensations that felt significant to her. I organized the lesson around the functional theme of standing and turning. Asking her to stand, I faced her and placed my hands on her hips. I gently turned her while she was standing, sharing with her that I was sensing the quality of her movements, noticing what parts of her skeleton were participating in the turning movement. I began moving her pelvis, her center of gravity, seeking the place where her movement became effortless. When we guide attention through the touch and verbal directions of FI we are enabling the brain to sense the distinct parts of the skeleton and how they are working together, or not; focal attention is used to develop awareness. Coupling my attention with Susie’s, we created awareness that otherwise would not be achieved. Eventually, by sensitively focusing our attention in a non-judgmental way, she would learn implicitly to notice and sense everything efficiently moving together. With this improved movement, her emotional and physical pain could subside.

Next, I asked Susie to lie on her back so that I could guide her through a self-scan. I asked her to notice where various parts of her skeleton made contact with the table and to note her emotional state. This would give her the ability to observe changes at the end of the lesson. I then asked her to lie on her side, the way she would if she were napping in her most comfortable position. I gently moved her, going toward the easiest directions first. This non-invasive approach creates trust and eliminates fear and resistance. By placing my hands in a variety of places on her body, differentiating and linking various parts of the skeleton, I provoked her awareness of her musculoskeletal movements, demonstrating to
her how everything can act together harmoniously. Enhancing her interoception and her proprioception allowed her to recognize the new patterns of movement available. The nervous system is self-correcting when the student is handled gently and clearly. This enables them to feel understood and supported while they experience deep, integrative change.

I asked Susie to lie on her back again, and to notice how she was resting on the table compared to the beginning of the session. On her back she felt expanded, lighter, and calmer. Then I asked her to sit up. While sitting, she felt calmer, taller, and her pain had subsided. She stood and walked, further exploring the changes. She said she felt relieved and hopeful for the first time in months. I saw and felt the new state she was in and thought to myself how quickly she was able to move beyond the old pattern.

We shared this happy moment and then spoke of how this feeling would continue. I asked her to notice when she felt this way each day. This would train her to look for feelings of hope, wellness, calmness, and pleasure. Training a client’s attention helps her cultivate a new state of ease and begin to eliminate old patterns of anxiety, tension and pain. From past experience, I expected that Susie would begin to carry my voice with her. Remembering my gentle guidance would enhance her self-care.

I then taught Susie a small, mindful movement that would calm her and keep the changes ongoing. I asked her to simply place her left hand on her left thigh, and then to
notice all the parts of her hand and fingers resting on her thigh. I directed her to slide her hand toward her knee and toward her hip, very slowly, noticing all the parts of herself involved with the movement. As she experienced this for the first time she took a deep, calming breath.

I shared with her that she was learning to shift her nervous system away from the fight/flight of the sympathetic, and that she would learn to find this neutral state. She could do this movement at any time to calm herself, whether alone or with her children. She could simply place her left hand on her left thigh, sense all the parts of her hand, and notice her breathing. I assured her that this ability to shift the state in her nervous system would become easier and quicker.

Susie’s case is an example of cultivating a new state so that it will become a new trait. Her response reminded me of the first lesson I received, and the hopeful new sense of myself I experienced so long ago. Susie, her husband, and her children would all benefit from her new state. And with more lessons this new state would indeed become a new trait that would help her become the mother that she is longing to be.

INTEGRATING THE FELDENKRAIS METHOD AND IPNB

The foundation of Functional Integration is using a coherent functional theme to create the integration of the parts. The functional aspect of the movement learning experience relates to early childhood learning. During infancy and early childhood, movement exploration is generated by the need to problem-solve while exploring the environment, as when a baby wants to reach for her bottle or pick up a toy. With the mind’s intention, the organization of all of the human parts—the brain, nervous system, and musculoskeletal system—becomes greater than the sum of those parts. Intention translates to clear action when all of these individual parts integrate harmoniously.

This organization evokes Siegel’s metaphor of “The River of Integration”: “The central channel of the river is the ever-changing flow of integration and harmony. One boundary of this flow is chaos. The other boundary is rigidity . . . Sometimes we move toward the bank of rigidity—we feel stuck. Other days we lean toward chaos—life feels unpredictable and out of control. But in general, when we are well and at ease, we move along this winding path of harmony, the integrated flow of a flexible system.” I first heard this metaphor used by the late dynamic systems theorist, psychologist Dr. Esther Thelen. She would describe the flow of the river, asking her students to imagine the water, the rocks, the earth, the foliage, the twists and turns of the riverbed, the change of temperature causing evaporation and rainfall, pointing out that everything in the system counts and every part of the system affects all other parts, and that the parts create a dynamic system we call river.

Siegel interchanges the term “complexity theory” with dynamic systems theory. The brain can be considered as a living system that is open and dynamic. It has many subsystems that interact, that are constantly changing. A living system is open to outside influences and in order to survive it must be adaptable and changeable with continuously emerging properties. An open, flexible, dynamic system displays the ability to integrate its parts harmoniously, while in times of stress it appears to disintegrate or become chaotic. Or, as Feldenkrais put it, “I hope to show that the human frame is essentially a dynamic organization, that human behavior is equally dynamic, and that therefore, ‘human nature’ is a dynamic entity made up of some inherited features and of personal experience, and that most of the limitations we encounter are imputable to the personal experiences we are subjected to rather than to inheritance.”
Through the practice of the Feldenkrais Method we are able to recover and rediscover this state of balance, our equilibrium, a functional state of integration. Feldenkrais said our resilience is a direct reflection of our state of health. IPNB can strengthen our practice of the Feldenkrais Method by deepening our understanding of how what we do with our students really works. In Dr. Feldenkrais’s own words, “Many people fail to recognize the true cause of their inability or failure. The cause is very often not lack of ability, but improper use of self—there must not be too little an urge to do, a desire to act, nor too much. Now, we may not be able to influence our inheritance, but we have a large measure of control over our urges and over the means of freeing them from inhibiting agents of which we are rarely aware.”

NOTES

4 Siegel, Mindsight, 72.
5 Mindsight, 72.
6 Mindsight, 73.
7 Mindsight, 74
8 Mindsight, 74.
9 Mindsight, 74.
10 Mindsight, 75.
11 Mindsight, 75-6.
15 Mindsight, 110.
16 Mindsight, xi.
17 Mindsight, 71.
19 The Potent Self, 3
BodyThinking
Jader Tolja and Francesca Speciani

The following two chapters are excerpted, with a few changes and additions, from Body-Thinking by Jader Tolja and Francesca Speciani. The excerpt is from a translation of the book published in Italian as Pensare col Corpo (Zelig, 2003), but not yet published in English.

The book is an interdisciplinary exploration of how the mind and body, health and illness, are each expressions of the other; and of the inextricable and dynamic connection of the self with the environment including clothing, furniture, architecture, and other cultural artifacts.

As stated on the cover:

Why stick with a few cubic centimeters of grey matter when we can think with the whole body? Work, space, time, relationships, our way of dressing, language, food, sexuality: whether we are aware of it or not, all our choices in life are changing us physically too. Our body is here, now, and whoever wants to can start and listen to what it is thinking.

Dividing the book into sections on Principles, Connections, Lifestyles, and Ideas, the authors write that the section on lifestyles from which these chapters are taken are meant “to illustrate how the experience of bodily perception can modify everyday points of view, and how each one of these aspects of daily life has a share in defining our mode of being. The intention is not to ‘discuss’ matters so much as simply to provide ideas for possible connections and different scenarios.”

This thought-provoking, controversial, occasionally challenging book is a further exploration of what many of us teach and experience in the Feldenkrais Method of somatic education—for example, how Awareness Through Movement (ATM) lessons change our sense of space, how movement can affect such processes as digestion, mood, and connection with others, and how a person’s thinking, feeling, growth, and cultural context intertwine.

THE BODY IN SPACE, SPACE IN THE BODY

What happens to a body when it passes through different spatial environments? Let us try going into a Japanese restaurant, with low tables, rice-paper walls, silence, and diffused lighting. A space of this type certainly induces a way of being and a psychophysical state quite the opposite of those that would be evoked by the small restaurant opposite, with its Seine Embankment hanging on the wall, red-checked tablecloths, tables too close together, neon lights, and stainless steel sideboard with the starters at the entrance. We very soon perceive, if we pay the body a little more attention than usual, that in the Japanese restaurant our breathing is likely to expand and deepen.

In contrast, looking for a place in the other restaurant—where in order to sit down we have to ask the person at the neighboring table to move in a bit—our body adjusts to the situation by miming a constraint, primarily by a reduction in breathing. The body does not pass indifferently through spatial experiences.

Although people are well aware of the sensation of well-being or malaise that is experienced in certain environments, in reality the reaction is much more complex. An asymmetrical wall, an overlarge piece of furniture, an ironing board in the middle of the room,
only one part of the house exposed to or facing the sun, the fact of having—or not—a view from the window, of being on the ground floor or the top floor, in an attic from which we only see the sky or in a barely lit basement rather than in an orderly, clean, well cared-for space, or the lack of borders because we do not have our own room—all these are sufficient to mold more or less unconsciously our mode of being and to produce a change in our psyche, personality, and body organization. This does not mean that the connection is taken for granted, automatically or inescapably, but simply that there is a connection.

