Where Does the Movement Starts?

This question often arises in our minds as practitioners and students during Awareness through Movement (ATM) and Functional Integration (FI) lessons, and it can be examined from various angles offering varied answers. In this article I show that in the confluence of three angles or perspectives we found a nuclear point that explicates the transformative power of the Feldenkrais method.

My focus is on three perspectives, which are the biomechanical, the developmental, and the evolutionary.

The biomechanical perspective for answering the question, where does the movement start? refers to the part of the body, a bone or an articulation, of a movement such as raising a hand. The answer in this case could be that it starts from the shoulder. For movements like bending a leg to take a step, the initiation point could be the hip.

The developmental perspective involves the process of sensory motor development and encompasses all the different steps concerned with learning how to roll, sit up, crawl, stand up, and walk.

This perspective explores the intriguing moment when infants transition from involuntary reflexes to executing movements voluntarily. For example, when raising a hand to grab an object becomes a conscious and intentional action. The answer to the question "Where Does the Movement Start?" will refer to the developmental moment when involuntary primitive reflexes are integrated with or transformed into voluntary movements or actions.

The third frame of reference, evolutionary, takes us back to the development of body movements throughout time, including the final shape that an action like raising a hand or walking on two legs takes.

In what follows, I want to show how the three sources of body movements are integrated into the lessons, and what are the grounds that make them fundamental for healing, and self-change.

In the lessons, the biomechanical perspective is denoted by the set of instructions of body movements, particularly focusing on bones and the skeleton. The instructions ask the student to "listen/sense what some part of the body does, while you move another part of the body."

To illustrate, let's consider the first movements of the lesson AY 429, "In sitting twisting with the eyes."

> 1. Sit down on the floor and bend your left leg backward. Bend your right leg to a comfortable position in front of you and lean on the right hand. The sole of the right leg is close/touches the knee of the left leg. Lift the left arm at the height of the shoulder. Bent the elbow a bit with the palm of the hand loose. That means allowing the hand to be hanging. Fix the eyes on the hand, which is loose, without power. Now, turn your face, your torso, everything, to the right and return, several times.
>
> While doing this, **pay attention to what you do with the sit bones**. The left side of the sit bones touches the floor, or not. But, when you go to the right, it moves away from the floor. It lifts a bit from the floor. (my emphasis)

Being instructed to sense the sit-bones, and the movements of the thorax rising and descending from the floor is a significant moment as we focus on where the movement starts.

Initially, it might seem that it starts from the shoulder or thorax, but with the continuance of the movement and the increased awareness, we realize how the hip is integrated into the entire motion. This understanding leads to the discovery that a movement can be initiated from different parts of the body, like the hip in this case.

Showing how a movement can start from different parts of the body is a theme consistently present throughout all the lessons, and it functions as a device of sorts for facilitating change.

The change is, first and foremost, biomechanical as it incorporates other parts of the body into the intended movement. We shall notice, however, that within the context of regular and suitable practice that goes hand in hand with somatic awareness, the notion reaches beyond the simple recognition that a movement can be initiated in multiple ways, it extends to our behavior and habits. It effectively teaches the embodied self that “things can be different.”

An illustration of the developmental frame of reference we have in the lesson AY #313 “Rolling at the rate of stretching and bending.”

The lesson reproduces the fetal position and a primitive reflex to experiment with balance and to demonstrate how to roll effortlessly from the back to the stomach and back.

The lesson is construed with the following set of movements:

> From the fetal position, lying on one side and on the back, the knees and elbows are flexed and brought toward each other, then moved apart by lengthening the limbs and the back, allowing the head to arch backward. The slow and continuous movement generates an unfolding, outward-growing force that moves the body through a curved path and gradually rolls it until a full roll onto the back or stomach is completed. The extension and flexion of the arms, and the movement of the back and the head, reproduce the Moro reflex. These movements prepare the infant to roll.

The lesson reproduces pre-natal movements in the fetal position, and the Moro Reflex – This reflex is an involuntary protective motor response of the newborn against sudden loss of support, a disruption of body balance, or an extremely unexpected stimulus such as loud noise. When this happens, the hands open, and the arms and legs are brusquely extended away from the body and to the sides, then drawn together as if in an embrace as the hands close.

To the question Where does the movement of rolling start? The answer would refer to the moment when the infant's extension and flexion of arms and legs, characteristic of the Moro Reflex, is transformed into a voluntary movement that teaches the infant to roll from side to side, and how to manage gravity and balance, while the nervous system is maturing.

This is part of a larger strategy that the method uses to change and heal, which reproduces the organization and patterns of the primary movements. In innumerable lessons we find all the different steps involved in the process of learning how to roll, sit up, crawl, stand up, and

walk, and by replicating prenatal and early life reflexes, which are the building blocks of sensorimotor development.

Reproducing the organization and patterns of the primary movements is also a characteristic of the third perspective, in this case, it applies to human evolution

Lesson AY 513: “Reptiles” is representative of this perspective. In this lesson movements, we can appreciate how the archaic roots of crawling, which characterize fishes and reptiles, evolve to enable crawling and walking in all human beings.

The blueprint of the origins of crawling is well ingrained in the human brain and nervous system. It is part of the evolutionary history and body-sensorial memory of humankind. It harbors the motor-sensorial development process, from rolling to walking, inherited from our forefathers and kept within the organism for its transmission to the descendants.

The lessons staging those movements aim to reproduce and take hold of evolutionary moments in motor development to enliven the most basic and rudimentary patterns of movement. The method facilitates a sensorial recollection of those archaic and primary motor experiences. The idea is to assimilate and adjust anew those original patterns.

The three perspectives have their grounds and corroboration of their effectiveness for change and transformation in two major fields of research in neuroscience.

One is on the interaction between consciousness and nonconscious processes, and the second, is neuroplasticity.

The biomechanical perspective teaches the body-self that there are alternative ways to do habitual movements thereby restoring their functionality. This idea, at the heart of the method, is supported today by research on neuroplasticity, confirming that a constant and systematic practice stimulates the roots of motor development and the ensuing organization of the body, its posture(s), and its movements. It restructures habits and brain maps.

Research on the interaction between consciousness and nonconscious processes validates what the Feldenkrais method does, i.e., it revitalizes neuro-sensorial memories that the body carries. The human body carries nonconscious knowledge designed to life management and to preserve and enrich life, such as the primitive reflexes that form the basis of motor development. These are features encoded genetically, inscribed in our organism, in our nervous system, passed down from our ancestors and preserved within the organism for transmission to future generations.

Professor Abraham Mansbach

Ben-Gurion University of the Negev, Israel

Certified Feldenkrais Practitioner

Author of *The Feldenkrais Method: Power of Self-Transformation*