

FEATURE : ON THE GROUND



WHAT DOES MOSHE FELDENKRAIS MEAN BY 'MANIPULATION'?

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...manipulation—it means the way you organize your movement—in the human it means knowing what you are doing (Moshe Feldenkrais)

Introduction

As Feldenkrais practitioners we inherit a number of key terms from the founder of our method, Moshe Feldenkrais. One of these terms is 'manipulation'. The etymology of the word manipulation comes from the

Latin *manipulus*, the root of which is *manus* or hand. This set of associations is given in the *Oxford English Dictionary* definition of manipulation:

The action or an act of manipulating something; handling; dexterity. Also (occasionally): the making of hand motions.

For reasons we discuss, Moshe emphasized this semantic connection between manipulation and how skilfully we (Feldenkrais practitioners) use our hands. He would have agreed with Bronowski's (1973, 115) proposition that:

The world can only be grasped by action, not by contemplation... The hand is the cutting edge of the mind.

One of the benefits of studying especially the transcripts (and not just the recordings) of the Trainings that Feldenkrais offered is that it gives us time to take in and ponder his statements which can be somewhat

rambling, elliptical, and suggestive. His mode of talking is that of story-telling and, while in this mode he calls on the relevant science of the thing, he does not offer a conceptually explicit and logically ordered exposition of the science. As we shall suggest it is in the nature of the material with which Feldenkrais is working to defy the linear and logical exposition of a concept because he wants how we think about our possibilities for more refined and autonomous agency to be informed by experience.

So, when in our San Francisco Training Study Group, we encountered Feldenkrais talking about manipulation, we both became aware that maybe our prior understanding of this term was not adequate and that something very interesting and exciting is going on with how he uses this term there. As we shall show in a moment, he identifies 'manipulation' with the human capacity for self-organization, and specifically, with a learnt capacity for the ongoing refinement of this capacity for self-organization. In this respect, and in relation to the other components of human agency that Moshe Feldenkrais identifies (orientation in space and time, thinking, moving, feeling and sensing), it is manipulation, understood as 'the way of performing

the thing', that seems to be the integrative dimension of such agency.

As we have suggested, Feldenkrais's use of ideas or concepts such as manipulation, and indeed, more broadly his engagement with words, is complex because he insistently refuses to stay with what Iain McGilchrist calls Left-hemisphere cortical processes of using words (language) in the form of linear-sequential chains of logical reasoning (what a modern culture calls rationality). Instead, Feldenkrais wants to use ideas and words (the form in which ideas are expressed) always in relation to what McGilchrist calls Right-hemisphere cortical processes of embodied experiencing. So, when Feldenkrais introduces his students at a training to the ideas that constitute the Feldenkrais Method he always does so in relation to facilitating in the students experience of how these ideas materialize in their embodied agency. This is where his phrase 'I make the abstract concrete' lands. Put another way, Feldenkrais never talks about aspects of the method without, simultaneously, inviting his students to experience what he means. To call on McGilchrist again, it is as though Feldenkrais is working the integrative seam between Left-brain

verbal-conceptual-rational modes of thinking and Right-brain embodied-experiential modes of thinking but with an emphasis on the importance of the latter leading the former. Once we appreciate this it becomes clear why his 'talks' are so suggestive, elliptical and non-linear. And it becomes easier to understand why he wants to sustain the semantic relationship between the idea of manipulation and the refinement of our skills in using our hands in working with our clients. Of course, as we know, when we come into an embodied-experiential relationship with our clients, it is not just our hands that are involved in this relationship, but it is true to say that in our method our primary way of listening to the self-organizing processes of our client is through how we use our hands to come into connection with them. This is why on the first morning of year one in the San Francisco Training (Feldenkrais 1975a, 1), Feldenkrais begins with: 'touch the person with the hands.' In what he goes on to say, he metaphorically compares how we use our hands to how the octopus manifests its intelligence in its tentacles, a wonderful metaphor that encourages us to sensitively use our hands and arms as tentacles in relation to the person we are working with:

...what we actually do is what we call Functional Integration. That means we join the two bodies, the tentacles, so that there is a communication between the two on a subliminal level: that means non-verbal level: that means ... your hands and the hands of the person with whom you work do two things.

