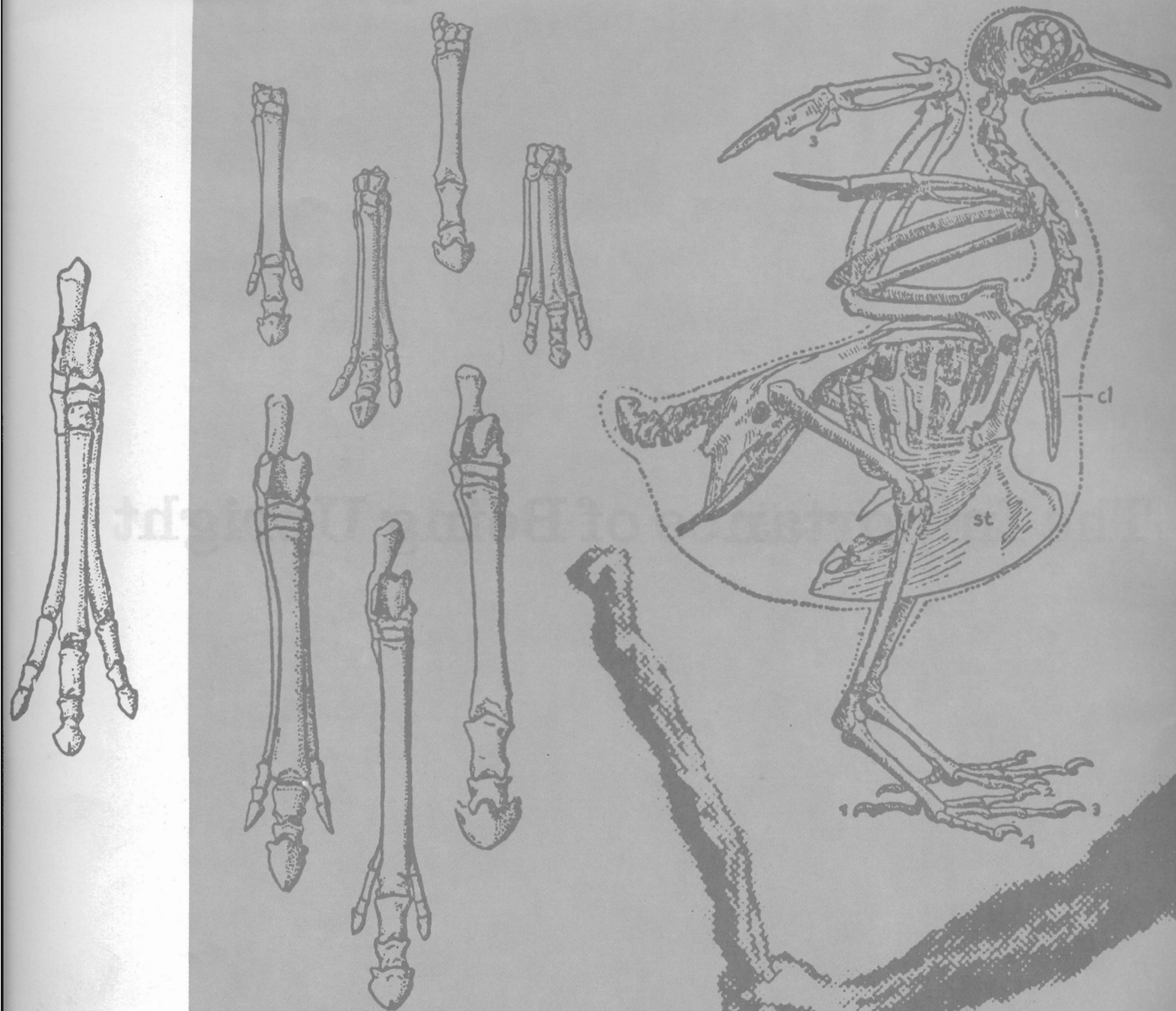


The Importance of Being Upright



The Importance

It is late afternoon in Tel Aviv, and Mediterranean sunlight slants into the plain hall where a varied group of individuals variously attired sit on coconut mats, lacing their toes. Their intent fiddling proceeds to the directions of a voice from the tape recorder on stage. The voice's owner is present and in charge—Dr. Moshe Feldenkrais, a powerfully built, light-footed man who prowls back and forth correcting, cajoling, occasionally scolding the pupils. He bears a resemblance to David Ben-Gurion, one of the more famous among the many people whom he has brought back to health.

