

Connected Knowing and “Somatic Empathy” among Somatic Educators and Students of Somatic Education

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In a groundbreaking book, *Women's Ways of Knowing: The Development of Self, Voice, and Mind* (WWK), Belenky, Clinchy, Goldberger, and Tarule examined “procedural knowledge” or the way that “technical know-how” and “powers of reasoning” were being taught in academic environments (1986, 93). They identified a new type of procedural knowledge that they termed “connected knowing,” which they contrasted with “separate knowing,” the dominant learning orientation among males (Perry 1970). In a study involving 135 women, they found that connected knowers manifested a different “voice.” From those women, they identified the epistemological position of “connected knowing,” which involves empathy or the ability to “feel with” (Basch 1983) or “feel into” (Schwaber 1984) the experience of the object of study—whether a person or a thing—by using a kind of oscillatory movement between self and other (Stark 1994). Empathy also has paradoxical qualities—“the paradox of separateness within connection” (Jordan 1991, 69). Connected knowers not only “develop procedures for gaining access to other people’s knowledge,” they also develop “the capacity for empathy,” which they use to develop their knowledge base (Belenky et al., 113). The authors of WWK build upon previous research that

highlights the importance women place on relationships (Chodorow 1978; Miller 1986; Gilligan 1982; and Lyons 1983) and point toward later research that underlines the centrality of empathy in women’s relational development (Surrey 1991). In particular, connected knowers carry out their investigations in a systematic and reasoned way. They build “on the subjectivist conviction that the most trustworthy knowledge comes from personal experience rather than the pronouncements of authorities” (Belenky et al. 1986, 112–113).

It is important to note, however, that we can find separate and connected knowing among both genders, as well as within the same individual’s knowledge orientation. The authors of WWK found “separate knowers” among women who were attending or had attended traditional, elite liberal arts colleges whose curricula were based on male-dominated approaches, and where male professors were in the majority. Likewise, in my study concerning the education of psychiatrists, I found “connected knowers” and “separate knowers” among both genders (1995). Thus we must be careful not to assume that all women evidence a “connected knowing” orientation and all men evidence a “separate knowing” orientation. We shall see below how Feldenkrais (1904–1984) integrated separate and connected knowing,

or “constructed knowing,” (Belenky et al. 1986) in devising his method of somatically based movement awareness education, the Feldenkrais Method.

The empathy that connected knowers draw from involves a somatic component (Corcoran 1981), which is often overlooked by those cited by Debold, Tolman, and Brown (1996) and Clinchy (1996). By supporting the somatic component we can deepen our ability to empathize and thus our capacity for knowing and understanding. Among the healing professions, it is well known that empathy is utilized and valued by psychotherapists of all sorts in building rapport (Cheever 1995). However, empathy has an ineffable quality that even psychotherapists find difficult to describe. For example, despite psychotherapists’ agreement concerning the importance of empathy in building rapport with their clients, they have difficulty describing the quality of empathy, according to my dissertation results (1995). Lynn, a psychiatrist whom I interviewed in a pilot study (1995), described how she experienced empathy: “an emotional awareness . . . an intuitive kind of awareness that I go on” in coming to understand her patient:

It’s hard to find words for this . . . feeling, there’s a quality . . . of what . . . I’m feeling in response to what they’re doing, to what I’m picking up from them, [It] goes

back and forth between us . . . and sensing . . . knowing . . . and working with that is very important. (Cheever 1995, 212-213).

What makes the experience ineffable is that it is somatically based, and we have not yet developed ways to describe our somatic experiences that are sufficiently nuanced and detailed. Corcoran, writing as a Rogerian client-centered psychotherapist, who studied with Feldenkrais, saw a direct connection between what he learned through Feldenkrais Awareness Through Movement (ATM) sensory-motor awareness exercises and the development of empathy. He points out that empathy is an emotional state and therefore is a "body phenomenon, since emotions are themselves body phenomena" (1981, 33). He cites Feldenkrais who, as early as 1949, contended that:

the voluntary muscular patterns corresponding to emotions are preceded by a sensory experience through four steps: (a) the neurological impulse reaches the thalamus, then travels to (b) the striated motor system, (c) the sympathetic nervous system, and (d) the cortex. Theoretically, this process elicits an involuntary motor reflex at the striated motor system, and awareness or recognition at the cortex. (cited in Corcoran 1981, 32-33).