We might think, simplistically, that to solve the problem of living in a less-than-ideal space it is enough to move to a different house. Obviously it is not like that, even if occasionally such a move may work. Much depends on how strongly we identify with our own space and our own body: persons who are intensely reflected in the space surrounding them are unlikely to succeed in modifying that space unless they also change something within. And the difficulty lies precisely in the fact that each change closely affects other aspects of the self. If the identification is strong, even changing cars can be a monstrous undertaking. But when the outcome is successful, it almost always triggers other transformations both of the body and the personality. In the same way a new view from the window can contribute to altering our perspective on life.

**Personal space and life strategies**

Perception of the body and perception of external space are two processes that develop simultaneously in the child, such that the development of the personality is closely connected with the maturation of these perceptions. It is not surprising, therefore, that spatial organization is reflected both in the body and in the psychic organization, nor that changes at the psychic and personality levels lead to modifications of the surrounding space.

Thus if our personal strategy leads to restrained breathing, it is probable that we will not require much space, and that our identity, compared to our potential, will be restricted. Whereas if our breathing is unnecessarily full, our need for space could be exaggerated, frequently to the point where we find ourselves occupying others’ as well. Similarly, the fact of growing up in a restricted space may lead to our need for space—and our identity—being diminished. On the other hand, seeing that there do not exist two people who are the same, the opposite could also occur, as when we feel ourselves large and awkward in a small space and small and defenseless in too big a space. In each case, attention to our breathing will provide a good indication of what is happening.

**The quantity of space**

If breathing is one of the more obvious ways by which we adjust ourselves to our surroundings, there are other mechanisms that are set in motion, more or less unconsciously, to fill up space. One of these is volume, or the quantity of space we occupy physically. If breathing, thanks to the extension of the chest, is the quickest and most reversible system to modify volume, a more solid way of occupying more space is by putting on weight. Reciprocally, in their relationships with obese persons others might diminish the space they take up. Similarly, a person might become excessively intrusive or reserved in response to others.

Another mechanism is smell: just as cats and dogs mark out their territory by delimiting it chemically, a person’s smell appropriates space: whether by the smell of smoke, food, expensive perfumes, sweat, or whatever else, those who permeate their environment with their own emanations make it their own. For some people it is important to be able
to leave their own olfactory mark all over the place, in a manner not too unlike that of certain stylists who put their trademark onto any type of object. We have noticed that an all-pervading smell spreading through a large area very often indicates that someone who seems to have consciously surrendered “his own space” has in fact acquired a great deal more.

At this point it seems evident that the space surrounding us is analogous to an individual’s basic strategy, revealing a sort of recurring pattern, and in this regard it is by no means a case of the more the better, or vice versa. To a degree, the way such space is organized is no different from the way we organize our own body. As we will see more clearly later on, the forms of houses and cities also reflect organizations peculiar to the nervous system.

So the first real question is to find out what, physiologically, the right quantity of space for ourselves is. And this goes as much for the volume of our body and breathing as for the apartment we inhabit, the city we choose to live in, and so on. We may feel suffocated in an apartment that is too small, but we could find it impossible fully to occupy one that is too big, and so have to leave some rooms uninhabited. Moreover a large space costs effort and money to clean and keep tidy. But the same analogy may equally well be applied to our body: do we manage to occupy it all, to keep it well organized and in good working order? And do we have enough space to realize ourselves in it or must we force our personality to adjust to its dimensions?

Theoretically the right quantity of space—and body—is that which proves to be more functional and reassuring from the physical point of view, namely what makes us feel better as a result of it. On the other hand, people who have undergone psychological trauma or have risked being seen taking space from others quite often develop a need for wider expanses: they are given little space, feel their own natural space is being invaded, and react by wanting to have more. For each of us the critical amount of space, namely that most suitable, effective, efficient, and harmonious for our own equilibrium, is defined also by traumas, personal history, basic needs, and our own life strategy.

We and others working in psychosomatic medicine have observed that obese or asthmatic people, whose problem is their difficulty in expelling air, often make such exclamations as: “It’s suffocating! I’ve got no room! I can’t breathe! They’re moving in on me!” These reveal that the person’s natural relationship with the environment has been altered because he has been disturbed and irritated in his vital space area.

Often, in order to survive a situation where our parents or a teacher, brothers and sisters or companions, want an inordinate amount of space—if we want to live together with them—is to reduce our own. And as we have seen, the tendency to occupy less space than is natural encourages setting up a need-based strategy. However, if the reaction to the same situation is of the “I-don’t-want-to-be-squashed” type, the way the space-managing problem reveals itself will resemble that of the power-based strategies. In this case the individual tries to get as much space as possible: a villa may not seem big enough, so the person must acquire a huge one, or more than one, and so on.

Both these alterations in the relationship with space represent a neurotic and forced response, namely one without choice because it is unconscious and uncontrolled, always repeats the same process whatever the situation, and therefore cannot be satisfied. Have you ever sat in a movie theater, a bus, or a plane beside someone who moves in on you physically or verbally, demanding a great deal of attention? You can immediately verify how you react, how you feel psychologically, what happens to your breathing, to your muscles, to the volume of your body. Another experiment is to observe for a moment how you feel now, while you are reading these pages.
Look around you and take note of how you feel in relation to the environment in which you find yourself. Now begin to breathe, bringing the air into the upper part of the lungs and emptying them completely; then bringing it into the back of the lungs (in this case feel if the lower ribs expand to make space for it) and emptying them again; then bringing it to the bottom; and, finally, to the sides, under the armpits, and so on.

Continue for some minutes to refill and empty the chest completely, trying to send the air into every little corner as if you were spring-cleaning the lungs. Perhaps actually imagine that the lungs, filled in this way, could extend into the arms, the stomach, the legs. Then resume normal breathing.

How do you feel now? Has something changed in the perception of yourself, of your immediate surroundings?

Around the body

In any situation in which the space available is limited (numerous families, narrow alleys, condominium-owners’ meetings, etc.) the conflicts leave their mark on us physically, and on our relationships. For we ought not to forget that for many people the body’s confines goes beyond the skin to include its entire field of energy, which may be broader or narrower depending on the situation.

When in the movies or subway a person we consider unpleasant sits next to us, or someone we do not like comes into the room where we happen to be, we are inclined to withdraw into ourself not only our breath but also our field of energy—at times so far as to leave unoccupied not simply the surrounding space but also our physical periphery. So if the other touches us we are not really there; it is as if we had left that part of the body which is suffering the contact. By contrast, when we are seated next to someone we like, it is as if our breathing and body energy extend beyond our own body’s confines, making the other’s body ours too, the more to enjoy the physical contact.

In general we are less aware of this when in contact with a stranger, but naturally it all occurs in greater measure in our sexual relations with those we love. In such cases the motivated person has the sensation of expanding into the body of the other and experiences a feeling of great sensuality and well-being. And when both partners are moved by the same desire, the well-being and the satisfaction are total.

When instead, for whatever reason, a person takes part in a sexual relationship without really wanting to, that person’s field of energy withdraws to a greater or lesser extent, depending on the case, and their partner will experience sensations that may vary from the disagreeable to the dreadful. Someone incapable of appreciating body perception or of understanding the “energy” presence of the other may reach the point of demanding mere sexual service, whereas someone who derives pleasure from feeling the play that the energy of two bodies arouses, the one in the other, may well be completely discouraged by the exclusively “formal” presence of the partner.

This same sensation of the self expanding beyond the limits of its own body may be tested in many other situations. When, for example, a therapist carries out a bodywork session involving the nervous system, there are times when she comes to perceive the other’s body as an expansion of her own, and therefore enlarges her own body image to incorporate it. In a situation of this sort the therapist finds herself able to influence the other’s body as though it were a part of herself. Thus even if she is working at the level of the head or the neck, her perception may arrive, via the patient’s spine or connective sheath, at the pelvis, to the point where she feels she is literally holding the sacrum in her hand, even though she is more than
a meter away from it. This can only happen, however, when the patient’s nervous system “trusts” the operator’s, namely when both feel sufficiently secure and motivated to run the risk of becoming—temporarily—a single organism.

Other situations in which we can experience the expansion of the self beyond its own physical limits are sports and games that involve some equipment, or an animal. What happens, for instance, when a person walks on stilts? By extending the body image, the stilts become a simple extension of the femur and tibia, a third bone segment in the leg. With this sensation the stilt walker comes to experience, despite his height from the ground, a quality of balance and support unimaginable to those who—perhaps from fear of falling—choose instead to withdraw into their own proper physical limits. The same sensation is confirmed by certain Formula 1 drivers who—integrating the car into their body image—maintain that they feel the asphalt as if they were touching it, obviously with such a degree of sensitivity as to be able to approach far closer to the performance limit, especially in risky conditions. The same thing can happen with horseback-riding, skating, skiing, or surfboarding.

Once we are used to extending our perception and nervous system a little beyond the limits of our skin, it is a very different experience to remain “withdrawn,” to “remote-control” the periphery instead of extending ourselves to the limit of the stilt, the ski, the skate, the car, the horse’s hooves, the tennis racket, the sword—whatever instrument or being that can be included in our own body image. We are talking, incidentally, about a very pleasant sensation, confirmed by comments we have noted from people with sophisticated physical proprioception, that when we are separated from sword, racket, horse, stilts, or the body of another person, then the impression remains in our feet, our hands, our whole body that they have been lived in as never before, right to their outermost periphery.

This ability to modify, contract, or expand the body image, to change it according to the situation, to take up space or to reduce it when necessary, is a characteristic of our plasticity which helps us avoid neurosis. If neurosis, in fact, means not having a choice, then having many different possibilities to hand, physical ones as well, represents an antidote. It is an ability that anyone can cultivate—for example, by consciously looking for this type of sensation when playing a favorite sport.

