Moshé Feldenkrais's Work with Movement - A Parallel Approach to Milton Erickson's Hypnotherapy
by Mark Reese, Ph.D.

The work of Moshe Feldenkrais and Milton Erickson epitomizes mastery of the facilitation of human learning. On the surface their approaches are dissimilar: Feldenkrais works primarily in the physical domain of touch and movement, while Erickson worked primarily in the symbolic domain of image and language. Nevertheless, there are striking parallels in their philosophical emphasis on human individuality, the importance of learning, and the role of unconscious processes. Even more remarkable are the similar innovations of utilization, indirect techniques, and pattern interruptions that each employs with a subtlety which defies verbal description and strains the powers of observation. Those who are familiar with Erickson's work can discern many similar patterns of communication in the following Feldenkrais excerpt. In this workshop session, Feldenkrais had participants lie on the floor on their stomachs and do various slow, gentle movements related to childhood crawling. After a while, Feldenkrais asked the group to begin bending the fingers of the right hand "as in you're going to make a fist", and then to:

Undo it, as if you stopped thinking of the fist...That is the easiest movement we can do. It's almost like moving the eyelid Close and open, as slowly, as comfortable, and as little as is necessary for you to feel that you're actually flexing and stretching [pause]...We can do everything to our own comfort....You'll find that in order to be able to do a thing comfortable, elegantly, and aesthetically right...we must do it with a minimum, of exertion, with the feeling of lightness, the feeling, the sensation of light...nests of lightness of the movement [pause]...You will see that the exists only when you flex it a little bit more and open it, but not completely. In order to make the hand completely flexed and completely open, you have to make a real effort, enough effort, but to flex it a little bit more and flex it a little bit less...gives you a sensation that it is easy, light [pause]...Now being easy light, will you please continue that movement...easy, light...so that the feeling of easy, light is actually connected...it will be...whether you want it or not...you can't do it otherwise...Your entire motor cortex, the entire nervous system is now pervaded with that feeling, light, and you should know that in our motor cortex the hand occupies, next to the lips, the largest area...so very slowly there will be a feeling of lightness permeating the entire musculature,...the entire self, making it...keep on doing it...and while you do that, while you feel it's really light, you'll find out the whole arm gets light and slowly you will feel the neck and the shoulder blade...over that...getting soft and nice and actually prepared to act without preparing itself. In other words, it's getting ready for action and you will see when we get that, how quickly, how nicely, we will all be moving, doing the same thing independently, whether you have arthritis, whether you had an operation or not, you will still move infinitely better than you started [pause]...Don't stop moving the right hand, flexing and...slowly, slowly see a remarkable sort of thing...If you keep on doing that movement, it will actually teach you...slowly, keep on moving the fingers gently and on top of that movement, lift your right shoulder and you will see that the gentleness of the movement, the skill of the movement permeates our entire being and therefore you will see that other things we do improve without doing them. You don't have to exercise in order to improve. You only have to be your own self. (Feldenkrais, 1981b)

In this example, Feldenkrais utilizes a hand-grasping movement-an infantile reflex and embryological "growth action" (Blechschmidt, 1977) -in order to induce hypnotic-like learning. His students are placed in a situation where they learn from their own movements the means to achieve "comfort, elegance, and aesthetic satisfaction." During the past 40 years Feldenkrais developed a somatopsychic discipline incorporating numerous effective techniques that in many essential respects complement and parallel the work of Erickson.
Many of us in the Feldenkrais community are drawn to Erickson's work because he so well conveyed certain implicit but unstated insights of Feldenkrais's approach. Similarly, some Ericksonians have discovered in Feldenkrais's work a subtle intelligence about nonverbal behavior, learning, and communication which makes Ericksonian skills more accessible. In this chapter I hope to stimulate reciprocal study and collaboration between practitioners of the two methods—-a collaboration which has, in fact, already begun. Furthermore, by understanding certain common principles that are instantiated but differentially applied in the two methods, I hope to promote the emergence of more integrated and effective somatopsychic theory and methods.

I begin with an overview of the life and work of Feldenkrais, followed by a discussion of the awareness of movement Feldenkrais and Erickson both learned through personal physical traumas. Then I describe their parallel philosophies of learning and their parallel techniques. The chapter concludes with a reflection on the artistry and experimentalism of Feldenkrais and Erickson.