He goes onto say that the first of these two things is the facilitation of a higher level of self-organization: 'you convey [to] him a change that he will make in himself,' an 'opportunity of learning what he didn't learn before':

Your direction does not come because you order, because you control the person; only you convey [to] him a change that he will make in himself-- and that's why it's not teaching. We present him with an opportunity of learning what he didn't learn before.

The second thing is his awareness that such new learning is actually possible by engaging in an ongoing practice of increasingly refined self-organization. Feldenkrais finishes this set of comments with: 'So with the hands we help the person' (all preceding quotes from Feldenkrais 1975a, 1).

Manipulation as 'the way you organize your movement'

Later in that same morning session beginning day one of the San Francisco Training, Feldenkrais says that 'any human action has two main structural things': manipulation and orientation. He goes on:

Orientation means both in space and time, and manipulation means the way of performing the thing. Any act must have all those three ingredients (Feldenkrais 1975a, 6).

These three are well known to practitioners as TOM (timing, orientation, manipulation).

He (1975a, 6) then says that 'orientation is just as important as manipulation.' And further that these three ingredients 'must be harmoniously connected, otherwise it [the act of the person] won't work.'

Because each ingredient is as crucial as the other two, the linear ordering of things in speech does not capture this truth.

He continues to elaborate and suggests that orientation and manipulation also involve what he calls 'action'. Action as he conceives it involves four components: thinking, feeling, sensing and moving. Just as with orientation and manipulation these four components or

dimensions are equally important and inseparable. It is only in the sequential syntactical ordering of language that we conceptually separate these dimensions, and in putting one first, seem to imply that it is more important than the others. But: 'you cannot do a thing without bringing all those things together...they never happen separately (Feldenkrais 1975c, 81).'

It turns out, then, that human action/agency has seven components or dimensions: timing and spatial orientation; manipulation; thinking; moving; sensing; and feeling. No one of these is more important than the others. However, if these components are distinct, it is because they play differentiated roles within human agency. Once we are able to differentiate these dimensions of our agency, we can then pay attention to them in such a way that enables us to refine how we bring them into play. This is 'awareness through movement'.

What, then, is the differentiated role of manipulation in relation to the other six components of action? Manipulation turns out to be 'the way you organize your movement':

But you can see that thinking, feeling, sensing, moving, connecting time, and space, and manipulation—it means the way you organize your

movement—in the human it means knowing what you are doing. Those are seven things that, when we make any act, whether we know it or we don't, they are all one (Feldenkrais 1975c, 81).

Does this mean then that if we *become aware of how we are thinking, feeling, sensing, moving, 'connecting time and space', then we can improve and refine how we organize our entire self for movement?* Does this mean then that 'manipulation' involves the whole self in moving, that it is a capacity for self-organization that improves with awareness, and that its essential role is one of integrating the other six dimensions of human action or agency? If this is so it would explain why Feldenkrais suggests that our capacity for manipulation is bound up with our self-image: 'We act in accordance with our self-image' (Feldenkrais 1980b, 3):

Each one of us speaks, moves, thinks and feels in a different way, each according to the image of himself that he has built up over the years. In order to change our mode of action we must change the image of ourselves that we carry within us ...Such a change involves not only a change in our self-image, but a change in the nature of our motivations, and the mobilization of all the parts of the body concerned (Feldenkrais 1980b 10).

Manipulation as self-organization

If manipulation and its degree of refinement concerns our self-image, 'the dynamics of our personal action' (Feldenkrais 1980, 10), it makes sense that Feldenkrais emphasizes over and over again that no one other than the person concerned can organize their movement. It follows that the practitioner must not try to re-organize the person:

... we are not going to reorganize the chap, we are not going to do anything to cure him or straighten his back or correct his posture--all these things, he should do, not you. You can only make him aware of those means to achieve those things, that he can't find himself (Feldenkrais 1975b, 89).

