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**THESIS**

**OSTEOPATHY: SENSING AND PHILOSOPHY**



**The Philosophy of Osteopathy as Prerequisite  
for Sensing and Meaningful Treatment**

# **MASTER THESIS - OSTEOPATHY**

## **OSTEOPATHY: SENSING AND PHILOSOPHY**

**(The Philosophy of Osteopathy as Prerequisite for Sensing and  
Meaningful Treatment)**

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# OSTEOPATHY: SENSING AND PHILOSOPHY

## The Philosophy of Osteopathy as Prerequisite for Sensing and Meaningful Treatment

This thesis is dedicated to my wife **Gesa**, who supports me and my work fundamentally. Thank you for your confidence.

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# **OSTEOPATHY: SENSING AND PHILOSOPHY**

## **(The Philosophy of Osteopathy as Prerequisite for Sensing and Meaningful Treatment)**

### **Chapter 1: Introduction**

It is the goal of this dissertation to figure out the importance of sensing and its relation to the philosophy of osteopathy. I want to demonstrate that sensing is the requirement for Osteopaths to treat patients.

In the following chapters I shall demonstrate how sensing can be responsible for effectivity and how Osteopaths can achieve a state of sensing. On the other hand I'll demonstrate also how the capacity of sensing can get disturbed and what are the reasons for it.

Osteopathic philosophy is indeed interlocked very much with the capacity of sensing, that will be shown by quotation of Still's written works. But I will also quote other scientists, philosophers and artists who gave interesting informations on this issue.

It is the task of this thesis to work out the importance of philosophy as a prerequisite for wise sensing provided that sensing is the precondition necessary for a meaningful action.

## Chapter 2: Etymology Of Osteopathy And Sensing

**Still: If you want to get sense in your head hold it open.**

(Still A.T., 1996, 28)

Osteopathy is a system of healing first discovered and used by the American physician Dr. Andrew Taylor Still (1828 -1917), who is for this reason called „the father of osteopathy”.

First of all, we have to understand clearly what osteopathy is. According to Still, it has to do with „sensing”. The word „sense” is to be understood in a double meaning: as a noun, meaning „sense, perception, sensation”; as a verb, meaning „to become aware of, perceive, understand”. In my view, “sense” and „sensing” are the most important words in the definition of osteopathy. Still was playing with yet another meaning of the word „sense”, when he quoted his father as saying: **„If you wish to get sense in your head, hold it open “** (Still A.T., 1996, 28).

His own definition of Osteopathy is the following:

„You wonder what Osteopathy is, you look in the medical dictionary and find its definition ‘Bone disease’. That is a grave mistake. Osteopathy is compounded of two words, osteon, meaning bone, pathos, pathine, to suffer. I reasoned that the bone, ‘Osteon’, was the starting point from which I was to ascertain the cause of pathological conditions, and so I combined the ‘Osteo’ with ‘Pathy’ and had as a result ‘Osteopathy’“ (Still A.T., 1996, 184).

This means that the bone is the tool for finding the cause of a dysfunction, not the tool for treatment or the site of the dysfunction itself. In other words, the bone is not the site where pathological processes take places, nor is it the site of therapeutic action,

but there is a store of information in the bone, which makes the bone a medium to ascertain disease somewhere in the body. This involves essentially a process of perception, not a therapeutic exercise or manipulation. Contrary to chiropractic, which is by definition a manual action, whereby bones or joints are adjusted by hand, osteopathic practice is sensorial by nature. The former describes an „efferent“ process, bearing away or discharging something (from Latin e-ferre), whereas osteopathy is an „afferent“ process, bearing or conducting inward (from Latin ad-ferre).

**Still: Unguided force is dangerous and often doing harm.**

(Still A.T., 1986, 20)

An essential concern of Still's work was to find conditions under which treatment could be applied without harming the patient, because he knew that unguided force from outside, as in manipulation, was potentially dangerous.

Still called osteopathy a philosophy and an art, as well as a science. Since the main part of osteopathic work takes place in the afferent range, the resemblance to art becomes evident, because art is by nature afferent, too. This is the essence of the creative process, whereas a mere imitation of sounds in music or of brush strokes and colours in the art of painting would be missing the point of what art is all about.

The well-known painter Oskar Kokoschka had an intuitive understanding of this, when he called his summer school in Salzburg „Schule des Sehens“ („School of vision“), because he knew that anybody who was able to „see“ would also be able to paint.

Likewise, the quality of music, for example in a symphony, is not primarily achieved by the production of single beautiful sounds, but by the ability to adjust these sounds to one another, by every musician listening to other instruments, by rhythm, musical

phrasing and harmony. This harmony of sound is what creates a symphony. Ideally, an osteopath is also a creator of this kind. He perceives the vibrations of the patients, as it were, and harmonizes them.

As osteopathy is by nature in the afferent range, it does not lend itself well to metrical representation or any form of measuring and quantification, just as the listening of musicians to one another in the orchestra, or the visual impressions of an artist, is not obvious to the public, and yet it is the essence of artistic creation.

The imitation of techniques, without sensing what is going on under one's hands, is worse than artistic epigonism, because these techniques can be dangerous to the patient. **„Unguided force is dangerous”**, as Still observed. For this reason, he refused to the very end to teach any technique of treatment or to write a book about the subject, because he was only concerned with the understanding of the principles of osteopathy. This, according to his view, was sufficient for every osteopath, in order to apply his own techniques successfully.

If the creation of a work of art means that efferences are the natural and compelling outcome of afferences, the same principle also applies to osteopathic techniques.

If efferences do not build upon a logical, preparatory afference, they are literally meaningless.

The philosopher Ludwig Wittgenstein opposed this innate wish for meaningless action with the famous 7<sup>th</sup> clause in his *Tractatus logico philosophicus*:

„Wovon man nicht sprechen kann darüber muss man schweigen“ (Wittgenstein L., 1971, 115 ). („If something cannot be talked about, it should be left alone, or in another, somewhat long-winded, but more accurate translation: If no meaningful discourse is possible about a given subject, it should not be talked about“ [Translation by Weber, 2006]).

## Chapter 2.1 Etymology of „PATHOS“

### J. Jealous: The breath of life heals only by direct action, transmutating form and function.

(Jealous J., s.a., 118)

An examination of the etymology of the words **osteon** and **pathos** may be helpful for our consideration at this point. The basic meaning of the Greek word **pathos** derives from the verb **pascho**, **paschein**. In Pape's German Dictionary of the Greek Language we find the following translations: „to suffer from outside influence, so that there is a suffering agent, who is the recipient of a good or bad impression as opposed to an autonomous free action“ (Pape W., 1906, 532).

Pathos is translated as „suffering“ by Pape and divided into three categories (Pape W., 1906, 532):

1. Pain, sickness, affect
2. Passion, affect
3. According to Aristotele: „**Possibility of transmutation to another condition**“, receptivity.

Hjalmar Frisk gave the following translation for **pas-chein** in his Etymological Dictionary of the Greek Language: „to receive, to have, to suffer an impression.“ The noun pathos is translated as „experience, passion“ (Frisk H., 1973, 478).

For me, this process of „receiving an impression from outside“, which turns me into a „suffering (sensing) agent“, as opposed to an „autonomous or free agent“, is the most important task of the osteopath. According to Stills definition this outside, from where the osteopath receives the impression, is first of all the bones.



## Chapter 2.2 Etymology of „OSTEON“

**Still: Our mind will explore the bone, the ligament, the muscle, the fascia, the channels through which the blood travels.**

(Still A.T., 1986, 44)

In the German dictionary of Duden, the bone is also described as that which is „innermost“, as for example in the German phrase „bis auf die Knochen“ (bis auf das Innerste) nass werden („to become wet through and through“), or „reaktionär bis in die Knochen“ („reactionary to the core“). A current English phrase expressing the same thing is, for example: „I feel it in my bones“ (Duden, 1983, 702).

In Hebrew „bone“ means **ezem**, but **ezem** also carries the meaning of **„essence, substance, the Self.“** This view that the bone is connected with the essence or core of the human being is helpful for the assessment of osteopathy. This is the reason why Still chose the bone - osteon - as structure of reference in the patient's body, rather than the skin, although the skin is the place of contact during treatment, or the muscles. In these cases, we would have to speak of dermatopathy or myopathy.

In the embryo, the bones develop from the deep or connective tissue. All derivatives of the mesenchyme, like muscles, cartilage, fascia and ligaments, as well as the connections of the mesenchym with the ectoderm (CNS) and the entoderm (inner organs), have a specific developmental relationship with the bone. Every tension or restriction of one of these structures will finally lead to an influence or tension on the bone (Wolff's law), which will result in a specific change or alteration in function. The bone absorbs the tensions, as it were; and the absorption of these tensions leaves a typical imprint on the corpus of the bone. These tensions on the bone affect other structures in the body (diaphragm, membranes, fascia), which can cause a

congestion of fluids (venous blood and lymph fluid). The task of the osteopath consists in locating this homeostatic disorder and in restoring function, according to Still who says that the osteopath's mind has to explore the bone, the ligament, the muscle, the fascia and the channels through which the blood travels (Still A.T., 1986, 118).

Thus, a tension in the liver leaves another kind of tension in the sacrum, as in the occipital bone or the fourth thoracic vertebra, or in the legs. All these bones, however, would have to convey to the osteopath the typical image of a liver tension. In other words, the osteopath has to be able to „read“ the bones.

In the stone age messages  
were scratched into the bone

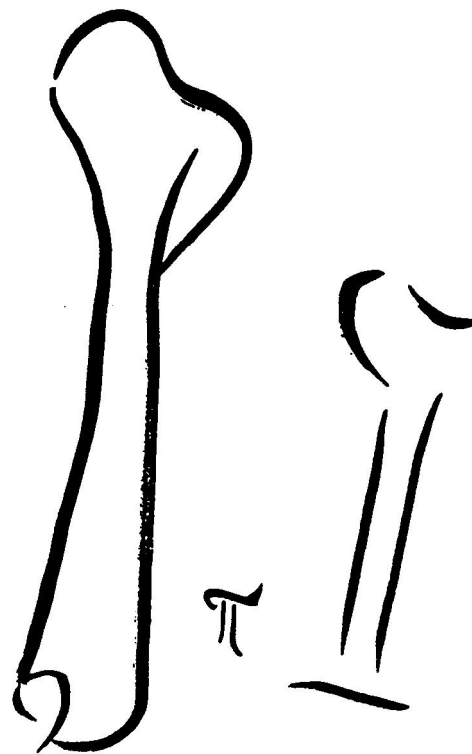


Fig. 1: The osteopath has to be able to read the bone

It is more than probable that Still used the word „pathos“ in „osteopathy „to refer to pathological conditions (the cause of pathological conditions), but one might also call the process of osteopathic work (i.e. ascertaining the cause, i.e. sensing the cause) a pathos-determined or sense-determined process, as this would correctly describe what osteopathy is really about.

Thus, the meaning of **pathos** in osteopathy corresponds to the pathos in the words telepathy, sympathy or empathy. As in these cases, it has nothing to do with disease, especially if one traces the development of osteopathy and appreciates how subtle the techniques have become in the hands of Sutherland. His maxim was to use „**no force at all**“, and especially towards the end of his life he worked according to this principle. This was the greatest achievement of his life. On these premises, it would certainly not be a mistake to call osteopathy a kind of „sensing with the bone“.

The disease or illness itself is just one form of pathos (pathological condition), where a person is no longer able to endure the suffering derived from it.

As the philosopher Peter Sloterdijk writes in his book Der Denker auf der Bühne Nietzsches Materialismus:

„The misery of man consists not so much in his sufferings, but rather in his inability to blame himself for them - to want to blame himself. This willingness to take the blame signifies neither a narcissistic hubris nor a certain masochism regarding one's own destiny, but the courage and serenity to accept the reality and potentiality of one's life. Whoever wants to blame himself, stops to look around for someone else to blame. He will give up existing in theory and justifying his existence from absent origins and illusionary causes. Due to his drama, he will himself become the hero of knowledge - the patient of truth“ (Sloterdijk P., 1986, 187-188).

This condition of refusing to take responsibility describes the condition of illness. What we have here is de - synchronisation, and it is the job of the osteopath to recognize where synchronisation or, in other words, where the health of the patient was lost. To return the patient to synchronisation is a process of uncovering the essence, because synchronisation is the element of healthy human existence.

The opinion of Aristotle, the Greek philosopher and physician, that **pathos** - suffering - tends to pass on or **transmute to another condition**, that is: from de-synchronisation to synchronisation, shows an interesting correspondence to the power of the „breath of life“, which James Jealous in the wake of Sutherland describes as „transmutation“. The translation of osteopathy as a „sensing the essence“ fully conforms to this fact. The point is to sense what the essence of a human being is, because from this comes the health. Still describes this basic fact with the following words: „**To find health should be the object of the doctor. Anyone can find disease**“ (Still A.T., 1986, 72).

In other words, we must reinforce health by finding (sensing) it. When Still says: „**It is quality, not quantity that we want**“ (Still A.T., 1986, 23), he makes exactly this point. Osteopathy is not concerned with changing disease (quantity), but to find health (quality); Osteopathy is „**sensing the essential.**“

The word “Osteopathy” carries the holistic axis of sensing from the hard (osteon) to the soft (fluid) and marks the point of the obstruction of fluids as dysfunction (pathos).

## Chapter 3: Physiological Fundamentals Of Sensing

### Chapter 3.1 The Autonomic Nervous System And Sensing

**Still: If you want to drink milk, put it in your mouth and not on your clothes.**

(Still A.T., 1996, 28)

The autonomic nervous system takes over numerous involuntary or spontaneous, mostly unconscious physiological processes of life. It can be divided into different categories, according to an anatomical or functional point of view. The best-known classification is that of the English physiologist John Newport Langley (1852-1925) at the turn of the nineteenth century.

This classification differentiates between the sympathetic, the parasympathetic and a third part of the autonomic nervous system: the nervous system of the intestines. (Newport Langley J., s.a.)

In the most textbooks on physiology, this third part is not mentioned. For this reason it shall not be discussed in detail here, but mentioned for the sake of accuracy.

According to this view of the autonomic nervous system, the sympathetic nerves extend from the thoracic down to the lumbar region. For this reason it is called the thoracolumbar nervous system. Above and below, the parasympathetic nervous system (from Greek para: 'next to') is located. Due to this location it is also called the craniosacral nervous system.

Besides this anatomical classification there is also a functionally-orientated classification. These divisions are not always entirely clear either, because frequently certain anatomical structures are used for the performance of different functions.

So, for example, while the opened pylorus can be closed by a stimulation of the vagal nerve, the closed pylorus can be opened by a stimulation of the vagal nerve.

No matter which system is given preference, the important point in my view is to examine more closely the connection which exists between the autonomic nervous system and sensing.

The parasympathetic nervous system is also called the trophotrope nervous system. Greek trophos means food, nutrition. Accordingly, a part of the autonomic nervous system is directed to take in and eliminate food.