MOSHE FELDENKRAIS: HIS LIFE AND WORK

Moshe Feldenkrais was born in Russia in 1904 and emigrated to Palestine at the age of 13. Like many innovators, he came to his field by a circuitous route, weaving together numerous influences. As a young man, he was an excellent athlete, a soccer player, and self-taught in jujitsu. He did construction work and tutored problem students while attending night school preparing to study physics. He had an early interest in hypnosis and translated Emile Coue's book on autosuggestion into Hebrew.

In Paris, Feldenkrais earned his doctorate in physics at the Sorbonne and assisted Joliot-Curie. During his university years he met Kano, the originator of judo, and trained with Kano's students to become a high ranking black belt and well-known judo teacher.

Evading the Nazis, Feldenkrais fled to England where he worked in antisubmarine research during the war, wrote scientific papers, trained paratroopers in self-defense techniques, and authored books on judo. On slippery submarine decks he aggravated an old soccer injury to his knees, and began the extended work on himself which led to his discoveries about movement reeducation. After he publicly presented his ideas, people sought his help with their problems. For several years he was an amateur somatic practitioner, first in England and later in Israel where he had returned to work as a research scientist. In the mid-1950s, Feldenkrais gave up his career in physics and devoted himself fully to his work with people. By the late 1960s he was training his first Tel Aviv group to become practitioners of his method, and he trained two subsequent groups in the United States. He wrote four books on his method, and his teaching is preserved in thousands of hours of audio- and videotapes.

Moshe Feldenkrais originated two interrelated, somatically based educational methods. The first method, Awareness Through Movement, is a verbally directed technique designed for group work. The second method, Functional Integration, is a nonverbal contact technique designed for people desiring or requiring more individualized attention.

As exemplified in the quote above, Feldenkrais's Awareness Through Movement lessons incorporate active movements, imagery, cues for sensory attention, and various informative and suggestive material. A typical lesson lasts about an hour and combines a few dozen thematically linked movements. Lesson themes may include developmental movements such as rolling, crawling, and standing up; functions such as posture and breathing; systematic explorations of the kinetic possibilities of the joint and muscle groups; and experiments in somatically based imagery and visualization.
These lessons are not "physical exercises" such as calisthenics; they are somatopsychic explorations which foster improvement by accessing inherent neurological competencies, increasing self-awareness, and facilitating new learning. The initial movements are usually very small with an emphasis on ease, comfort, and learning so that gradually one becomes aware of how the musculature, skeleton, and entire personality are involved in every movement. From seedlike beginnings, small movements grow into movements of greater complexity, magnitude and speed. The result is learning to move with greater efficiency and satisfaction.

Awareness Through Movement lessons often evoke a trancelike state. Unlike a typical exercise class, one is not told where the movements are leading or shown what they look like; thus, what one learns arises organically and as a surprise. Often only one side of the body is physically worked at a time but the other side is worked mentally; that is, in the imagination. This mental practice refines kinesthetic sensitivity to the point where muscular impulses and patterns are clearly felt and differentiated with minimal mobilization. Throughout the lesson, one is guided to integrate and apply one's newly discovered skills by means of verbal suggestions or stories.

The individual lessons of Functional Integration are based upon the same logic as Awareness Through Movement. They are used with a broad spectrum of people from those with physical limitations and discomfort, including neurological and musculoskeletal problems, to athletes and performing artists. The method of Functional Integration is neither a medical nor a therapeutic practice; it is learning-based, primarily nonverbal, and directed at enhancing the efficiency, coordination, grace, and self-possession of a person's movement. Lessons are done with the student lying on a soft but firm worktable, or standing, or sitting. The practitioner gently touches or moves the student in a variety of ways to facilitate the student's awareness and stimulate organic learning and vitality. Each move in the lesson is part of a communication Feldenkrais has likened to dancing. Through touch, the practitioner partially discloses or hints at a functional motor pattern, and the student's nervous system responds with altered muscular responses. Gradually, with repetitions and variations, the student assembles or synthesizes—mostly at an unconscious level—a new neuromuscular image of movement which can later be translated into active performance. At the end of a session the practitioner helps the student to integrate the learning in everyday life through alternative movements based upon the lesson's functional theme and through verbal suggestions.