Corcoran recommends teaching "experiential empathy" based on sensory-motor learning using Feldenkrais ATM. "It is through the therapist's body that he or she has an empathic experience, and it is the meaning of this experience that is to be communicated accurately to the client" (1981, 33). Citing Feldenkrais (1972), who developed movement exercises for "learning to listen and respond to one's inner experiences, which is one's felt-level experience" (Corcoran 1981, 35), Corcoran points out that prior to the verbalization of empathy, there is an earlier stage of kinesthetic awareness within the therapist's own body of what he or she is sensing from the client:

Body awareness through movement is proposed to influence the development of empathy because it generates feelings, or stimulates one's proprioceptive, kinesthetic sense. This in turn, enables the counselor to become increasingly aware of his or her own inner experience, or felt-level experience. Since inner awareness is related to openness to the experiences of

others, it thus enables the counselor to be more open to sensing the client's emotions as if they were the counselor's own. It is only subsequent to this experience that the counselor or therapist is in the position to verbalize this empathic awareness to the client (Corcoran 1981, 35-36)

In my Ed.D. dissertation, I described how somatic educators utilize a special kind of empathy that involves a bodily based sensing of one's own and another's somatic experience and, as such, might be called "somatic empathy" (Cheever 1995). Practitioners of somatic education thus demonstrate a kind of empathic connected knowing that allows them, through mindful and sensitive touch, to know how to help their "students" or "clients" learn, with or without verbalization, while guiding their movement. In this article I will illustrate how two modalities of somatic education—The Feldenkrais Method and Aston-Patterning—developed from the connected knowing of each of their founders in relation to their life experience. I will also show how those modalities teach—each in a different way—through a kind of systematic, procedural connected knowing, which includes, but is not limited to, enhancing one's own awareness of somatic experience in relation to movement.

To be complete, I should mention that the Alexander Technique, Aston-Patterning, Body Mind Centering, the Feldenkrais Method, Hanna Somatic Education, Rubenfeld Synergy, Rosen Method, Trager Technique, and Rolfing are all considered somatic educational approaches (Knaster 1996). Modalities may vary in the degree to which they emphasize the structure of the human body and/or its functioning. For example, at one end of the spectrum, modalities such as the Alexander Technique and the Feldenkrais Method focus on function in the service of structure, whereas, at the other end of the continuum, Aston-Patterning and Rolfing include a bodywork approach where structure is often emphasized in the service of function. Each of those educational modalities involves having a student or client learn new ways of moving while being guided, through touch and/or verbally by a qualified somatic educator. Each also emphasizes the

importance of the student's taking responsibility for his or her own learning. With other kinds of hands-on approaches, such as massage therapy and bodywork, clients receive treatment for relaxation or to alleviate symptoms from a qualified massage therapist or bodyworker. Although many massage and bodywork practitioners engage the client's attention, work with the client by encouraging the client to breathe in a certain way to help release tension or decrease pain, and may even utilize somatic empathy, unlike somatic education, treatment does not depend on (although it may indeed involve) the client's awareness of what is going on, nor does it involve the client's learning at the level of the sensorimotor cortex.

Feldenkrais described his process of connecting with the experience of a student whom he is guiding through touch: "When touching I seek nothing from the person I touch; I only feel what the touched person needs, whether he knows it or not, and what I can do at that moment to make the person feel better" (1981, 3). Feldenkrais, is describing somatic empathy—a particular kind of somatically based empathic connected knowing (Cheever 1995). Judith Aston, the originator of Aston-Patterning, also uses empathic, somatically based connected knowing or somatic empathy to help Aston practitioners connect with the somatic experience of their students. They are taught to "feel into" (Schwaber 1984) the experience of their students through duplicating it in their own bodies or taking on the body organization of the student they are working with in order to understand how to help the student move better (Johnson 1995). Taking on that pattern helps the Aston practitioner to sense and feel the somatic experience of the student and then to point out new options for movement. Once students learn about their own patterns and learn new movement tools, they can learn to recognize their body wisdom and their own teacher within. Thus, methods of somatic education, such as Feldenkrais and Aston-Patterning, not only provide a means for students or clients to receive help from a qualified practitioner, they also teach students how to help themselves through developing an embodied aware-

ness. Embodied awareness involves including our bodily based, or somatic sensations in awareness as one acts in, and makes sense of the world. I will attempt to show below how by using somatic education methods we become embodied and how, as we continue to sense our embodiment in action, we practice a kind of empathic, connected procedural knowing.

In their sample, Belenky and her colleagues differentiated "connected knowers" from "silent women" who were "voiceless" and experienced themselves as powerless, and under the thrall of an authority. Those women appeared to lack an embodied sense of themselves that would allow them to see and experience the world from the inside out:

When these women attempt to describe the self, they remain standing in their own shoes, describing what they see gazing outward from their own eyes. They find no vantage point outside of the self that enables them to look backward, bringing the whole self into view. (1986, 32)

Likewise, they had no vantage point from inside the self. One young woman, Cindy, could not describe herself. According to researchers she felt that "the source of self-knowledge is lodged in others—not in the self" (1986, 31). That could be seen when she answered: "No one has told me yet what they thought of me" (1986, 31). Cindy's "voicelessness" is the antithesis of a somatic sense of self. To have an integrated sense of self, incorporating both mind and body, one needs to develop a somatically based awareness from *inside* as well as *outside* the self.

