MIND AND BODY

Moshe Feldenkrais, Ph.D.

The way the mind and the body are united has preoccupied human beings throughout the centuries. "A healthy mind in a healthy body" and similar sayings show a conception of one kind of unity. In other teachings, the healthy mind *makes* a healthy body.

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

Let me substantiate this point by some examples:

1. It takes us longer to think the numbers from twenty to thirty than from one to ten, although the numerical intervals are the same between 1 and 10 and 20-30. The difference is that the amount of time needed for thinking the numbers is proportional to the time needed to utter them aloud. So one of the "purest" abstractions—counting—is inextricably linked with the muscular activity through its nervous organization.

In general, in counting objects we find that the motor elements of sight and speech keep down the speed of thought to their own rate of activity. Most people cannot think clearly without mobilizing the motor function of the brain enough to become aware of the word patterns representing the thought. It is of course possible with sufficient training partially to *inhibit* the motor aspect of the thinking and thus increase the facility of thinking.

2. Macular vision, that is, distinct, clear seeing, is limited to a very small area at a time. To perceive clearly the content of what we see while reading takes us the time necessary for the muscles of the eyes to scan the area under inspection. Here again, we see the functional unity of perception and motor function.

These examples indicate that an improvement in speed and clarity of thought may be obtained by reducing the extent of body movement and smoothing the performance of the muscular controls.

Jacobson asserts that when deep muscular relaxation is obtained, it is difficult, or even impossible, to think without noticing tension in some muscles. Even when picturing an object with closed eyes, one senses a tensioning of the eye muscles.

Also, note how persistently we retain the same thoughts and the same modes of action throughout our lives, for example, how we use the same patterns of the speaking apparatus producing the same voice so that we can be identified by it for decades on end. This is equally true of our handwriting, our carriage, etc.; so long as there is no marked change in these, there is no change in our jokes, attitudes and moods.

We have no sensation of the inner workings of the central nervous system. We can feel their manifestations only as far as the eye, the vocal apparatus, the facial mobilization and the rest of the body provoke our awareness. This is the state of consciousness!

There is little doubt in my mind that the motor function, and perhaps the muscles themselves, are part and parcel of our higher functions. This is true not only of those higher functions like singing, painting and loving, which are impossible without muscular activity, but also of thinking, recalling, remembering and feeling.

Let us consider feeling in more detail; I may feel joyful, angry, afraid, disgusted. I am buoyant, my breath even, my face at the point of smiling—I feel gay. My motor attitude is quite different when I feel disgusted—then my face is that of a man on the brink of, or immediately after, vomiting. I clench my lower jaw, my fists, my breath is held but pulse accelerated, eyes and head move in jerks, my neck stiff—I am angry and am ready to hurt, but I am trying not to let myself go. I am afraid, I scream, I am trying to get away or I am frozen stiff.

There is usually a motor pattern sufficiently clear even for an objective evaluation of the intensity of my feeling. Which comes first—the motor pattern or the feeling? The question has been the object of many famous theories. I stress the view that basically they form a single function. We cannot become conscious of a feeling before it is expressed by a motor mobilization and, therefore, there is no feeling so long as there is no body attitude.

RE-EDUCATION

There are two major roads for changing a person's behavior—either through the psyche or through the body. However, real change has to be brought about in a way which allows both the body and the psyche to be changed simultaneously. If the approach is not integral but through either the psyche or the body separately, the change will last only as long as the person has not lost the awareness of it, and has not resumed spontaneous habitual patterns. However, by scanning one's own body image, one can detect the return of the unwanted, habitual muscular function some time before it occurs, and can then either inhibit or facilitate it by an act of will.

The advantage of approaching the unity of mental and muscular life through the body lies in the fact that the muscle expression is simpler because it is concrete and easier to locate. It is also incomparably easier to make a person aware of what is happening in the body, and therefore the body approach yields faster and more direct results. On acting on the significant parts of the body, such as the eyes, the neck, the breath, or the pelvis, it is easy to effect striking changes of mood on the spot. I have achieved clear results with a group technique which can also be self-taught.