In recent years Feldenkrais has become well-known for his work with brain-injured children and adults, but he is equally respected in the theater and dance worlds for performance training. Many people have sought his aid for muscular and joint problems, and others for personal growth. By working with the whole person, Feldenkrais's techniques promote self-esteem and learning skills.

Within this broad educational context Feldenkrais focused especially on the unconscious sensory-motor experience that lies beneath the surface of human behavior. This includes but is not limited to: (a) sensations of the muscles and joints; (b) the sense of gravity, balance, space, and time; (c) kinesthetic associations; (d) motor skills and competencies; and (e) self-image. Feldenkrais spent a lifetime exploring and revealing the inexhaustibly rich, multidimensional world of human movement (Note 1). 

A PARALLEL AWARENESS OF MOVEMENT

One of the most striking parallels between Feldenkrais and Erickson is that the origin of their awareness of movement was grounded on their personal discoveries while overcoming physical traumas that impaired their movement abilities. Erickson said:

---

Note 1: This text is a summary of the work of Moshe Feldenkrais, a pioneer in somatic education and movement therapy. For detailed information, refer to the original sources or specialized books on Feldenkrais' work.
I had a polio attack when I was 17 years old and I lay in bed without a sense of body awareness. I couldn't even tell the position of my arms or legs in bed. So I spent hours trying to locate my hand or my foot or my toes by sense of feeling, and I became acutely aware of what movements were. Later, when I went into medicine, I learned the nature of muscles. I used that knowledge to develop adequate use of the muscles polio had left me and to limp with the least possible strain; this took me ten years. I also became extremely aware of physical movements and this has been exceedingly useful. People use those telltale movements, those adjustive movements that are so revealing if one can notice them. (Haley, 1967, p.2)

For many years Feldenkrais's knee injuries were a major problem in his life, sometimes confining him to bed for weeks at a time. He knew that certain movements aggravated his condition, but only intermittently. Therefore, he felt that there must be some unconscious aspects of his movements which contributed to reinjury and which he could correct if he developed sufficient awareness. He lay in bed experimenting with tiny movements so that he could feel the subtle subconscious connections between all parts of himself. He studied biology and the neurosciences which supplemented what he had learned from physics and from his training in judo. In this way Feldenkrais reeducated his own movement habits and learned to walk efficiently and painlessly. In the process he learned a great deal about learning itself.

Thus, both Feldenkrais and Erickson had the intense motivation and curiosity to undertake the extraordinary project of becoming precisely aware of their own muscular efforts and movement. They learned to sensitize their feelings to that twilight reality at the boundary of intention and muscular action, emotion and sensation, conscious and unconscious experience and expression. Through a subjective, inner process of discovery they each acquired the perceptiveness to observe the subtle reflections of life in the visible and palpable body. Their experience of discovering and utilizing their personal resources prompted the vision that now awakens these resources in others.

A PARALLEL PHILOSOPHY OF LEARNING

While neither Feldenkrais nor Erickson espoused a "theory" per se, a working philosophy of learning is discernible throughout their writings. This philosophy is essentially a positive and growth-oriented, and hoes beyond the therapeutic dichotomy of sickness and health. In fact, the work of Feldenkrais and Erickson is as much transformational as it is remedial.

Learning entails going beyond one's limitations. One senses in Feldenkrais's and Erickson's work a tremendous enthusiasm and confidence in people's ability to learn. Yet, they lament, people limit themselves instead of using their potential. Erickson noted, "when we were very young, we were willing to learn. And the older we grow, the more restrictions we put on ourselves" (Zeig, 1980, p.75). Similarly, Feldenkrais remarked that as people get older "movements or actions are gradually excluded from their repertory" (1981a, p.xii). In order to convince people of their potential, Feldenkrais and Erickson often reminded them of the learning they did as children: learning to stand up, to talk, learning the alphabet, learning about the body and sex (Feldenkrais, 1981a; Zeig, 1980). These learning parables are woven into Erickson's inductions and Feldenkrais's lessons as affirmations of the fact that people can learn.