Finding the Missing Voice of Empathic Somatic Connection

Because of our culture's disembodiment, or disconnection from our bodies, connected knowing and somatic empathy have not been widely practiced. At the beginning of the twenty-first century, we face, on the one hand, myriad problems including the physical and psychoemotional. We experience high rates of musculoskeletal disease, back pain (Lake 1985), and repetitive stress injuries (Weinberger 1999; Zaza 1994). Our youth exhibit feelings of disconnection, which too often result in violence (Gibbs and Roche 1999). The signs of

disconnection are all around us, especially in the way bodies are treated in our culture—from body piercing to the prevalence of eating disorders to senseless tragedies like the Littleton, Colorado, school shootings of April 1999. One practitioner attributes that, in part, to a "mind-body split," which has come about largely due to what he calls "kinesthetic dystonia" or a "general kinesthetic ignorance and its many social and individual sequelae of pain, alienation, misunderstanding, and reduced function" (Myers 1998, 101–102).

However, within the last fifty years, somatic education has made important discoveries about the way humans learn. Thus we find ourselves once again in a position where we need to reassess our methods of teaching and learning (Hanna 1988; Knaster 1996; Myers 1998). Perhaps, somatic education could help address the sociocultural problems facing young adolescents (Brown and Gilligan 1992), especially those manifesting a mind-body split (Debold, Tolman, and Brown 1996) or the problems of disavowed feelings (Stern 1990). It might be helpful as well in addressing the particular problems facing boys and young men (Pollak 1998). Somatic education provides a means for us to restore the intimate connection between our bodies and the world as we know and understand it. This is the way of knowing that we first experience in the first two years of life, during the stage of sensorimotor intelligence, when the foundations of our cognition are being laid (Piaget 1952). Knowing ourselves in this way can give voice to the body in a way that is greatly needed in our disembodied culture. Just as the authors of *WWK* gave voice to women as knowers and, in so doing, inspired a re-evaluation of our teaching and learning methods that is more in keeping with the way that women learn (see Wright, this issue), I hope to give voice to our bodies' somatic or "body/mind" (Dychtwald 1977) experience in this article. Through listening to what some of the originators of somatic education modalities, as well as their students or clients, say we will be driven to re-evaluate those teaching and learning methods that perpetuate a disembodied culture.

Somatic educators are sounding an

alarm: Members of postindustrial societies are increasingly suffering from "sensory-motor amnesia" (SMA) or a deadening of our ability to sense ourselves internally in relation to the world around us (Hanna 1988). Human aging also includes deterioration from the stresses and traumas of life, as the loss of somatically based awareness develops into "sensory-motor amnesia" (Hanna 1988, xiii). "This habituated state of forgetfulness . . . is a memory loss of how certain muscle groups feel and how to control them" (Hanna 1988, xiii). Because the central nervous system, and especially the sensorimotor cortex of the brain, is involved "we remain unaware of it." Because it is a learned, "adaptive" response, it can be unlearned (1988, xiii). Drawing on the wisdom of Selye (1978) and Feldenkrais, with whom he studied, Hanna developed a series of somatic exercises to counteract the effects of SMA. When teaching students to redevelop their capacity for sensory-motor learning, he observed that their stress-caused SMA, chronic pain symptoms, and structural, and functional problems disappeared (1988, xiii). Hanna's students moved from a passive, victimized position, to a more active stance of increased choice, responsibility, self-care, and self-empathy. The results indicate that the effects of disembodiment and SMA can be counteracted through empathic, somatically based connected knowing. Those results are in keeping with my observation of somatic learning among male and female students in academic as well as nonacademic environments.

Our disembodied, postmodern culture is permeated by a mind-body split that is based on a lack of empathic, somatically based awareness. We lack a sense of our "soma," or body consciousness based on a sense of a whole, embodied self interacting with our environment, human or otherwise, in a manner integrating both body and mind. Human beings are meaning-makers, and "meaning is in its origins, a physical activity (grasping, seeing), a social activity (it requires another), a survival activity (in doing it, we live), . . . [and] it cannot be divorced from the body, from social experience, or from the very survival of the organism" (Kegan 1982,

18–19). Yet, Leder, in *The Absent Body* (1990) points out that “although human experience is incarnated . . . [and] I receive the surrounding world through my eyes, my ears, my hands . . . [and] the structure of my perceptual organs shapes that which I apprehend, . . . it is via bodily means that I am capable of responding . . . and my actions are motivated by emotions, needs, desires, that well up from a corporeal self, . . . yet this bodily presence is of a highly paradoxical nature” (1990, 1). For the body is “absent” from our awareness most of the time:

While in one sense the body is the most abiding and inescapable presence in our lives, it is also essentially characterized by absence. That is, one’s own body is rarely the thematic object of experience. When reading a book or lost in thought, my own bodily state may be the farthest thing from my awareness. I experientially dwell in the world of ideas, paying little heed to my physical sensations or posture. Nor is this forgetfulness restricted to moments of higher-level cognition. I may be engaged in a fierce sport, muscles flexed and responsive to the slightest movements of my opponent. Yet it is precisely upon this opponent, this game, that my attention dwells, not on my own embodiment. (1990, 1)

Leri, a Feldenkrais somatic educator, explains that in the process of Western acculturation, dichotomization of mind and body take place as “the nearly infinite possibilities of the child’s nervous system are pruned and shaped to fit its culture”

During this process, the original organismic wholeness of the child turns into an assemblage of parts. The hand, a part, serves the whole, the body, by feeding it with a fork or chopsticks. Language breaks the body into separate parts: the hand, the wrist, the arm, etc. which create a fragmented “body of thought” apart from our unified organismic body. To make language a part of our biology, we need to be able to read, gain access to, and use the organismic body’s “alphabet,” “grammar,” and “vocabulary.” (1993, 51)

Methods of somatic education can address the problems of fragmentation that we face due to the mind-body split. For example, the Feldenkrais Method incorporates sensory-motor learning to teach one how to access the body’s “alphabet,” “grammar,” and “vocabulary,” (Leri 1993). While engaging in

repetitive, neurodevelopmental ATM movement sequences, Feldenkrais students develop kinesthetic awareness of the environment—the chair, the floor, or the “other”—by touching it or being touched by it. In developing our awareness in this way, with Feldenkrais and other methods of somatic education, we develop a kinesthetically attuned “inner eye”—almost as if we come to “see inside” ourselves as we develop a felt sense of ourselves acting in the world. We sense how our bones and muscles are relating to one another proprioceptively. We feel the surface on which we are lying, sitting, or standing, as well as gravity—an “elusive obvious” (to use Feldenkrais’s [1984] term)—always affecting us, but rarely consciously so.

As we develop that enhanced, kinesthetically based self-image, we develop “an inner I,” or a growing sense of our selves, that incorporates what we are sensing inside as well as outside of us. Through that specialized form of kinesthetically based connected knowing, we develop a more complete, neurologically based, sensory-motor self-image in our brain. It is constructed on a felt sense of how our different body parts move through space and connect with one another and the environment. That includes performing simple actions, such as rolling over, as well as more complex activities, such as walking, engaging in a sport, playing a musical instrument, or relating to another emotionally.

Feldenkrais and other methods of somatic education, although they have psychological and emotional elements, are different from psychotherapy (Steisel 1992) because when we use them we focus on our somatic experience in the present, as we learn to sense how to move most comfortably and with the least effort in a safe and pleasing way. We thus develop a way—through somatic connected knowing—of empathizing with ourselves or “feeling into” (Schwaber 1984) our own embodied experience. We also learn ways to notice nonjudgmentally when we do not move or when we exert effort unnecessarily. That process of tuning into our own somatic experience can provide an effective means for self-care and self-empathy.

In my dissertation, “Education as

Transformation in American Psychiatry: From Voices of Control to Voices of Connection” (1995), I pointed out that “somatic empathy,” when engaged in by a somatic educator with a student, is synergistic in that the whole—or the relationship between the practitioner and the student—is greater than the sum of the parts (the individuals). Feldenkrais calls that becoming “a new ensemble” or “a new entity” (1984). Through touch, he links his own nervous system with the other’s nervous system, and together they become “a new ensemble” (1981, 3). The “new ensemble” is perhaps best represented symbolically by a topographic figure, a Mobius strip, which is constructed from a two-sided strip of paper. Because the strip is twisted once and the two ends are connected, it appears paradoxically to have two sides yet no longer has a clearly identifiable inside or outside surface. The two sides have become one in “a new ensemble” (Feldenkrais cited in Cheever 1995) Feldenkrais, in giving a hands-on Functional Integration lesson, or guiding students through an Awareness Through Movement lesson with his voice, is practicing a kind of “somatic empathy” (1995). Somatic empathy involves a particular kind of connected knowing where “we use the personal self as an instrument to develop knowledge and understanding of our internal and external universe” (Wright, this issue). Somatic empathy involves learning both how to move in one’s own body and, for somatic educators, being able to put oneself in the shoes or “soma” of another, and sense what their body/mind might need to learn how to function better.