His record of rehabilitation has already made Feldenkrais a byword in Israel and

has now begun to attract attention to his technique in Switzerland and other parts of Europe. In his firm opinion it's high time. As we watch the group coping, he observes, "There must be something good in an approach that can give a sense of personal development to people as different as that ballerina over there or this scoliotic boy who is now able to function as a human being again. More people should know about it."

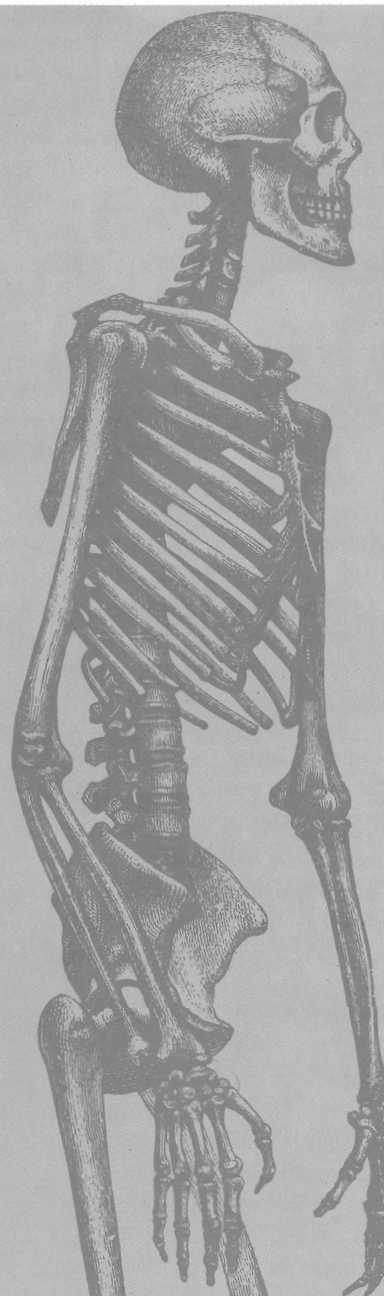
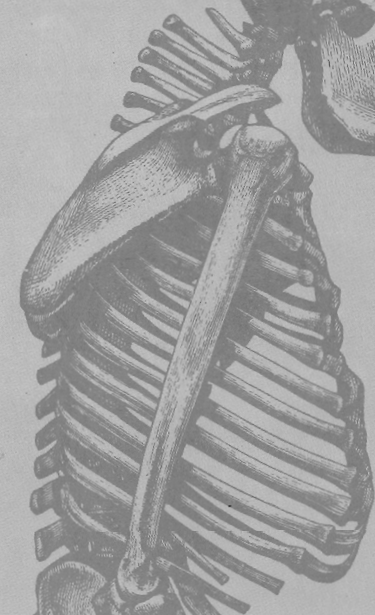
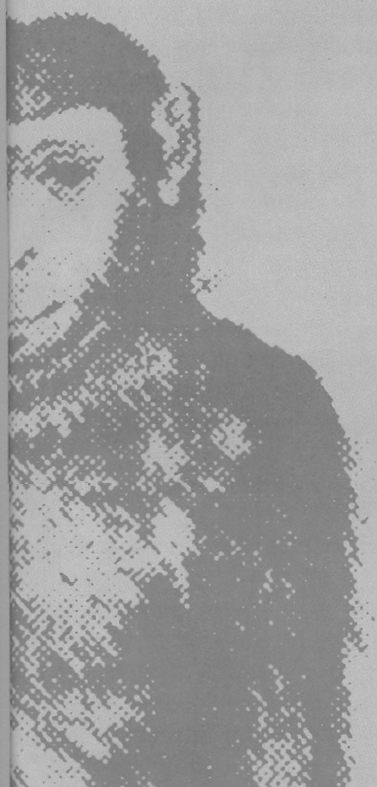
The Gravity of Our Situation