The sympathetic nerves are also called the ergotrope system, from Greek ergon, meaning “work, labor”. Therefore, the second part of this system is connected with work and performance.

This principle of taking in and eliminating is a functional pattern which we also observe frequently in other physiological processes. The conditions in which this give-and-take functions are best, will be discussed in this chapter. I propose to look at the performance of the autonomic nervous system exclusively from the point of view whether the autonomic performance is food-related or work related.

According to Konitzer, the Viennese psychoanalyst Wilhelm Reich classifies the autonomous system in the following way (Konitzer M., 1992, 33-35):


Parasympathetic	Sympathetic
tumescent expansion	shrinkage (contraction)
increased turgor (surface tension)	diminished turgor (surface tension)
low central tension	high central tension
open	closed
extrovert	introvert
non-ego-related	ego related
sexual excitement	fear, pallor, cold sweat
"flow" from the center to the periphery	"flow" from the periphery to the center
<p>"Parasympathikonie" ← life process      "Sympathikonie"</p> <p>relaxation      wavering between      high tension</p>	
	

Fig. 2: The flow of plasma in the amoeba in the state of expansion and contraction

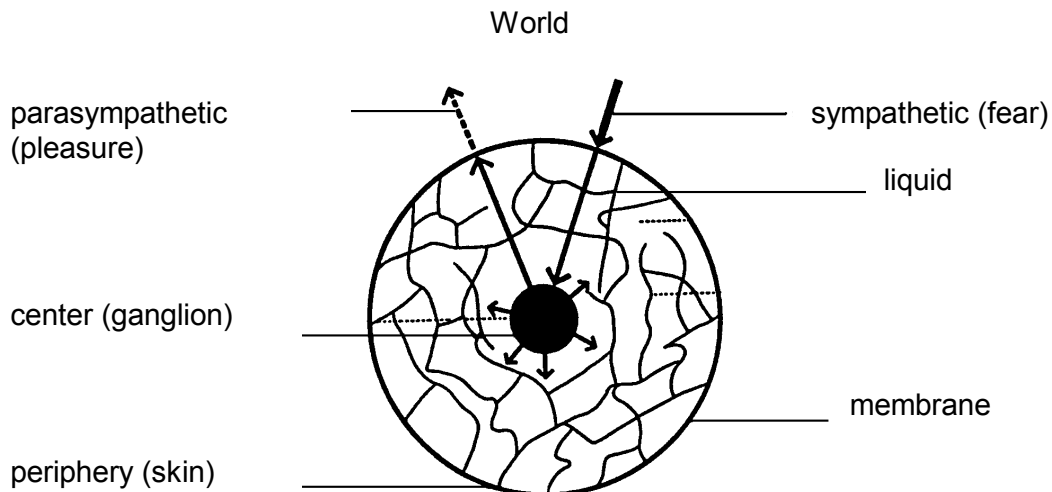


Fig. 3: Reich's view of balance between fear and pleasure

Here, the anatomical structures can also change their functions: they may function one time for the trophotrope part, and another time for the ergotrope part. However, as a rule, the **parasympathetic** supports the **trophotrope**, and the **sympathetic** supports the **ergotrope** system. Also the voluntary motor system is usually based on the same principle. Here we speak of afferents, however (from Latin *ad-ferre*, to bear, bring or carry toward). These afferent forces transmit information from the periphery to the center. The forces working from the center toward the periphery we call efferents (from Latin *ef-ferre*, *ex-tuli*, *e-latus*, to bring or bear away).

When we speak of a food-related and a work related system, we find an analogy in the afferent and the efferent systems. This give-and-take also seems to be basic to sensory and motor nerve fibres as a pattern of development in the embryo.



Blechschtmidt, the well-known embryologist, writes in his book Wie beginnt das menschliche Leben? (“How Does Human Life Begin?”):

“In summary, the difference between sensory and motor tract-finding consists, kinetically speaking, in the fact that the ‘sensory’ tracts are **sucking** towards a source of substance by using molecules from outside to build their membranes. Conversely the fiber ends of the ‘motor’ tracts **transmit** building elements to the growing muscle fibers and are therefore biodynamically attracted by them” (Blechschtmidt E., 1989, 108).

This observation of Blechschtmidt’s offers an interesting aspect suggesting that the sensory performance has something to do with the ingestion of food. The familiar German expressions “Ohrenschmaus” (“a banquet for the ears”) or “Augenweide” (“a feast for the eyes”), for the experience of pleasurable sounds or of a beautiful sight, confirm this theses also by the common use of language.

Blechschtmidt calls this achievement, the act of balancing give-and-take, the first mental function of the embryo.

“Only someone who has gathered riches, can give them away. Internalization, that is to carry riches inside for others, not self-exhibition, should be the aim of education” (Blechschtmidt E., 1982, 91).

This balance of giving and taking is quite simple but only at first glance.

The efferent activity frequently suffers from a disturbance in absorbing the afferents.

### **Still: They eat and rest.**

(Still A.T., 1986, 43)

Still's observation that slaves take a rest during meals and that the collection of riches do not burden their minds, suggests that the processes of nutrition should preferably be linked with the condition of rest. He writes:

“Slaves and savages seldom fall victims to paralyses of any kind, but escape, for they know nothing of the **strain of mind** and hurried nutrition. They eat and rest, live long and are happy. The idea of riches never bothers their slumbers” (Still A.T., 1986, 43).

Everyone who feels “obliged” to engage in other activities while eating, such as reading, watching television, walking or even working, knows that is not easy to achieve this state of rest.

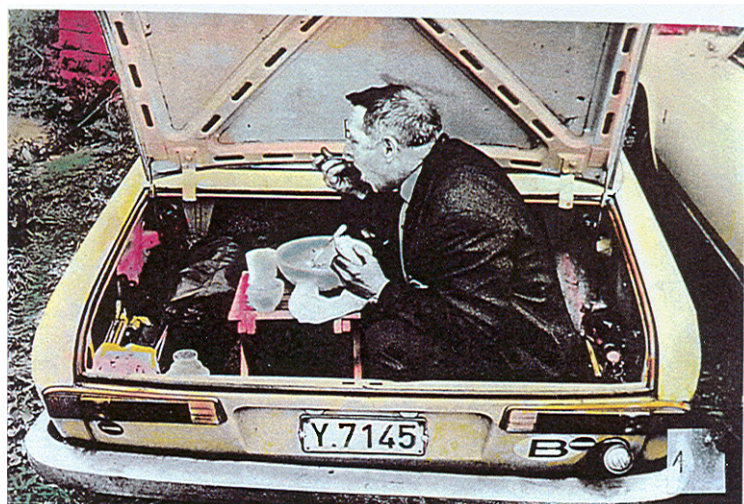


Fig. 4: Hurry and eating can lead to severe problems

Many rituals associated with eating fulfil this task of creating a state of rest. It is their function to bring the parasympathics and the sympathics into balance. So, for example, the washing of hands and face, which is the custom in many cultures, separates the world of labour from the world of recreation, the ergotrope from the trophotrope world.

Also, an essential aspect is added to this ritual by prayer, because it is associated with an attitude of silence. A meaningful transmutation of something outward into inward, until a state of saturation is reached, can only take place if the person calms down and is at rest. H. Jacobi, a German music pedagogue, thinks that human beings who are at rest never make unjustified demands (Jacobi H., 1995).

As far as nutrition is concerned, one is inclined to think that individuals who are capable of rest never eat more than is beneficial to their health. On the other hand, one might say that individuals who are unable to rest have greater tendency to compensate for other deficits, like loneliness, anger, depression etc.

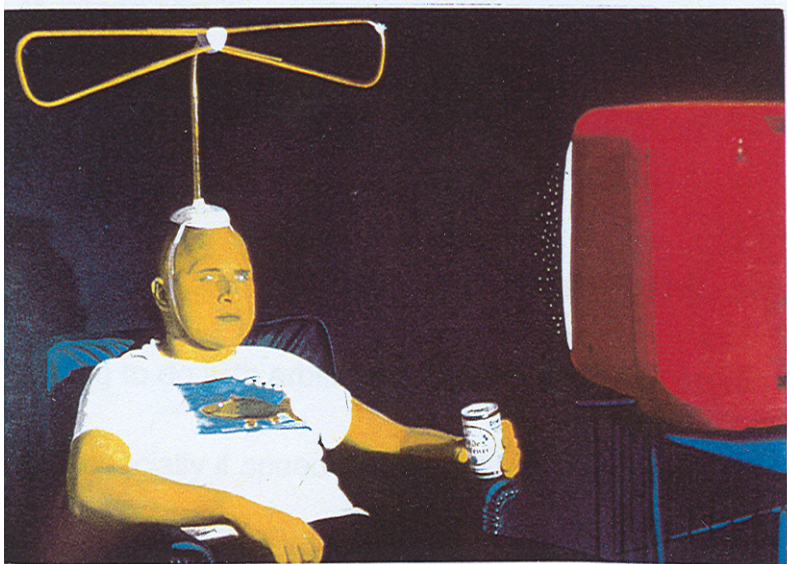


Fig. 5: Meaningless activities occur more often if people don't sense what they do.

A very interesting scientific study of wrong decision-making by referees during the World Championship of Soccer in 1998 shows how much the speed of intake influences the performance. Thus, the Dutch athletics specialist and researcher Raymond Verheijen of the Free University of Amsterdam was able to demonstrate that referees make the most mistakes when they are closest to the ball (Verheijen R., 1999). Also, the running speed of the referees was examined, and it turned out that those who were exerting themselves most often gave the wrong whistle signals. If a referee moves at the speed of two metres per second, he is likely to assess correctly what is going on in the playing field. At four metres per second, there is a good chance that his whistle will give wrong signals.

This study is an impressive demonstration of the impact this ability of taking in has on the actual performance and how it is determined by the proper speed. It also shows very clearly that if there is too much volition or ambition, it defeats its own purpose. If volition is too intense, accompanied by patterns of meaningless motion, it does not link up with anything and leads to wrong results.

**Still: Do one thing well and leave the rest alone.**

(Still A.T., 1996, 140)

For us osteopaths it is very important to understand that sensing has everything to do with taking in, and nothing to do with arbitrary action. In this area certain laws prevail, to which we must adapt. Especially if speed is arbitrarily determined and not taken over from outside, inadequate behaviour will be the consequence. We have to realize that the “ingestion of food (i.e. information)”, in whatever form, has to follow rhythmical laws which are not dictated by arbitrary human volition, but by superior forces.

The arbitrary dictation of the speed of food intake leads to a process which Still calls “**hurried nutrition**” and this ends up with cramps which inhibit any kind of ingestion. If we, as osteopaths, do not take these laws into consideration in our work, if we attend to nothing else besides our work and by our restlessness waste our energies on unimportant details, we convey to the patient that we are not willing to obey these higher laws ourselves. We need periods of rest, too, and should learn to relax regularly, and above all to find the appropriate pace in our work.

Still has a relevant piece of advice to give:

“Do one thing well and leave the rest alone. Did you ever see a coon climb two trees at one time? If he did, he would be like an osteopath who has his head in many kinds of cures, and fails because he cannot climb but one tree at a time” (Still A.T., 1996, 140).



Fig. 6: This picture of Jan Vermeer, shows perfectly the ability to devote oneself to one thing.

The assimilating parasympathetic part of the vegetative nervous system correlates extensively with the assimilating sensorial processes of the nervous system. The rhythmical synchronisation with this part of the vegetative nervous system by the Osteopath supports him in improving his capacity of sensing.



## Chapter 3.2 Posture And Sensing

**Still: I constantly urge my students to get their minds full of pictures of the normal body.**

(Still A.T., 1986, 9)

There are many different systems and concepts from various cultures which expound in detail on the proper body posture. There is the system of Hatha Yoga in India, Tai Chi in China, gymnastics in our civilization, and the body techniques according to Moshe Feldenkrais, Elsa Gindler or Frederick Matthias Alexander.

All of these gymnastic schools of posture aim at the harmonization of body functions, because their proponents understood the link which exists between organic dysfunction and wrong posture. For most of them, the declared goal is the upright posture of a child, who is able to adjust his back and head in a physiological position with the least expenditure of energy. This posture always looks graceful, elegant and free.



Fig. 7: Young boy in harmony with nature

**Feldenkrais: The center is the place from which you can move into every direction with the same ease.**

(Feldenkrais M., 1978, 110)

In this chapter, I propose to take a closer look at the relationship between posture and sensing. The segment of the spine which is most vital for the sense organs of the head and their **sensing functions** is the **atlanto-axial joint (C1/C2)**. The axis, i.e. the second cervical vertebra, is also called “epistropheus”, because its joint is constructed in a way that **allows the sensory cells of ears, eyes and nose to be turned towards the sense stimuli by a specific rotating movement**. The head merely needs to be turned in the direction of the stimulus, and everything else happens without the need of any kind of assistance.

H. Jacobi always emphasizes in his courses that these **sensory processes occur passively**, and that any attempt to assist them does not only have no effect, but is definitely a disturbing influence (Jacobi H., 1995).

The study of the performances of referees discussed in Chapter 2, which shows that those referees who were exerting themselves the most came up with the worst results, confirms this point.

The basis of this unrestricted ability of the atlas and axis to rotate is the positioning of the spine in the center. It is not easy to define the “center” biomechanically, because the spine is connected to the entire organism, and every kind of tension in the body naturally causes a change in the position of the joints as well.



Moshe Feldenkrais found a very simple and intelligent definition, which is also very precise: **“The center is the place from which you can move into every direction with the same ease”** (Feldenkrais M., 1978, 110).

This definition is congruent with Fryett’s third law: “The initial movement of an intervertebral joint heavily obstructs or diminishes the mobility of this joint in the other two spatial dimensions.” This means that the spine has to find a middle or centre between extension, flexion, sidebending and rotation, to keep the specific turning movement of C1 and C2 in function.

It is easy to test whether the spine is in the centre by sitting on a chair in a forward bending position and trying to turn one’s head. It will be observed that this movement of turning one’s head is much easier in an upright position.

However, the following example will show how difficult it actually is to find the centre: Sit down on a chair, with freedom of movements in all directions. Now, if a person whom you are afraid of enters the room, the central position you adapted to is no longer valid, because the direction of movement towards the feared person is blocked, without changing the posture just assumed.

**The rotating ability of the head, which carries the sense organs, is now an expression of the readiness for sense perceptions.** But how can the spine now be brought to the central position most easily, in order to allow the head to rotate?

**Feldenkrais: The ideal standing position, as well as sitting position, is not obtained by doing something, as for example standing upright by an act of will, but by literally doing nothing.**

(Feldenkrais M., 1992, 118)

Feldenkrais writes in his book The Potent Self:

“We see, therefore, that there are two kinds of muscular contractions. One kind is involved in intense, slow, sustained effort; the other is of graded intensity - faster, but of much shorter duration. Of the first kind, we have no awareness at all. The second is entirely obedient to our volition and produces inner awareness. The first is tonic concentration, and the second is phasic concentration which we use through direct voluntary control in all our acts” (Feldenkrais M., 1992, 117).