A few examples may be useful.

Mr. B. was in a mental institution for three years, where he had analysis and later was given electric shock treatment. He left the institution when no further improvement could be reasonably foreseen. When he was reeducated by our method to make only a few more or less normal breathing movements, he dreamt that he was in the bathroom, the walls of which suddenly fell apart, exposing him to onlookers. This dream continued for ten consecutive nights until a complete change in breathing took place. A marked beneficial change in the person's behavior occurred during those days, the forerunner of still further improvement.

Professor Z., who was one of the first psychiatrists to associate himself with my method, has published a remarkable case of a patient in one of his wards, about whom no useful clues were obtained after one hundred sessions of psychotherapy. At the weekly meeting of the medical staff, the somatic approach was suggested. The person was put in an embryo-like position and a certain degree of relaxation and improved breathing brought about. After four sessions a sufficient amount of significant information was obtained, providing a definite course of treatment. This example shows that for purposes of diagnosis, assuming the oneness of mind and body *and* working on the body provides a new outlook which reveals relations between apparently unrelated facts.

Old age, for instance, begins with the self-imposed restriction on forming new body patterns. First, one selects attitudes and postures to fit an assumed dignity and so rejects certain actions, such as sitting on the floor or jumping, which then soon become impossible to perform. The resumption and reintegration of even these simple actions has a marked rejuvenating effect not only on the mechanics of the body but on the personality as a whole.

STANDARDS OF NORMALITY

In my examination of the bodies of several thousand people before and during reeducation, I have found there are some norms for the definition of health and normality. In particular I have looked at the distribution of tonus throughout the bodies of these people. Though it is difficult to do full justice to these concepts of health and normality, in a few words, the general principles can be drawn.

For example, the head must have no tendency to move in particular directions. The "normal" head should have easy access to all directions of the anatomically possible range of movements. In fact, the factor limiting movements of the body in general should be the skeleton structure and not *muscular* tightness. Actually, every adult uses only a part of the theoretical possiblities of the human frame.

Also, the healthy coordinated movements of the body as a whole obey the mechanical principle of least action, which means the muscles are designed to work in step and perform their tasks with the least expenditure of metabolic energy. In view of these principles governing the operations of the whole human frame one can decide on normal and abnormal behavior.

To make these norms of normality have universal application, we must view human beings in their entirety. A person is made of three entities: the nervous system, which is the core; the body—skeleton, viscera and muscles—which is the envelope of the core; and the environment, which is space, gravitation, and society. These three aspects, each with its material support and its activity, together give a working picture of a human being.

There is a functional correspondence between the core, (the nervous system) and the outside physical world, or even the social environment. This relationship can be much closer and more vital than even between some adjacent parts of the nervous system itself. Think, for instance, of men going deliberately to face death in order to preserve an established social order. In this case, the ties of a nervous system to a social order may be

stronger than those with the body itself, so that some individuals sacrifice the first two parts of themselves to preserve the third. It is to ignore reality, if one intends to make a change in the behavior of a person and disregard, even for a moment, any one of the three constituents of existence.

The nervous system relates itself to the body through the nerves and the hormonal chemistry, and to the outside world through the nerve endings and through the senses, which give information about position in space, pain, touch and temperature. The nervous system has no *direct* perception of the outside world. What this means is that the distinction between the self and the outside world is a function which must be developed or learned. The system slowly and gradually sorts out the signals of information coming in from the body and from the outside, and recognizes which is which.

The development of this process leads to a clearer and clearer distinction between signals derived from the body (the self) and those derived from the outside world. The former become known as "I" and the latter as "not I"—this is the beginning of consciousness. By learning to recognize how our bodies are oriented we come to know ourselves. Subjective and objective reality are thus organically dependent on the motor elements (the nerves, the muscles and skeleton) which are oriented by and react to the gravitational field.