By his own say-so Dr. Feldenkrais does not "treat"—he "teaches." Some ingenious minds invent more efficient tools;

what he "invents" are more efficient people, by inducing a better relationship with our gravitational field. "The best stimuli arriving at the nervous system is from muscular activity constantly affected by gravity," Feldenkrais says. So the conclusion is that "posture is one of the best clues not only to evolution but also to the activity of the brain. From this insight he has evolved his working method based on mind-body environment.

Gravitation is a key factor in the Feldenkrais calls his working picture of a human being. That picture consists of our nervous system (the "core"), skeleton, viscera and muscles

"To live
is to function
and to respond."—
René Dubos,
*So Human
an Animal*



of Being Upright

velope"); and our environment—
pace, the social milieu, and gravitation.
ception of a human being can be
mplete, he insists, which ignores any
these constituents and their dynamic
dependence.

Very soon after we are born we begin
rting out the distinction between our
lf and the outside world. This is
rowth, and as our consciousness de-
lops we learn to differentiate between
e "I" and the "not-I," which implies
mong other things the ability to fix the
sition of the body in relation to its
roundings. This is both a particularly
al matter in man with his vertical pos-
e and quite impossible without some

motor background.

Apart from keeping the body temper-
ature and chemical balance, which is
automatic and beyond conscious con-
trol, the greatest part of our nervous and
muscular expenditure goes towards
maintaining equilibrium and motility in
the gravitational field—a survival func-
tion of the highest importance.

Here is where man proves specially
vulnerable. The growth of his brain after
birth gives him a greater opportunity
than any other animal to build up a
wealth of learned responses to stimuli,
but by the same token he can go wrong
more easily than any other creature.
Were, after we are not even aware

that the bad habits learned during our
formative years have imprinted us for
life, cutting down our potential drasti-
cally. "The fact that the end can, most
of the time, be achieved equally well,
irrespective of the amount of effort in-
volved in achieving it, is very fortunate,"
Feldenkrais concedes, "as it makes life
possible for a large number of imperfect
doers."

The whole point, however, is that
such waste is not only unnecessary but
may lead to an impairment of our ability
to function in the form of disease, or
what Feldenkrais prefers to speak of as
"deviations." Nor does it suffice to say
that an action "if it is done" is

kinesthetic sense has become warped along the way the statement is meaningless, since we lack objective norms to test it against. To take an example, how many of us can trace the outline of our mouth or chest in the air, eyes closed, with less than a 300% margin of error? Or who in the chairborne West actually knows where his hip joints are located?

"A complete image of oneself," says Feldenkrais, "giving the same clarity and importance to the body—in front, behind and all around—is an exceptional, indeed an ideal case." But one can work on it.

Feeling and motor pattern are inextricable. If one can act to the detriment of the other, it also follows that they can, indeed should, be mutually enhancing. Feelings are difficult of access, hard to correct. The motor patterns, on the other hand—the "body English" which is part and parcel of the quality of our emotions and thoughts—can be got at and corrected. On the premise that the unity of mind and body is an objective reality, the technique devised by Feldenkrais acts upon the soma (body) to influence the psyche (mind) at the same time. His approach, in short, is integral.

Comment Vous Portez-Vous?

The approach aims to transfer the objective working picture of a human being which we have described to the individual subject in such a way that he gains a more accurate image, hence greater control of himself. The source of that image is our built-in instrument console, the head. Here are located our teleceptors, the double organ senses that enable us to take bearings from the two ends of a base in order to define and relate to a point, as when we register a sound and then turn in response to it. Beyond the limited range of touch, our ears, eyes and nostrils link us with the outside world and "steer" us in relation to it.