The impulses which regulate the tension of the tonic muscles apply to the lower parts of the nervous system and only relate indirectly to the higher cortical centers. The tonic distribution of contraction in the skeletal muscles is a phylogenetic adjustment of the human organism to the gravitational field of the earth, and only indirectly accessible to individual, personal experience.

Contrary to this, the impulses for voluntary contractions of the skeletal muscles are released from the cortex, where they reach the peripheral nerves via pyramid tract and the spinal cord. As long as there is no ontogenetic connection between the pyramid tract and the spinal cord, a voluntary movement of the segments located below is not possible.

Feldenkrais continues:

“Each skeletal muscle has two sort of fibers, red ones and pale ones. The red fibers contract slowly and fatigue even more slowly; the pale ones contract sharply and fatigue rapidly. Voluntary movements correspond, therefore, to the pale fibers’ contractions, and tonic movements to the red ones. Muscles that are constantly tonically contracted and do the major work of maintaining the body against gravitational pull - that is, all the muscles extending the articulations, the extensors, which are also referred to as ‘anti-gravity muscles’ - have more red fibers than the flexor muscles, which contract much faster.

The voluntary movements are due to impulses from the highest nervous centers, which have an overriding control over the lower centers. Thus the horse can inhibit the tonic contraction of its neck extensors and voluntarily lower its head or enhance them and lift its head. When the voluntary impulses stop arriving, the head returns to its normal position, as the inhibitory effect on the tonic contraction is lifted. That is, **when the horse does nothing at all**, its head is lifted by the tonic apparatus that evolved with its species adaption to the physical environment” (Feldenkrais M., 1992, 117).

Feldenkrais continues to state that the voluntary movements of human beings are the result of personal experience, and that, in opposition to this, the tonic activity represents the adaption of the species.

**Increased activity of the flexor muscles**, which can **only bend the joints** and contract the body stature generally, has therefore something to do with **the experience of the individual**.

Here we have a point of utmost importance, says Feldenkrais, for the understanding of posture in relation to action:

“Namely, if in the act of standing we eliminate all contraction due to impulses from the cortical areas (such as are subject to volition in the physiological senses - that is, with no concern as to whether we are aware of issuing the order producing the contraction or whether its origin is entirely unknown to us), the body will be held in the tonically erect posture that the evolutionary adaptation of the skeleton, muscles, and the tonic apparatus of the nervous system has produced” (Feldenkrais M., 1992, 118).

Here, Feldenkrais has an insight which is astonishing to many physiotherapists.

The ideal standing position, as well as sitting position, is **not obtained by doing something**, as for example standing upright by an act of will, but by literally doing nothing. I do not know any description of the qualities of these two muscle systems which is more precise than that of Moshe Feldenkrais.

In summary, we might say that the tonic muscle system makes the spine erect. Due to its dorso-lateral position, the spine is able to make the processii spinosi come together by virtue of bilateral contraction, whereby the vertebral bodies move away from each other and relieve the intervertebral discs. By unillateral tension, a rotation movement is initiated. However, this tonic muscle tension, as Feldenkrais clearly indicated, is by nature autonomous. Contrary to this, the phasic muscle system, which often connects the trunk and the extremities, induces the spine to bend by contraction. This contraction of chains of phasic muscles have the **task to make the body move in space**. However, the nature of the phasic muscle system is its potential voluntariness.

We can see that also in posture, there are two opposite body systems, one that is receptive or taking in, the tonic system, and another which gives away, the phasic system.

**Still: There is no need for an operator to unnecessarily tire himself and his patient when no good is to be derived from the effort.**

(Still A.T., 1986, 40)

Still speaks about the importance to keep sensing and acting in balance, in order to avoid an unnecessary expenditure of energy:

“There is no need for an operator to unnecessarily tire himself and his patient when no good is to be derived from the effort. He is dealing with **cause and effect**. We pay for a lamp of reason to guide us. We feel that we are only tinkling cymbals or sounding brass as osteopaths until we can have **reason at the beginning and at the end of all our methods or efforts** to cure the afflicted” (Still A.T., 1986, 40).

In this context it is interesting to note what the German word “Krankheit” (illness, disease) originally means. The word “krank” (ill) is still used in the lingo of sailors as the word “krängen”, which means “to fall of (the wind)”, also to “bend”. This “bending” occurs when a phasic (doing) activity is losing the contact to the tonic (sensing) activity on which it should be superimposed (see fig.8).

This means that there is an intention to accomplish more than is possible and necessary, and therefore the effort is meaningless, because it is not based on actual perception, but on what the head wants to perceive as reality.

The philosopher Peter Sloterdijk remarks in his last book Die Sphären ("The Spheres"): "Und ist nicht in jede Regung offensiver Selbstsetzung ein Zorn über versäumtes Genommenwerden eingeschossen?" - "Doesn't every impulse of an offensive self-affirmation betray some anger about a missed opportunity for being accepted?" (Sloterdijk P., 1998, 96) [Translation by Weber].



Fig. 8: Modern Pumptraining: Anger for not having been accepted?

In my view this "offensive self-affirmation" describes exactly what I call an excess of phasic activity, because its main task consists in preventing a state of rest, in whatever form. It is the state of rest and the erect posture of sensing, upon which osteopathic work is based. "**Be still and know**", is the advice Sutherland gave to his students (Sutherland W., 1998, 209). It is necessary to learn not to intervene in areas and situations where things happen by themselves.



Fig. 9: Young boy in contact with cause and effect, the phasic activity is guided by sensory inputs.

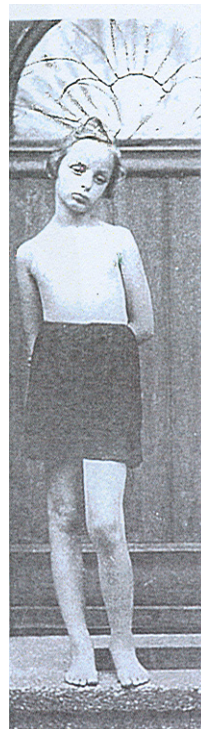
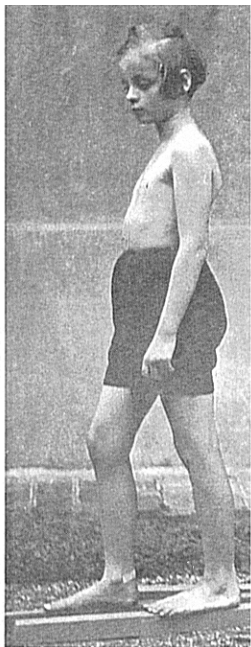


Fig. 10, Fig. 11: Bored girl and her posture, a lack of interest is the reason that the tonic system is not able to establish itself.



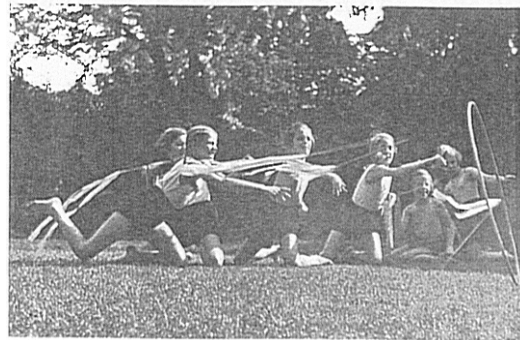
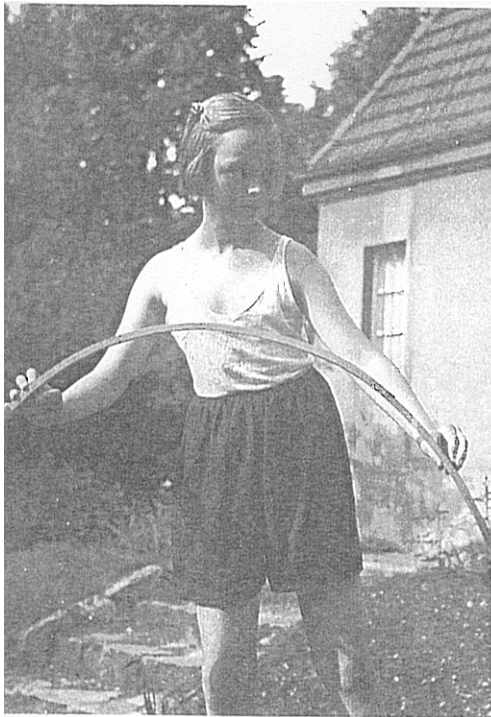


Fig. 12, Fig. 13: The same girl in the field of cause and effect - who corrected the posture perfectly? Phasic and Tonic System in balance, i.e. sensing and doing at the same time.

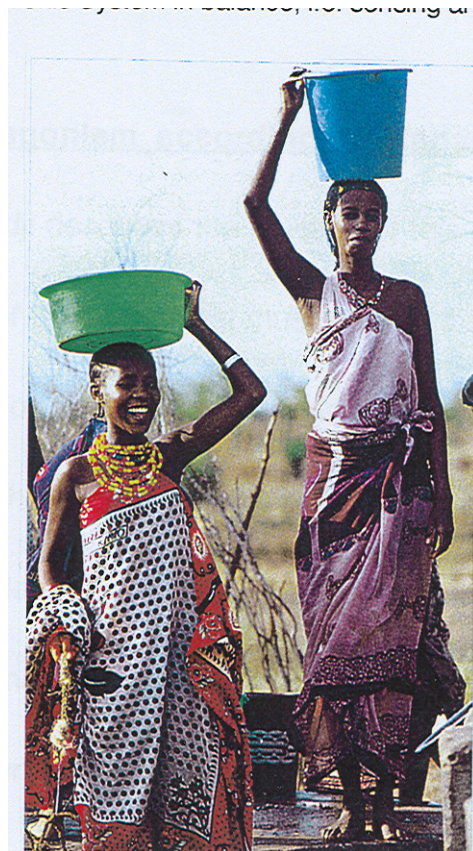


Fig. 14: There is no need for an operator to unnecessarily tire himself.



Also in posture, there are two opposite body systems, one that is receptive, the tonic system, and another which is productive, the phasic system. Osteopaths who synchronize with the tonic system and avoid synchronisation with phasic muscular movement-intentions as far as possible can improve their capacity of sensing.

## **Chapter 3.3 Respiration And Sensing**

In osteopathy, we differentiate between primary and secondary respiration. The term “primary respiration” is derived from cranio-sacral osteopathy and refers to the inner movement of all organs on the cellular level. Thus, this primary respiration is firmly related to secondary respiration, which is known to us as “chest and abdominal respiration”. In this chapter, I shall mainly deal with the different forms of secondary respiration, its physiology and biomechanics and its significance for sensing processes.

### **3.3.1 Antagonism according to Kapandji**

The biomechanic Kapandji describes the function of this outer respiration as a respiratory antagonism of the abdominal muscles and the diaphragm (Kapandji I.A., 1985, 142-143).

According to this concept, the inspiration, i.e. the breathing-in of oxygen, occurs by lowering the diaphragm and relaxing the abdominal muscles at the same time. By this process the lungs are enlarged or inflated. During expiration, the diaphragm moves upward again, whereby the abdominal muscles are tensed and the lungs are deflated or shrink in volume. This up-and-down movement of the diaphragm must be unobstructed for optimal respiration. However, upon closer examination it cannot be confirmed that this antagonism really takes place between the diaphragm and the abdominal muscles.

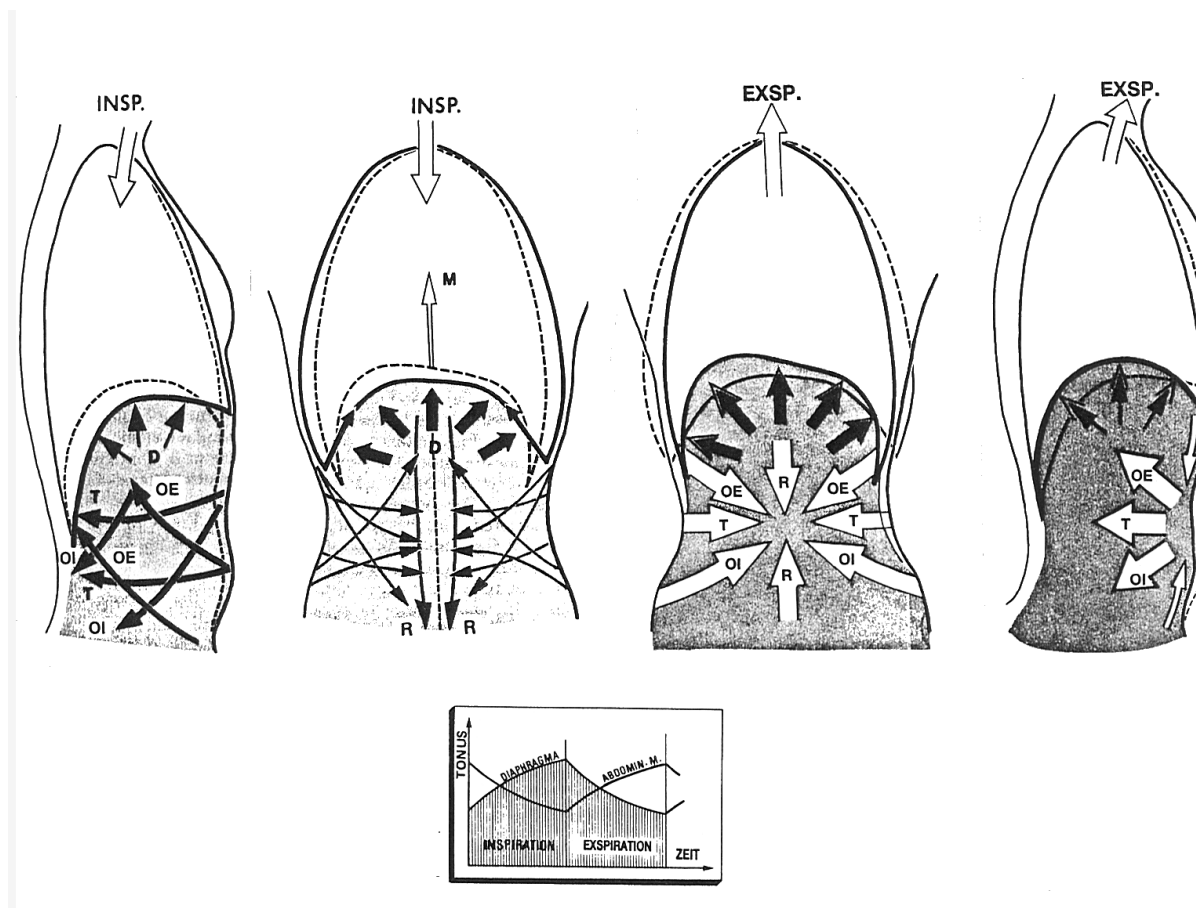


Fig. 15: Antagonism of Diaphragm and Abdominal Muscles.

### 3.3.2 Embryologic Development

If we take a look at the development of the embryo, we see that the lungs develop from the endodermal gut tube (Drews U., 1993, 310).