Reorganization of space and the body

Every time a person radically changes his mode of breathing, his whole body and field of energy come up against a series of reorganizations, particularly at the neurological level—those who work in the field of body techniques know this well—with consequences also for the immediate surroundings. It is a fairly common experience, for instance, to suddenly feel an impelling desire to shift furniture around and reorganize spaces which until yesterday seemed to go very well where they were. Normally these unstoppable “fits” are closely correlated with profound transformations in the organization of our lives and the way we think of ourselves: the return from vacation, the accomplishment of a big task, after a seminar on personal development, in spring when we begin to sense the hormones moving.

Another interesting phenomenon regarding body-mind relationships is that the need to do the cleaning is very often accompanied by an analogous process in which the intestine—and to an extent the whole organism—is the main character.

Who has not experienced, at one time or another, having the sensation, upon emptying one’s bowels, of its being a greater emptying than usual, as if the entire intestine were
ridding itself totally of its contents? This is effectively what regularly happens when the body is going through a phase of profound reorganization, timed to coincide with a personality transformation—the same pattern repeating itself on more than one level. Just as a certain respiratory dynamic accompanies each organization, so also does a different state of the colon, the last of the intestinal tracts.

If it is not yet clear how this comes about, just consider how a person’s emotional state affects his muscular tensions—for example, at the diaphragm level—and therefore the mobility of the connective sheath and the transmission of nervous impulses, which in large part influence the mobility, position and complex state of each organ, including the colon. Functional Integration (fi), affecting as it does all these states, can have a similar effect. A colleague who is a Feldenkrais trainer has remarked that students receiving fi who had complained of constipation have had to stop the lesson to visit the bathroom.

There are situations in which the breathing involves only the upper part of the lungs and the front part of the chest, increasing their energy supply, while in others the breath moves more toward the periphery of the system, or more inward, or to the back of the body. Similarly, through having tested and observed it in many people (in this case clinical experience seems to point to a theoretical explanation, but one which still needs to be fully established), we know how different physical forms and organizations correspond to a greater or lesser tension or distension of certain zones of the colon, as well as variations in the composition of the almost two kilos of bacteria contained in it. More simply, the colon can, in its different parts, be functionally more contracted, more distended, fuller or emptier, more capable or less so of handling its fermentations, and so on.

To obtain a particular physical form, we must direct and involve our breathing in a certain way: modifying this parameter also changes its structure. The same repercussions occur in large measure at the level of the colon. The proofs of these connections between conditions of the colon and profound physical transformations are afforded, among other things, by numerous studies that have highlighted a significant correspondence between various common pathologies and peculiar bacterial compositions of the colon’s contents. So significant a correspondence, indeed, that in a number of cases, after an intestinal washing-out treatment more thorough than the classic enema, there occurred an apparently miraculous cure of numerous ailments that had resisted all other approaches.

Such treatment is very fashionable today, but its radical nature also brings with it certain risks, in that it completely eliminates not only the dross but also the useful part of the bacterial flora of the intestine which, among its many other functions, includes those of producing vitamin B, of recycling bile components, and of protecting the intestinal walls, which are extremely thin (only one layer of cells before reaching the blood). This type of treatment can, therefore, weaken the entire organism and leave the colon exposed to the infiltration of intestinal contents in the blood and consequently to the development of food intolerance. On the other hand, the washing-out of the intestine, precisely because of its close correlations with every other organ in the entire system, can produce a strong movement at the level of lived-through emotions that need to be “drained.”

**Space and ensemble**

Considering the close relationship between intestinal movements, physical organization, and personality structure, it is not surprising that those who suffer frequently from colitis (chronic irritation of the colon) are people who, as a result of their personal history, experience a conflict connected with the differentiation phase⁶, and therefore do not calmly live through separations or the fact of keeping things for themselves. At the physical level
the disorder is reflected in the attempt alternately to hold back, to close—well reflected in constipation—and then, given that the choice is not a calm one, suddenly to open with diarrhea, which lets everything go because retaining something within for oneself is experienced as uncomfortable or dangerous. At this point, however, the sensation is one of not being differentiated (typical of the belonging phase⁴), so that there follows a new attempt to close and then once again to release, ending up with either a chronic alternation of diarrhea and constipation, or one of the two itself becoming chronic.

A totally different way of dealing with our own space, of being with others without renouncing ourselves, making our own voice heard, giving something of ourselves and at the same time taking something from others, leaving a sign of our own presence without canceling that of others, is the experience of ensemble. Closely connected with the feeling of ensemble is balance in the relation between personal and collective space.

The practice and tradition of ensemble consist in managing to combine our own need for personal space with the same need in others. This is a model to be found in some cultures (the Swedish, for example, who espouse a principle of “what suffices”: lagom), which in a simple, healthy way protects and develops in the citizens a rapport that guarantees a sense of belonging without submission or dominion, and has nothing to do with that sense of being “flattened” that is so common elsewhere. (The concept of lagom derives, in fact, from the laget om of the ancient Vikings, whose custom it was to pass round a horn of cider during work breaks, from which each man drank only what he needed to. And by drinking he was, indeed, aware of his own need to quench his thirst, to nourish himself and recover energy, but at the same time was also aware of the needs of others.)

**Space and culture**

So far we have been examining the close connection between body, space, and personality. But the rapport with space influences, and is certainly influenced by, the culture in which people live. The need to divide up the space available, for example, in many cases entails the need to limit. In various cultures one may note, therefore, how the geographical areas exhibit different thresholds of tolerance as regards personal space. While the Japanese, who must divide a somewhat narrow island into so many pieces, can sleep in the “cells” of certain hotels in Tokyo and squeeze themselves into their overcrowded metros, in the United States, with its boundless spaces, the majority of people have their own car and house, each house has its own garden and, inside the house, each son or daughter has his or her own room.

If an Italian tourist goes to America or Japan it is probable that, reacting to the differences in their respective collective space, the traveler’s breathing, body perception, and general state of awareness will also change, almost automatically. After all, if out of the automatic human tendency to synchronize we quite frequently find ourselves imitating the breathing of another individual, and consequently also that person’s state of awareness, how much more will we do so when surrounded by an entire population?

Apart from the availability of space, a further characteristic influences our psychophysical responses to the environment in a particular way. The prevalent dimension of a place also influences its inhabitants so as to activate completely different movement structures among them—on the physical plane—with consequences for the nervous system and effects on the psychological plane. When, for instance, a place is for geographical and architectural reasons characterized by a prevalence of horizontal lines, the movements especially activated are those on the horizontal plane of the rotators. In turn, vertical lines activate movements on the vertical plane (involved in the lateral flexions) and longitudinal
lines (such as long corridors) the movements of the flexor and extensor muscles on the sagittal plane.

These three types of movement are also typical of the different evolutionary phases of the human being as we have found from observations and experiments in workshop groups and psychoanalysis; as well as from such fields as neurodevelopmental research and movement analysis (e.g., Labanotation). To the activation of these three modalities of the nervous system there correspond, therefore, three completely different psychological states which, if they last for any length of time, tend in their turn to structure very different personalities and peculiar attitudes. The horizontal dimension more readily evokes conditions of “the visceral” and belonging, just as the vertical stimulates the cortical nervous system, or rational thought and differentiation, and the longitudinal dimension the muscular system and action.

It could be interesting at this point to ask ourselves if certain spatial forms are not thus different precisely because they derive from different modes of being which in turn are able to evoke different states of awareness in those who stay or live there.

Bologna and Turin, for example, are two cities characterized by different prevalent lines, the former round and horizontal, the latter square and vertical. Are they so different because those who built them were so different? And when we walk around two such different cities, are we truly the same as before, or do we ourselves change at the neurological, physical, and psychological levels?

Summing up: the process through which individuals imbue their own psyche and their own soul with what surrounds them does not extend only to their physical self, but to whatever they may be doing, whether it be making furniture, building houses, or building entire cities. Just as the same song by the Beatles takes on three completely different personalities if it is sung by the Beatles themselves, Joe Cocker, or Tracy Chapman, so listening to each performance in turn evokes different states of mind.

It is similar when the same architectural subject (a city quarter, a square, an arch, etc.) is treated by different people and different epochs. Each style resonates in people in a different way, so much so that when inhabiting or visiting a space planned by a Renaissance architect, the sense of harmony and balance characteristic of it is perceptible at the physical level as well as the psychological. By contrast, if the space where we live creates a state of malaise, it is probable that sooner or later we find ourselves having to reckon with this fact. (A pity that changing houses or cities is not as simple as changing a CD.)

ORGANIZATION OF THE ENVIRONMENT, ORGANIZATION OF THE BODY

The more intelligent and sensitive an organism’s nervous system, the more intense its response to information and stimuli coming from without. If a clam, whether on a rock, in a sink, or in a bucket, does not change its state in any noticeable way, the same cannot be said for a cat, an animal with a nervous system nearly as complex as that of a human. If a cat displays clearly visible signs of pleasure and relaxation or, by contrast, of irritation, even at our lightest variation of touch, all the more so will the nervous system of a human being respond to the subtlest information it receives.

As we have already said, the corporeal parameters are infinite in their continuous variation, and the instrument that detects them—the body—is always turned on, whether we read it or not. It is inconceivable, therefore, that sitting down on different types of chair, or sleeping on two beds different in form and material, would elicit identical physical
reactions—as is proved by our difficulty in going to sleep in some other place than usual.

