

Awareness Through Movement

by Moshe Feldenkrais, D.Sc.

Man is an animal because of his structure. But he is the highest animal and a human being because of the functioning of his nervous system. The hand of man differs only slightly from that of an ape - in the position and movement of the thumb - but the nervous system of man allows him to do what an anthropoid ape cannot do: the fine, manipulative, specifically human movements such as writing, playing an instrument, counting bank notes, repairing a watch, or focusing a microscope.

TWO MODES OF LEARNING

Learning the two uses of the hand happens in two different modes. The common movements of the hands are spontaneous and improve with the growth of every normal animal - ape or man. The fine, human, manipulative skills, however, must be taught to every individual human being in a specific way and at a proper time. The specific mode of learning (perhaps the most important property of the human nervous system) is apparent not only in man's hands but in all his functions. Man's upright stance, his gait, his speech - all are learned and need several years of apprenticeship and then many

more years to achieve perfection. The ability to utter noises (i.e., the animal part of speech) improves with growth in both man and other mammals, but a person who grows to be an adult outside a human society may never reach the skill of an average human being. Animal instinct is phylogenetic learning, or the learning of the species; human learning is ontogenetic - i.e., it needs personal experience. In short, learning is to the human nervous system what instinct is to animals. Dogs, for instance, learn spontaneously all canine languages, and a Chinese dog can communicate with an American dog as well as with a Persian one. But a human nervous system "wired in" through personal, individual experience can speak only one language. The remaining two thousand or so tongues will remain forever foreign unless the individual engages in new learning. Instinct has certain drawbacks, as does human learning. Instinct is useless in a suddenly changed environment, or a completely new situation. The value of learning depends on the choice and the quality of what is learned. The human nervous system, however, in which the patterns of actions are wired in during the learning process and are not inherited (as are instincts), has a major advantage: relearning or re-education is comparatively easy.

MOVEMENT

The best clue to the activity of the human nervous system is movement. Tremors, paralysis, ataxia, impeded speech, and poor muscular control generally indicate injury or derangement of the function of the brainstem or other parts of the nervous system. Movement or its absence shows the state of the nervous system, its hereditary endowment, and its degree of development. Movement occurs only when the nervous system sends the impulses that contract the necessary muscles in the right patterns or assemblies and in the right sequences in time. When born, we can do very little voluntary movement besides crying and contracting all the flexors in an undifferentiated effort. We learn by experience how to roll, crawl, sit up, walk, speak, run, jump, balance, rotate, and do whatever else we are capable of performing as adults. Our consciousness becomes gradually adjusted to our surrounding environment. The first contacts with the outside world are through the skin and mouth. Later we learn to use the parts of our bodies separately and regulate them through seeing them. The major difficulty is differentiation of movements. Thus the fourth finger will remain clumsy unless we play an instrument or make a special point of learning to move it at will. Usually,

however, we manage to bring the all-or-none response of the primitive muscular contraction to a more or less perfectly differentiated voluntary activity. Normally, we arrive at this naturally, i.e., without being aware of the process involved, or of the state or degree of perfection achieved in our apprenticeship. The majority of us achieve a happy-go-lucky mediocrity, just enough to make us one of the many.

THE FELDENKRAIS METHOD

My technique of bringing about better maturation of our nervous system uses the reversible relationship of our muscular and nervous systems. Both have evolved in the gravitational field, which sets the standard both for the development and apprenticeship of each individual and also for the evolution of the species. The extraordinary development of the frontal lobes in man shows that the functioning of these is an evolutionary improvement and helps the survival of the fittest. This development of the human brain becomes effective through its growth after birth and is thus directed and molded through personal individual experience.

OPPORTUNITY AND VULNERABILITY

As a result, man has both the extraordinary opportunity - given to no other animal - to build up a body of learned responses and the special vulnerability of going wrong. Since other animals have

their responses to most stimuli wired in to their nervous systems in the form of instinctive patterns of action, they go wrong less frequently. Even more irritating, we have little opportunity to become aware of where we went wrong. Since we are the learner and the judge at the same time, our judgement depends on, and is limited to, our learning achievements. Obviously, to improve, we individuals have to better our judgment. But judgment is the result of learning already completed.