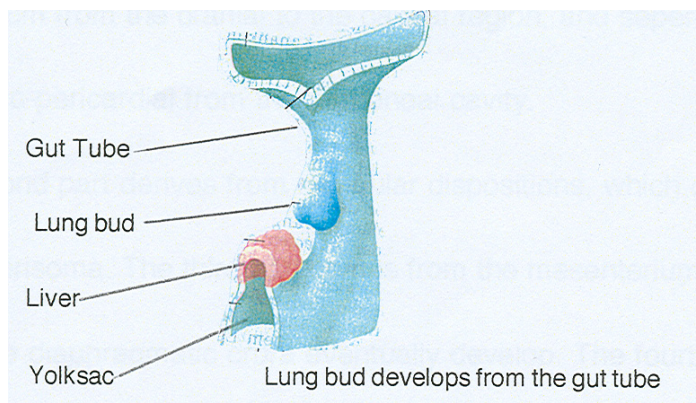


Fig. 16: Lung bud develops from the gut tube.

Besides this development related to the intestines, the respiration structures also show functional connections between diaphragm, peritoneum and pleura (fascia). But the peritoneum and pleura, as well as the pericardium (heart sac) develop in the embryo from the umbilical coelom. In brief, it may be stated that the real lungs develop from the intestines and that the covering of the lungs, the above mentioned fascia, develop from the umbilical coelom.

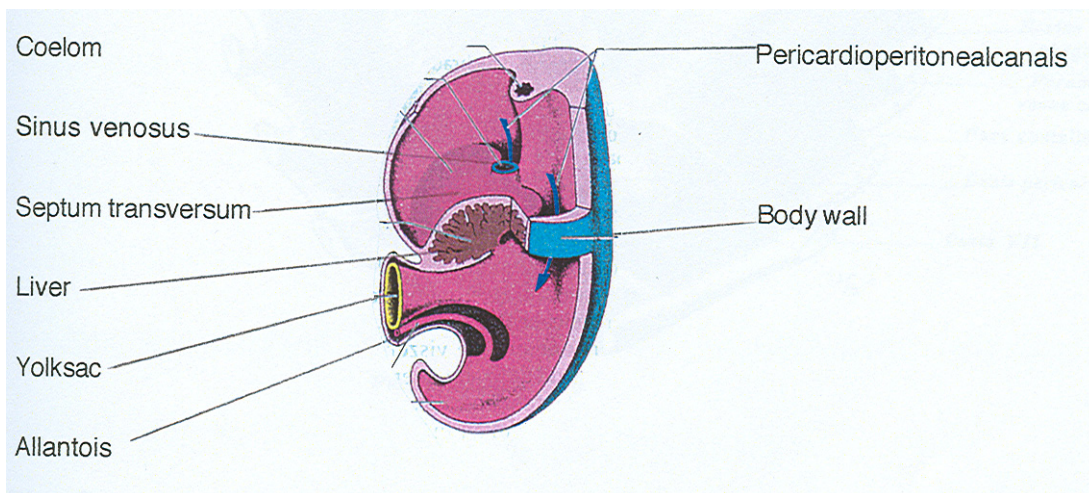


Fig. 17: The pleuro-peritoneal cavity derives from the umbilical coelom

As far as the development of the diaphragm is concerned, we observe that it consists of four parts. The central or innermost part, the centrum tendineum, developed from the septum transversum. During the development of the embryo, it drops with the pericardium from the cranial to the caudal region, and separates - although not quite - the pleuro-pericardial from the peritoneal cavity.

The second part derives from muscular dispositions, which originate in the lateral and dorsal perisoma. The third part comes from the mesenterium of the oesophagus, from which the diaphragmatic crura eventually develop.

The fourth part of the diaphragm develops from the two pleuro-peritoneal membranes (Langman J., 1989, 289- 290).

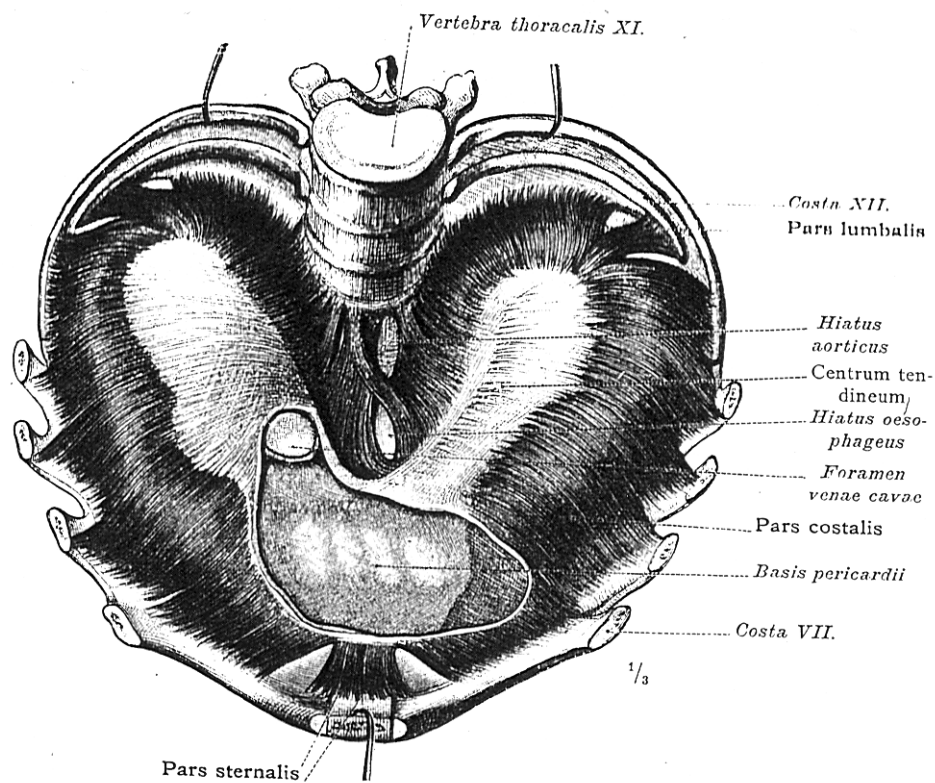


Fig. 18: Diaphragm and the Basis pericardii.

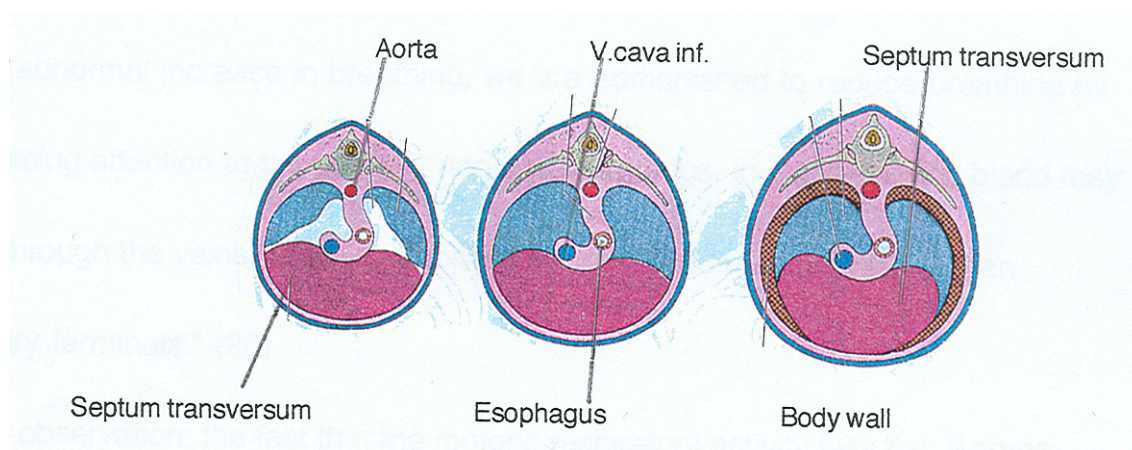


Fig. 19: Pericardioperitoneal canal, Pleuroperitoneal membrane, Esophageal mesoderm.



It is interesting to point out that the diaphragm is innervated motorically in the centrum tendineum by the nervus phrenicus, and displays its sensitive innervation in the pleuro-peritoneal part which derives from the umbilical coelom. Besides the sensitive part of the phrenicus, also the nervi splanchnici and the nervi intercostales are significant for the control of the peritoneum. The sensitive branch of the nervus vagus functions in a similar way. It supplies the pleura pulmonalis with 60%, but also the interlobarseptum as well as the lung tissue close to the pleura.

It seems as if the navel (umbilicus, omphalos), out of which develops the pleura and the peritoneal cavity, was the conductor of this respiratory orchestra, because it is the task of the sensitive breath control to create just enough space to give the motoric movement the scope necessary in this moment.

**Still: We are admonished to reduce breathing by addressing attention to the sensory nerves.**

(Still A.T., 1986, 63)

Still writes about the importance of sensitive breath control:

“With this foundation, we observe that if there is too great action of the motor nerves, as shown by an abnormal increase in breathing, we are admonished to reduce breathing by addressing attention to the sensory nerves of the lungs, in order that the blood may pass through the veins, whose irritability has refused to receive, further than capillary terminals” (Still A.T., 1986, 63).

This subtle observation: the fact that the motoric respiratory activity falls flat, if some tension set by the sensitive nerve tracks inhibits the respiratory performance, is extremely important. This is the crucial point of any respiratory dysfunction.

Friedrich Nietzsche articulated the same fact in the chapter “On Wisdom in Pain” of his work *The Joyful Wisdom*. If we compare the sails mentioned in the quotation with the unbroken fascia of the respiratory system (Diaphragm-pleura-peritoneum etc.), his view correlates exactly to Still’s.

Nietzsche writes:

“I hear in pain the captain’s command: ‘Take in sail!’ Man, the brave seafarer, must have practised setting his sails in thousand ways, or else he would soon perish, and the ocean would drag him to the ground. We must know how to live even with reduced energy: as soon as pain gives its security signal, it is time to reduce it” (Nietzsche F., 1980, 318).

**Still: The rule of artery is supreme.**

(Still A.T., 1986, 55)

It is not the motoric tracts which decide the quality of respiration (they are also subject to the will), but the sensitive tracts. These, however, depend on stimuli received from outside and are, therefore, subordinate to the will. The quotation from Still points out how important an unobstructed activity of the diaphragm is for homeostasis. The consequences of an interference can be observed in the ultrasound test of the tibial artery. In order to find out whether he is palpating the vein or the artery, the doctor asks the patient to hold his breath. This short respiratory arrest (apnea) causes of the venous pulse to vanish, while the arterial pulse persists. Thus the physician knows whether he is palpating the artery or the vein. Via the contraction of the diaphragm, the respiratory arrest leads to pressure on the vena cava inferior and thereby effects a minimal congestion in the entire venous system, but of course also in the lymphatic

system. This example is a striking demonstration of how little it takes, in this case a short cessation of breath, to cause a visible disturbance in the circulation of the blood. It is easy to imagine how dramatic the effects of this dysfunction would be, if this respiratory malfunction were practised permanently. It seems that Still's postulate that the "rule of artery is supreme", meaning that it is of the utmost importance that the fluids can flow, presents a challenge to prove his point.

**Still: Functional Antagonism of Opening and Closing: "By its action we live, and by its failure we die."**

(Still about the Fascia, Still A.T., 1986, 60)

Creating space in the pleuro-peritoneal region corresponds to an opening movement, which precedes the downward movement of the diaphragm in inspiration. In Yoga there are breathing exercises which are based on this concept. The practitioner is asked to imagine that he is pouring his breath into a bottle, as if it were water. Accordingly, the breath rises from the bottom upward, comparable to the liquid poured into the bottle.

One prerequisite for filling the bottle is its opening, and the other is the fact that the bottle is empty. The opening is effected by a sensitive control of the fascia, with their center in the region of the navel, which report constantly on the present situation of the outside.

If, due to certain conditions which I shall discuss later, there is no optimal opening, the motorically innervated part of the diaphragm cannot unfold. The emptiness of the bottle or the lungs, respectively, is induced by a correlating expiration.



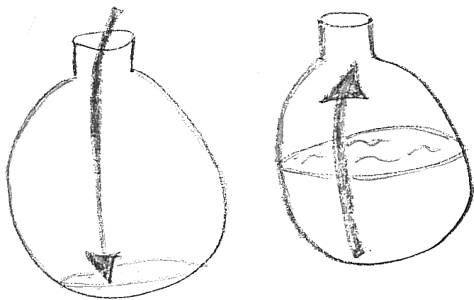


Fig. 20: An open and empty bottle is the requirement for filling it.

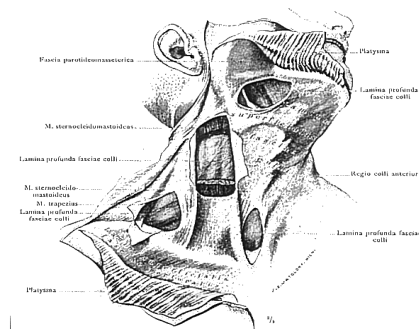


Fig. 20a: Above the unbroken fascia by Toldt.

Now we may discern a synergism of all pleural, peritoneal and diaphragmal structures in a general opening movement, but no antagonism of the structures as described by Kapandji (Kapandji I.A., 1985, 142-143). For this reason, his view of the respiratory antagonism is refuted, because the latter does not exist between the abdominal muscles and the diaphragm, but as a functional antagonism in the opening and closing of the gut tube, the umbilical coelom and the organs connected with it.

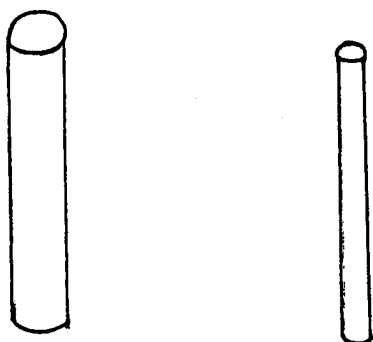


Fig. 21: Gut tube open

Gut tube closed



Fig. 22: Maximal expirations

**Blechschiidt: These processes are not induced by the nucleus, but by the bordering cell membrane.**

(Blechschiidt E., 1989, 37-38)

If the sensitive parts of the diaphragm really derive from the umbilical tissue, Blechschiidt's view agrees with it. He postulates that the significant changes do not originate in the nucleus of the cell, in this case the motoric branch of the nervus phrenicus, but in the membranes of the body, because for motoric impulses the sensitive preparations are responsible.

Blechschiidt describes how development represents a process which turns outside into inside:

"The first processes of germ differentiation are already a response to stimuli which have been proved to come from outside. Therefore the development of cell reactions first takes place in the relatively large cell border membrane, and only afterwards inside the zytoplasm. As a matter of fact, a thorough investigation of the processes of differentiation in the human being demonstrated that these processes are not induced by the nucleus, but by the bordering cell membrane, i.e. from outside" (Blechschiidt E., 1989, 37-38).