Both men attached importance to the therapeutic and self-actualizing value of human learning; they demonstrated how learning new abilities can lead to such positive transformations that symptoms spontaneously disappear. The key is that learning builds self-confidence. Erickson said, "Most neurotic ills come from people feeling inadequate, incompetent" (Zeig, 1980, p.222). And according to Feldenkrais, what makes therapies effective is that "your acts and responses must contain, even in your
expectations or imagination, feelings of satisfaction and pleasurable achievement or outcome" (1981a, p.37). They carefully and masterfully created learning situations which established a foundation of success so that feelings of accomplishment could generalize to other situations (Feldenkrais, 1981a, p. 92; Zeig, 1980, p. 314).

For Feldenkrais and Erickson, learning is not fundamentally an intellectual process; Learning is a sensory motor process involving the entire self, and results from doing. Feldenkrais quotes an old Chinese saying: "I hear and forget. I see and remember. I do and understand" (1981a, p. 89). Erickson said, "The thing to do is get your patient, any way you wish, any way you can, to do something" (Zeig, 1980, p.143). Both Feldenkrais and Erickson were men of action who enjoyed the life of the body. Erickson's polio, despite the physical restrictions it caused, seemed only to heighten his appreciation for physical experience. Telling a client to climb Squaw Peak was an example of one of Erickson's prescriptions, parallel to Feldenkrais's more general emphasis on physical activity.

The concern for experiential learning is reflected in the way Feldenkrais and Erickson trained students to practice their methods. Erickson taught that learning hypnosis was like learning to swim: You have to get in the water (personal communication, November, 1979). Most people spent their time in an Erickson seminar "in the water". Likewise, Feldenkrais's training programs bear little resemblance to academia where objective knowledge is often dissociated from subjective experience. Instead, Feldenkrais creates a personal learning context where students have the opportunity to discover in themselves the kinesthetic sensitivity he learned through the work he did with himself.

Underlying these methods of experiential learning is the assumption of somatopsychic unity which has profound implications for everyone in the helping professions. This unity is the basis for psychic complaints "surfacing" in the body and for neurotic complaints disappearing as a result of physical improvements. Out of the experience of their own integrity, both Erickson and Feldenkrais transcended the traditional mind/body dichotomy and saw human beings as fundamentally whole. Thus, Feldenkrais emphasizes that he does not touch bodies but rather persons. And when Erickson spoke to a person's unconscious mind, he was likewise relating to a whole person.

Learning and the Unconscious

Erickson described the unconscious as "made up of all your learnings over a lifetime, many of which you have completely forgotten, but which serve you in your automatic functioning" (Zeig, 1980, p.173). Feldenkrais said, "Immense activity goes on in...us, far greater than we appreciate or are aware of. This activity is related to what we have learned during our whole life from inception to this moment" (Feldenkrais, 1981a, p. 6).

There is a special, other kind of "learning": phylogenetic knowledge, learning acquired and passed on through evolution over countless generations. When Erickson taught the little bedwetting girl to control her urination by imagining being frightened, he used reflexive, phylogenetic potentiality that with awareness she could learn to utilize (Zeig, 1980, p. 82). Similarly, many Feldenkrais techniques are based upon utilization of latent, neuromuscular phenomena, including tonic and righting reflexes, grasping and sucking, protective reactions, and muscular synergy. Thus, for Feldenkrais and Erickson "the unconscious" is not the reservoir of difficult-to manage instinctual impulses depicted by Freud, but a life-sustaining activity which supports our thinking, feeling, sensing, and acting. Accordingly, many of their techniques are designed to reduce the interference of overly conscious direction and will.
Curiously, in light of the foregoing discussion, Feldenkrais rarely if ever uses the term "unconscious"; he refers instead to the biologically specifiable entity, the nervous system. However, he speaks of the nervous system in a way that is comparable to Erickson's use of "the unconscious". When giving lessons, Feldenkrais will say, "Don't you decide how to do the movement; let your nervous system decide. It has had millions of years of experience and therefore it knows more than you do" (Note 2). This injunction parallels Erickson's characteristic induction: "You don't know what all your possibilities are yet. Your unconscious can work on them all by itself" (Erickson & Rossi, 1979, p. 46).