So how does the Feldenkrais practitioner facilitate and enable such awareness? The Feldenkrais practitioner offers an experiential body schema that enables the person to become aware in practice of the seven dimensions of her action. This offer is made through touch and/or through the prosody and tonal quality of the practitioner's voice in offering both content (the *what* of a functional awareness through movement lesson) and guidance of *how* the person attends to herself in the course of doing the lesson. Such guidance directs the person to attend to herself in such

a way that she becomes more aware of how she thinks, feels, senses, moves, orients in space and time, *and thus, how she organizes her entire self for movement.*

Here we can see why Feldenkrais says that manipulation, understood as the capacity to organize yourself, is directly linked to the human ability to 'know what you are doing'. He differentiates the human capacity for self-organization from that of the other great apes because of the complex development of the human cerebral cortex which gives the human the capacity for ongoing and endless self-refinement:

And what I want to show you now is that any act must have a manipulative part which is that particular mental direction of the body which comes not from the lower centers but from the motor cortex (Feldenkrais 1975c).

Manipulation is something distinct from the organism's capacity to use inbuilt reflexes for re-establishing balance as in the reflex action of saving oneself when slipping on a banana skin. Such reflex action is automatic, and it is not susceptible of refinement and improvement through conscious awareness:

Now you don't know how you right yourself. Nobody does. It's only after that we know that we

did right ourselves. ...there are very old structures in the brain for very fast movement... (Feldenkrais 1975c, 76)

These are functions related to survival and protection for life that operate below the level of awareness and which we share with other primates. However, if we engage in the practice of improving our manipulation this informs the quality of our entire organic functioning so that, for example, our ability to fall without injuring ourselves improves.

Manipulation and the skill of our hands

It is because manipulation is directly linked to cortical processes of awareness that enable continuous refinement of action that in the San Francisco Training Moshe emphasizes the link between manipulation and the evolutionary development of the human hand which is capable of extraordinarily fine somatosensory and motor skills. This is not just an academic point. He is wanting to emphasize to the students in the Training that how they cultivate and grow the fine somatosensory and motor capacities of their hands will make all the difference in how they offer lessons.

...when we talk about manipulation, it's an idiotic word because manipulation means only with the hand... Manipulation, you would think, is a question of acting with the hand. But there is an

enormous difference between acting with the hand by a human being, or even a primate even the most developed primates (Feldenkrais 1975c, 75).

It is in this context that he shares the idea of the homunculus:

...when you come to that part which is manipulative, which we call manipulation... it has nothing to do with strength. It has to do with skill. And our hand has - it is the finer, the most delicate muscles that we can and the most delicate movement we can do is with the tips of the fingers.....and the thumb for instance on the homunculus, on the motor cortex, occupies an area on an adult which is about five times the area of the legs (Feldenkrais 1975c, 77).

The homunculus was an idea offered by Wilber Penfield (1891-1976) in indicating the area of the human cortex that is dedicated to somatosensory and motor functions. It is known as the homunculus as it has features of a



human figure. The relative size of each body part in the homunculus shows its relative functional significance in our capacity to organize ourselves for action. The area for the hand in the sensory motor cortex of the cerebrum is huge then compared with, say, the thigh.

More recent discoveries in neuroscience revise any suggestion of the homunculus idea that these body parts operate independently of each other. Moreover, some parts such as the hand, foot and mouth have a connective role to play: 'The classic homunculus is interrupted by regions with distinct connectivity, structure and function, alternating with effector-specific (foot, hand, and mouth) areas (Gordon et al 2023, 351).' Perhaps, in linking the hand to manipulation understood as the integrative agency of self-organization, it was precisely this point that Moshe Feldenkrais wanted to make. He suggested that manipulation is not just an action of the hand, it has 'particular mental direction of the body which comes not from the lower centers but from the motor cortex.'

Attention is central to manipulation:

'The manipulative part is the part of knowing what you do in movement'

In the Feldenkrais Method whether and how we pay attention are paramount. The key to opening up new possibilities and refinement of self-organization is

'attention'. It is in how we give attention, and to what, that we open up the gateway to doing something other than habitual patterns of self-organization and, also, to conscious 'aha's' about how we may move more easily and elegantly.