What happens, for instance, when we sleep on a spring mattress? When we push down on a spring with our hand, we soon become aware how the tension and the energy it requires to return to its normal position build up, snapping like an elastic band as soon as we let it go. Whether we are aware of it or not, the springs of the mattress—pressed down for the whole night—transmit to whoever is lying on it a sense of tension and impermanence that is scarcely compatible with sleep, and that is the stronger the more sensitive the person’s nervous system is. A similar sensation, one we are probably more conscious of, is what we experience when we lean against someone tense and nervous, ready to “snap like a spring” that we cannot relax against such a person. Imagine now the very different sensation of lying on the sand, relaxing completely and leaving imprinted the shape of our own body.

The spring—while it is compressed—can only insist on its vocation, which is to expand, whereas a surface able to guarantee a stable and uniform support—like sand or a solid mattress supported on a semi-rigid base—immediately evokes in the nervous system a comfortable, safe situation, and thus a better chance of relaxing. A mattress of this type—it need only be made of layers of cotton—by adapting harmoniously to the curves of the body provides the kind of support that approximates what we experience when leaning on the—relaxed—body of another person. It is virtually useless to undergo a session of relaxation or meditation if we then lie down on a bed which in its form, consistency, or spatial position continues for hours on end to hint at tension and instability. Considering that we spend about a third of our lives in bed, the old American maxim “Don’t skimp on the mattress you buy” seems reasonable.

The nervous system and the musculo-skeletal structure react in a similar way to the support provided by various sofas, chairs, armchairs, car seats on which we remain seated for a couple of hours a day in mainly unnatural positions. Whatever body work or physical activity we undergo is fated to be dissipated by the force of a constant stimulus which leads to our back and pelvis being arranged unnaturally. There exist numerous books and pamphlets informing us about the advantages of more respectful furnishing for the physical characteristics and movement of the human body, so we will not go further into this. Nevertheless, it is worth remembering that the same thing holds for furnishing as for therapeutic choices: there does not exist an ideal solution that will cater to everyone. Even if it is generally a good idea to avoid sleeping on an aerial or surrounded by metallic structures, electromagnetic fields, and television stations, we can all test for ourselves what type of furniture suits us best: the same ergonomic chair that holds the pelvis correctly inclined and unloads the weight of the body onto the knees may in fact be extremely comfortable for those with difficulty keeping their back straight, but extremely uncomfortable for another who has arthrosis of the knee. And if an anxious or tense person sleeps better on a cotton mattress, it does not follow that an all-too-relaxed person will not feel better balanced by retiring on a spring mattress. Our physical and psychic state while we are sitting or lying, and once we have got up, is always a more reliable indication than any prescription, however brilliant or modern it may appear.

**Physical stance and mood**

In what way, then, can the furniture with which we have dealings on a daily basis influence our psychophysical state? One knows, for example, that depression is characterized by a C-shaped closure of the spine with the point of the sternum buried in the stomach and the point of the coccyx between the buttocks, which produces the same dynamic as a dog with its tail between its legs. At present it is not possible to establish, beyond all reasonable
doubt, whether the depression induces the physical stance or vice versa. Nevertheless, the fact that the two processes—namely the physical closure and the emotional—are not separable deserves attention. Thus if the car seat, the beautiful but uncomfortable sofa, or the great designer’s chair compel our pelvis forward—thus curving our back—it does not seem illegitimate to expect also some effect upon our mood.

Every piece of furniture that compels its user to adopt a certain posture in fact also influences her condition. In some cases—even though it is a trick insufficient in itself—for an individual to get out of her depression she may have to change the sofa or the chairs, or the way she uses them. In our experience, altering certain objects and furniture in common use encourages, more than one would think, changes in one’s approach to life that are being acquired through other instruments of personal growth.

**Right brain and left brain**

To move in a space full of cumbersome furniture, to use furniture bristling with edges that are a constant menace—even if by now you avoid them out of habit—or dangerous objects like coffeepots that scald because a piece of the handle has been lost, or electrical household appliances that give you a shock, are all things that keep the nervous system, and therefore the body, in a constant state of alarm. In the same way an unpleasing object, a piece of furniture, a lamppost or a pylon that we find constantly in our field of vision produces a disturbing stimulus that never allows the nervous system a complete rest—and therefore neither the body nor our emotional state.

If the desk remains regularly cluttered with books, papers, pens that could be replaced on the shelf or put in a drawer, it is probable that most of the time the person who works at it finds himself in a state of awareness—or in a modality of the nervous system—characterized by greater activity in the left half of the brain, which is activated precisely by the recognition of objects. If the left half identifies and analyses every recognizable object defined in space, the right half, by contrast, is active when, looking at a room or a view, it notices in particular the space between things.

Quite a few studies on cerebral functioning show that the most advantageous physiological condition is when both halves are active. In this way both the alternation and the synergy of the specific and complementary functions of the two halves become possible, and so too the recovery for each of the two halves and their capacity to confront problems that arise—all thanks to the fact of being able to gain simultaneous access to both rational and intuitional resources. But seeing and considering the specificity of these functions and how they are activated, when we duly fill the space we live in with something recognizable—not simply a neutral spatial form but something automatically given a name—it is fairly inevitable that our state of awareness will veer toward the modalities characteristic only of the left, rational, and analytical, brain.

Thus moving in a Zen garden, on the open sea, or in the desert will mainly evoke modalities connected with the activity of the right brain, and therefore stimulate the more intuitive and holistic faculties. At the other extreme, moving in a space crammed with peculiar objects like the Vittoriale (the house-museum of Gabriele D’Annunzio), or along a road plastered with billboards and studded with traffic signs, industrial warehouses, and hypermarkets, will more probably lead to the rational state characteristic of the left brain. Obviously, with reservations: the human body, in fact, although sensitive is not impotent. So much so that even in an environment like the latter the eye may always be captured by the space between the cars, or by the indistinct outline between the buildings, rather than by the objects. But the probability is drastically reduced. However, it is
clear that this is not the intention of those who designed the billboards and street signs (on whose visibility the safety of the drivers depends), whereas, by contrast, a Zen garden or painting is studied with the precise aim of directing our attention to the space between the few neutral forms present.

At this point it is easy to understand how the environment in which we live, both in the home and outside, abounds in spaces characteristic of the left brain. If we do not expressly create a free space, a corner less laden or a desk less cluttered, then at home it is likely that we will find ourselves deprived of the possibility of recovery guaranteed by the alternation of the two cerebral halves. Fashion apart, one of the recognizable merits of the New Age movement is that in any case it has reintroduced into our culture a taste for spaces that well agree with the meditative state or mental void.

NOTES

1 The translation is by Nick Carter, of the University of Trieste, Italy.

2 In Chapter 7, “Life Strategies,” the authors posit that a person who uses physical and psychological strategies based on need—as would a defenseless child—arouses protective feelings in others while encouraging them to feel “strong, capable . . . intelligent . . . courageous.” Reciprocally, those with a power-based strategy—“teachers, doctors, gurus, military men”—like to surround themselves with those who have a need-based strategy.

3 Characterized elsewhere in the book as an attempt to control, often expressed metaphorically as attempting to fight, eliminate, or wipe out—for example, a disease.

4 Characterized elsewhere in the book by culturally or developmentally living in equilibrium with “whatever occur(s) in the body and in the environment.”

5 See, for example, Galen Cranz, The Chair, W.W. Norton Company, 1998.

The introduction and notes were provided by Judy Windt.
An Essay and Book Reviews

The Inner and Outer: Phenomenology, Science and the Feldenkrais Method
Carl Ginsburg

The Physiology and Phenomenology of Action
Alain Berthoz, Jean-Luc Petit
Oxford University Press, 2008

The Corporeal Turn: An Interdisciplinary Reader
Maxine Sheets-Johnstone
Imprint Academic, 2009

Experiencing and the Creation of Meaning: A Philosophical Approach to the Subjective
Eugene T. Gendlin
Northwestern University Press, 1997

A Process Model
Eugene T. Gendlin
The Focusing Institute, 1997

I believe that the unity of mind and body is an objective reality. They are not parts just somehow related to each other, but an inseparable whole while functioning. A brain without a body could not think; at least the continuity of mental functions is assured by corresponding motor functions.

—Moshe Feldenkrais

A frequent argument is that one can use only what is publically observable as a basis of thinking. This usually misses the fact that inner experience occurs in publically observable contexts (in action contexts) exactly like language does. We have our inner experience in contexts (situations) with others, and they have their public significance just as much as words do. Internal events are neither private (in the sense of not public) nor inconvenient for theory. To remain unable to think of them means being unable to think about most of human life.

—Eugene T. Gendlin

INTRODUCTION

In our learning and practice of the Feldenkrais Method of somatic education, we depend on inner resources as well as external knowledge and observation. Inner and outer is thus a major theme in the successful outcomes of our Awareness Through Movement (atm) and Functional Integration (fi) lessons.

After teaching for twenty years in Feldenkrais training programs in many countries, I have found that the inner-outer aspects of the Method, although essential, are often confusing for students as well as some practitioners. The Method is different from normal school learning. We may gain knowledge, but knowledge by itself is not the essence. Explicit instructions and protocols can be useful, but these also are not essential to the practice of the Method. There seem to be secrets that are not revealed. Two aspects strike me as problematic: The first is the implicit. In our schooling, we are used to seeking explicit descriptions, explanations, and diagnoses. The Method inherently involves subliminal, or implicit, understandings and learning. Not everything is articulated in a language that we
already know. The second aspect is related to the first. We are asked to learn mostly through experience and then use that experience to find out what next to do. Students often end up feeling that they do not know what they are doing in practice. Yet a vast percentage actually succeeds in giving a successful lesson to a client in the final practicum before graduation.