Gravity is a major aspect of reality and plays an important part in constituting our normality. But we are so accustomed to the gravitational field that we have to *learn* about its existence. The same is true of consciousness, which is continuous so long as the sequence of bodily orientational cues is uninterrupted. How organic this body orientation is to consciousness can only be realized when there is a break in the connection between them. When we wake up to consciousness after fainting or anesthesia, the first thought is "Where am I?" When there is a break in the sequence of orientational cues, as when we fail to find the expected next step, there is a momentary lapse of consciousness. The jolt is so violent that for a moment we lose the ability to direct ourselves.

The term orientation is used here in its widest sense, including the distinction between "I" and "NOT I" in the social field, with all its ramifications. And of course one can see more clearly in the skeleton than anywhere else attitudes of submission, of arrogance, of insignificance, or of importance. An immense field for inquiry is opened once the organic ties of social orientation are followed up into the muscles, nerves and skeleton. Not only can individual development or abnormality be followed through the body, but so can even wider cultural and racial differences in attitudes. The introversion, the nonattachment, and the indifference of the Hindu with corresponding looseness of hip-joints, and the extroverted, holding-on, time-is-money attitude of the industrial nations (with their utter inability to sit cross-legged), are a few examples. Of course, to soften and bring to normal one's hip joints, one must spend time, look at oneself, give up something, detach oneself from something else.

In human beings a "normal" action can be either unconscious and automatic or fully conscious and awared. Almost all activity which evolved phylogenetically with the human species is common to the entire animal world. This activity becomes more and more complex or awared with the higher members of the tree of evolution. Still, phylogenetically acquired activity is always expressed in abstract terms and is, therefore, unchangeable, as there are no means to affect an abstraction. On the other hand, individually acquired action (ontogenetic action) pertains to the senses. Such action can be altered or learned as one can become aware of actual differences, such as the extent of the effort, its coordination in time, the body sensation, the spatial configuration of the body segments, the standing, the breathing, the wording, etc.

This kind of awared learning is complete when the new mode of action becomes automatic or even unconscious, as all habits do. The advantage of a habit acquired by awareness is that when it shows unfitness or maladjustment when confronted with reality, it easily provokes new awareness and so helps one to make a fresh and more efficient change.

My inmost belief is that, just as anatomy has helped us get an intimate knowledge of the working of the body, and neuroanatomy an understanding of some activities of the psyche, so will understanding of the somatic aspects of consciousness enable us to know ourselves more intimately. Tension is self-destructive. In the future, we should be able to *direct* the forces that generate tension not just to release it, but in order to improve human functioning.

TECHNIQUES FOR INDIVIDUAL TEACHING

In individual teaching I use my hands to produce the desired alignment of the different segments of the body. The effects are very difficult to describe but some sort of idea can be given.

I never deal directly with the affected part or articulation of the body before I bring about an improvement in the head-neck relationship and in breathing. In turn, improvement in the head and neck and in breathing, cannot be achieved without correcting the spine and thorax configuration.

Again, to do this, the pelvis and abdomen must be corrected. In practice, therefore, the procedure is a successive series of adjustments, each one allowing a further improvement in the segment just dealt with.

Feldenkrais—demonstration on skeleton

Before using this technique, one must experience it oneself first, in order to acquire the necessary delicacy of touch and clear sense of which muscle group or segment needs attention first and which needs it at all.

The peripheral trouble is usually largely dissipated when the spine-head relationship is improved, so that very little work is necessary at the periphery to bring its functioning up to the level of the rest of the body.

I insist on 30 to 40 sessions on a daily basis and then two or three sessions a week until the major complaint is gone. Normally, in about fifty per cent of the cases, pains and inability to use a body part disappear before the daily sessions are over.

I begin with the person lying on his or her back. This position is meant to reduce most of the influence of gravity on the body, freeing the nervous system. The reaction of the nervous system to the pull of gravity is a habit, and under these circumstances, there is no way to bring the muscles to respond differently to the same stimulus, which is the major means of reeducating the body. Obviously, it is difficult to bring about any real change in the nervous system without reducing or eliminating the effect of gravity.