Organic and Hypnotherapeutic Learning

Feldenkrais's philosophy of learning is perhaps best expressed by what he call organic learning. Organic learning is related to the physical development of the body and nervous system codependent interaction with the outer world. The first few years of life display the most intense expression of this learning which is linked with organic growth. However, for human beings, there is no limit to potential growth since neurological growth is concomitant with new learning and is, in effect, the direct continuation of our embryological and infantile ontogenesis. Unfortunately the social norm is for organic learning to stop at puberty except in the social sphere. The personal somatic functions usually become arrested in their development or gradually deteriorate, causing a host of preventable somatopsychic difficulties from ulcers to backache.

The parallel between organic learning and Erickson's hypnotherapeutic learning is that each represents an inner-directed, highly personal learning process which unfolds the individual's potential. This process lies at the heart of how the person experiences and regards him or herself. Both of Feldenkrais's methods (Awareness Through Movement and Functional Integration) are intended to reinstate the self-perpetuating movement of organic learning. They lead the student through primal sensory-motor pathways and forests of discovery where the nervous system has retained the memory of, and thus the competency for free and natural movement. Analogous to Erickson's hypnotherapeutic learning, this process of reconnection with the inner, intelligent, sensory-motor self reinforces the impulse of growth, individuation, and creativity. The essence of both organic learning and Ericksonian learning is that they are self-directed. As Erickson relates:

I didn't know what her problem was. She didn't know what her problem was. I didn't know what kind of psychotherapy I was doing. All I was a source of weather or a garden in which her thoughts could grow and mature and do so without her knowledge. The therapist is really unimportant. It is his ability to get his patients to do their own thinking, their own understanding. (Zeig, 1980, p. 157)

Similarly, Feldenkrais has called himself "a funny sort of teacher who doesn't teach, yet the students learn" (Note 2). The two methods thus create the conditions that nurture the flowering of individuality and self-realization.

PARALLEL TECHNIQUES

Creating a Learning Context

Analogous to some of Erickson's "reframing" procedures, Feldenkrais often resituates his students' problems in a learning context. For example, a woman approached Feldenkrais to be treated for her scoliosis. Feldenkrais told her that he would not deal with her "scoliosis" since many therapists had already tried unsuccessfully to "correct" her spine. She could, of course, go to a surgeon; but if he straightened her spine surgically, she would surely lose mobility. Feldenkrais explained that he could help her to learn how to move without pain and with ease in all cardinal directions. Furthermore, by learning how to perform functionally symmetrical movements, she would learn to appreciate in herself and improved skeletal organization and, in effect, learn to "straighten" herself.
Feldenkrais's learning orientation is atypical of most somatic approaches which (a) diagnose and isolate specific structural or physical problems; and (b) attempt to cure or correct these problems; by (c) administering authoritarian, directive forms of manipulation and behavioral prescriptions. In contrast, Feldenkrais (a) situates the problem in terms of the availability or unavailability of choices and options open to the person; (b) engages in a mutual search for new options of behavior and experience which can lead to more favorable outcomes; and (c) utilizes already present competencies and works indirectly to support the person's ability to discover solutions through awareness and learning. In the following sections I describe how this general approach is embodied in Feldenkrais's techniques which parallel those of Erickson.

Utilization

The "utilization principle" (Erickson & Rossi, 1979) is recognized as central to Erickson's work, and it is likewise important in understanding Feldenkrais. Feldenkrais and Erickson often match the student-client's ongoing experience and behavior in order to facilitate learning and change. In one dramatic example, Erickson joined in with the agonized chant of a terminally ill cancer patient in order to induce hypnotic anesthesia (Zeig, 1980, p. 185). Once I saw Feldenkrais work, rather grossly I thought, with a small boy with an athetoid form of cerebral palsy until I realized he was matching the child's rhythm and quality of movement; the boy was able to learn far more easily from this resonant pattern than from very smooth movements which lay outside his range of experience. Bandler and Grinder (1975) have discussed utilization in terms of "pacing and leading" and say that in pacing, "the hypnotist is making himself into a sophisticated biofeedback mechanism" (p. 16). Feldenkrais's methods indeed exemplify a sophisticated biofeedback mechanism. Functional Integration creates a direct kinesthetic linkage whereby the practitioner and student become "a new entity", joined by the hands of the practitioner (Feldenkrais, 1981a, pp. 3-4). Feldenkrais kinesthetically "paces and leads" the students breathing, muscular tonus, rhythm, and other subtle qualities and styles of minimal neuromuscular behavior.