**Still: My patient tried to talk with empty lungs.**

(Still A.T., 1992, 152)

In his book Practice and Research, Still describes the importance of this opening capacity of the whole body for inspiration and the function connected with it, on the basis of his reflections about stammering. In his opinion stammering is caused by an inability to maintain the inspirative opening position during the act of speaking.

Still writes:

“In all stammering cases which I have observed and treated during the many years past I have found without exception that my patient tried to talk with empty lungs” (Still A.T., 1992, 152).

These empty lungs are caused, above all, by the fact that tension of the abdominal wall prevents deep inspiration.

Still's therapy consists in eliminating all faulty positions of the joints. Besides this, he also tries to effect a change of this behaviour by functional speaking exercises, in which he addresses the empty lungs, which are not activated enough for inspiration.

This is how he instructs his patients:

“Take a good big breath. Fill your lungs just as full as they can possibly hold, then repeat each word after me clearly and distinctly as I call them over. Now fill and say one; fill and say two; fill and say three.” Let them count up to ten or fifteen. Then I would say, “Load up your lungs, get them very full and say ‘man’; load up and say ‘woman’.” For the first day I would have them load up the lungs before every word spoken, my object being to separate the vocal and respiratory nerves by having the lungs very full of atmospheric air and ready to blow out, so that each nerve could perform its function normally” (Still A.T., 1992, 152).

The separation of the vocal nerves (nervus recurrens - nervus vagus) and the respiratory nerves (nervus phrenicus) corresponds to the categories of efference, i.e. voice, and afference, i.e. inspiration, including the preceding opening of the fascia. If the one gets mixed up with the other, or the preparation, in this case: if inspiration, is “not given enough time”, the function will be seriously disturbed. Still then elaborates his treatment for stammering by having the patients pronounce more and more words with full lungs, and later he proceeds to complete sentences.

It was important for him to detach the process of speaking from emotions, and therefore he instructed his patients to speak exclusively with him during a certain period of time, and to refrain from any other communication.

He writes:

“For some time I kept my patient close to me not allowing him to speak to any other person but myself, and I cautioned him not to try to answer any person or pronounce any word until his lungs were so full they were ready to blow off. By this process, at the end of a week or ten days I would discharge my patient with the order positively never to speak until he had filled his lungs with a full fresh breath. My success in such cases has been to give complete relief from the stammering habit” (Still A.T., 1992, 152).

Still recognizes very clearly that fear of an interlocutor may trigger off a pattern of fascial tension, which makes deep inspiration impossible. This process is a common experience, and we have words for it. We may say, for example: “This person is taking my breath away” (“Dieser Mensch raubt mir den Atem”).

Although this behaviour may be the result of some bad experience with only a few persons, it may become independent and grow into a habit, in which the partner in conversation can no longer be distinguished from those persons who were

responsible for the formation of this pattern. Only individuals whom the stammerer can trust are able to stop this pattern.

The moving story of a stammering child clearly demonstrates this connection. The boy says: "I have to stammer with all the people I talk to, except my grandmother. But with her, this achievement does not count, because she loves me even when if I stammer". For these patients Still assumes the part of the loving grandmother, in whose presence they can take a deep breath, and he works in this atmosphere of trust like a behavioural therapist, in order to resolve disturbing habits.

### **3.3.3 The supplementary space**

Here I would like to take the opportunity to point out that trust is of crucial importance for an undisturbed functioning of the human organism. Perhaps it is of interest in this context to emphasize once more the part the navel plays. The first actual human relationship takes place via the navel. The relationship with the mother, as Peter Sloterdijk notes in his book "Die Sphären" ("The Spheres"), is at the same time a relationship with the placenta. In his view the placenta represents the primary (original) companion of every human being. If an individual is able to develop a feeling that he can share togetherness with another person, this can be traced back to these primary experiences of being together in the uterus with his own placenta. Therefore, Sloterdijk calls the space in front of the navel of every human being a potential "supplementary space" ("Ergänzerraum"), which has to be potentially open for a suitable person to enter (Sloterdijk P., 1998, 347).

Sloterdijk goes on to say that, in case this “supplementary space” disappears, the individual is no longer “able to live”. To me, it is important to understand how much the first breath, which is of the greatest significance in cranio-sacral osteopathy, is influenced by a pre-natally acquired umbilical tension. Looking at the umbilical arteries, which harmoniously wind around the umbilical veins, one can well imagine how a distortion of the entire umbilical unit, connected with an impaired opening of the pleuro-peritoneal fascia, may be caused by a state of homeostatic unbalance on this level. This may happen, for example, by a congestion of the maternal vena cava in the vena iliaca interna and, therefore, in the uterus, due to hypertension of the diaphragm. The first breath may be possibly be affected a priori by this mechanism.



Fig. 23: Foetus and umbilicus

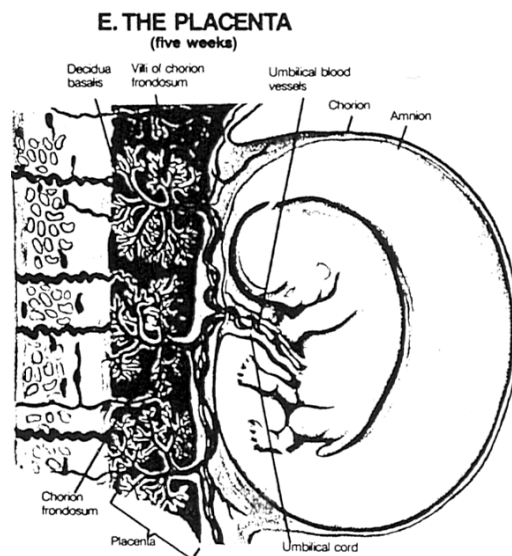


Fig. 24: Formation of the umbilical vein and arteries

### **3.3.4 Inhalare la voce**

In the art of singing, the above mentioned problem has been known for a long time: that even after deep inhalation, the breathed-in air is exhaled too fast and without using it, by tensing the abdominal wall. Due to this unwholesome process, not enough air is provided for long cantilenas. The Italian Belcanto school of singing developed a technique to prevent this tendency, known to specialists as “support” (in German “Stütze”). This support has basically the same effect as the treatment used by Still for his stammering patients.

The teacher of Belcanto singing found out that during the act of singing, shortly after deep inspiration, there is a tendency to form a protective pattern, which attempts to return as fast as possible to a position of reduced inspiration. It seems as if the realm of deep inspiration inspires some sort of fear. There is also the danger of trying to sing with “empty lungs”, as Still would have put it.

However, since the position of deep inspiration corresponds to a wide opening position, in which one has to leave the “protective pattern” behind, this process as such is logical.

The mental support of a singer consists in a paradoxical notion. Since the respiratory process requires trust for the person to assume an extraordinary opening and closing position, the prevention of this extreme position corresponds to a process of distrust.

Yet singing, more than any other activity, demands immense trust in one’s abilities if one is striving to satisfy a critical audience. Since singing requires a very brief period of inspiration, but necessarily a very long interval of expiration, the singer tries - in order to prevent exhaling too fast - mentally to mix the expiration, which tends towards closing, with inspiration, which aims to opening. In Italian, this process is

called “inhalare la voce”. To us, this signifies the support of the voice. This paradoxical approach is best described by saying that singing should have a quality which is achieved by exhaling in such way, as if one were inhaling. This means that singing is performed with an opening, and because the function of opening is only possible with trust, this means singing without fear.

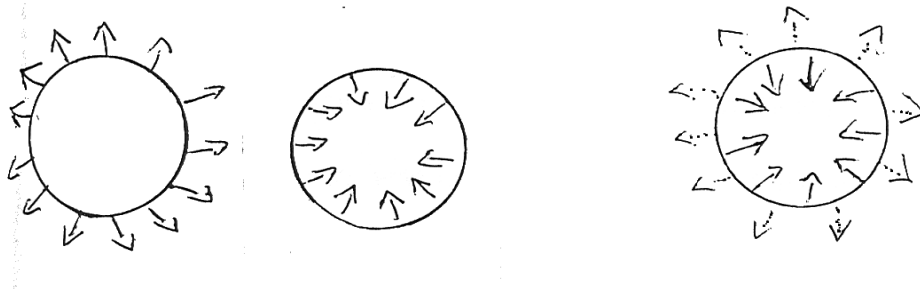


Fig. 25: Inspiration- Expiration-Closing  
Opening

Expiration and imagined opening of  
inspiration i.e. inhalare la voce

**Boadella: This posture helps to keep control of one’s emotions, by obstructing a full and relaxed expiration.**

(Boadella D., 1998, 157)

This interruption of normal respiration, in order to build a protective pattern, leads to an abrupt respiratory arrest, thus preventing inspiration as well as expiration for a short while. The breath comes to a standstill, as it were. In situations of danger, fear or overstrain due to stress, the breathing will exhibit a typical pattern of apnea. The abdominal wall is tensed by reflex, by which in-and expiration are prevented and the flow of breath is stopped short. In certain situations of danger, this pattern may be physiological and even helpful, but at the same time, this pattern may lead to serious damages. Intoxicated persons, who are too slow to activate these protective measures, demonstrate impressively that no great damages occur even when falling,



if they just let themselves fall, and the particularly cautious individuals, who activate this protective pattern a priori, very often come to grief.

The psychotherapist Wilhelm Reich, a disciple of Sigmund Freud, discovered that the tensing of muscles and the restriction of breathing may serve to reduce or suppress the intensity of feelings and sensations.

David Boadella writes in his biography of Wilhelm Reich:

"It was around 1935, when Reich's attention was drawn to his patients' respiratory problems, which manifested in very different forms. One of the most frequent disorders was connected with a posture which is typical for a certain, consciously cultivated kind of military carriage: a high, thrust-out chest and a drawn-in stomach. This posture helps to keep control of one's emotions, by obstructing a full and relaxed expiration. Every child struggling against threatening feelings of fear, does this by interrupting the rhythm of breathing in one way or in another, and by tensing the abdominal muscles" (Boadella D., 1998, 157).



Fig. 26: Typical pattern of fear, closing the mouth, i.e. gut tube and pressing teeth together.



Fig. 27: Pattern of fear: Tension of the umbilicus, i.e. supplementary space.

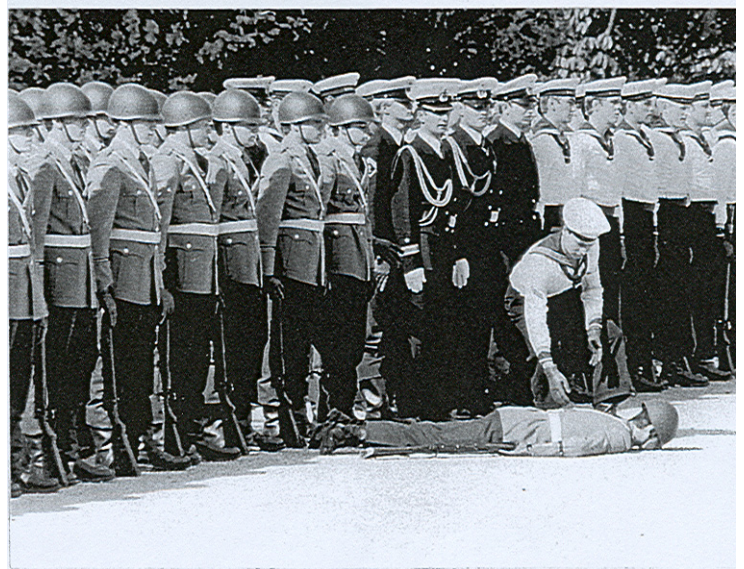


Fig. 28: Military carriage high, thrust out chest, drawn-in stomach

I would like to add to this relevant observation of Reich's that it is not only the expiration that is obstructed, but also the inspiration. If deep pelvic and abdominal respiration is obstructed, the function of breathing, which should take place in the pelvis, has to be taken over to the neck. This respiratory activity by way of compensation (m. trapezius, m. scalenus etc.) results in an additional burden of 20.000-30.000 muscle contractions per day. If no way is found to correct the cause of this disorder, a relaxation of the neck area is impossible.



Fig. 29: 20 000 - 30 000 contraction per day

**Schmitt: A strong inhibition of the respiratory rhythm was observed.**

(Schmitt J.L., s.a., 195)

Dr. Johannes Ludwig Schmidt, a German physician who devoted his life to the study of respiratory diseases and collected results of many scientific investigations, writes about this subject:

"When students who were not gifted for mathematics were passing a test in algebra, a strong inhibition of the respiratory rhythm was observed, whereas more talented students produced more harmonious, uninhibited, and animated curves of respiration" (Schmitt J.L., s.a., 195).

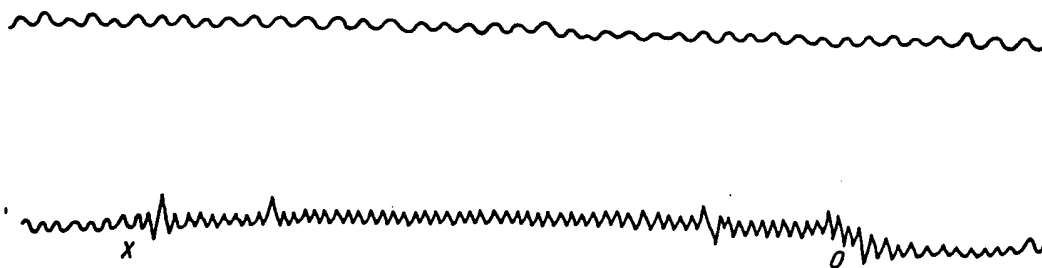


Fig. 30: Curve A and B towards G.A. Roemer (Recorded in straight-lined graphs of ordinates, with special instruments of the "Psychomedizinisches Institut" Tutzing.)

Curve A: Normal curve in a resting position, soft oscillation of in-and expiration.

Curve B: Curve of the process described above; normal curve in a resting position until X and from O onwards. Curve of increased tone of respiratory muscles between X and O.

In this context, the question may be raised whether the students might not have difficulties with algebra because of their faulty breathing, and whether their performance might be improved by the correct speed of learning and the removal of fear.

**Jacoby: They can tell exactly by the tone whether an object falling to the ground is of wood or metal.**

(Jacoby H., 1984, 15)

The music educator Heinrich Jacoby, disciple of Alfred Adler and mentor of Moshe Feldenkrais, describes the subtle adjustment required in these processes, in order to achieve an improvement of the function. In his book “Jenseits von Musikalisch und Unmusikalisch:” (“Beyond Musical Talent”; or in a more loose translation: “Musical Talent Is Not the Issue”), he states:

”Likewise, a thorough investigation shows that also the seeming inability to differentiate between ‘high’ and ‘low’ notes or intervals has nothing to do with a special condition of the ear - as long - as it is organically sound. This seeming inability could in almost every case be traced back to conscious unwillingness to try. If willingness returned, the ‘ear for music’ was suddenly there! This appears to be plausible, considering that the same individuals who apparently cannot distinguish between a major and a minor key, are able to recognize spontaneously an acquaintance by his voice or even his gait! They can tell exactly by the tone whether an object falling to the ground is of wood or metal. They know by the kind of sound whether a fragile object remained whole, or whether it broke by falling. Unconsciously, they differentiate by ear every day in such a subtle way that the

difference between major and minor third seems coarse by comparison. The reason for this failure can be found in an unconscious unwillingness to listen and be calmly receptive” (Jacoby H., 1984, 15).