While students often think of the processes as inner, paradoxically, as practitioners, many seek the explicit. Some practitioners flock to advanced trainings, where the promise is to articulate everything that they think they were denied in the training. Some others begin to teach and give lessons and begin to discover what was implicitly absorbed. Where is the difficulty? The two quotes above from Feldenkrais and Gendlin give a clue.

Moshe Feldenkrais took radical scientific positions that, for his time, put him beyond normal science. By the mid-twentieth century, most scientists distrusted the implicit, the unarticulated, and first person experiential evidence. In psychology the notion of psyche was abandoned. Only external “objective” observations that could be shared with other experts and that fit current notions in available theories were considered valid. In Feldenkrais’s work he crossed the two domains of objectivity and subjectivity. But, of course, he was convinced these two stances were not separate entities. He thought that productive thinking would not be possible without the use of inner experience. At the same time he followed the dictum of Wittgenstein: “What can not be said, can be shown.” This he did with his ATM lessons and FI practice. He pressed his students to develop the ability to transcend the need for direct instruction through a movement practice that invited his students to explore the puzzles of their own kinesthetic and kinetic moving experience. He experimented with his processes by trying out new patterns and observing how his subjects changed in response. His lessons became small learning masterpieces. Some students hungered for the correct answers to his puzzles, but at the same time expanded their awareness for what they were doing. It is what we love about our work. On the other hand, his recognition of the implicit allowed him to realize that articulation of the unsaid was a difficulty in the learning process. His belief, based on his teaching experience, was that the underlying learning could well be degraded when using old words for new understandings. Is there another way? Can we seek articulation in a more exacting form? That will become one of the tasks in this essay.

MIND-BODY

The conception of two different realms, mind and body, historically became important in the seventeenth century. While the notion had been considered before that, the writings of Descartes were extremely central to the adoption of a separation between a physical body and mental thoughts and feelings in Western thinking. Descartes reasoned by doubting himself until he established a rock bottom belief that he could doubt everything except his own thinking consciousness. The body was in essence a machine that could be studied by science, while mind related to spirit and thinking, which was essential to being human. However, we can ask whether experiencing also connects to the source of the belief in two realms. We need to find out how the dichotomy of mind and body could have originated out of common experience.

Before concepts, before the development of distinctions and difference, an infant as fetus lives directly in experiencing. There is evidence that the infant in the womb already apprehends light and sound, and moves in response to sensory stimulation. A fetus follows a light moved against the mother’s body or turns and reacts to sounds from the outside. The experience of moving is thus part of living in “animation”¹ (using the nomenclature of
Maxine Sheets-Johnstone) and essential to the beginning of beingness. Is the experiencing at this point a totality? We can certainly speculate that this is so. It is possible nevertheless that there is a distinction between what is within and what impresses from the outside, which we can call environment. After birth, distinctions become a part of living in sensation and a form of sentience. There is movement, for example, that comes from the person holding and moving the infant and movement that is intentionally generated from within the body. There is reflexive movement, which has another feel, different from the two previous possibilities. How are these differences determined in feeling experience? We can certainly speculate that this is so. It is possible nevertheless that there is a distinction between what is within and what impresses from the outside, which we can call environment. After birth, distinctions become a part of living in sensation and a form of sentience. There is movement, for example, that comes from the person holding and moving the infant and movement that is intentionally generated from within the body. There is reflexive movement, which has another feel, different from the two previous possibilities. How are these differences determined in feeling experience? As adults we have all learned to make distinctions between inner feeling and outer sensation—we divide a mind and a body, a self and other. We even make boundaries for all sorts of other differences, such as nationality, religion, politics, etc.

Spencer-Brown in his *Laws of Form* writes about the act of severance that begins to enable us “...to attempt to distinguish different things in the world where, in the first place, the boundaries can be drawn anywhere we please.” The suggestion then is of arbitrariness. Nevertheless, we form ourselves in relation to the experience of acting in the world. We do this exactly in our Feldenkrais experience when we deal with moving in relation to gravity, space, time, and the echoes of functioning. We eventually arrive in a new state where our bodily experience is shifted in acting and being. Where is the severance made that allows for the shift? We can try to map it within the nervous system and brain. With all the research of a century and a half, we have no real clue.

**Origins of a New Thinking**

Perhaps experiencing can be explored in and of itself, and here we need to introduce a new discipline of thinking. The tendency in western culture was to postulate as reality what we could discern in an outer world. However, there were difficulties. How was the outer world entering the inner space of what we called the “mind”? Physical science in the nineteenth century was already celebrating the making of agreeable physical models of an outer “reality.” Physical models took hold with the successes of physics and chemistry. In the late nineteenth century psychologists were interested in somehow measuring the world of the psyche through experimenting with subjects’ internal descriptions. Introspection was a common method of observing but often produced inconsistent data. Gustav Fechner developed psychophysics exploring “...the dual aspects of observed material exteriority and observing interiority” successfully measuring sensory experience.

The model of physical science attracted researchers, however, and psychology abandoned inner observations, limiting psychology to observing behaving subjects in an attempt to form psychology into a science like physics. There was no need for exploring experience as such or accounting for consciousness. This attitude lasted through the mid-twentieth century, especially in the United States and United Kingdom. But there were rumblings in another direction. Somehow an account was needed to understand such phenomena as perception and, at a larger level, consciousness. How was inner experience created from the senses and how was the fact of animate moving life involved in developing perception and the sense of being? How did our ideas evolve from experiencing? They were not just artifacts of culture that were passed on to generations. Consciousness is where we live and experience a living presence of ourselves and a world.

A new thinking was begun within philosophy with the coining of a new word, phenomenology. Kant and Hegel used it in a technical way. Kant made a distinction between the thing as given and the thing-in-itself. In other words, the thing as given means how it is experienced, and the thing-in-itself is the external physical thing as revealed through reason. Later in the nineteenth century, in his book *Sensory and Noetic Consciousness*, Franz
Brentano, concerned with perception (what we perceive within experience), brought this phenomenal aspect of an object into terms of what he called intentionality. He described it as phenomenon of inner mental thought, directed at the outside object in the world. Edmund Husserl, who had been a student of Brentano, expanded these formulations at the turn of the twentieth century into an exploration toward a pure phenomenology and the development of a philosophy of phenomenological process. He found that he had to create new concepts to accurately convey what he discovered. When we are habituated to thinking as we are normally taught, Husserl’s work seems impenetrable. I will cover a few of his concepts later. It is important for readers to read difficult passages at least three times to reach the meaning of new thinking.

The authors of the books in question come to phenomenology from different perspectives: Alain Berthoz from neurophysiology, particularly with regard to action and movement science; his co-author, philosopher Jean-Luc Petit, an expert in Husserl’s phenomenology, from his study of action as phenomenal experience; Maxine Sheets Johnstone from her expertise in dance and movement, coupled with the study of biology and philosophy; Eugene Gendlin from experience in continental philosophy, psychotherapy, and the study of human thinking in relation to his developing of the concept of the “felt sense.” I will explicate this unique concept in the section about his writing.

PHENOMENOLOGY AS INVESTIGATION:
ALAIN BERTHOZ AND JEAN LUC PETIT

Phenomenology is not a fixed doctrine, but a framework for philosophizing about experience. From Husserl’s point of view, phenomenology was a possible groundwork for a new approach to scientific investigation. He felt that such an approach could better account for the way we perceive and create from living human experience. At the time there was little understanding of perception. Husserl’s influence is strong in continental Europe, especially with thinkers such as Maurice Merleau-Ponty, Martin Heidegger, and scientists such as Francisco Varela. Existentialism and postmodernism grew in the twentieth century from this stream of thinking, in contrast to Anglo-American philosophy based on analysis, language and externality. We need then to examine phenomenology further, but we are limited since the field is vast in its dimensions.

A good place to start is Berthoz and Petit’s *The Physiology and Phenomenology of Action*. It provides a comprehensive description of phenomenology and introduces the reader to many of the special concepts developed by Husserl. As Berthoz and Petit put it, “The goal of the phenomenologist is to get rid of every already constructed grid of interpretation (as far as lies within our power), of every schema that might presuppose knowledge acquired elsewhere, to get back to the lived experience. Is this a form of subjectivism? No, rather a coming to terms with our actual subjective situation” (p. 131). A second quote suggests the following: “One of the central theses of phenomenology is to be found in this affirmation of the active contribution of the perceiver to the very sense of being of the world perceived, an affirmation that physiology has been confirming through experimentation” (p. 14).

Getting rid of “every constructed grid of interpretation” is not an easy task. Husserl labeled it “epoche.” One suspends presuppositions and established concepts in observing, otherwise one assumes too much before experiencing. What are some of the presuppositions? Some are so ingrained we don’t even recognize that they are suppositions. We would normally take them as fact: for example, that we can be detached subjects as observers, and secondly that there is an objective world that exists outside ourselves that we can know as if we were viewing from nowhere. It is the normal stance in science.
Nevertheless, some scientists have begun to investigate the usefulness of phenomenology to explore such topics as consciousness, perception, and life itself.\(^6\)

While Moshe Feldenkrais did not subscribe to phenomenology directly, his systems of learning are based precisely on suspending habits and leaving preconceptions behind. Thus he guided us through action that evolved toward a puzzle without giving answers. The steps led us to slowly solve the puzzle with new patterns and understandings, revealing a kind of internal unity, or integration. We could call his lessons self-experiments. They cross the subject-object boundary while continuing a notion of objectivity. I believe his thinking simply ran parallel to that of Husserl.