Feldenkrais's movements often accentuate the student's way of holding the body; his hands shape themselves to the musculoskeletal contours, supporting and exaggerating what is already being enacted and taking over the student's own muscular effort. For example, Feldenkrais might lift and support a pupil's hunched shoulders or tightened lumbar arch. Once, while working under Feldenkrais's supervision, I was attempting to release a muscle spasm in an elderly woman's pelvic muscles. He came over to me, put his hands on mine, and I felt his and my hands merge with the woman until the three of us were moving as on "ensemble". As her spasm released and her pelvis began to softly move, Feldenkrais rhythmically intoned, "Don't contradict her nervous system. It is very intelligent. It has been making life feasible for this woman for 76 years. Help it to do its job" (personal communication, April, 1979). For Feldenkrais, muscular tensions are intelligent, useful behaviors that serve some purpose to the person.

Utilization means cooperating with these unconscious patterns and adjusting to the individual so that "we can all do our own learning in our own way" (Zeig, 1980, p. 224). Thus it may be helpful to lengthen further the side of the body which is longer, or twist the student in the habitual direction of musculoskeletal torque; this establishes rapport with, and enables reorganization of those individual-specific patterns which are often called "symptomatic". Paradoxically, when a person is pushed sufficiently in his or her own extreme, it begins to feel right for the person to spontaneously correct his or her posture. For example, if a man habitually carries his head to the right, by gently increasing his natural "bent", his own "biofeedback" will redirect him toward more symmetrical functioning. However, if the man were corrected directly, he would perceive it in his self-image as an unnatural movement to the left and his unconscious bias might undermine the correction. In another instance,
Feldenkrais taught a student to open an eye which could not open properly by exaggerating the eye's closure, thus rendering the movement of opening, however slight, more perceptible. Even as a young man, Feldenkrais only played football with him until one day the boy insisted on his own, that they do some math homework together. In this case, utilization of the boy's rebellious feelings toward his father and his positive feeling for sports were the means to carry him beyond his learning block Note 3).

Indirect and Paradoxical Techniques

Erickson was well-known for employing indirect and often paradoxical techniques in hypnosis and psychotherapy. As in some of the examples already discussed, Feldenkrais, too, avoids direct and obvious approaches and believes that an indirect solution is often the most effective and elegant one.

For example, in Functional Integration Feldenkrais often works only with the "good" side and not the injured or restricted side of the body. A person with an injured leg depends heavily upon the "good" leg which, therefore, often becomes strained from doing the work of two legs. Working on the "good" leg helps the person to move easier and gives the "bad" leg a chance to rest and heal. In addition, passively lengthening and shortening the "good" leg effects an isomorphic, reciprocal movement on the opposite side of the pelvis and spine; thus, the "bad" leg undergoes the same movement but indirectly. Indirect movements can bypass protective reactions which may be considerable in cases of pain and trauma and help teach the person how to move in a healthful manner.

Feldenkrais's "artificial floor" technique illustrates how he can elicit the learning of whole functions through partial cues conveyed through any part or parts of the body (Feldenkrais, 1981a, pp. 139-142). With a pupil lying supine on the work table, Feldenkrais applies subtle pressures to the sole of the foot with a flat board or book in order to "simulate walking on even ground" through proprioceptive cues. While on the table, the person probably has no conscious inkling of what is being learned; he or she is simply absorbed in pleasant kinesthetic sensations. However, upon getting up and walking, the pupil will appreciate that his or her nervous system has undergone a substantial reorganization in its "image" of walking. In this manner Feldenkrais teaches "sensory-motor excellence to normal individuals and to individuals with problems such as cerebral palsy.

Feldenkrais's indirect techniques are made possible by what neurophysiologist Karl Pribram (1971) has called the "hologramic" nature of the nervous system whereby each part expresses an image of the whole. This idea also helps explain Erickson's ability to "mind read" from minimal cues. Feldenkrais's and Erickson's techniques represent a refinement of what we all observe in nonverbal communication: the signaling of intentions through partial and initiatory actions. We follow a person's attention through eye movements and posture; the readiness to speak—or even its content—is conveyed by changes in a person's mouth or breathing; and so forth. By extension we can conceive how, by delicately moving a cellist's scapula, one could not only "relax" the musician, but much more precisely, convey the means to bow the instrument in a new way. Every motor skill is inscribed in a global pattern of organization in the person's body and nervous system. Erickson pointed out, for example, that writing is an action of the entire body (Zeig, 1980, p. 319). Accordingly, our wealth of lifelong motoric learning has created a kinesthetic matrix of associations as individualized as "our own linguistic patterns, our own personal understandings" (Zeig, 1980, p. 78). The efficacy of these indirect learning techniques is therefore dependent on a Feldenkrais practitioner's ability to "speak" with the hands in a way that the individual student kinesthetically understands.