The head turns on the neck, and the neck in turn draws along the spine and thorax with its breathing chamber. To function as they should these "segments" must be properly aligned. Technically, Feldenkrais formulates the correct action resulting from proper alignment as follows:

1. The trajectory of each bone of the skeleton is such as if the skeleton were pulled by the head or the extended arm into the final position;

2. The muscles operate in such a way as to bring about the final position dictated by that trajectory;

musculature, and the stress in each muscle is proportional to its cross-section;

4. These three conditions together fulfill the principle of least action, so that

5. the total work expenditure is minimal.

From these conditions, Feldenkrais postulates, one could write the differential equations for every bone and muscle! Less technically put, the body should be so organized that it can initiate any movement—forwards, backwards, upwards, down, to the right or left or turning—without sudden change in the rhythm of breathing, without clenching of teeth or stiffening of the tongue, tightening of the neck muscles or fixation of the eyes. Efficient movement should be effortless.

Put to the test, who demonstrates such fluency? How, for example, do we perform in this simple experiment:

Sit down and place your feet on a pair of bathroom scales. The scales will read about one-fourth of your total weight, i.e. the weight of your legs. Now rise from the sitting position with your feet still on the scales, standing up as you normally do, and watch how the pointer jumps beyond the point which is your actual weight. Only afterwards does it return to the true reading.

What does this prove? It shows that you have raced your motor in the act of getting up. If you had risen properly the scale pointer would have moved up gradually. Its jerky reaction shows that you have wasted energy because you are not in control of your body.

Indeed, Feldenkrais does not hesitate to assert that most of us "squander" our energy, utilizing a bare five per cent of our biological endowment. "Few people," he says, "do justice to the machinery they are." So corrective action is indicated, with rehabilitation—and release of capability—the aim.

Teaching People to Grasp their Reach

In Tel Aviv they come to Dr. Feldenkrais with ailments ranging from asthma to neuroses and migraine headaches to sciatica. He "teaches" both individually and in groups.

His individual practice resembles the doctor-patient relationship. With his gifted eyes and hands Feldenkrais diagnoses the condition and then uses his hands to produce the new alignment which will improve it, through what he calls a "successive series of approximations." It is very difficult to describe *how* he does this, but one thing the manipu-

technique, says Feldenkrais—and he is now training a select group of pupils to do so—one must first experience it oneself. "Through that experience one acquires the necessary delicacy of touch and the clarity of sensing which muscle group or segment needs attention first and which needs it at all."

The duration of the "teaching" depends, of course, on the severity of the deviation and also on the age of the pupil. As a rule of thumb Feldenkrais prescribes one daily session for each year of life up to the age of 60, with a follow-through interval of sessions at less frequent intervals until the major complaint is gone.

The groups which Dr. Feldenkrais personally supervises are made up of two classes of pupils: people suffering from particular complaints and other mainly active in the expressive arts such as dancing and so on, who wish to keep or improve their "form." For both categories the lessons, which last about 45 minutes, are designed to lead to "awareness in action." Typically they begin by having the subject lie on his back; in this position he is asked to "scan" his body until he becomes aware of where and how its various parts touch the floor.

After this inventory, which has given the subject a starting picture, as it were, the sequence of movements constituting the lesson is gone through. They may be done prone, on the side, sitting or standing—depending on the "neat change in sensation" which each lesson is designed to achieve. Feldenkrais has devised hundreds of them, deliberately, so that the person performing them never runs out of surprises—and illuminations.

One feature of the technique which has given the halt and the sluggish the courage to try it is the absence of drill. Never is the subject instructed to make that "extra try," and in fact straining for effect is expressly discouraged, for obviously, Feldenkrais says, "in order to be able to tell differences in exertion one must first reduce the exertion." By encouraging the pupil to do less well than he might, the method produces both the mental ease which is necessary for the reduction of useless effort and the sensation that one could do better, thus smoothing progress. This is not the same as relaxation, however, for, as Feldenkrais points out, "true relaxation can be maintained only when doing nothing."

The object in any case is not to compete against one's own limitations but rather to develop a more and more precise insight into *what* one is doing.

being brought into play, his breathing, the difference in fluency or range of movement between one side and the other, etc. He is in simultaneous rapport with his skeleton, his muscles, and the environment, and this schooling in the somatic aspects of his consciousness gradually heightens his self-understanding.

