

The article that follows is a translation of a chapter from a book by Peter Schwind - Alles im Lot. Eine Einführung in die Rolfing-Methode. (published by Hugendubel [January 1, 2001]). The chapter was written for the book by Hubert Godard, and translated from German to English by Manfred Jansen. - LL

Hubert Godard, Improving sensory dynamics

A self-help course in movement and gravity

Whenever we watch a person start to move, this process, observed from outside, looks as though he or she would proceed into movement activity from a state of complete rest: the center-forward of a soccer team appears to be standing still prior to kickoff; the sprinter seems to remain motionless in the starting block waiting for the starting signal. However, this external impression hides the fact that an intensive activity is going on prior to the visible movement.

Most elements influencing the quality of a movement are already there before the movement becomes visible; there is activity going on before the movement begins. We could call this anticipatory movement activity.

We are, however, unaware of this anticipatory activity. That is why we unwittingly remain caught in our habits, because these anticipatory activities are present in our movement without us being aware.

To give an example: From a standing position, as we begin to lift our arm forward, it is the musculature of the lower leg in the calf which becomes active first. We are unaware of this muscular activity in the calf, and while we do not realize that those muscles are contracting, the quality of the arm movement is influenced by that activity.

The precision of the arm movement depends on actions preceding it occurring elsewhere, in order to keep the body within its orientation to gravity. If it was only the arm being active without muscular activity in the lower leg, as soon as the arm movement began, there would be a loss of balance.

Apart from this process there are two other factors making the movement more precise, i.e. a micro motor activity balancing the movement determined by "posture patterns" and a factor of influence on a psychological level. Whenever a certain action is forbidden, then the anticipatory activity or the activity of postural muscles will also limit the movement.

All this happens to a large extent without conscious awareness: Whenever one decides to move, something is already happening inside. There is already an activity present before the actual movement.

It is easy to understand, therefore, that gymnastic exercises, in which the same movements are repeated over and over again, are limited in their meaningfulness. They train a pattern into the body which is already there beneath consciousness.

Even within an active movement process, that is, a movement which can be observed by an outside onlooker, there is another relevant level, i.e. that of the expressional character of the movement. If, for example, I want to make somebody stop by giving him a sign with my hand signifying "stop", I am using the same gesture as if warding off someone whom I fear. The person towards whom I direct my gesture will interpret its meaning not from the hand's gesture but from the postural activity of the tonic musculature. Whenever I am afraid of something, I will somehow contract, and when I want to stop a person, my postural muscles will stretch. It is now understood that a newborn baby recognizes its mother not by her bodily shape but by the mother's postural activity.

These examples show that gravity plays a central role in movement because it supplies the physical framework for our orientation.

Because anticipatory movement figures so prominently, the natural question is: "How we can intervene with this process?"

This question leads to the key term "perception" and in particular, how perception serves in orientation. In our work, we need to link up with the anticipatory patterns of the client. In order to intervene with the relevant activity prior to the visible movement, we should help the client sharpen his or her sense of direction with respect to gravity.

The anticipatory activities depend upon our sensory habits, from the way in which we select information stemming from our environment, and from our body within this environment. In this context, perception is an "active" action. The permanent character of our psychological uniqueness is supported by the permanent character of our habits which we develop with the activity of our senses. These habits are formed by our history and by our cultural and linguistic context as time passes. Our capacity for gestural expression increases on the basis of improved sensory dynamics and new ways of perceiving, so that we arrive at a broader spectrum of action.

Any activity is preceded by an orientation process with respect to gravity. In that moment there are two parameters, one with respect to a substrate and one with respect to space.

Plants use two parameters for orientation: in primary orientation, roots dig into the soil by means of gravity, and in secondary or heliotropic orientation, the plant grows towards the sun or light. Scientists were able to prove that a seed outside the field of gravity points its roots in all directions and not towards the earth. As soon as the plant returns from a spaceship to the earth, it will immediately direct its roots towards the ground again.

In the same way, a plant in our room will not only grow in the opposite direction of gravity but also towards the source of light, e.g. a window.

Looking at the human body in similar detail, when I bend sideways with my eyes closed, I return to my initial posture by pressing slightly against the ground and orienting with my inner ear; this is called substrate orientation. Another method to return to my initial vertical stance is to choose a vertical object in my environment to serve as a reference point; this is called spatial orientation using the visual sense.

Space research has shown that astronauts develop hyperactivity of their eyes in gravity-free space. Visual hyperactivity enables them to find what is called subjective verticality when gravity is not available as a reference.

We know that people always tend to stick to either one of these two orientation systems, by orienting himself/herself to the substrate or to the spatial context.