Pattern Interruptions

"Differentiated" and "nonhabitual" movements form a group of Feldenkrais techniques which can be understood as analogous to Erickson's pattern interruptions. Just as Erickson often prescribed out of the
ordinary behaviors and even engineered situations in order to shake people out of their patterns, Feldenkrais often creates sufficiently novel and unfamiliar learning situations to do the same. "Differentiated" movements may refer to moving the eyes, head, shoulders, and pelvis in separate directions; "nonhabitual" movements may consist in simply reversing one's habitual way of interlacing the fingers or being asked to perform unfamiliar and familiar movements in novel positions. The situation of learning something radically new produces a major shift in the brain and often induces a trancelike state reminiscent of Erickson's "confusion technique". Feldenkrais's differentiated and nonhabitual movements are modeled on the organic, experimental learning of children.

Normal motor development follows a rhythmic course of increasing differentiation and synergistic integration. For example, discrete movements of the extremities are differentiated from global actions involving the entire; discrete finger movements are differentiated from undifferentiated hand movements such as grasping, with each succeeding differentiation supported by integrated activity of the whole body. In cases of abnormal development such as cerebral palsy, Feldenkrais may initially go with, and pace a person's spastic, undifferentiated functioning that displays the action of "higher" neurological inhibition. In cases of stroke or even stress-related muscular tension, people regress to less differentiated functional states; and differentiation must be reacquired. Again, Feldenkrais's approach is to "pace and lead", shifting between undifferentiated and increasingly differentiated patterns.

Nonhabitual and highly differentiated movements displace a person from his or her customary mind and body "set". The person who, for example, has back trouble or is depressed is transported to a novel situation where he or she has not already learned how to have this problem (Baniel, personal communication, July, 1983). The new way of acting is therefore not tainted with recollections of inability and discomfort. When learning, we disengage from customary patterns and awaken to discover ourselves capable of doing things formerly believed impossible.

Hypnotic Communication

Functional Integration as described by Feldenkrais certainly evokes the image of trance experience:

Functional Integration turns to the oldest elements of our sensory system- touch, the feelings of pull and pressure, the warmth of the hand, its caressing stroke. The person becomes absorbed in sensing the diminishing muscular tonus, the deepening and the regularity of breathing, abdominal ease, and improved circulation in the expanding skin. The person senses his most primitive, consciously forgotten patterns and recalls the well-being of a growing young child. (1981a, p. 121)

Similarly, the Awareness Through Movement extract at the beginning of the chapter calls to mind many Ericksonian patterns of hypnotic communication, including embedded and indirect suggestions. And, the effect of the lesson is certainly "hypnotic". Yet, interestingly, Feldenkrais does not refer to "hypnosis" or "trance" either in practice or theory, His language is situated in the context of human movement learning, and it is sensory-based. "States of consciousness" are invoked primarily insofar as they are embodied in sensible qualities of activity. In actual practice this is not as restriction as it may sound since movement is an expression of the self.

Feldenkrais's parallel "hypnotic" approaches may be summarized as follows: (a) the induction of a positive, subjective state which is conducive to learning, including feelings of ease, comfort, reduced muscular tonus; (b) the sensitivity to an validation of self-experience; (c) the training of somatopsychic skills including imagery, memory, attention, physiological and neuromuscular control; (d) the utilization of life-experiential and species-experiential knowledge; (e) indirect approaches; (f) pattern interrupting techniques; and (g) emphasis upon mutual respect, codependent interaction and communication where practitioner and student reciprocally learn from each other.
An Illustration

Once Feldenkrais worked with a middle-aged man who had been in a wheelchair for 16 years after an automobile accident and subsequent spinal operation. His legs were spastic and he sat quite stooped with a depressed look on his face. Feldenkrais began by seemingly attempting to straighten the back directly, gently pushing with his hands into the middle of the kyphotic curve. As long as Feldenkrais supported him, the man sat erectly; but as soon as he took his hands away, he slouched into his original position. Clearly, the man's nervous system would reject any willful attempt, on his own part or anyone else's, to straighten his back.

