



**Muscular Intelligence - an introduction.**  
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Muscles in the human body hold a large psychological potential. As well as their physical function they are active in numerous emotional and cognitive functions. They are in fact involved in everything we do. This is the thinking that lies behind the ideas that will be presented in this article.

For instance what do you use muscles in your arms for? In addition to movement, the muscles in the arms are active in all contexts related to regulation of contact. Whenever you grab on, reach out, pull in, hold on, keep a distance, push away, throw, hit or let go, one or more muscles in upper or lower arms and hands are involved in your action. So your relationship to these muscles affects your relationship to your versatile contact abilities. What about your ability to keep a goal-direction? Try walking in a way, where you push off the ground with your big toe, deliberately using the power of the big buttock muscle (Gluteus Maximus) in your walk. How does this affect your gait and your sense of goal-direction? Now try to alter your walk, pushing off with your four small toes instead - feel the difference - both in your physical and emotional experience of walking. Pushing off with the four small toes is different from pushing off with the big toe. It releases a different movement in the pelvis - the pelvis will move from side to side which for many people is connected to an increased sense of sensuality and sexuality.

This movement is not released through push-off with the big toe - which on the other hand has an ability to release power and goal-direction in the walk. Different muscles in feet and lower legs are active in these two ways of walking. These were just two examples of the link between muscles and psychological function.

All will-controlled skills and acting potential in our personality can be described in a similar way by specifying the muscles involved in the activity. As well, this knowledge clarifies the magnitude of psychological potential contained in our muscles.

This understanding of the significance of muscles is an integral part of the Bodynamic Analysis framework - a body-oriented psychotherapy which has continued to develop in Denmark since the late 1960's

## Background

Bodydynamic Analysis formulated a phase theory, which - simply put - links specific muscles to specific age phases and developmental themes in children. The theory is based on repeated registrations of the connection between specific muscles and the emotional potential that arises in the conscious mind. The activation of muscles through touch or movement is linked to knowledge of psychomotor development.

For instance the two previously described ways of walking are linked to two different developmental phases. Push-off with the toes does not become part of children's motor function until the age of three when the first push-off comes from the small toes, not the big toe.

At the age of three children often change in their appearance. From being small and boxy, they elongate, appear longer and lighter in their movements. They are becoming "older children". This shift is supported by push-off from the toes. Push-off from the toes triggers a whole new way of carrying the body; a child automatically straightens up, when it pushes off the ground with the toes. All the way up to the neck its carrying ability is affected, and at the same time pelvic movement from side to side is triggered. This motor function development takes place simultaneously with the child's budding attention to it's own sex in a new way and how the child starts flirting in contact. This is the phase Freud named the Oedipal phase, which in Bodydynamic analysis is named the Love/Sexuality phase. Motor function and psychological theme are linked. Muscles participate in the integration of new psychological skills.

Push-off with the big toe will be a few years later when the child reaches the age of seven. Again this is just one example of the way muscles and psychological development can be linked and described as a whole. The whole development of psycho-motor function can be similarly linked to motor function of specific muscles.

All psycho-social functions that muscles are involved in, are in Bodydynamic Analysis gathered in a description of eleven Ego-functions. Combined they describe a long line of varied skills that form parts of our personality's coping with the world. Skills such as reaching out, pushing away, standing firm, keeping yourself together, carrying yourself, being in contact from the heart, feeling attached, getting support, balancing, being present in your gender - and many, many more.

Ego-functions cross developmental phases as kinds of developmental paths that are learnt and developed all through life. For instance, our skills in relation to attachment gain new facets in each developmental phase. We never finish this process of learning and maturing. The eleven Ego-functions are named: Connectedness, Positioning, Centering, Boundaries, Grounding, Social Balance, Cognitive Skills, Gender Skills, Energy Management, Self Assertion and Interpersonal Skills.

### **What use is then all this knowledge of muscles?**

In therapy and training we meet both resources and limitations in our clients - and in ourselves. Nobody has gone through their personality development with perfect integration of their full potential. In some areas we have unproblematic access to a healthy potential. But when we do not have access to our healthy potential, everyone experiences in differing degrees how resources and skills are lost along the way: we get locked up or lost in the defence patterns we use to cope. Defense patterns create difficulty in the areas of life where retrieving this lost potential to act would have been useful.