The Feldenkrais Method of Embodied, Empathic Connected Knowing

Becoming somatically aware of ourselves involves, in part, becoming aware of our movement and thus tuning in to our nervous system, which directs our movement. But what motivates us to do so? Moshe Feldenkrais, suffered an injury to his knee that left him unable to walk and inspired the experiential dimension of his learning system, which became the Feldenkrais Method. In the 1940s Feldenkrais, a respected Israeli

physicist, worked as an assistant in nuclear fission research to the 1935 Nobel prize winner Joliot Curie. Feldenkrais initially applied his skills in empirically based scientific observation to find out how humans learn to move, while he was studying Judo. He wrote a book, *Body and Mature Behavior: A Study of Anxiety, Sex, Gravitation and Learning* (1949/1977), based on lectures that he presented before the Association of Scientific Workers at Fairlie Scotland in 1943 and 1944. In that treatise he laid out his theoretical framework based on what had been discovered regarding human mind/body functioning at that time. We might say that the book was written from the stance of a separate knower. However, by the time he wrote *Awareness Through Movement: Health Exercises for Personal Growth* (1972), Feldenkrais was writing from the stance of the connected knower, having taught himself to walk again after injuring his knee. Feldenkrais believed that "the unity of mind and body is an objective reality, that they are not entities related to each other in one fashion or another, but an inseparable whole while functioning . . . [for] I contend that a brain without motor functions could not think or at least that the continuity of mental functions is assured by corresponding motor functions" (1964, 47). He knew (intellectually) that "in man, . . . the actual innervation of the motor paths is left to grow after birth . . . as if his nervous system is left to adjust itself to the conditions in which it is likely to grow" (1949/1977). Feldenkrais, through his own movement explorations to heal his knee, created a way to access the sensorimotor cortex with an experiential learning system whereby individuals could continue to learn to move more efficiently. Movement sensations are going on all the time, but as we mature and develop automatized, habitual ways of moving, we no longer notice how movement feels—often to our detriment. For research clues, he decided to study the first two years of life (Piaget's stage of sensorimotor intelligence). Using his well-honed powers of scientific observation, Feldenkrais observed babies and toddlers as they were learning to crawl, to stand, and then to walk and imitated them in his own movement exploration.

After recovering the use of his knee, he began to teach others verbally "through Awareness Through Movement (ATM)" sequences and to instruct others kines-thetically through hands-on Functional Integration (FI).

In the *Elusive Obvious* (1981), Feldenkrais described how he experienced a kind of connected knowing in the process of touching and guiding people's movement that allowed him to put into practice the ideas of other scientists, philosophers, and semanticists whose work he had been reading:

This touching, handling, manipulating of living human bodies enables me to see in the books of these superb writers and turn into practice the science they teach. Probably they themselves do not know, how useful their knowledge is already when translated into the nonverbal language of the hands, i.e. Functional Integration, and the verbal Awareness through Movement. (1981, 3)

Feldenkrais described how that systematic exploration, including his experience with his knee, helped him develop procedures to understand the way that the brain works. The connected knowers in the study by Belenky and her colleagues drew on their own learning in similar way. Feldenkrais pointed out how "sensory stimuli are closer to our unconscious, subconscious, or autonomous functioning than to any of our conscious understanding" (1981, 3) and that sensory communication is therefore "more direct . . . and therefore more effective and less distorted than [communication] at the verbal level" (1981, 3). Unlike words, which can obscure intentions, touch, with its kinesthetic truth, goes right to our core:

Words as somebody said, are more to hide our intentions than to express them. But, I have never met anybody, man or animal, who cannot tell a friendly touch from an evil one. Touching, if unfriendly even in thought, will make the touched stiff, anxious, expecting the worst, and therefore unresponsive to your touch. (1981, 3)

In contrast, Feldenkrais goes on to describe what he does in a one-on-one Functional Integration (FI) lesson, based on what he experiences when guiding another's movement through touch:

Through touch, two persons, the toucher and the touched can become a new ensemble; two bodies when connected by

two arms and hands are a new entity. These hands sense at the same time as they direct. Both the touched and the toucher feel what they sense through the connecting hands, even if they do not understand and do not know what is being done. The touched person becomes aware of what the touching person feels and, without understanding, alters his configuration to conform to what he senses is wanted from him. (1981, 3)

Feldenkrais used somatic empathy (Cheever 1995) in deciding how to move with the person he was working with. Through touch, he linked his nervous system with that of the "touched," and together they became "a new ensemble" (1981, 3): "When touching I seek nothing from the person I touch; I only feel what the touched person needs, whether he knows it or not, and what I can do at that moment to make the person feel better" (1981, 3).

Although all instances of empathy include a somatic component (Corcoran 1981), Feldenkrais appeared to sense in his own body the neuromotor organization of the person with whom he was working, both when he was touching them and when he was not. "I only *feel* [emphasis mine] what the touched person needs, whether he knows it or not, and what I can do [e.g., by guiding the touched person's movement] to make the person *feel better*." With those last two words, Feldenkrais introduced some ambiguity, since *feel* can mean to feel better emotionally, through experiencing a change in mood, or to sense kinesthetically. Through Functional Integration, Feldenkrais helped the touched person learn by increasing his or her awareness of how to *sense* and *feel* kinesthetically what he or she was doing with greater refinement and ease.