Then Feldenkrais asked him to stick out his tongue and do the movement animals do to lap water (which involves a wavelike movement of thrusting the head forward). He was asked to repeat the movement slowly, reducing his effort, and making each movement more comfortable than the last. After resting, he was asked to repeat the movement with his face turned to the right, then to the left, and finally while moving his head slowly from one side to the other. As his movements gradually involved more of his spine and entire self, minute by minute he sat more erectly in his chair; and after about 15 minutes, he sat with his head held high and an alert, pleasant look on his face. Feldenkrais then pointed out that his legs were relaxed and no longer spastic. Next, Feldenkrais had the man lie down on the table on his back; and in the process his legs became spastic once again. Feldenkrais asked the man to think of what he had been doing with his tongue. As the man imagined the movement of lapping water, his legs again relaxed. After working nonverbally with the man for about 15 minutes, Feldenkrais had him move back to his wheelchair. But as he started the effort of lifting himself, his legs again became spastic. After Feldenkrais reminded him of the tongue movement, he was then able to manage himself much more easily without his legs becoming stiff.

In order to understand the movement of lapping water, experience the movement yourself and observe what your head and neck do. You will discover that if you perform the movement slowly, gently, and repeatedly, your entire body will become involved in the act. Notice that although the active, intentional, and conscious movement is to thrust the head forward as the tongue reaches for "water", the relatively passive, unintentional, and unconscious phase requires straightening the cervical arch and taking the head into its most erect position. Thus, in light of what has been said, we can see that this movement is an indirect technique of learning improved posture and spinal organization; a utilization of the man's forward stoop in a pleasant-feeling movement; a pattern interruption of his usual manner of seeing himself and holding himself; a "naturalistic trance induction" involving repetitious movements and sensory-based suggestions for increasing ease, comfort, and satisfaction; and a utilization of latent phylogenetic and ontogenetic neuromotor patterns involving movements of the mouth and jaw in organic relation to the first cervical vertebra, the tongue, swallowing, breathing, and locomotion. Finally, we can see how the new movement quality can be used as a kinesthetic reminder-and a form of "posthypnotic suggestion"-for the possibility of increased ease and lightness of movement.

THE ARTISTRY OF FELDENKRAIS AND ERICKSON

Feldenkrais and Erickson are artists as well as therapists and teachers. As artist-scientists, they continually go beyond themselves and never abandon an experimental attitude. With their students they consistently attempt to provoke creativity, individuality, and originality of thinking. For example, when Erickson said that the practice of psychotherapy should be "charming and interesting", he was going beyond a solely practical, therapeutic frame of reference. He was challenging himself as an artist to be inventive as well as effective. Analogously, Feldenkrais directly compared his lessons to "procedures...in learning to paint, to play an instrument, or to solve a mathematical problem...Pianists..."
of genius when practicing...always...discover an alternative to the habitual" (1981, p. 95). Thus, over the years Feldenkrais developed literally thousands of different Awareness Through Movement and Functional Integration lessons, and Erickson displayed a similar virtuosity of styles and techniques.

A Teaching Seminar demonstrates how Erickson was able to find unexpected ways to humor and stimulate his students to "think in all directions" (Zeig, 1980, p. 128); and Feldenkrais, like Erickson, tells stories to teach flexible thinking as well as moving. He relates that he once was seated opposite a man on a train who was reading from a book held upside down. After a few moments of bewilderment, wondering if the man were crazy, joking, or only pretending to be literate, Feldenkrais asked him why his book was upside down. "Upside down?" the man replied. "How can a book be upside down?" The man had gone to a school in a small Yemenite village where there was only one book to a class. The children sat each day in a small circle reading their book from "all directions" (personal communication, March, 1979).

REFERENCE NOTES

1. For information concerning Feldenkrais's work and trained practitioners, contact the Feldenkrais Guild Office, 5436 N. Albina Ave, Portland, OR 97217 | 800-775-2118

REFERENCES