This unwillingness may be caused by a lack of interest, but also by excessive demands made on the person, whereby a lack of interest often comes from overstrain resulting in fatigue accompanied by failure. When a demand for musical achievement is made, this may cause a fear of failure, and then the subtle adapted sensory processes do not function any more, because fear is always connected with a respiratory obstruction. Too much volition in primarily involuntary sensory processes does not result in an improved performance, but in a massive disorder. In this context, I would like to draw attention once more to the performance of referees discussed in Chapter 3.1. Tranquil listening is therefore the prerequisite of osteopathic work.

**Schopenhauer: That is to say, causality must carry within itself the qualities of time and space, no matter how opposed they are.**

(Schopenhauer A., s.a., 40)

The capacity of tranquil receptiveness also corresponds to the ability to synchronize. Here, volition submits to involuntary processes. If this process is reversed, and voluntary action forces its own intentions upon involuntary activities, the sensory processes become blocked. This merging of the body with given vibrations (oscillations) from outside is called synchronization.

In his work The World as Will and Representation, the philosopher Arthur Schopenhauer states:

“Causality unites space and time. However, we found that the whole essence of matter consists in the effect, that is, in causality, and therefore space and time must also be united in it. That is to say, causality must carry within itself the qualities of time and space, no matter how opposed they are, and it has to unite within itself that which is impossible as such for each of them, namely, the fleeting evanescence of time and the rigid inertia of space, and from both it derives the endless divisibility. Accordingly, we find that it induces above all a synchronicity, which could neither exist in mere time, which is not a side-by-side, nor in mere space, which does not know any before, after or now. However, the essence of reality consists in the synchronicity of many diverse conditions” (Schopenhauer A., s.a., 40).

In the case we are discussing, this synchronicity of space and time refers to the body space with its anatomical definitions, as well as to the functions connected with these structures, which find expression in a time sequence. The synchronicity of space and time implies a constant respiratory function (time) of every anatomical structure (space). If this inner respiration is free on the cellular level and in the same measure on its way from inside to outside towards the periphery, we speak of health or wellness.

Nicolaus Cusanus, the medieval philosopher, calls the condition which regards man as a created being directly connected with the creator, “**minimum in maximum**” (Cusanus N., 1998, 586). This “**minimum in maximum**” exists also on the respiratory level, if the quality of primary respiration is congruent with secondary respiration, and this is spontaneity, because it is not done by us.

From the physiological-embryological point of view, this synchronicity of many conditions may also be regarded as afference-efference movement of respiration not interrupted by apnea, and therefore of the diaphragm area. What I mean is a **harmony in the transition of afference to efference in the umbilical coelome.**

This synchronicity of many conditions is the prerequisite for respiration to take place in relation to what is happening. It describes a condition of security and well-being, in **which the body as an undivided whole is on its way towards the future.** Therefore, trust in the unknown, the “outer”, is the precondition of a synchronized respiratory movement. The opening process of inspiration is responsible for transporting fresh oxygen from the outside to the inside, but together with oxygen, something new, unknown and alien to the body is always brought in as well. The popular phrase “The air is clean” illustrates the importance of this afferent way for the conveyance of trust.

The German phrase “jemanden nicht riechen können” (“to hate the smell of somebody”), gives expression to an attitude of resistance of the whole body, not just an olfactory process.

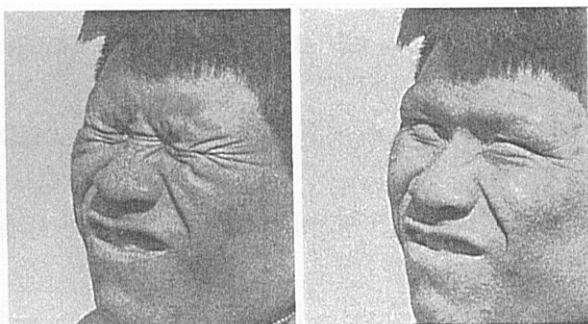


Fig. 31: Negation by closing the nose and sneering, expressed by an Ayoreo male  
Smelling (Sensing) is stopped.

### 3.3.5 The Gardener Vallier

The difficulty of recognizing this outside as **a priori** harmless is based on the definition of Western civilized man as an individual. He regarded himself as “in-dividual”, i.e. indivisible, whose border is his anatomical body, and thus he turns himself into a part (“dividuum”) of an alien, great “other”. Curiously, we do not seem to have any problem when we imagine that we know our own “in-dividuum” very well. In fact, we know hardly any more about this small part of an unimaginably large whole than about the whole itself. That is, if one is ready to admit how remote one’s own self appears at times, the outside may be just close as the inside.

Here I would like to remark that the original experience of life certainly is not an individual experience of anatomical bodies, because the embryo, like the foetus, represents a “dividuum”. It is part of the mother, as the mother is also part of the child in her womb.

From conception until birth, the human being is an inseparable part of his mother. This being-in-relationship to something or somebody is the primary element of existence. When I become aware - as the french painter Paul Cezanne did in his wonderful painting, the last before he died, “The Gardener Vallier” - that the outside is just as close to me as the inside, and that both planes intermingle in a miraculous way, because there is no more fear, then it is easier for me to release this foolish individualistic paroxysm.





Fig. 32: Cezanne: The Gardener Vallier, outside mixed with inside.

The German philosopher Martin Heidegger aptly stated: **“Everybody is the other, and nobody is himself”** (Sloterdijk P., 1998, 642).

This way of thinking facilitates the perfect adjustment of breathing simply because, by a cognitive process, the outside is brought as to me as the seemingly known inside, and because the process of inspiration is thereby becoming a process which transports something related to me.

**Blechschiidt: As in breathing, they are sucked into a space of former hypotension.**

(Blechschiidt E., 1982, 56)

Perhaps it is no accident that the respiratory movement coincides with the thrust of development of the embryo. Prof. Blechschiidt has a very interesting description of the embryological development of the lungs in the field of suction between the CNS and the visceral tract:

"In relation to the spinal cord and the brain (more precisely: the apex of the chorda), the viscera are shifted downward in the second month, whereas brain and spinal cord move more and more upward in relation to the viscera. The diaphragm and the liver definitely participate in the descent of the viscera. As it moves forward, the diaphragm separates its dome-shaped part from the spine, as soon as the liver, which is fused with it, becomes larger and flattens out. As soon as in the embryo measuring 10 mm the heart and the liver increase in size, the spatial angle between them, the spine and the side wall of the trunk widens, as between inflated balloons. The increase of the spatial angle results in the emergence of a field of suction, the tender intestinal wall is tucked in as disposition for the lungs. With the later extension of the chest, the lungs grow larger. As in breathing, they are sucked into a space of former hypotension. Thereby the origin of the lungs is already a very differentiated beginning of the later respiratory activity" (Blechschiidt E., 1982, 56).

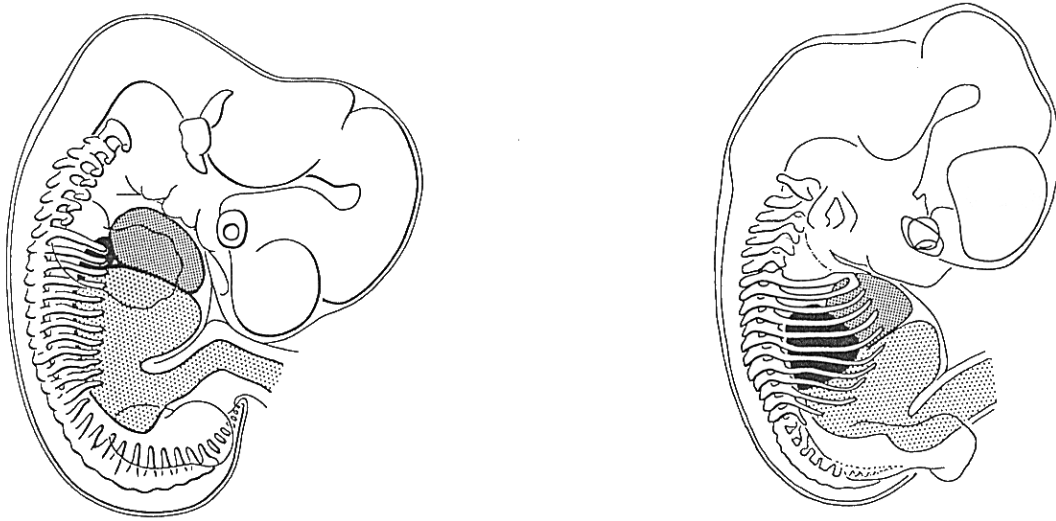


Fig. 33: Lung in the field of suction between liver and heart, by an 10 mm and an 17,5 mm Embryo.

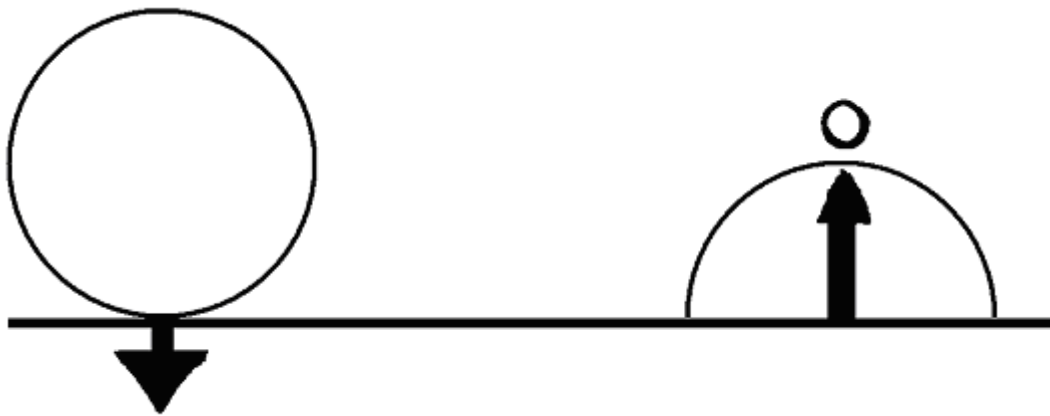


Fig. 34: Lung is big, visceral descending.

Lung is small, viscerals ascending.

**Blechschiidt: Life ends with the terminal breath, one last vigorous expiratory movement.**

(Blechschiidt E., 1982, 56)

Accordingly, the movement of growth of the lungs takes place in a space which has been opened by the upright position of the central nervous system and by the descent of the visceral tract, and we recognize the same movements in the respiration of adults. The erect position of the entire organism is only possible when the inspiratory faculty is unobstructed, and this includes the possibility of the visceral tract to descend. Pain, as, for example, a gallbladder attack, will prevent deep inspiration, the body convulses and approaches the embryo position again.

Now, if we take two directions, one **toward** development, and the other **against** development, the movement toward development makes contact with the present time, and the counter-movement with yesterday and the past. These movements describe the character of in- and expiration. The direction of inspiration is the way to the present moment, into the new, into creation and life, whereas expiration stands for the past and for the perfect future, i.e. for death, because life ends with the terminal breath, one last vigorous expiratory movement, which was embryologically placed in the field of suction between central nervous system and the visceral tract. Thus, death is encountered in both directions: on the way back, tracing the embryonic development in reverse, as well as bringing development to an end on the way forward.

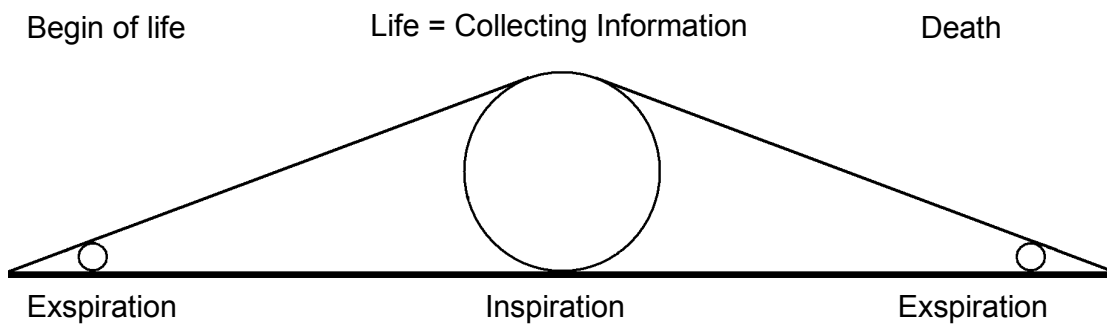


Fig. 35: Life as a process from expiration to inspiration to expiration.

**Sloterdijk: This is the basic risk of all intimacy: that the destroyer occasionally comes closer to us than the ally.**

(Sloterdijk P., 1998, 100)

Life means to be able to unfold in this paradoxical framework, and this requires above all a conscious, fearless approach to death. Breathing means to trust life and death, because the fear of death does not prevent us to die, but it prevents us to live.

Peter Sloterdijk states this problem precisely:

"The inner access to your life cell, as we can see, quite often belongs to a voice which strives to impede or negate your possibility of life. This is the basic risk of all intimacy: that the destroyer occasionally comes closer to us than the ally" (Sloterdijk P., 1998, 100).

Also Still seems to have realized the far reaching significance of which the diaphragm is in contact with: **"By me you live, and by me you die. I hold in my hand the powers of life and death, acquaint now thyself with me and be at ease"** (Still A.T., 1986, 145).

Therefore, it is a prerequisite for free respiration and consequently for health, to learn to be familiar with life and death, because both find expression in an unobstructed respiration.

**Still: Osteopathy is knowledge, or it is nothing.**

(Still A.T., 1986, 152)

Now, how does respiration affect osteopathic work and the processes of sensing?

The simple example of smelling a flower may illustrate how much inspiration in the respiratory procedure is responsible for sensory receptivity. Information, in this case the scent, is only transmitted by breathing in, not by breathing out. In summary, we may say that free respiration promotes sensory perception, and that the obstruction of breathing by apnea blocks sensory processes. Synchronization is the key to the present, as it were, because we can only collect experiences in the present, and only in the present can we assess a patient. If an individual is not capable of synchronizing, he cannot experience the present, and if he does not experience the present, he cannot build a past, and for this reason he feels that there is no future.

Therefore, synchronization and free respiration are important for osteopaths, because it is only in this area where we can develop and accumulate experiences. If we succeed to convey this to our patients, we are able to transmit the essential message. Knowledge is engendered exclusively in this area of trust, because in fact knowledge (Wissen, germ. derives from visus, lat.-I have seen) is literally nothing else but collected acts of seeing with trust. It is in this light that we understand Still's statement: "**Osteopathy is knowledge, or it is nothing**" (Still A.T., 1986, 152).