As experienced, the exercises are of a compelling logical simplicity and agonist-antagonist symmetry. There are built-in checks all along the way, the narrating voice "quizzing" the pupil on what he feels and then suggesting an interpretation—but *not* suggesting what he "should" feel. Each sequence, furthermore, is structured so as to allow

before-and-after comparisons, the difference illuminated by coming back full circle at the end to movements one was asked to execute at the beginning—and, often enough, could do but awkwardly. Suddenly the pupil discovers connections he had not known before—as between the left shoulder blade and right hip joint, or unlikely-seeming ones like the connection between the eye muscle and the toes.

Occasionally, only one side of the body will be worked with. This again gives the subject a standard to measure by, enabling him to "feel the difference," transfer what he has learned, and so ease up from within. The purest form of instruction is also the hardest to carry

out: "imagine only" lessons in which the pupil is asked to perform movements without moving a muscle outside his mind's eye. This is the sub-liminal quintessence of a technique which aims to develop inwardness, to the point of an awareness of one's body below the threshold of consciousness which will allow self-regulation. "My work is done," says Feldenkrais, "when I have brought a pupil to the position where he himself recognizes his new possibilities and can set about realizing them."

Happy Motoring to Maturity

Because of its sub-verbal character the technique is more convincingly tried out than written about. Yet Feldenkrais' method is a modern-day, practical approach to the perennial ideal of a healthy mind in a healthy body, and differs substantially from methods which it might at first appear to resemble—esoteric doctrines such as yoga, for example. There is no mystic component in this eminently down-to-earth teaching, nor is the pupil obliged to master a theory. The Feldenkrais philosophy is "western" in that it rests on scientific premises and can be expounded, repeated, and verified.

His teaching is also western in its basic optimism. It claims and demonstrates that nothing is permanent about our behavior patterns except our belief that they are so. And it offers the individual of every age a way of working on his own development, of integrating his physical and mental equipment towards greater maturity. What Dr. Feldenkrais understands by this fulfillment he describes thus:

"Maturing usually conveys the idea of reaching a stationary stage where no further change takes place. This introduces an element of fixity which is contrary to the dynamics of life. My contention is that in properly mature persons no faculty and no articulation is so utterly excluded from use directly or indirectly as to render it unserviceable. What I understand by maturity is the capacity of the individual to break up total situations of previous experience into parts, to reform them into a pattern most suitable to the present circumstances, i.e. the conscious control effectively becoming the overriding servo-mechanism of the nervous system. Maturity, in that sense, is an ideal state where the uniqueness of man, his capacity to form new responses, or to learn, has reached its ultimate perfection."

Numerous people who have come alive the Feldenkrais way can and do



Moshe Feldenkrais

He is a literal incarnation of creative response to the ancient injunction, "Physician, heal thyself"—the irony of it being that he is not even a medical doctor.

Born in former Russian Poland, Feldenkrais emigrated as a young man to Palestine, afterwards studying in France, where he took his doctorate in physics and became an associate of the great Joliot-Curie. He was an outstanding judoka (black-belt) and footballer, and football decided his fate in the form of a knee injury which he sustained while playing.

How fateful he realized in 1940 when, in Britain working on anti-submarine warfare, he consulted a Glasgow surgeon and was told that an operation, which should have been performed years before, would now have only a fifty-fifty chance of success. The odds were not good enough for Feldenkrais; he went to bed, analyzed the situation, and resolved to teach himself to walk anew. Which he did, steeping himself at the same time in the literature on anatomy, physiology, psychology, anthropology. Out of this autodidactic storm, and his perception of what the books failed to teach, came his own original method of schooling the human consciousness with its motor apparatus.

Back in Israel after the war, he took the decision to give up altogether the paramilitary assignments in which his scientific expertise had continued to involve him and to devote himself to teaching the new technique. In 1949 he published "Body and Mature Behavior." Over the past 25 years hundreds of pupils have taken in-