In a Functional Integration lesson, as practitioners-- our attention guides how we lead into and follow out a lesson. We observe in our client how she engages in a functional movement, a useful action in her everyday world. We notice how easy it is for her, how clearly it fits her intention and how satisfied she is with the quality of her movement. Then we create a scenario in which to delve into more granular details. We then chunk down what we observe. That means we divide it into simpler and smaller components: clarifying the quality, ease and flow of each component, the path through space taken by parts of the body and the sequence of the components as they come together within an entire pattern of movement that engages the whole person.

We choose what to 'foreground' in a process of spotlighting a part or quality of the movement pattern under investigation. We may choose to foreground breathing and how this major function is integrated. Or muscular effort, or the way the movement passes through the skeleton. We use maps, that guide the

process of working with the client, and help us plan our path of engagement with the existing patterns of self-organization, including as they do not just a somatic but also an emotional- inner landscape, of the client.

Feldenkrais proposes that the quality of self-organization is profoundly dependent on us learning to pay attention to how we 'do'. If self-organization is to have the quality of harmonious connection or integration of all the components of action it is because we have learnt to not just pay attention to how we do, but also to refine the practice of how we pay attention:

Therefore in each act, whatever you learn, unless you pay attention, you become aware of your body, how it's oriented, and you pay attention to the orientation in space and in time and manipulation - all the three ingredients of action must be harmoniously connected, otherwise it won't work (Feldenkrais 1975a, 6).

It is attention, that in enabling us to know how we do something, opens up the possibilities of choice. A freedom of choice is what makes the practice of continuous refinement of our action worthwhile: if I know how I do, then I can do what I want; is a point that Moshe makes many times.

Paying attention through how we use our hands

Imagining in sensation, our arms and hands as two octopus tentacles gives us a feeling of increased sensitivity and connection. Quality and attitude of touch encompasses our own self-use in the communication between our nervous system and that of the client.

Not only do our hands express our self-organization, not only do they gather information about the client's self-organization, they also share our feelings of care and nurture. Becoming aware of how our hands express our emotional orientation, our intention, and our self-organization in working with our clients gives us super-powers!

Our clients sense the difference in how we use our hands between an attitude of invitation, kindness, friendship, curiosity, or apprehension, blocking, tension. Our hands express what and how we are thinking and provide a mode of thought that is more sensory than verbal, and more dynamic than a static image. Our hands articulate the state of both our central and autonomic nervous systems in communication with those of the client.

Here it is useful to call on McGilchrist's schema that contrasts how the Left and Right hemispheres of the

brain operate. Physiotherapy, for instance, like other western medical health sciences, was inspired by the early 20th century reductionist model which tends to be a left-hemispheric cognitive orientation, although current practice now encourages a more functional approach. From its inception, the Feldenkrais Method operated in terms of the relationality of the whole living system of a person. It is oriented to a dynamic, evolving whole, and the art of functional integration is to find a path for an enacted pattern of whole self-use that is somatically and emotionally more functional than the habitual pattern(s). Where the physiotherapist invites her client to become more skilled in managing and controlling her 'body' (or, more accurately, her body parts), the Feldenkrais practitioner invites her client to become aware that (as McGilchrist 2021, 17, puts it) attention changes the world, in this case the world of herself as a complex, dynamic, living whole in constant interaction with its environment.

To be sure, Feldenkrais and the Method he offers incorporates the detailed mapping of the human body that is offered in anatomy, neuroscience, and physiology, and to this degree, our practice is a Left-hemispheric cortical activity. But as we have said already, while such knowledge informs our practice, it

is the experiential dimensions of our practice as they bring into play how we engage all seven dimensions of agency that are the key to our work. And it is how we use our hands that brings together those scientific maps, our capacity to listen or attend to, our emotional receptivity and expressivity, and our somatic awareness. Stanley Keleman (2014, 2) eloquently conjures just how the hands do this:

The hand is a cueing organ that teaches the cortex via the tactility and kinesthesia of motor action. The hand is a small body in dialogue with the cortex and has an important relationship of self-knowing that cues action.