The free floating uninhibited breath during inspiration as well as during expiration is a precondition in order to gain a clear image of reality by sensing.

## Chapter 3.4 Thinking And Sensing

### Still: To think implies action of the brain.

(Still A.T., 1986, 48, 59)

Thinking takes energy, and it is tiring. Everyone knows this from his own experience. Still and many others observed that thinking leads to neural activity. In his book *Philosophy of Osteopathy*, he writes: "To think implies action of the brain." About the disturbance of body and mind caused by excessive mental strain, he says:

"Add to this mental strain the increased action of his body and you see the beginning of a worry of both mind and body" (Still A.T., 1986, 48, 59).

Scientific evidence to prove this assumption was brought forward only a few years ago. On the basis of EEG-tests, performed on the intact skin of the head, activity correlates were observed, which showed the changes in the level of direct current voltage of the unspecific activating system. Gisela Guttmann, Professor of Psychology at the University of Vienna, presented a sizeable number of scientific studies about this subject in his textbook of Neuro-Psychology (Guttmann G., 1984). This activity correlates, which emerge before effector activities in the frontoparietal area, form a coherent negative wave, which is called "**Contingent Negative Variation**", abbreviated CNV, due to the shape of its course. It represents a reliable characteristic value of the actual overall activation and is able to differentiate between conditions of tense and relaxed attention. It was possible to prove that conditions of relaxation or stress cause different conditions of activation by the expectation of painful stimuli. This CNS-stimulation correlate was first discovered in an experiment in 1964. The starting situation was the following: an acoustic signal, the sound of a click, was followed by optical stimuli, a series of light flashes. The test persons were asked



to press a button as soon as possible after the appearance of the light flashes, in order to interrupt the series of flashes. In the control test, the subjects were only required to observe passively the acoustic and the optical signal, without pressing a button, and in these cases only the expected acoustically and optically evoked potentials appeared. Contrary to this, there was a characteristic difference in the group required to press the reaction button. After the preliminary signal, a negative potential, which persisted until the point of reaction, appeared in the parietal area of the head. As soon as the person reacted and pressed the button, this negative potential immediately disappeared.

The strange feature about this CNS-wave was that it appeared not only when the button was actually pressed, but also when the behavioural process was merely imagined in the mind! Due to the expected optic and acoustic stimuli, it was also called “expectency wave”. The changes in the potential also appear when no behavioural process is actually taking place and the test person is instructed to imagine a behavioural process at the time of the reaction signal. The Viennese psychologist Dr. Bauer was able to prove this in an experimental setup in 1969 (Bauer, 1982, 299-300).

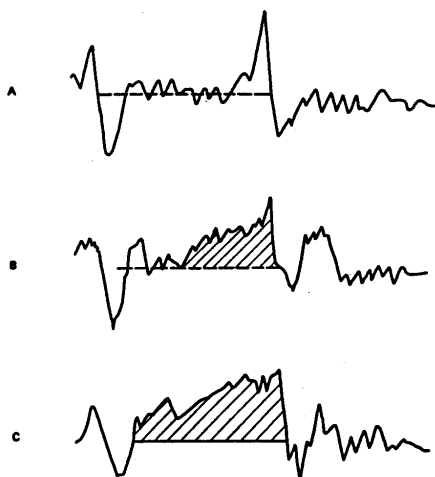


Fig. 36: EEG-correlates of behavior actually carried out and a merely imagined behavior.

a: Control group, who was offered click and flash stimuli without instructions

b: Test group 1: the click as preliminary signal for pressing a button, to be performed after the flash stimulus.

c: Test group 2: potential course during a merely imagined movement.

These experiments demonstrate that the simple thought of a movement produces a preliminary tension in the brain, as if the action were actually being performed.

This mental activity claims the entire organism to such an extent that other processes are habitually suppressed in certain situations, the result will be a kind of behaviour mainly controlled by thought processes which do not derive their information from the present situation, but rely on experiences of the past. This may lead to habit, a kind of behaviour which Still considers extremely dangerous.

**Still: While a man is bound by his habits, and is satisfied with fishing forever without getting a nibble of truth,...**

(Still A.T., 1996, 165)

In his autobiography, Still often writes about effects of thinking and acting from habit and his idea that osteopaths should largely be independent of this:

“While a man is bound by his habits, and is satisfied with fishing forever without getting a nibble of truth, he can, like Bunyan, bring four corners of his old sheet together, take up his load, and toddle along. We will not debate with him if he is satisfied he is not the man we are looking for” (Still A.T., 1996, 165).

In another place, Still describes how habit can become an addiction:

“I was not long in discovering that we had habits, customs, and traditions no better than slavery in its worst days, and far more tyrannical. By day and by night I saw legions of men and women staggering to and fro, all over the land, crying for freedom from habits of drugs and drink” (Still A.T., 1996, 82).

At the end of this chapter, he expresses the longing of these people who live in absolute bondage:

“Who can free me from this serpent who has enslaved all my liberties and the joy of myself and my loved ones? I wish I was as free as the negro for whose freedom I faced the deadly cannon three long years” (Still A.T., 1996, 83).

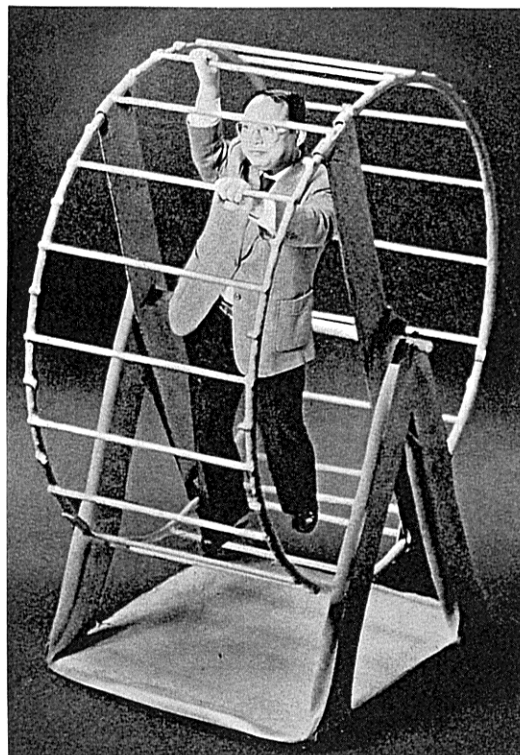


Fig. 37: The fear of something new leads very often to repetition and habit.

These examples show clearly how fear of something new, and the correlating, almost spastically repeated old ideas and habits may cause great harm. As far as the perceptive functions are concerned, the perceiving ability of various sensory organs may be assessed via sensorically evoked potentials. It was discovered (by Ritter and Vaughan, in 1979) that acoustically evoked potentials clearly depend on whether sounds are noticed or ignored. If certain sounds are not given attention, the acoustic potential, too, will be reduced (Guttman G., 1984, 266-267).

In biodynamic cranio-sacral osteopathy, this process of paying attention is called “augmentation”. By giving one’s attention to certain anatomic structures and their inner respiration, these changes are effected, without the necessity of an efferent activity. This may be compared with listening to symphonic music, where attention is given alternately to the flutes, the horns, the violins or the contrabass. The instrument particularly attended to a certain moment is “augmented”, as it were. For us osteopaths it is important in this context to augment the patient’s health for if we only see the illness with its terrible consequences, this sets in motion a process of fear, which produces exactly the condition one is afraid of. This happens according to the motto that fear of some mistake will produce this very mistake, or, Karl Kraus aptly put it: “The worst disease is the diagnosis.” Results similar to the above-mentioned appeared in tests where a constant series of impulses included an “unexpected stimulus”, whose potential amplitude was much larger than that of the uniform impulses (Guttmann G., 1984, 261). Thus, the openness for sensory processes may naturally be blocked by the attention required for the performance of a movement.

**Becker: Everybody’s physiology has a physician within.**

(Becker R., 1997, 141-142)

Rollin E. Becker, D.O., describes in his book **Life in motion** how important the inner attitude is especially for osteopaths, and how easily it can be disturbed by techniques applied by routine, without enough sensing and without considering the uniqueness of the patient. He states that in his training as an osteopath in 1930, he learned many useful techniques, which served him well in his practice for eight or ten years. But

then he became more and more aware that many of his patients returned after some time with the same complaint. In the long run, he found it tedious to continue treating these patients unsuccessfully with the same techniques. He was frustrated at not being able to discern by palpation why he was successful with one patient and not with the other, and so he began to study Still's books.

"I decided to give up the practice of "osteopathy" and instead decided to study the practice of A.T. Still. Over a period of time, I realized that in order to understand and use his concept-spelled out in one paragraph in particular-as a goal for development, it would be necessary to drop all my so-called palpatory skills and learn a whole new set-up. I began this by simply putting my hands on various segments of the patients' bodies that related to their complaints, and I learned to listen, listen, listen to the tissues within. I did this because the Old Doctor, Dr. Still, had said every body physiology has a physician within that allows physiologic function to work towards self-correction.

All the powers, motive forces, and everything necessary for the treatment of that case are already built into the machine; all what is necessary is to recognize and work with these mechanisms" (Becker R., 1997, 141-142).

The French osteopath Jean Pierre Barral writes about this art of listening in his book on visceral osteopathy (Barral J.P., 1994, 9). It is of the utmost importance to be as passive and receptive as possible, and to take great care not to project oneself onto the patient.

In a similar vein, the English philosopher David Hume writes in his **Treatise of Human Nature** (1748) about sensory perception as a purely passive reception of sensory impressions without participation of the faculty of reason:

“Nor is there in this case any exercise of the thought, or any action, properly speaking, but a mere passive admission of the impression through the organs of sensation” (Hume D., 1985).

Hume states explicitly that thinking (“any exercise of the thought”) may disturb processes of perception. Neuro-physiologically, this confirms exactly the process presented above. If an CNV-activity sets in too early, because thought processes primarily focused on action ( in the form of acquired techniques of treatment) have from the beginning prevailed to such an extent that the sensory processes necessary to grasp the unique case of a patient are interrupted, this will result in a treatment primarily concerned with old experiences, but not related to the cause of this particular case.

Osteopathic work rests firmly on this listening process, and has to lead us to the discovery of the patient’s health, to enable us to envision it and point it out more clearly. If this does not take place, there can be no healing.

A disease is often caused by a lack of trust in this state of health, because one senses that it depends on so many components and one does not feel equal to controlling them. If this control does not surrender to trust, no healing can take place.

**Still: The thousandth of an inch is vital.**

(Still A.T., 1986, 18)

An osteopathic sayer is: “Treat what you find and not what you are looking for.”

All these scientific insights confirm this assumption, because, as we can see, movements can be introduced by mere imagination and expectation. If they are carried out without building on a specific sensory correlate firmly connected to the patient’s present situation, they do not relate to anything but the osteopath’s idea of what the patient should be like. By proceeding in this way, a wrong fulcrum is created, a wrong point of reference, which leads the therapeutic procedure into a wrong direction, because it no longer conveys a true image of reality. The success of osteopathic work is not least due to the fantastic precision of the treatment, confirmed by Still’s statement: “The thousandth of an inch is vital” (Still A.T., 1986, 18). Knowing how delicate and subtle anatomic structures may be, and observing how little force it takes to upset functions, we can only endorse this statement. Many times, thoughts responsible for a lesion measuring “one thousandth of an inch” may be the cause of a lasting disturbance of some function.

At the end of this chapter, I would like to illustrate the facts described above by the following example:

An “osteopathic fisherman” is sitting on the bank with his osseous (bony) fishing rod and his line gets entangled in the branch of a tree in the muddy water. I call this entanglement of the fishing line the “primary lesion”, as is the custom in osteopathy.

Now there are two possibilities to disentangle the rod:

**1. Thinking (to know one is right) may obstruct finding the solution**

**Still: He feels that the people expect more than guessing of an osteopath.**

(Still A.T., 1986, 57)

In the first case the osteopath takes a boat to the spot which he assumes to be the place of the primary lesion. Without sensing and without being able to see in the muddy water, he searches (guesses) with his hand until he gets hold of the hook. He may be successful the first time, but perhaps more attempts are required, and if time is short, this may not work at all.

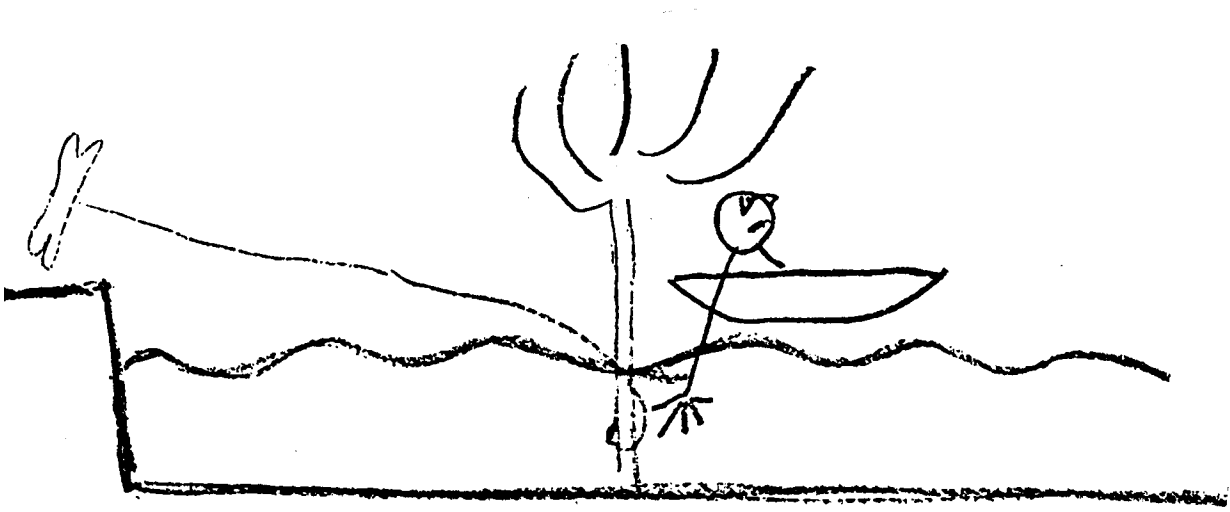


Fig. 38: Attempt of a solution by guessing



## 2. "Finding the cause by sensing."

**Still: He feels that he must put his hand on the cause and prove what he says by what he does; By his knowledge he must show his ability to go beyond the musty bread of symptomatology."**

(Still A.T., 1986, 57)

The second possibility is that the osteopathic fisherman follows the line with his hand exactly to the spot where the hook got entangled. Here he is certain to find the primary lesion and can dissolve it. But in this case the osteopath may get his feet wet.