Lynn, the psychiatrist mentioned before, also provides an example of a Feldenkrais student's learning with the method's other component, Awareness Through Movement (ATM). While her Feldenkrais somatic educator, Andrea, guides her with her voice rather than with her touch, Lynn practices somatic empathy in relation to herself. Lynn is an empathic connected knower using Feldenkrais's procedural method of learning to heal herself from a debilitating illness. Lynn is a 48-year-old psychiatrist who had had to undergo some

career changes due to her health. Initially a pediatrician, she went into psychiatry fifteen years ago after an illness made pediatrics too physically demanding. The illness, however difficult, nonetheless allowed Lynn to gradually let go of some of her preconceived notions about what she needed to heal herself and to try a new approach to healing her illness—one that did not “make sense” within an orthodox allopathic medical framework. In Lynn, we see an example of an empathic connected knower. Belenky and her colleagues defined connected knowers as learners who carry out their investigations in a systematic and reasoned way, “[building] on the subjectivist conviction that the most trustworthy knowledge comes from personal experience rather than pronouncements of authorities [but also] . . . developing procedures for gaining access to other people’s knowledge, [while] . . . they also develop a capacity for empathy, and use it as they develop their knowledge base” (1986, 112–113).

I asked Lynn whether there were any life experiences in particular that had affected her ability to help others. She mentioned the importance of her own illness in allowing herself to be vulnerable and to accept alternative ways of helping herself, as well as giving her deeper insight into the suffering of her patients and how to help them:

My own illness has really had a profound effect on my being able to help others, because I had to learn how to heal myself, with help, which wasn’t easy for me to do. If I could have done it alone, it would have been great in terms of my style, but I had to learn how to do it with help. And that has had a real profound impact on my seeing how other people want/do not want, need/do not need to be helped and are ambivalent about it. (1995, 209)

Andrea, who taught her how to regain her ability to move without pain, systematically guided Lynn with her voice through several ATM sequences during individualized lessons. Lynn then took what she had learned and continued to practice ATM sequences on her own at home. To her surprise, repeating those simple, neurodevelopmental movements had profound results. The experience challenged assumptions about learning that she had absorbed in medical school, such as the belief that learn-

ing had to be difficult to be worthwhile. Throughout this process, she had to overcome her own self-doubt, especially about using a model for learning that was based on assumptions she could not rationally explain.

Lynn spoke about going through a stage of learning in which she had had to surrender to something new that was happening to her and that she couldn’t quite explain, and yet had to trust because of what she was experiencing in her body: “I felt really dumb because I couldn’t explain it. I had no rational reason why I was doing it. I was doing it on pure, unadulterated faith” (Cheever 1995, 210). But the fact that it worked was proof. That became clear to her when, one morning, she could once again reach up and turn off the alarm without pain. At first she did not even realize what she had learned in her body—somatically. It had “snuck up on” her. A friend had to point out that she was now walking and standing with better balance. She marveled at how, given her own extremely controlled habitual learning style in medical school, she was now able to stop controlling the process of regaining her balance. It was a necessary part of the process, which “I couldn’t direct . . . it wasn’t under my ‘control’ and it was just happening . . . [and] it was the most incredible [thing]!” (1995, 210).

Lynn marveled that she could experience such profound effects from the “infinitesimal” ATM sequences Andrea had taught her, which, unlike traditional exercise programs, did not involve pushing or exerting oneself to achieve new limits (her old habitual way of learning): “I’m telling you, it was just a little bit of movement!” she said (1995, 210) Lynn believed that she healed, in large part, because in her own self-disciplined “style” she followed her teacher’s advice and did certain movement repatterning exercises “faithfully” and consistently.

Lynn felt that that form of connecting with her own sensory-motor learning experience in her healing process not only improved her ability to sense empathically what was right for her, but it also helped her to help others develop their own ways of helping themselves:

It’s helped me to be aware, as I have healed, it’s certainly helped me to be

more patient, but more than that it’s helped me to be aware that people don’t necessarily do things themselves on purpose, they do it because they’re not aware, and they need help to become aware. And I guess . . . I’ve learned a number of things, many, many things. One of the things I’ve learned is that you just never know where things are going to go with people. (1995, 211)

That particular kind of knowing thus comes from a kind of attunement, or “being tuned,” and involves a kind of movement in relationship that changes depending on the affect or feeling generated between two people. As Lynn tried to describe this unique kind of knowing, she was at a loss to understand exactly where it began and ended. She conveyed a sense of circularity and recursiveness in the dialectical movement between Andrea and her—sort of like a Mobius strip of human interaction that reminds one of Jordan’s “paradoxical” view of empathy as “separateness within connection” (1991, 69):