INCREASE IN SENSITIVITY

To break this vicious circle, we must use the basic quality of the supralimbic part of our brain, which is able to sense and abstract and often even express in words what is happening in our bodies. By reducing all stimuli to their bare minimum, we also reduce to its lowest value any change in our muscular system and sense. We thus increase our sensitivity to its maximum and can therefore distinguish the finer details that escaped our notice before. We are like a color-blind person to whom the ability to differentiate between red and green has been restored. Once the ability to differentiate is improved, the details of the self or the surroundings can be better sensed; we become aware of what we are doing and not what we say or think we are doing.

LESSONS IN THE METHOD

To begin with, the lessons take place

in the lying position, prone or supine, to facilitate the breaking down of muscular patterns. The habitual pressures on the soles of the feet and the ensuing configuration of the skeletal joints are suppressed. The nervous system does not receive the habitual afferent stimuli due to gravitation, and the efferent impulses are not linked into the habitual patterns. After the lessons, on receiving again the habitual stimuli, one is surprised to discover a changed response to them. The lessons are done as slowly and pleasantly as possible, with no strain or pain whatsoever; the main object is not to receive training in what one knows, but to discover unknown reactions in oneself and thereby learn a better, more congenial way of acting. The movements are light, so that after fifteen or twenty repetitions the initial effort drops to practically nothing more than a thought. This produces the maximum sensitivity in the person and enables him to detect the minute changes in the efferent tonus and the change in alignment of the different parts of the body. By the end of the lessons, one feels that his body in hanging lightly from his head, his feet do not stamp on the ground, and his body glides when moving. The head, which carries all the teleceptors - eyes, ears, nostrils, and mouth - and which turns right and left in almost every movement, attending to changes in the space around us, should turn with a smoothness unequalled by the most perfect man-made mechanism. Of all the teleceptors, the eyes also move right and left, relative to the head, and their movement in the direction

of the head's rotation or opposite to it should be gliding and easy.

RESULTS

Training a body to perfect all the possible forms and configurations of its members not only changes the strength and flexibility of the skeleton and muscles, but makes a profound change in the self-image and the quality of direction of the self.

TWO MAJOR TECHNIQUES

The method employs a manipulative and a group technique. The manipulative technique is necessarily individual and is custom tailored to fit the particular needs of the person. About thirty different positions of the body are used. Historically, the manipulative technique was the first to be evolved. The group technique was created to produce the effect of the manipulative teaching in the greatest possible number of people. (The word teaching indicates that the changes in self-image are produced by the pupil through becoming aware of his changed body image.) Lessons have been broadcast by Swiss Radio Zurich for two years. To date, nearly a thousand lessons of forty-five minutes each exist in Hebrew and a few hundred in English, French and German.

APPLICATIONS OF THE METHOD

By seeing all functioning as a manifestation of the nervous system, the Feldenkrais method has universal applicability. I have taught world-famous musicians, violinists, and pianists, such as the well-known conductor Igor Markevitch, who has used my services in the international course of orchestra conductors in Salzburg and in the opera of Monte Carlo for many years. In the last few years I have taught yearly for Peter Brook in his International Centre of Theatre Research in Paris, as well as in San Juan Batista, where he worked with El Teatro Campesino, and at the Brooklyn Academy of Music. The drama faculties of Carnegie-Mellon University, the University of Pittsburg, New York University, and many others have used my techniques. I have also done work with chronic ailments and deficiencies.

SEMINARS IN THE METHOD

The Feldenkrais Institute is located in Tel Aviv, Israel. Here teachers are trained in the manipulative technique in a three-year course, using the group technique. I have held seminars lasting a month or six weeks each in Washington, D.C., New York, Berkeley, and Big Sur; shorter seminars have been conducted in Chicago, Pittsburgh, and Seattle. Similar training has been given in Vancouver, B.C. (a special course for one hundred senior citizens), Montreal, London, Paris, Tokyo, and elsewhere. Workshops incorporating the method are periodically offered at Esalen Institute, Big Sur, California.

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