How does the phenomenological stance change the way we understand the relation of outer to inner and vice versa? And what is the role of the nervous system? In phenomenological investigation, what is experienced is taken as given after the suspension of interpretations and presuppositions. If we look at a classic approach, it isn’t clear how we perceive the outer. In the past, scientists in particular assumed that what was observed was simply a reality. The senses reveal the outer world. The scientist as observer looked at the world with a different sort of suspension, as a view without a bias. Only the sense data were important.

The most curious thing about the senses is that each sense is experienced as distinctly different from the others. We see, hear, taste, feel, etc. The sensory nerves from each sensory detector, however, cannot be distinguished by the signals that go to the brain. If a nerve cell is actively making pulses, those pulses are all alike. The optic nerve connects to different areas of the visual cortex. Some areas produce the experience of shape and form, others color, still others movement. No one in neuroscience has yet found where the different separate parts are integrated into the conscious experience of seeing. Most likely there is no such place and there may be other activity involved in experiencing. Perception is a neurological mystery. And, as Berthoz and Petit point out (p. 216), perception is multisensory and coherent\(^7\). For neuroscience, these are called hard problems. If the signals are all alike, then the brain area connected to the sense is significant for making hearing different from seeing, from touching, etc. Even here there are conundrums, for example, when some people see different colors when hearing certain sounds. An ongoing search has been going on to discover the neural correlates of conscious experience in general and there is no end in sight.

There are many layers of complexity. In cognitive science, speculation suggests that conscious experience is a form of representation within the brain. Representation is a metaphor based on the act of representing something through an image, word, or symbol and so forth. It is an essential to human thought and culture. In the standard view, the inner activity in the brain creating the representation of the outer is considered analogous to information processing in the computer. But from the stance of phenomenology there are no such representations.

Berthoz and Petit are convinced that representations are not the answer to understanding perception and movement as a whole. Here we have a problem that is within philosophy, within science, and between both approaches. What is so daring about The Physiology and Phenomenology of Action project is that it exposes the conflict between assumptions in the scientific stance and the phenomenological stance while at the same time the authors search for bridges. Assumptions are a major problem for both philosophers and scientists.

Given that human beings live in a world and perceive the world, themselves, objects, and other beings, and have what seems to be a way of representing and communicating about all this with language and concepts, we gravitate toward different basic conceptions
of our reality. In some Eastern philosophies it is assumed that all that is perceived is an illusion that hides a true reality. In Western philosophy and science, it used to be accepted that what we perceive gives us a physical world, which is revealed through the senses—or even that reality is given when we open our eyes and touch the things of the world. Today we consider this naïve. We know much more about the brain and nervous system; nevertheless, many assumptions persist and are used without questioning. Surely the metaphor of representation in the brain and the model of the brain as a computer doing information processing are not adequate assumptions with which to understand how we move, think, and how we perceive. We need to understand with ongoing dynamic interactions and not static models.

One of the most useful aspects of Berthoz and Petit’s book is to bring Husserl’s special philosophical language into a more concrete understanding, using material from physiology and psychology. Let me give two examples of how this can be done, using more recent language: There is a process in learning to perceive that specifies how a perception is created through moving and attending. (The possible German words can mean to outline or estimate or mark out. The English word for Husserl’s German is the unusual word, adumbrate, for which there is no direct translation.) Berthoz and Petit explain how we describe living experiences as sensations and images, which become constitutive of an object. A perception is given. The cybernetician Heinz von Foerster makes the idea clearer, calling the percept an invariant—in perceiving, you move and see an object from many angles and distances and yet the perception is that of one object. Feldenkrais would take a pack of cigarettes out of his pocket and ask people in the audience to identify it. Everyone could do that, despite differences of perspective and distances. Everyone has a different image on the retina but perceives a singular form and shape. In learning we may pick up a pack of cigarettes and look at it from many angles and perspectives. We may play with it, open it up, or throw it. In doing so we create or coalesce the images into a percept.
A second example is Husserl’s kinesthetic constitution, which includes the relation of intention and action. Husserl here makes a term that involves a linking of two related experiential aspects of action in the world. It creates a new concept beyond simply movement, or even behavior, and leads into Feldenkrais’s concept of function. A further extension develops an understanding as to how moving brings about the perception of space. In the book Petit articulates the phenomenology of movement and perception while Berthoz brings his expertise in bridging neurophysiology and the complexity of the experiential qualities of living as animate beings. It is a unique effort and important to the understanding of many practices and investigations about movement.

I have only lightly described some of the ways of thinking and exploring in this very dense and complex book. As a primer for Husserl’s concepts and reasoning, it is one of the best I have seen. The material about moving beings is especially fascinating. Three topics that are not covered in any detail are learning, development, and self-organization. Nevertheless, Husserl inserted into philosophy the vast importance of movement and body to consciousness, experience, thinking, living, and animate life. It took the entire twentieth century, and many others in fields of investigation, both philosophical and scientific, to open to these considerations in a broad way. Feldenkrais, in his vast practical investigations, without any influence from Husserl, made parallel discoveries and promoted the idea that development in moving with awareness also develops our thinking, affect, intelligence, stability in life, and even our physiology and health.

INVESTIGATIONS AND CLARIFICATIONS: MAXINE SHEETS-JOHNSTONE

Philosophy is still today thought of as thinking through argument and searching “truth” through propositions, and logic. Of course there is also the school of postmodernism that deconstructs all thinking so as to demonstrate that there is no such thing as “truth.” Many people think of philosophy as heady and not very useful. Wittgenstein proposed that thinking and philosophy get polluted through misunderstanding language. He eventually thought of his work as a kind of therapy to untangle the confusions, enchantment, and traps that people make with their words and within their verbal thinking. But philosophy has a tradition from its earliest beginning in ancient Greece as a process of clarification and not of creating final truths. Science works toward finding evidence. That, however, requires conceptual clarification. And here science and philosophy need each other.

Maxine Sheets-Johnstone belongs to the tradition of clarification. Her passion is to explore how movement, animation, and bodily life can bring us to deeper meanings of existence. She is a tough critic of popular trends in science that propose static mechanistic explanations for living processes. Equally she opposes the notion of programming as a mechanism within nature. For example, she disputes the trend to explain life in terms of genes and DNA without the context of bodies and organisms and environments. And she critiques the idea that the brain determines action and function. For example, in reaction to a paper on evolution which tries to answer the question of how mental powers can evolve, she writes, “It is not a question of brains—not only it is “persistent wholes,” not brains, that evolve—but because it is not brains that are motivated, curious, or explorative; it is creatures who are” (p.131). The brain is a useful organ but not the source.

Machines are designed and function as causal instruments. Living systems can be said to be acausal in contrast. We can describe them as dynamic systems always in relation to other living systems. They are coupled to elements of an environment and are in coupled or antagonistic relations to other living systems. This is the background of her biologically grounded thinking.
The Corporeal Turn is a collection of her philosophical and scientific papers written over twenty-six years. In the introduction of her book, she describes her work “...as an ever-expanding, continuous and open-ended spiral of inquiry. ... No ideology attaches to this endeavor; that is, no set of beliefs or rules apply other than a belief in experience as a grounding source of knowledge, and a dedicated examination of experience as a grounding source of knowledge and a dedicated examination of experience as a testing ground of one’s knowledge.” She makes the caveat, however, “...that cursory or expeditious observations and third-person observations on the order of naïve verbal reports are inadequate to the methodological task.” Among the fifteen papers in this collection are: “Thinking in Movement”; “On the Conceptual Origin of Death”; “Taking Evolution Seriously: A Matter of Primate Intelligence”; “Consciousness: A Natural History”; “Emotions and Movement: A Beginning Empirical-Phenomenological Analysis of Their Relationship”; “Kinesthetic Memory”; and “Man Has Always Danced: Forays into an Art Largely Forgotten by Philosophers.” It is an enticing menu.

“Consciousness: A Natural History” is one of her most influential papers on the subject of biology and evolution, tracing the origin of consciousness from the sentience of the simplest of organisms. Here she peels away the common thinking that creates the predicaments and confusions in the field of consciousness studies and points out how careful understanding of nature can clarify what we need to know about our life and the life around us. For me, Maxine Sheets-Johnstone is one of the most insightful thinkers of our time. She has sharp, accurate positions and uses evidential sources to back up her arguments. She is often willing to take on the big guns in philosophy, evolution, and cognitive science with gusto. She finds speculations and arguments in their work that elude critical thinking and block pathways into new directions of thought. In this essay, which was published first in The Journal of Consciousness Studies, she begins with the question from philosopher Thomas Nagel, which she frames as, “How does consciousness arise in matter?” There are many speculations and philosophical answers which pose a particular problem for thinkers who claim to be materialists. Sheets-Johnstone retorts, “consciousness does not arise in matter; it arises in organic forms, forms that are animate,” and points out the muddle that occurs when writers begin with definitions of consciousness before they explore the territory. She then punctures the belief that consciousness is what distinguishes human beings.