There’s a way of being focused, being very much there . . . Where’s it coming from? Is it coming from me, is it coming from them, what is it? Yeah, it’s a knowing that I’ve not trusted initially. It wasn’t the usual kind of knowing that I know about. It’s not cognitive, I can’t always write it down or call it up when I want to and it’s not something you can always validate, it’s not traditional, academic kind of knowing, intellectual kind of knowing, but it’s very important. (Cheever 1995, 213)

We see how Lynn went through a process of “feeling dumb” and “not knowing” as she continued to open herself to a new somatically based way of knowing. Yet, she did not shy away from that uncharacteristic feeling. Instead she surrendered to the process of sensory-motor learning, in which she was learning to slow down and listen to her body and feel what was most comfortable, and what was least comfortable. She realized that she had choices of how to move despite her disabling disease. She came to sense her embodied experience and her vulnerability in a way that she had never allowed herself to do, when as a separate knower, she had pushed herself to achieve in medical school. Furthermore, after connecting with her own somatic vulnerability, Lynn felt she was able to empathize bet-

ter with her patients' vulnerabilities and their "not knowing."

Wright, in this issue, points out how, contrary to the experiences of the subjective knowers, who remain "essentially alone in one's world and disconnected from a wider community of knowers, connected knowers [like Lynn] welcome differences, dialogue, and new or unfamiliar modes of understanding." Another of my Feldenkrais students, Jeanne, a woman in her fifties who struggled with pain and movement problems as a result of a congenital disease, exemplifies the ability of a connected knower to come up against such "new or unfamiliar modes of understanding" (Wright, this issue). She described a difficult period in our work when she felt afraid because for a few days she was experiencing pain while walking as she started to experience a new movement option. During this time, she had been working in one-on-one Functional Integration lessons with me once a week and attending a weekly Awareness Through Movement group class. After the pain subsided, she looked back on this challenging period and expressed to me that she was comfortable with ambiguity and what she calls "confusion":

I don't mind being confused because confusion is a prelude . . . to understanding at a deeper level. If you can't get confused, you can't go somewhere you've never been. You have to be willing to be confused. Otherwise, you only go to places you already know.

What allows connected knowers like Lynn and Jeanne to tolerate periods of fear and confusion during Feldenkrais work? I believe it is because they develop a growing ability to connect with and trust in themselves and the relationship they have with their somatic educator, as they become more comfortably embodied through somatically based, sensory-motor learning.

Aston-Patterning as Embodied Empathic Connected Knowing

Judith Aston, another originator of a method of somatic education, Aston-Patterning (AP) also utilized a kind of empathic connected knowing in developing procedures for her method of movement education and bodywork.

Like Feldenkrais, she used herself as an object of study by drawing on her own innate ability to create a system of bodywork and movement education and developed her techniques from her own life experience and world view. Similar to Feldenkrais, her experience with a serious injury led her to develop her method further in the process of healing herself. In the 1960s, Aston was already teaching her community college students about posture and movement in her dance and physical education classes. Then, in 1966 a car accident led her to seek out the help of Dr. Ida Rolf, the originator of Rolfing, for her rehabilitation. Rolf learned of Aston's extensive background in movement and dance and asked her to create a movement education program for Rolfers. Aston learned Rolfing, "an innovative connective-tissue system of body rehabilitation" (1998, 3), but her own work continued to develop on a different path where asymmetry was key, and eventually she left Rolf to develop her own paradigm, Aston-Patterning.

In November 1999 Aston described to me her process of discovering "a new body mechanics based on the body's natural structure and function"

This discovery came to me in the mid '70s, and it was like discovering gold, for it changed everything from the design of medical appliances, ergonomic products, and athletic equipment to the way that people coach and help in rehabilitation. This became a new paradigm of which the biomechanical model is one piece. Another piece is the way that people learn to become empowered through gaining access to information inherent in themselves [e.g. their own unique structure and function] to become their own teacher. At that moment, everything I had been working on up to then such as how people move, learn, teach, all then fell into place.

In another interview Aston shared how her unique world view led her to develop the Aston paradigm from three perceptions: her propensity to notice "things that are mismatched or out of proportion, . . . [her] skill for imitating people . . . her awareness of patterns, and one strong compulsion that I had even as a little girl—my interest in problem-solving" (Johnson 1995, 207).

The Aston paradigm sets itself apart from other bodywork and movement

education models by emphasizing the body's true asymmetry, which is indicative of Aston's propensity to notice "things which were mismatched and out of proportion." Aston practitioners develop skills in seeing the different proportions and alignment of each individual body segment in relation to the one above and below. They also learn how to take on the body pattern of the person they are working with. Thus, Aston has used her own innate capacity for imitation as a starting point to teach practitioners where to intervene in helping others to move better. AP is thus a systematic problem-solving approach that allows for the unique features of the individual to be assessed and identified for bodywork. Aston told me that concepts embody not only her own sensitivity to asymmetry, which is "what creates continuous movement," but also reflect a philosophy that allows for the individuality of each person

by recognizing how natural it is for us to have asymmetries in our bodies and by taking that recognition down to the subtlest details of our being. . . . Aston Patterning offers us a way to shed culturally imposed limitations. (Woods 1997, 38)

Somatic Education—A Possible Solution for Our Disembodiment

Somatic education, exemplified by Feldenkrais, Aston, and others, "recognizes not only that human beings are bodily beings who can become victims of physical and organic forces, but also that they are equally somatic beings who can change themselves. . . [for] humans can learn to perceive their internal functions [and proprioceptive sensations] and improve their control of their somatic functions" (Hanna 1988, 21).