Exact knowledge of which muscles that are linked to which psychosocial skills as described above, makes it possible to reach into both the accessible and the lost or forgotten potential - behind defence patterns - with simple but profound bodily training.

As previously mentioned, this training is based on knowledge in which psychological potential is linked to each muscle and on knowledge of how psychological defence patterns show in muscles.

Examples of the actual training will be described later in this article.

### **Hypo- and hyper-response (hypo- and hypertension in muscles)**

Just as muscles are active in all psychosocial skills they are also involved in the defence patterns we establish when access to our healthy potential is made impossible.

For instance, if the environment we grew up in did not approve or allow anger to be expressed directly what do we do with the feeling of anger and the urge to hit which are linked to muscles in the back of the upper arm?

What if love and contact is cut off when anger appears? Or you are stopped by a violently judgemental parental voice?

Experience shows that there are two possible defense strategies which will appear in our muscles in different ways and with different intensity. In the first strategy you continue to feel anger and have an urge to hit but hold it back. You control the action, hold the impulse inside, accumulate and hold back energy. From the muscle's perspective it is a hypertense state - also called hyper-responsive. The connection between psychological defence and tension in muscles is widely acknowledged. Wilhelm Reich talked about muscle armour, physiotherapists and massage therapists work with muscle tension to relax people. The second defence strategy is less commonly known, partly because it doesn't draw as much attention to itself. It is giving up as defence. For instance, when something gets too hard and we feel that our surroundings reject us in harsh ways, we can react by giving up, going limp, dead, distant, absent, as a way of survival. The result is a state where you no longer can feel for instance the impulse to hit and neither the feeling of anger. In many ways this is a brilliant strategy in relation to a surrounding environment that doesn't welcome this part of life.

The muscle will in this state become hypo-tense or hypo-responsive. It holds a very low energy level and loses energy easily.

Notice how you react differently at the mere description of these two reactions.

Typical words describing the hyper-responsive state are: Tight, retained, controlled, strenuous, violent, pressure cooker, accumulated, tense, etc.

For the hypo-responsive state words are different: Feeble, tired, lacking energy, distant, sleepy, weak, not feeling anything, etc.

Both states can occur with different levels of intensity.

The two states in muscles, hypo- and hyper-responsive (the two defence strategies) have different needs: bodily, emotional and contactual. If you want to impact the muscle state making it possible for the individual to risk discovering that their original potential still exists, it is wise to adopt an attitude to the existence of both states and develop methods that can meet both.

Bodydynamic Analysis has developed a resource-oriented training specializing in the ability to meet both hypo- and hyper-responsive states with bodily precision.

An example - simplified - yet realistic:

If an individual has difficulty expressing anger and wishes to work on this issue - where can you begin?

One option is to examine how the individual feels about pushing with the arms. How does it feel to push against another person's hands? How strong or weak do you feel when doing it? Do you like it? Which emotions arise in you?

The individual's reaction to a bodily exercise such as pushing will often make it possible to guess if pushing muscles are hypo- or hyper-responsive and to find a way to adjust the intensity of the exercise accordingly.

With hypo-responsive muscles in the back of the upper arm, it will often feel strenuous to push. Soon you will feel tired in your arms, feel like quitting. Maybe you feel sad or feel it's hard. Maybe you feel sorry for yourself. Feel as if you can't cope.

When you have hyper-responsive muscles you will feel quickly frustrated or annoyed.

Maybe you don't really trust the other person to offer enough resistance. You are careful not to be "too much" for the other person. You hold back your strength.

What do these two reactions need? You work with the same bodily skill: the ability to push with the arms and thereby express a "No", a need for distance, a marking of boundaries, etc. But the path into these healthy acting potentials varies according to the character of defence pattern whether characterized by giving up or control.

A hypo-responsive muscle needs to learn how to build up energy and contain the increased level of energy instead of letting go of it. Reclaiming this skill requires respect for what level of intensity the muscle - and the individual - can handle. A flaccid muscle does not gain strength from being pressured to work hard. Quite the opposite - oftentimes it gives up even more. A given-up muscle does not get stronger from being passive or receiving passively either. The best way of rebuilding the ability to hold a presence and increase of energy is slow activation of muscles respecting the level of "dosing" that installs the individual with a feeling of coping, a feeling of success and not a feeling of getting tired. In relation to a specific bodily exercise or activity, this means that you might have to get down to quite a low level of dosing before you can awaken the feeling of coping. Working in this subtle way shows to be quite powerful.