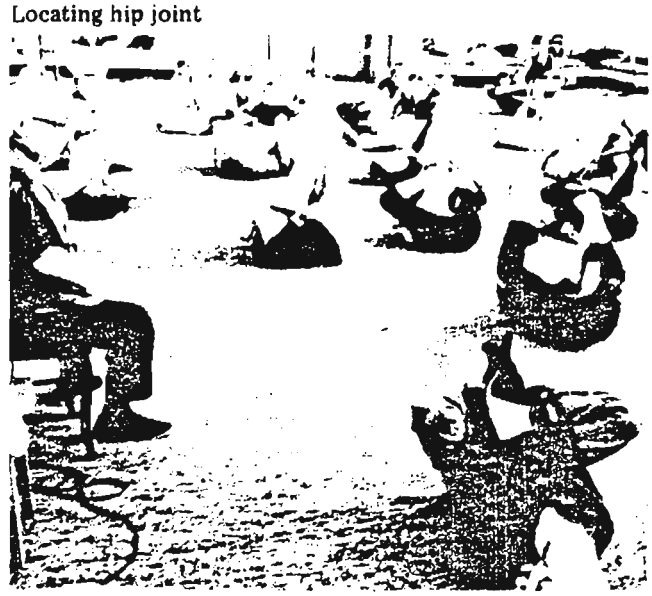
In due course I reach people by using thirty different body situations, going to sitting, standing, walking, and balancing on two wooden rollers. Some further details of individual work will become clear with the description of the group techniques.

GROUP TECHNIQUES

A group consists of 30 to 40 people. They may be people from the age of 15 to 60 or more. For example, a particular group I have taught consisted of men and women suffering from sciatica, discal hernia, frozen shoulders, and similar complaints. Most of the group were over 35 and had been wearing corsets for many years. Other groups may be composed of teachers, actors, singers, dancers, etc.

I begin by asking people to lie on their backs (after the same principle of reducing gravity) and learn to scan themselves. That is, they examine attentively the contact of their bodies with the floor and gradually learn to detect considerable differences—points where the contact is feeble or non-existent and others where it is full and distinct. This training develops awareness of the location of the muscles producing weak contact through permanent excessive tension, thus holding parts of the body up off the floor. Some improvement in tension reduction can be achieved through muscular awareness alone, but beyond that no improvement will be carried over into normal life unless people increase their awareness of the skeleton and its orientation. Here the most difficult joints are the hip joints. Awareness of the location and function

Locating hip joint



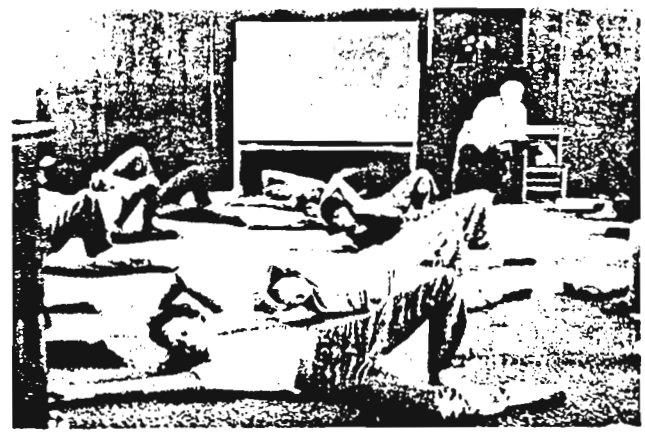
of these joints is nonexistent in western cultures, as compared with that of people who sit on the ground and not on chairs. The chair sitter is almost without exception completely out of place when locating the hip joints. Moreover, chair sitters incorrectly use their legs as if they were articulated at imaginary points in the body image and not where they actually are.

I usually make clear that the point of my work is to lead to awareness in action, or the ability to make contact with one's own skeleton and muscles and with the environment practically simultaneously. This is not "relaxation," for true relaxation can be maintained only when doing nothing. The aim is *not* complete relaxation but healthy, powerful, easy and pleasurable exertion. The reduction of tension is necessary because efficient movement should be effortless. Inefficiency is sensed as effort and prevents doing more and better.