Given the continuity in evolution as explicated by Darwin, it is unlikely that consciousness arose with the appearance of the human or even the primate brain. Sheets-Johnstone shows that the functions that indicate sentience and the ability to act in an environment began with very early single-celled creatures. It is this observation that leads her to the idea that it is proprioception and kinesthetic sensing, a tactile sense, that allows creatures to survive through movement in an environment. In bacteria she calls this a “meta-corporeal” consciousness, which gives such creatures animation and a form of cognitive abilities, which allow them to engage in a world in complex ways. They are sensitive to their surroundings and at the same time they navigate and even learn. Thus it is the sense of moving in kinesis and proprioception that is primary rather than seeing, which is the sense most studied in popular science books. The movement senses are not even usually listed along with the original five that were identified early on in human history. Modern psychology and cognitive science have privileged human beings as being the first to have real consciousness during evolution. Only very recently have some scientists and philosophers realized some connection of humans to the rest of living creatures on our planet.

We can find a similar disconnect on the question of emotion. Affect and emotion are still considered by many a mental state or a psychological event. Sheets-Johnstone takes
on this assumption in the essay, “Emotions and Movement.” The origin of a different point of view began with Charles Darwin. Darwin, an acute observer, did not agree with the idea of emotion as only a mental state. In his classic book, *The Expression of the Emotions in Man and Animals*, he saw a great continuity in evolution and a direct relationship of feeling and emotion as shared between many species and expressed through movement and body. Neuroscience has corroborated this insight in a number of explorations. Today there are many other sources, especially within ethology, the observation of animal behavior in the wild. Sheets-Johnstone’s major consideration is in shifting from thinking of movement as “a change of position,” to thinking of the experience of moving. We could then attend “to a phenomenological analysis of the experience of movement . . .” She writes further, “Indeed, emotions are from this perspective possible kinetic forms of the tactile-kinesthetic body. This is the direction in which all of the empirical research points”(p. 205). We find this insight in working with ourselves and others through our Feldenkrais lessons when emotions and feelings arise in the process. Rethinking established ideas can be very productive.

**FINDING PRECISION IN THE IMPLICIT: EUGENE GENDLIN**

In a small note in his book *Zettle*¹⁰, Ludwig Wittgenstein, making a note based on an insight of William James, asks, “The thought is already complete at the beginning of the sentence. How can we know that? – But the intention of uttering the thought may exist before the first word has been said. For if you ask someone: ‘Do you know what you mean to say?’ He will often say yes.” This brings up an interesting comparison to what occurs in action. Let us say you want to stand up at the table and get the butter dish from the refrigerator. It is like saying a sentence, in that a complex of steps is already there to create the action. At each step you can describe that you know the next step, and while you act, you know you are completing the anticipated movements. But you don’t think each step verbally. In Berthoz and Petit’s thinking you anticipate the entire act as an unfolding with the arising of the intention. They say, “Anticipation is a property of the animal and human organism, one that belongs to it by right. Such a property could never have been acquired in the context of that naïve ontology of an ‘external reality’...” Feldenkrais put forward the sequence of an action in terms of the parameters in moving, which he labeled manipulation, orientation, and timing.

Philosopher and psychologist Eugene Gendlin generalized a basic process of life in which steps arise to complete a sentence or an action. He called the process “implying and carrying forward.” It describes basic ongoing activity in life in which each step implies the next step. At closure another sequence evolves. An example can be as simple as getting the butter at breakfast. The understanding is implicit and a whole. The steps are understood in the action of moving yourself toward an intent—speaking, singing a melody, making a drawing, thinking a new thought, etc. The act unfolds from the body in Gendlin’s formulation. It is not a program, in which case the steps would be rigid, as with the metaphor of the computer. In the examples the action is not rigidly specified, which goes to the point that human action is flexible and in relation to context, environment, and the others in your surroundings.

Eugene Gendlin notices that our usual formulations are approximations in describing what we are doing, even in everyday life. He looks for the complexities and what is unsaid. But where is the unsaid? In *Experiencing and the Creation of Meaning* he opens the introduction to the book with a description of what he calls the “felt sense.” He describes it as “a directly felt, experiential dimension” and says “that there is a powerful
felt dimension of experience that is pre-logical, and that functions importantly in what we think, what we perceive, and how we behave.” (p.1)

To give the reader a concrete example of a felt sense, here is a common experience that most of us know. At times we may seek a name we have forgotten. We feel uncomfortable in a bodily way. We try to guess and come up with possibilities. When two or three guesses are not right nothing changes in the feeling. We let go and stop searching. We are still uncomfortable, but in letting go something close to the name may come to us. It still isn’t quite right. Letting go again, suddenly the correct name arrives. With sudden relief we breathe and know from the feeling (felt sense), yes, this is the correct name.

The acknowledgement of a felt sense is a significant step ahead in understanding human thinking, acting and communicating. Normally subliminal and under the radar, it is available to consciousness, although it does take training to become aware of its existence. Nevertheless, without a felt sense or other forms of affect, human beings would not be able to use their thinking function in acting or deciding; life would be flat, without motivation11. “A felt sense is body and mind before they are split apart” (Focusing, p. 165). The “body,” in effect, is knowing beyond what we normally know. Implicitly we do know and lose contact. Brought to awareness, the felt sense can become a key to discovering yourself, your underlying motivations, the meaning of your dreams, and its shifts indicate movement toward resolution within yourself12. Each shift is important. It is a step, but further steps are a needed process. Gendlin suggests that, cut off from the felt sense, you can live with affect and emotion, but not really know yourself. Lastly, for our purposes in this essay, the discovery of the felt sense reveals that we have to modify our view of psychotherapy. Knowing yourself means coming to trust what is revealed according how it is sensed. By continuing steps you can ask yourself, is this understanding correct? Is it accurate or do I feel that it is not quite correct? Can I articulate the understanding and express it until the words feel right? The process can always continue. In this sense of a process we can say there is no true subconscious as Freud conceived it, or, as Jung postulated, a collective unconscious. And no interpretation from the outside is correct for you until it feels right.

Gendlin also has expanded his thinking beyond mind-body. In certain respects body-environments are also one. He articulates a spectator’s environment, what we see of the world outside. There is also an environment which is one event with the body, for example, air coming into the lungs and the red blood cells and, in our Feldenkrais work, body and gravity. The bones of the body grow in this event of living, growing in relation to the ground and in gravity. Bees gather honey from pollen. Fish live in an ocean. Body and environment imply each other. There is only an environmental reality for each species. And then there is the environment that is modified by organisms, from the simplest to humans. Think of insects building nests, and then think of beavers building homes out of logs and mud, humans building cities. Each species has its own world, created differently from others. Looking at it this way we can make the designation, mind-body-environment.

While Gendlin began with philosophy, his position at the University of Chicago was in the Department of Psychology. All of the above is expanded immensely in Gendlin’s philosophical writings. His thought can be difficult, but to stay with it can be very rewarding. He uses his language to bring out new conceptions with new words or with old words in a new way. I found many gems among his posted papers and his writings about other philosophers. His ideas on Wittgenstein and Heidegger, particularly, were enlightening and brought a new understanding of their work. My suggestion is to go to www.focusing.org/bios/gendlin_bio.html or do a Google search for Gendlin and click Eugene T. Gendlin — The Focusing Institute. There is a link where all of his writings are
listed in a complete bibliography, many of which can be easily and freely downloaded. Books are also available through The Focusing Institute.

A SUMMING UP

On one level our work seems simple. We learn through sensing and feeling in a kinesthetic way. We observe patterns and what we are doing in moving, as well as observing others in moving, through the patterns of the lessons. That we cross between the subjective (inner) and objective (outer), moving from observing our selves and then others, is not noticed. Out of this we pass the practice to others and continue with ourselves. It seems that the lesson protocols are enough, but the process is more than that. Phenomenology can open more depth for appreciating our work and practice. To be better practitioners we need to be able to think out of the implicit. Explicit understanding is not enough. In giving lessons we need the implicit to connect to our clients and students. The felt sense can be a guide to what to do next when we get confused. Our ability to understand our clients and students depends on being able to contact the other person’s experience. Each person is different and needs a different learning that fits him or her at that moment. Somehow contact and feeling can connect us. The books reviewed in this essay review reveal different aspects of phenomenology. All touch upon some aspects of this vast field of exploration that can engage your interest.

NOTES

1 Animation implies more than just movement. It includes direction and intention as well as the sense of self-direction.


3 E.P. Dutton, 1979, p.xxix.


A Review
Dennis Leri

*The Intelligence of Moving Bodies: A Somatic View of Life and Its Consequences*
Carl Ginsburg, Lucia Schuette-Ginsburg
Awareing Press, 2010

Carl Ginsburg and Lucia Schuette-Ginsburg have crafted a singular book. It braids together several traditions of thought and practice: science, especially neuroscience and cognitive science; anecdote and first-person narrative; and deep insights into the actual practice of the Feldenkrais Method of somatic education. Carl Ginsburg’s position is unique in the Feldenkrais community. Not only is he one of its most competent practitioners, he is also a scientist, a former professor of chemistry, and a writer known for his beautiful literary constructions. Grounded in many years of private practice and training others in the Feldenkrais Method, his insights have much to tell us about what we as Feldenkrais practitioners do. So, what has he done in his book that hasn’t been done before?