This basic quality of human orientation was demonstrated in an experiment with aircraft passengers during a dive. The passengers inside the plane were in gravity-free space for three minutes, and then, owing to a change in the aircraft's direction, in twice the gravitational pull of the earth for three minutes. In the very moment in which the aircraft dove, and the passengers became weightless, some of them tried to grab something with hands or feet, while another group found visual orientation by looking outside. Those passengers were flying with arms wide spread and eyes open inside the plane without showing signs of discomfort. They greatly enjoyed their gravity-free state. The experiment showed that there are two absolute different patterns of orientation which are of utmost importance for our perception and movement capacity.

Another example that demonstrates this in greater detail is a musical number in the famous movie "The Ziegfeld Follies" by Vincente Minnelli, starring the two dancers, Fred Astaire and Gene Kelly. The two dance in exact time next to each other performing the same dance steps. When watching the movie in slow motion, it becomes obvious that the two artists prefer a different kind of orientation system: Fred Astaire moves with the help of spatial orientation, he uses his eyes, he first glances, then he takes a step. The movement commences with moving

the head which follows the eyes. Gene Kelly, however, follows the other orientation pattern: He feels the ground with his feet and moves from it into space.

Why is this so important for us? Each one of these orientation systems allows for a different action potential. While substrate orientation nourishes the capacity to carry, push away, and fight, the spatial-visual orientation system fosters the capacity to hand something over, to point in one direction and, of course, to fly.

If it is our objective to reach an extended movement potential, if we want to move in a fluent, effective, and expressive manner, it is quite consistent to foster the capacity of changing from one orientation system to the other, i.e. from the substrate-oriented one to the spatial-oriented one and vice versa. In this way we increase sensory dynamics, the capacity to orient oneself from the ground and also to “fly” with respect to space. Thus we improve our perceptive capacities in general. We see better, our olfactory and auditory senses improve. And so, finally, we are able to improve our movement – we find a better equilibrium.

This improved equilibrium also creates more balance for the process of breathing since both orientation systems are present in breathing.

The process of breathing freely is fostered and supported by spatial orientation, and better exhaling is supported by sensuous perception of weight and “substrate”.

If we live exclusively in a spatial-oriented manner, we have problems exhaling deeply, and if we live exclusively as substrate-oriented, we have problems letting the breath freely flow.

In breathing the concept of sensory dynamics figures prominently: We should develop the capacity to freely change between the two basic forms of orientation, owing to the fact that we breathe in and out 24,000 times a day. This kind of endless repetition of certain movement patterns shapes bodies and we should strive to understand the direct relationship between sensory dynamics and the visible shape of our clients.

The process of the ten Rolfing sessions can also be seen in this context: Session by session we bring to life in the client his or her fullest capacity to access sensation. The Rolfing method of structural integration not only deals with shaping the body but also with improving the flow of information within the client. If we enable to get in touch with a client's two orientation systems, we can help to guarantee a better structure and also, a better action potential.

Despite well-organized structure and brilliantly developed perceptual capacities, we may occasionally find ourselves in situations in which we seem to lose our way, to find ourselves disoriented. In the following chapter on self-help, taking an object into our hands and becoming active will help in reorientation.

Our structure and postural habits are never neutral, we do not exist outside the world and its objects and subjects. It is impossible to separate our postural habits from the way in which we deal with other people.

The object which we will need for the exercises described below is a simple round wooden stick - very important! These are not really “exercises”, but rather a voyage of discovery, a journey requiring that we not only become active with respect to gravity and orientation but also that we simultaneously do something with our orientation in relationship to an object.

Experience has taught us that plain relaxation exercises are helpful. However, such exercises often make us only look inside while shutting out a variety of sensory perceptions. As soon as we get up after these exercises and have to deal with the objective facts of life, little remains of the experiences of that relaxed introspection.

The inconspicuous wooden stick does indeed play an important role: It is designed to foster the tactile capacities of our hands and feet; it is designed to connect our inner movement with the world outside, and it is designed to guide us into the school of objective relations while we are expanding our orientation capacity.

This practical course aims at making us wide awake. Its objective is not only to make us feel something, but to feel something while we are in action. All you need for this course is a robust stool or a solid chair on which you can put your legs as shown in illustration 1. Apart from that you will need two wooden sticks of about 90 cm (35 in.) in length. One of them should be about 3.5 cm (1.4 in.) in diameter, and we will need it for our hands. In case you have very big and sturdy hands, please select a stick with a larger diameter. It is important that the stick is large enough in diameter so that the palm of your hand and the fingers can feel enough contact with the round stick.

The second stick, which will be required for the feet, should have a lesser diameter, say 2 cm (3/4 in.). For people with very long toes it may be a bit thicker.

It is a good idea to first read through the descriptions to get familiar with the basic concept. Maybe you have a friend who would want to join you in exploring this course in self-help. At first, please look at the illustrations.

Can you see that the young woman is not doing any static exercises? Can you see that the movement process shows inner and outer dynamics and that perception is playing an important role in this context?

If you have a partner you may ask him or her to read the text slowly while you become active. Or you might tape the text and play it.