Human self-awareness [is] not a vacuous and disembodied "epiphenomenon" but [is] a holistic awareness of the self which [is] embodied and always aware of the state of embodiment. . . . Self-awareness (or self consciousness) is a function of experiencing the whole state of one's organic structure, [and] as that organic structure changes, so does our basic self-awareness—and vice versa. (Hanna cited in Ginsburg 1984, 69).

Somatic education thus describes a certain kind of learning that involves connecting the mind with the body through

sensory-motor learning. Inherent in the term is the Greek word for body, *soma*. Instead of observing the body objectively in third-person terms as in medical approaches, somatic educators experience their own bodies and those of their students more subjectively—in the first person—through enhancing their awareness of internal sensations (Hanna 1988). Somatic education courses are currently being taught in varied academic environments, including high schools (Howell 1980), at Harvard's health and fitness and wellness program for students and faculty and staff, and in schools for the performing arts. The latter is in recognition, in part, of the debilitating prevalence of repetitive stress among musicians (Weinberger 1999; Zaza 1994). For example, my colleagues and I at the Longy School of Music, in Cambridge, Massachusetts, created a collaborative Mind/Body Program in 1997 to help music students and faculty learn more functional ways of playing and performing. Students may take experiential somatic education classes in the Alexander Technique or the Feldenkrais method of movement awareness education for academic credit, along with their studies in classical music, Dalcroze Eurythmics, or jazz studies at an undergraduate or master's level. Students who are involved in the somatic education curriculum are learning to practice a version of connected knowing that helps them increase their awareness of potentially harmful habits that may result in injury. They are learning to sense what they are experiencing in their bodies as they play. Instead of enduring pain and discomfort—and thus disconnecting or dissociating from their bodies—they are learning nonhabitual movement sequences that result in repatterning their neurological "body/mind" organization. In this process, they learn more efficient and comfortable ways to move. As they learn to play less effortfully, they are able to play with greater expression. They learn to practice self-empathy and self-care while under a great deal of pressure to develop their proficiency and creativity as performers. As one Longy student, Carol, told me after participating in a Feldenkrais Awareness Through Movement class:

When I began taking your ATM class, I was suffering from almost constant pain due to an injury to my shoulder that made it very difficult for me to play or teach violin. My traditional exercises and stretches were not helping. It was only by beginning to learn how to slow down, observe, and reduce my effort in repeating the gentle, repetitive ATM sequences involving other parts of my body as well, that I began to learn how to listen to my body and move out of pain. I can head off most discomfort by continuing to practice my ATM sequences as needed. Prior to and during a performance, I can relax myself by connecting with my body, sensing my support, letting go extra effort, and thinking about my whole body participating as I play.

Earlier I spoke of the silent knowers, lacking a sense of self, whom the authors of *WWK* discovered. Other researchers have chronicled that adolescent girls increasingly lose their voice as they come to terms with their sexuality (Brown and Gilligan 1992; Debold, Tolman, and Brown 1996). In my opinion, adolescent girls might benefit the most from somatic education, which helps develop a more integrated, somatically based autonomous self. An advantage of the Feldenkrais Method is that ATM does not require touch. Thus, the student is not dependent on another's touch in order to learn. ATM sequences are taught verbally and can empower individuals to rely on their own strengths, rather than looking outside themselves for authority. Furthermore, with students who have been abused sexually, it is often important to keep touch out of the relationship between client and somatic educator.

Myers, a leading somatic educator, believes that our "production-line" educational methods are antiquated because they rely too heavily on auditory and visual modes in the classroom and not enough on kinesthetic ways of learning. We need to develop more appropriate ways to educate our children about how to live in a body to prepare them for the future. (Myers 1998, 101). Methods of somatic education, such as Feldenkrais and Aston-Patterning, can do just that by providing empathic techniques for learning embodied connected knowing. Somatic education can be of significant help in counteracting the negative consequences of disembodiment, discon-

nection, and dissociation from our bodily based experience. It can help us develop our "inner eye" and our "inner I" in both academic and nonacademic environments.

NOTE

*Feldenkrais®, Feldenkrais Method® Functional Integration®, Awareness through Movement® are registered service marks of THE FELDENKRAIS GUILD®. **Aston-Patterning is a registered trademark of Judith Aston.

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