To explain what is meant by low "dosing", take the pushing exercise. Let the individual find the level of resistance to push up against that leaves a feeling of actually being able to push the other person's hands away. Finish the exercise before the individual's arms get tired. Finishing soon enough can leave an emerging feeling of being able to cope, an increased sensing of the muscle, a greatly increased sense of self-worth. As well, there is a chance for forgotten, given up feelings to come into consciousness again.

On the other hand, what does a hyper-responsive muscle need? What is needed for me to feel met in that part of my defence patterns?

A hyper-responsive muscle holds accumulated energy that basically needs to be used or released. In order to let out the power you are used to holding back, you need to feel safe. A firm, strong resistance will empirically establish this kind of safety. If somebody out there has the power to really meet my push, then it is easier and safer to let out the power.

In the pushing exercise you can get into a playful fight, where the one offering resistance gives the other one room to really use arm force. You push each other round the room and give yourselves permission to make sounds. Energy and sometimes feelings are released - the opposite of holding back and controlling. An experience like this will have the potential to leave the person with empirical knowledge of being able to do something different with power and anger rather than holding it in. It becomes possible to release it safely into a field where there is contact. An experience such as this can make way for retained feelings to come into consciousness again.

To find the right dosing when working with body exercises is a therapeutic and training method in itself. It requires practice of precise inner sensing to be able to find the right dosing - both in student and teacher, client and therapist.

When the dosing is optimal fixed self images are often changed. (this is particularly the case working with hypo-tense muscles).

The method supports the individual in finding that exact dosing which will provide the highest level of contact to resources. The level of hyper- or hypo-response in muscles (hyper- or hypo-tension) determines what level of dosing will provide the person with the most steady contact to resources. The more resignation is present in a muscle or body area, the lower intensity of exercise necessary in order to enable the given-up area to wake up.

The hypo-responsive defence is easily overlooked. It does not draw attention to itself because it is not within the person's conscious awareness. Knowledge and experience regarding this response pattern opens the possibility of stimulating and taking care of the weak areas in a person. This way offers support in slowly being able to build and contain energy and thereby find a sense of presence and integration.

Experience shows that hypo- and hyper-responsive defence strategies (giving up or control) cooperate. When given-up areas, areas lacking energy, get attention and support to stay present, the hyper-tense controlling parts of the body begin to let go on their own.

### **Resource-oriented skill training**

In summary, the above description illustrates the principles of the "resource-oriented skill training as a psychotherapeutic method".

Any psycho-social skill can be related to one or more muscles in the body in a way that is parallel to the previous examples. In these muscles in the back of upper arms were linked to an ability to say "No", keep a distance, etc. The big buttock muscle and the big toe flexor muscle were linked to an ability to keep a goal-direction and to put power behind a forward movement. Muscles in the lower legs creating push-off with the four small toes were linked to sensing and carrying sensuality and sexuality, etc.

Combined with respect for the exact individual dosing connected to hypo- or hyper-responsive muscle states this skill training forms a precise psychotherapeutic and training method. Both touch and muscle-activation through movement can be used as part of the method.

The bodily training of skills hold a psychological potential. Skill training can extend a person's ability to cope with everyday life and to hold both high and low intensity in life. By that means a person is supported in staying present and being able to act even in difficult situations.

One could say that the more you practice and sense skills such as centering, contact abilities and grounding the more these skills become automatic and available as a resource in more situations in life.

Skill training also results in less fear when encountering old traumatic memories, because there are now more skills to meet them with.

An important task for clients or workshop participants presented with resource-oriented skill training is noticing which exercises are providing access to which resources. For instance which exact exercises makes one stronger, more whole, more ready or more in contact.

Bodily skill training always touches upon two layers of human consciousness. They are the potential connected to activated muscles and the experiences linked to this potential. The balance in this kind of training is to support people in finding the precise exercises and the precise amount of dosing which will widen the person's access to resources and abilities to act. The more resources available the easier it is to cope and meet what is difficult. This is the philosophy and experience underlying this resource-oriented method.

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MHB specializes in resource-oriented skill training as a psychotherapeutic method both in relation to trauma and personality development. She developed this method in collaboration with the teaching staff at Bodydynamic Analysis from 1985 through to 2003 and now generates it within her own framework.

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