The gradual reduction of useless effort is necessary in order to increase kinesthetic sensitivity, without which a person cannot become self regulating. The Fechner-Weber law shows clearly that this is so. This law states that for a wide range of human sensation and activity, the difference in stimulus that produces the least detectable difference in sensation is always the same ratio to the whole stimulus. For example, if I hold a 20-pound weight, I cannot detect a fly sitting on it because the least detectable difference of stimulus is from 1/20 to 1/40 and therefore at least half a pound must be added or subtracted from the carried weight to become aware of the change. If I hold a feather, the weight of a fly makes a great difference. Obviously, then, in order to be able to tell differences in exertion one must first reduce the exertion. Finer and finer performance is possible only if the *sensitivity*, that is, the ability to *feel* the difference, is improved. For this reason group work begins with small discoveries in muscle awareness.

Another important feature of the group work is the continued novelty of situation that is maintained throughout the course. Once the novelty wears off, awareness is dulled and no learning takes place. If a configuration needs repetition, I teach it in tens and even hundreds of variations until they are mastered.

All exercises are arranged to produce a neat change in sensation at the end of the lesson and usually a more or less lasting effect. This enables pupils to find connections between different parts of the body, as for instance between the left shoulder blade and right hip joint, or between the eye muscle and the toes.



Locating connections in the body

To produce the mental ease necessary for the reduction of useless efforts, the group is repeatedly encouraged to learn to do a little *less* well than is possible when trying hard to be less fast, less vigorous, less graceful, etc. They are often asked to do the utmost and then deliberately to do a little less. This is more important than it might seem. For if enabled to feel progress while not tensing, pupils have the sensation of being able to do better, which induces more progress. Achievements that otherwise may need numerous hours of work can be obtained in twenty minutes with this attitude of mind and body.

Special mention must be made of very small, barely perceptible movements that I use extensively. They reduce involuntary contraction in the muscles in an astonishing way; in a few minutes by working on one leg or arm, for example, it may be made to feel longer and lighter than the other. After the lesson the pupils keep on feeling what the new way of action is, and the sensation of the light and long member is continuously contrasted by the other which feels clumsy and awkward in comparison.

Very often one half—the right or left—is worked with during a lesson, and the other half is left as it was. Again, for hours afterwards, pupils carry with them two standards in their bodies—their habitual one, and the proposed better one. They keep feeling the difference until the clumsy side eases up. In this way students learn to ease up, so to speak, from within. This promotes the transfer of learning from the action worked on, to other actions, completely different. The transfer of learning is essentially personal and differs from one individual to the other. One may feel the change in speaking, another person in ways of attending or observing.

Another principle in the group technique is the scanning of the body image, which is done in two parallel ways. One way consists of producing a sensation of length, width and lightness in one side

of the body, by actually moving the body, as explained above. The other half of the body is brought to feel the same sensation by mental scanning *alone*. The mental scanning consists of listening and becoming aware of the difference of sensation in the motor memory of the muscles of the two halves, and the sensation of change of orientation in space.

The other way consists of scanning the body on *both* sides from the start; directing attention to the sensation of the distances between different parts of the body on either side until these sensations correspond to the actual difference.

Another part of the training focuses on improving voluntary movements. In all voluntary acts two phases follow each other so swiftly that it is difficult to note the time delay between one and the other. The preparatory phase is the mobilization of the body attitude needed for the action. The second phase is the performance of the action. Because there is a minute interval of time between these phases it is possible to learn to inhibit or enhance the preparatory mobilization by choice. When there is choice, we can either complete the action or else prevent it and cancel the preparatory attitude entirely. In the group, we work on clarifying the delay between the preliminary attitude for action and its completion. This clarification or awareness improves the fluency and voluntary control of movements.

Many exercises use induction, both positive and negative; the after-effects of prolonged, sustained efforts. For example, stand with your right side close to a wall and press against the wall with the back of your hand as if to push it away. After maintaining this pressure for about a minute, stop. Then leave your right arm free to do as it wishes, it will rise and lift itself to shoulder height with a peculiar lightness like floating. If you voluntarily lower your arm and leave it free again, the same thing will happen several times, but with decreasing intensity. This exercise shows how sustained effort can induce movement after the effort stops.