For one, Ginsburg has drawn Moshe Feldenkrais into a working relationship with some of the most important thinkers and trends in contemporary thought. I spent the winter and spring of 1979 in Israel working for and studying with Feldenkrais. In our many discussions I had tried to make the case for the relevance of the research and neuroepistemology of Francisco Varela, Humberto Maturana and Heinz von Foerster, all of whom I had studied with. Their notion of autopoiesis (from Greek αὐτό- [auto-], meaning “self,” and ποίησις [poiesis], meaning “creation, production”) was at the time a radically new definition of what constitutes a living system. When I left Israel I gave Feldenkrais my copy of Francisco Varela’s *Principles of Biological Autonomy*. In 1980, I had the opportunity to introduce Feldenkrais to Varela. Feldenkrais surprised and delighted Varela by telling him that the *Principles of Biological Autonomy* was one of the two or three most important books he had ever read. To understand the significance and importance of Varela’s worldview to the practice of Functional Integration and Awareness Through Movement, *The Intelligence of Moving Bodies* is a must read. But, there are a thousand other reasons to read it also.

For any Feldenkrais practitioner, or even a long-term lay student, the many short observational experiments and explorations will seem familiar. The case histories from the authors’ Feldenkrais practices are solid and well told. Yet, set against the background of the rest of the book, their explorations and anecdotes yield a new comprehension and appreciation of the Feldenkrais Method as well as a sense of the book’s import. The exercises and case studies situate the Feldenkrais Method alongside an emerging approach to consciousness research known as First Person science. First Person science necessitates shifting the focus from observed systems to observing systems. Heinz von Foerster, in his keynote address at the 1992 Feldenkrais Guild annual conference, made the call for this new kind of science to be named “systemics.” It is to be understood that systemics will be no less rigorous than traditional science. In fact, because it invests our researches with a thorough accounting of our own contributions to our observations and our subsequent formulations, it demands of the practitioner not only a fundamental ethics but also—and importantly—an evolving and self refining aesthetics. Feldenkrais practitioners can live with Heinz von Foerster’s definitions: Ethics—act always to increase choices. Feldenkrais practitioners can live with Heinz von Foerster’s definitions: Ethics—act always to increase choices.
practitioners: We start out assuming that, given their perception, each person makes the best choice possible. That’s the first half of an ethical stance. The other half is how we endeavor to expand their perception of options. Again, von Foerster: Aesthetics — to know, learn how to act. Feldenkrais practitioners: We become adept at evaluating sensations based upon two related dynamics of distinguishing differences. There are “more or less” differences and “same and different” differences. The feeling for difference fosters learning how to learn.

I am partial to Ginsburg’s chapter on Kelso and Engstrom’s “Coordination Dynamics.” Kelso and Engstrom write that “the science of coordination . . . is a set of context-dependent laws or rules that describe, explain, and predict how patterns of coordination form, adapt, persist and change in natural systems.” Kelso and Engstrom trace their scientific pedigree to Aharon Katachalsky, known in Israel as Aharon Katsir. Very close friends, Feldenkrais and Katsir authored a book on the origins of thinking. Feldenkrais and I talked about the ideas in the book so I have no doubt it once existed. Sadly, the manuscript of that book was never found amongst Feldenkrais’s belongings. What does remain is a conversation between Aharon Katsir and Moshe Feldenkrais which was published in 2006 in The Feldenkrais Journal #19 with an introduction by Carl Ginsburg. In The Intelligence of Moving Bodies Ginsburg gives a good accounting of a kind of science that is compatible with a first-person, felt-sense awareness. With coordination dynamics he says, “one can potentially create a research agenda to account for the integrative and disintegrative processes of living systems.” What kinds of processes characterize living systems? They would need to be linear and nonlinear, able to shift from convergence to divergence and back, have both “attractors” and “repellers,” be capable of having stability, meta-stability, and instability, plus they could be multifunctional.

The language of coordination dynamics could easily describe the learning dynamics found in Feldenkrais lessons. I would say that the logic and aesthetic style of Ginsburg’s writing could also be so described. I say that as a compliment. While we may find ourselves following along with the book’s general structure and direction, at various moments this or that thought might arise in response to a quote, story, thought experiment, or description that completely surprises us and gives us pause. It can also launch us on a novel train of thought that comes more from reading between the lines than reading the lines themselves.

Perhaps the book rests most firmly upon the work of G. Spencer-Brown, who created the cult classic, the Laws of Form. Brown built upon the work of C. S. Peirce, Ludwig Wittgenstein, Alonzo Church, and others. That book underpins much of Ginsburg’s efforts to unite many different levels of first-person experience and third-person information. Initially the idea behind Spencer-Brown’s book came from an intractable real-world engineering problem. Since it was intractable it meant that a new means was needed to approach it. Rather than solving a problem, the task became how to pose it. In learning how to pose the problem, Spencer-Brown essentially accomplished a profound unlearning of some of the most entrenched elements in mathematics. He was able to deconstruct any number system down to a more fundamental or primitive level by shifting from the use of numbers to using tokens of indication. He noted that before we can number or enumerate, we must first distinguish. That is, to form any collection (cardinality) or delinate a series (ordinality) of objects (virtual or actual), we must first draw a distinction, that is, indicate a this . . . this . . . this from a background that, and then map the distinctions or indications into a numerical system. By circumventing mapping into a number system, he was able to create a tool fit to underpin a new framing of problems in engineering, biology, physics, and pure mathematics.
Ginsburg explains quite well how and why the so-called “calculus of indications” is so helpful when one needs to understand living systems as temporal processes. While the *Laws of Form* is ostensibly about mathematics, the import for any kind of fundamental thinking is not lost on Spencer-Brown, whose preface and notes to the *Laws of Form* have become famous in their own right. Within the Feldenkrais tradition, essential to any really new thought, act, feeling, or sensation, is the need to unlearn the hold of its past meanings on us and to move the new meanings into a new meaningfulness, a new “form of life.” We must, as the poet Valery says, understand that “Seeing is forgetting the name of the thing one sees.” Unlearning the hold of verbal meaning resonates with Feldenkrais’s mistrust of verbal understanding, which is, thinking that if you can name it you then understand it. Feldenkrais encouraged us to think in images, that is to say, to think for ourselves out of how life presents itself to us. Fundamental images prior to a naming of them are for Spencer-Brown tokens for how our primary processes cleave us to the world we make. To cleave, meaning to cut and also to join, is Spencer-Brown’s way of characterizing and packing differentiation and integration into a simple, fundamental image. Novel and fresh images are essential to stimulate a reaching for Feldenkrais’s notion of mature behavior, that form of life that exhibits harmonious thinking, sensing, feeling, and acting.

Ginsburg and Schuette-Ginsburg rekindle our connections to ways that the Feldenkrais Method can create a new relation to the world, to others, to ourselves. Developmental learning theory, biology, neurobiology, thoughts on affect, an exegesis of perception, Feldenkrais anecdotes from their practices, observational explorations, a nifty glossary and a fantastic bibliography—it’s all in the book! The book is a reminder that, in being a Feldenkrais practitioner, one has experienced a fundamental shift away from received second-hand knowledge, knowing what, to embracing a practice, a way to know how.

**NOTES**

Contributors

Adam Cole is a music educator in Atlanta, Georgia. He incorporates the Feldenkrais work into his instruction to enhance musical learning, and to broaden awareness about the Feldenkrais Method in the public school system. Adam is also a novelist and composer. His most recent book, A Thousand Points of Darkness, is coming soon from Nuncici Press.

Linda Flanders (1991) lives in Bay City, Wisconsin and works primarily in Minnesota and Wisconsin. She has developed a unique approach to using her Feldenkrais training in the areas of filmmaking, prevention program design, and atypical children. Her MovieMaking Process was nominated as one of the Midwest’s most promising prevention programs.

Carl Ginsburg has been writing about the Feldenkrais Method since the beginning of his training with Moshe Feldenkrais (1975-1977) in San Francisco. In his incarnation prior to his Feldenkrais career he taught chemistry at the college level. In addition to his many writings he also edited Feldenkrais’s book, The Master Moves, and wrote a book of short stories, Medicine Journeys. His new book The Intelligence of Moving Bodies: A Somatic View of Life and Its Consequences is now available.

Dennis Leri lives in San Rafael, California.

Joseph Love (1929-1992) was an American painter and art critic who lived in Japan for 36 years. His work is made available to us by his wife, Feldenkrais practitioner Yasuko Kasami, who lives and practices in Tokyo and organizes Feldenkrais training programs there.

Alan S. Questel is known for his clarity, creativity, and down-to-earth style of teaching as he brings a depth of understanding, humor, and a gentle human perspective to the learning of the Feldenkrais Method. Trained by Dr. Feldenkrais, he teaches worldwide in Feldenkrais professional training programs and has directed and co-directed trainings in New York, California, Arizona, Brisbane, Adelaide, Melbourne, Perth, Australia, and Malmo, Sweden. His upcoming trainings are in Malmo, Sweden; and Bogota, Colombia.

Donna Ray, M.A., MFT, is an internationally known Feldenkrais Trainer and psychotherapist. She practices in Encinitas/San Diego, California. Her practice includes people of all ages and stages of life. She is an active member of The Mindsight Institute in Los Angeles, directed by Dan Siegel, MD, and is a member of the Feldenkrais Guild of North America.

Katrin Smithback recently spent a month in India with her daughters and would love to go back. Until then, she makes do with a cup of hot chai and her photos.

Francesca Speciani is a journalist, author, translator, and editing counselor in the field of psychology and complementary medicine. She is also a bodyworker and Gestalt therapist. She works and lives in Milan with two children and two cats.

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