Our practice, then, is a predominantly Right-hemispheric cortical activity. And this is why we may have difficulty offering a clear account of just what we did and why in a session with a client. We can say what we intended by way of meeting the client in functional terms but as far as the sensory, intuitive, non-linear processes of the lesson we may have difficulty offering a verbal narrative of what we did and why. Of course, this is why Trainees and Practitioners are invited to directly observe and 'feel' a practitioner giving a Functional Integration lesson. Moshe discusses his process in FI in the Amherst Training Program: '... it's a feeling. I can only afterwards reconstruct the

reason. It's like an intuition. You can find how you worked in order to get to the final result without thinking of the details (Feldenkrais 1981a, 4).'

Our ability to directly access Feldenkrais's Amherst Evening FI Series through the video recordings offers us an extraordinarily rich resource. Of her study of these lessons shared with a group of curious practitioners, Catherine comments: I have always been drawn to the way Dr Feldenkrais' fingers and hands gently probe and question the client, nonverbally through their tissues. He seeks to clarify what is, the local relationships and anatomy but contextualizes these explorations in relationship to the client's whole embodied living system and lived experience. Catherine further comments of her processes of researching and thinking about Moshe's idea of manipulation in relation to her own practice, and in conversation with other sources and colleagues: my action has become more intuitive, which to me means it is based on knowledge from many spheres and also appears in my hands as I work in FI, or in my teaching verbally, as I find diverse descriptions, and examples and introduce new variations and games to clarify a concept.

To conclude...

Our intention has been to open up the idea of manipulation as Moshe uses it, and to take it out of what tends to be our way of using 'Feldenkrais-speak': to use key words without thinking about what they mean, and so denying ourselves insight into the powerful and imaginative invitation to engage in human maturation that Moshe makes to us. If the quality of self-organization matters, it matters because we can endlessly refine this quality and in so doing become both more mature and more free. What these terms (maturation and freedom) mean is a whole other discussion but perhaps at this point we can remember what Moshe said of 'improvement':

...to achieve optimal function while growing there must be continuous change in the direction of improvement.

...the complexity of this process [of change] is so great that failure to achieve is inherent. In ordinary conditions, it is very rare to find the optimum in structure, form, and function. Dysfunction in movement, regressions, and partial development are to be expected. This generality makes it possible to help normal individuals achieve the optimal development which they would otherwise fail to do (Feldenkrais 1981b, 16).

References

- Bronowski 1973 *The Ascent of Man*, British Broadcasting Corporation, London, UK
- Feldenkrais, M. 1975a *San Francisco Training Transcripts. Year One. Weeks 1 and 2*. Paris, France: International Feldenkrais Federation.
- Feldenkrais, M. 1975b *San Francisco Training Transcripts. Year One, Week 3*. Paris, France: International Feldenkrais Federation.
- Feldenkrais, M. 1975c *San Francisco Training Transcripts. Year One, Week 7*. Paris, France: International Feldenkrais Federation.
- Feldenkrais, M. 1980a *Feldenkrais Professional Training Program Transcript. Amherst, Massachusetts*. Paris, France: International Feldenkrais Federation.
- Feldenkrais, M. 1980b *Awareness through Movement. Health Exercises for Personal Growth*. Arkana. Penguin Books.
- Feldenkrais, M. 1981a *Feldenkrais Professional Training Program Transcript. Amherst, Massachusetts. Year 2, June 30, Morning Session Tape #27*. Paris, France: International Feldenkrais Federation.
- Feldenkrais 1981b *The Elusive Obvious*, Meta Publications
- Feldenkrais 1977 *The Case of Nora*, Somatic Resources, Berkeley, California
- Gordon, E.M., Chauvin, R.J., Van, A.N. et al. 'A somato-cognitive action network alternates with effector regions in motor cortex.' *Nature* **617**, 351–359 (2023). <https://doi.org/10.1038/s41586-023-05964-2>
- Keleman 2014 'Touching and being touched: the hand as a brain.' neurophychotherapist.com
- McGilchrist Iain 2021 *The Matter with Things: Our Brains, Our Delusions, and the Unmaking of the World. Volume One*. London: Perspectiva Press.
- McGilchrist Iain 2023 <https://channelmcgilchrist.com/home/> ■

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