But whatever the exercise or the principle used, the lesson is so arranged that without concentration, without trying to sense differences, without real attention, pupils cannot proceed to the next stage. Repetition, just mechanical repetition without attention, is discouraged, made impossible in fact. Many exercises consist in attending to the *means* of achieving a goal and not to the goal itself, which is an important way of reducing tension. All these exercises aim at achieving mental and physical coordination and in particular good erect posture and correct action.

ERECT POSTURE AND CORRECT ACTION

There is nothing simpler than erect posture—it means a vertical straight line. But all such words, "posture" included, imply something rigid and static. And in fact, indeed, few people do justice to the flexibility of their bodies. On close examination it becomes clear that erect posture is actually dynamic with the body frame constantly readjusting itself, rather than being held in a fixed and rigid way.

Demonstrating erect posture

The real advantage of erect posture is ease of rotation around the vertical, that is, from right to left, or the other way around. This rotation widens the human horizon and also is naturally the most frequent movement of the head. During the evolution of the human frame, the most recurrent use made of the head was its turning towards the source of an external stimulus. The senses located in the head all have double organs—vision, hearing and smell. This is because two sources of data are needed to pinpoint the exact location of the stimulus. For example, the head turns toward a source of sound so that the two ears are equally stimulated. The head also turns to face a visual stimulus. The retinas are internally so connected that they are equally stimulated when we face the object which originally stimulated one retina more than the other. The same sort of thing happens with

odors, though this is a much cruder definition of direction and distance.

Thus our relation with anything outside, beyond what can be explored by the sense of touch, is determined through the movement of the head. All the information from the space around us comes through the head. And our relations with the world outside us affect the quality of the movement of the head most of all.

Numerous mechanisms in the nervous system organize these elementary functions of linkage with the environment, so that when one of the double organs is stimulated, the head rotates until we face the source of the stimulation. The head is rotated on the cervical spine and the twist elongates the skin, muscles and tendons on the left side of the neck when we turn to the right, and vice-versa. The lengthening or stretching of a fibre compresses a nervous fibre inside and this stimulation is used to organize the body so that it is ready to follow the head and face in the direction of the original disturbance in the environment. When the body follows the head, the twist of the neck is undone, the nerve fibres in the muscles of the neck are no longer compressed, and so the body has no more urge to turn.

Like the cervical or neck area, the lower part of the spine is capable of rotating around the central axis. Rotation in the rest of the spine is comparatively small. In both the upper and lower regions of the spine, nerve fibres report rotation of the head to the higher centres which see to it that the body is so organized, that it can rotate to reduce the twist and face in the same direction as the head.

In most people, their heads show clearly with which parts of the space around them they rarely make contact. And the carriage of the head is characteristic of the general bearing and manner of acting of each person.

Another aspect of erect posture is that it is a biological quality of the human frame and there should be no sensation of any doing, holding or effort whatsoever. For example, the lower jaw with all the teeth has an appreciable weight, yet we have some difficulty in becoming aware that we are doing anything at all to hold up the lower jaw. The *normal* state of the muscles of the lower jaw is a contraction just equal to the gravitational pull on the jaw. Voluntary movements add to or subtract from this permanent contraction. The muscles of the lower jaw, like most skeletal muscles, receive orders in the form of impulses from more than one source. The holding up is assured by antigravity mechanisms in the nervous system and there is no feeling of action, let alone effort, so long as the message to the muscles comes from the lower centers.

In the neck muscles, the same sort of thing obtains. Even though the head is quite heavy and its center of gravity is in front of the spinal column, there is no sensation of effort or action in holding up the head. This is because of the very considerable contraction of certain muscles to hold the head up. The whole body is prevented from falling forward by the calf muscles, but we sense no effort there either. Once again, these relationships show how erect posture is not a static state but a dynamic activity.

Actual posture is always the result of what the frame would do because of inherent mechanisms and of what we have *learned* to do by adjusting ourselves to our physical and social environment. The problem is that much of what we have learned is harmful to our system, because it was learned in childhood, when immediate dependence on others distorted our real needs. Long standing habitual action *feels* right, but our feeling is unreliable until we reeducate our kinesthetic sense to reality tested norms. How can this reeducation be done? We must first realize the benefits of improvements so that we will spare the needed time. But the benefit cannot be imagined until the improvement is sensed, so at first we must try simply out of curiosity. People whose vitality is at the lowest ebb will not try, and God himself cannot help them.

The body should be so organized that it can start any movement—forward, backward, right, left, down, up, or turning right and left without previous arrangement of the segments of the body, without any sudden change in the rhythm of breathing, without clenching the lower jaw or tensing the tongue, and without any perceptible tensing of the neck muscles or fixation of the eyes. When the body is organized in this way, the head is not held fixedly but is free to move gently in all directions without previous notice. If these conditions are maintained during an action, then even lifting the entire body is not sensed as an effort. To demonstrate this, bend your right index finger gently and observe the sensation of no effort. Then bend the wrist gently—the effort is the same as that of bending the finger. Now bend the elbow or gently lift the arm, or lower and lift the head or the trunk. In each case the sensation of effort is the same as that of lifting the index finger. But the work done to lift the finger is roughly 100 gr. cm., that of the wrist, 1000 gr. cm., that of the trunk, 500,000 gr. cm. When movements are made the sensation of effort does not increase proportionately to the work done, even within such wild limits as 1 to 5000 and for that matter 1 to a million. This is because the *sensation* of effort does not measure the work done but indicates the degree of *organization* producing the effort. This organization corresponds to the structure of the body. The

size and strength of the muscles increases from the periphery, such as the fingers, to the centre of the body. The *rate* of effort is, therefore, equal in all the parts at work. To lift or lower the trunk involves the muscles of the pelvis (such as the buttocks and thigh muscles with their enormous cross-section), as compared with those used in moving the fingers.

Finally, self-knowledge through awareness is the goal of reeducation. As we become aware of what we are doing in fact, and not what we *say* or *think* we are doing, the way to improvement is wide open to us.

There is still a vast field left unexplored in the realm of body and mind. But a useful start has been made that provides means to make considerable changes in behavior. There can be no *improvement* without *change*. Though help can be given when things go wrong, we cannot relax our efforts before teachers throughout the world will learn how to develop in their students, awareness of the unity of body and mind so that higher achievements than merely correcting faults can be arrived at. Training a body to perfect all the possible forms and configurations of its members changes not only the strength and flexibility of the skeleton and muscles, but makes a profound and beneficial change in the self-image and the quality of direction of the self.

BIBLIOGRAPHY

Cubley, S. "Feldenkrais and Yoga." *Yoga Journal*, October 1976.

Feldenkrais, Moshe. "Adventures in the Jungle of the Brain." *The Case of Nora*. New York: Harper & Row, 1977.

———. *Awareness through Movement: Health Exercises for Personal Growth*. New York: Harper & Row, 1972.

———. *Basic Feldenkrais Manual*. 1979.

———. *Body and Mature Behavior: A Study of Anxiety, Sex, Gravitation and Learning*. New York: International Universities Press, 1970.

———. *Fifty Lessons by Feldenkrais*. New York: Simon and Schuster. N.D.

———. "Mind and Body." Two lectures in *Systematics: The Journal of the Institute for the Comparative Study of History, Philosophy and the Sciences*, 2, No. 1 (June 1964) pp. 47-61.

———. "On the Primary of Hearing." *Somatics*, I, No. 1 (1976).

———. *Twenty Five Lessons*, Introduction. Israel: The Movement National Society, 1971.

Fox, C. "The Feldenkrais Phenomenon." *Quest*, II, No. 7 (December 1978).

Holmes, B. "Moshe's Healing Touch." *Runner's World*, August 1976.

Yochanan, Rywerant. "The Creative Process As Seen in Functional Integration." *Somatics*, I, No. 4 (Spring 1978).

Tapes: Big Sur Recordings, 2015 Bridgeway, Sausalito, CA 94965

Feldenkrais, Moshe. *Esalen Workshop*. 1972.

———. *Exploring Awareness Through Movement*. 90 min.