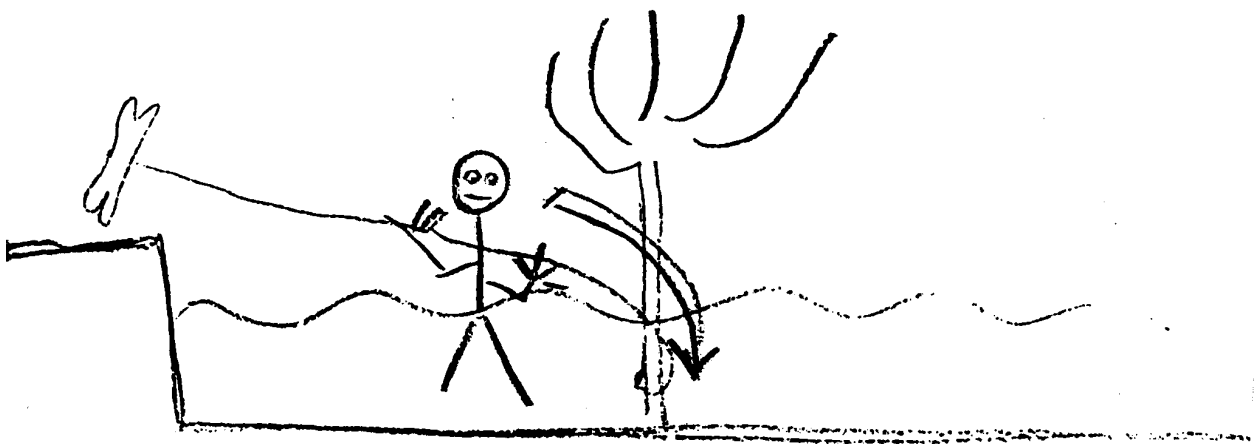


Fig. 39: Solution by sensing

Thinking can cause a false fulcrum for sensing and distort the process of treatment.

## Chapter 3.5 Consciousness And Sensing

**Still: He steps aside and lets the body pass on, as though he moved in obedience to some order.**

(Still A.T., 1986, 16)

As these unspecific CNV potentials were further developed, it became possible to represent voluntary movements in the EEG. The German neurologist Lüder Deecke and the neurophysiologist Hans H. Kornhuber discovered a method in the sixties to record and objectify voluntary movements by EEG-diagrams. Both scientists showed that these diagrams are subject to certain regularities.

In his textbook on neurophysiology, Giselher Guttman writes:

“The results of these investigations showed that certain processes of excitement, which can be divided into three partial processes, take place before every voluntary movement. The first herald of a movement is the Readiness Potential (RP). It is profoundly influenced by the voluntary participation of the person. The second complex of this diagram is the premotion positivity, and directly before the actual movement procedure the third part of this process comes into play, the Motoric Potential (MP). This is discerned in the EEG as a short negativity corresponding to a stimulation of the precentral motoric region. The whole potential complex of voluntary movement processes is also called Averaged Movement Potential (AMP)“(Guttman G., 1984, 301-302).

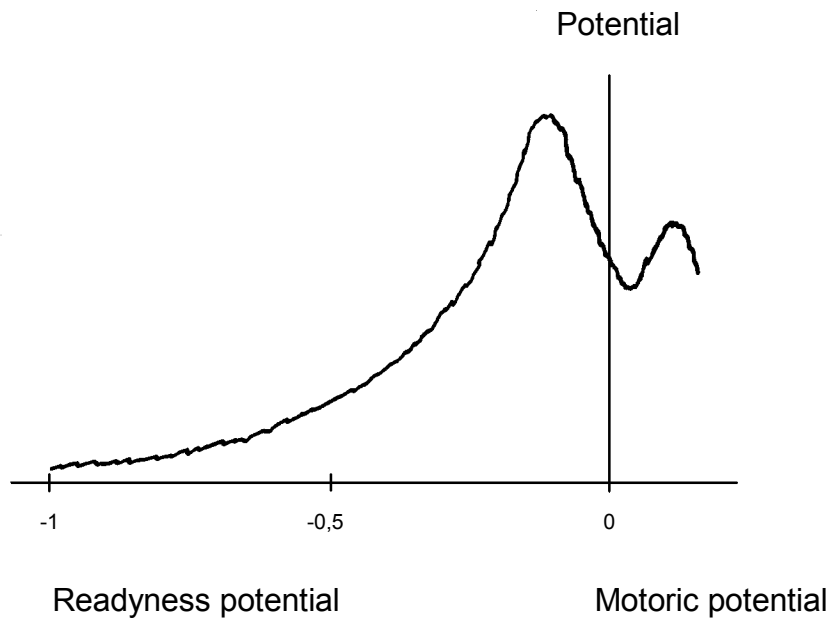


Fig. 40: AMP-Complex

These results confirm that every voluntary action is accompanied by a typical EEG-pattern and that spontaneous activities are not only characterized by motoric movement potentials, but also by readiness potentials. This movement potential is rational, as the body calculates precisely how to carry out a movement and how much energy it has to expend for it. In this respect, the emergence of a readiness potential is not surprising, but the strange thing is the timing within the AMP-complex, because there is an interval of almost a second between the emergence of the readiness potential and the performance of the action.

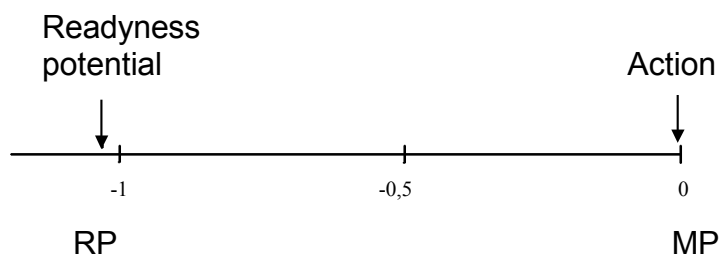


Fig. 41: Interval of almost a second between RP and MP.

We have to understand that we are not dealing with reflexes, but voluntary movements. We know from our own experience that the performance of a voluntary action, like bending a finger - to quote the activity which led to the same result in the experiments of Deecke and Kornhuber - takes less than a second (Deecke L., Kornhuber H., 1997, 311-313). The first person to notice this discrepancy was the American neurophysiologist Benjamin Libet. The question Libet asked was: At what time exactly does the conscious decision for a voluntary action take place, if a simple activity like bending a finger begins as early as approximately one second before the actual performance of the action? Our everyday-experience contradicts the early emergence of the readiness potential and the emergence of awareness within the APM-complex. All "civilized" persons assume that the conscious decision for a movement takes place before the performance of the movement and all the potentials connected with it, including the readiness potential. However, it is strange and rather disconcerting that such an incredibly long time should pass between the emergence of the readiness potential and the motoric potential. Libet was able to find out, with the help of a particular experimental setup (3/1979), at what time the conscious decision for an action in a voluntary movement process is made (Libet B., 1997, 314-316). Libet created a great stir when he presented his results, which nobody ever had the courage to pronounce, although some scientists may have had a hunch. Consciousness sets in between the readiness and the motoric potential. More precisely, the readiness potential appears 0,55 seconds and consciousness 0,20 seconds before the action.

Tor Norretrander, the most renowned Danish scientific journalist, gives the following summary in his book **Spüre die Welt** ("Sense the world"):

"When we wish to perform an action, which we decided to carry out by our own will, this awareness appears almost half a second after the moment, when the brain started to prepare the decision" (Norretrander T., 1997, 314-316).

The shocking message for persons who want to lead independent and rationally controlled lives is, that voluntary action rests on an involuntary basis, which for this very reason cannot be influenced. It is not consciousness which stands at the beginning, but certain unconscious processes.

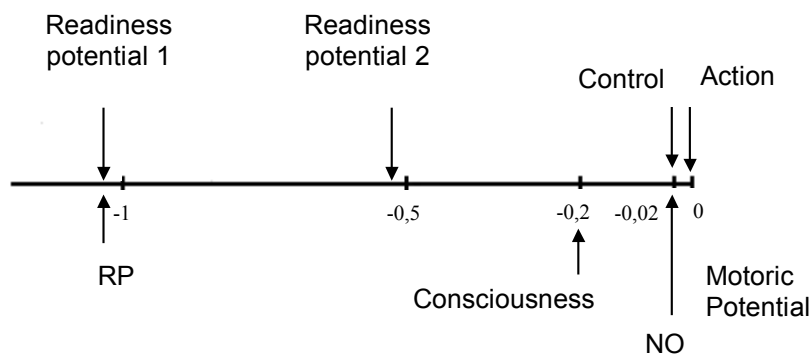


Fig. 42: The Emergence of Consciousness between RP and MP

**Still: This being the condition of the five physical senses, we are forced by reason to conclude there is a superior being who conducts the material man, sustains, supports, and guards against danger.”**

(Still A.T., 1986, 16)

If these processes really take place in this way, as Benjamin Libet describes them, then where is the free will, which civilized humanity is so proud of? Our consciousness makes us believe that we are able to decide what we want to do, because at the point in time when the decision for the movement is made, awareness is not even there yet. Contrary to conscious processes, involuntary reactions happen very fast; they take 0,25 seconds on the average. This reaction time cannot be slowed down. If this is attempted, there is a noticeable prolongation of the whole movement complex, which now takes 0,5 to 0,8 seconds (Libet B., 1997, 348).

This means that we have two possibilities of movement: on the one hand, an unconscious, reactive behaviour, which is fast; and on the other hand, a conscious behaviour which is slow and in crucial situations often far too slow. Tor Norretrander tells us in his book about the Danish physicist Niels Bohr, who was very partial to bad Western movies, that Bohr submitted these films to analytical scrutiny and observed logical defects in their often dubious plots. He noticed, for example, that it is always the hero who wins the duel, although the villain draws his colt first. His explanation was that the villain has to decide when to draw the colt, whereas the hero grabs his revolver automatically due to a conditioned reflex, and therefore he is faster, of course. Libet's calculation confirm these cinematic reflections of Niels Bohr.

Still observed the same phenomenon and writes in the chapter **“Truth of Nature”**:

“After seeing a human being complete in form, self moving, with the power to stop or go on at will, to us it seems to obey to some commander. He seems to go so far and stop; he lies down and gets up; he turns round and faces the objects that are travelling in the same direction he does. Possibly he faces the object by his own action. Then by about facing, he sees one coming with greater velocity, sees he cannot escape by his own speed, so he steps aside and lets the body pass on, as though he moved in obedience to some order. The bystander would ask the question, ‘How did he know such a dangerous body was approaching?’. He finds on the most crucial examination, that the sense of hearing is wholly without reason. The same is true with all five senses pertaining to man, beast, or bird. This being the condition of the five physical senses, we are forced by reason to conclude there is a superior being who conducts the material man, sustains, supports, and guards against danger” (Still A.T., 1986, 16).

**Becker: It is interesting to note that the fact that I could not feel in the early years, did not determine the efficiency of the treatment**

(Becker R.E., 1997, 143)

Another study of Libet, published in the journal Brain in 1991, demonstrates how easily we are led astray by consciousness. It confirms the theory of a half-second interval till the emergence of consciousness and the same time the presence of subliminal perception.

The test persons in this study were patients of an American neurologist, who applied electrodes to the patients’ heads to alleviate pain. These electrodes were used to send minute impulses bordering on the subliminal in the area of the thalamus. The experiment was set up in a way that the patients were exposed to short sequences of

stimuli of less than half a second and to long ones of a duration more than half a second. Only the stimuli of more than half a second produced awareness, the shorter stimulations didn't.

The patients were asked to guess whether a stimulation had taken place at a given point of time or not. During the longer sequences of pulsation, they were aware that a stimulation was taking place. Therefore it is not surprising that the test persons were able to identify them. However, they were also able to make the right guess during the shorter sequences of stimulation. In some way, which the patients were not aware, the organism registered the stimulus and caused them to "guess" right. A stimulation of a quarter of a second is long enough to make the patient guess right, without his knowing the reason (Libet B., 1991)

In osteopathic sensing, there are many extremely subtle changes in this area. Especially in cranial osteopathy, there are many changes in the organism of the patient, which may be so delicate, but also so fast or slow that it is difficult to follow them with awareness.

Rollin. E. Becker writes:

"It is interesting to note that the fact that I could not feel in the early years, did not determine the efficiency of the treatment. I could not feel any of the things that I can feel now, but I was working with the body physiology within the patient that could understand that something was going on. It was a job of quietly positioning my hands and then listening through my hands, quietly, for that which the patient was trying to tell me" (Becker R.E., 1997, 143).

This is a beautiful presentation of how respectfully the osteopath stands back, in order not to trespass with unguided forces on the patient's sphere of intimacy. The urgent question raised by these dramatic scientific discoveries concerns the free will of

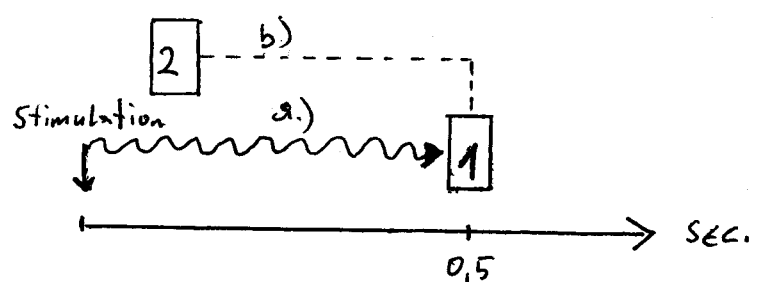


human being. Can there be any free will, if the body is doing something without asking consciousness for permission? Libet has a logical explanation, arguing that consciousness has no possibility to induce the beginning of a movement, but in the time interval between its emergence and the actual performance, it has the possibility to say NO. This time interval is about 0,2 seconds, and this is enough to prevent a movement which has already been prepared by a readiness potential. This means, however, that consciousness is activated especially when it is saying NO. Movements which occur elegantly, freely and unhampered, are normally also movements performed without the domination of the consciousness.

Benjamin Libet also pursued the question of why we don't notice that our consciousness reacts with considerable delay, and he was able to prove that a process of back-dating takes places. This makes us believe that a conscious process is occurring now, although it dates back to at least one half-second, the amount of time the brain needs to process the stimulus. But this delay of half a second leads us so far astray that also our relation to Being is disturbed (Libet B., 1997, 340).

Fig. 43:

1. Consciousness is attained.
  2. Consciousness is experienced.
- a.) Delay of half a second.
- b.) Back-dating of the subjective experience.



**Still: The word 'treat' has but one meaning, that is, to know you are right, and do your work accordingly.**

(Still A.T., 1986, 69)

The principle of the French philosopher Rene Descartes: "Cogito, ergo sum" ("I think, therefore I am", Descartes R. 1905) also seems subject to this error. Because, if we add the conscious-ness-producing half second, the tenet should spell more precisely: "I think, therefore I was."

Libet writes at the end of this chapter:

"The human being is really happy if consciousness does not interfere and chooses to act upon unconscious impulses. He is most at ease when he only acts. The conclusion is: When we feel at ease, consciousness is not dominating. Therefore, we have to put the question: Do we only have free will when we are not well, or also in moments when we feel at ease? Who or what is it, then, that has free will?" (Libet B., 1997, 360).

If at the end of this chapter I present another quotation from Still, in which he refers to the confidence the osteopath needs in order to do his work, the reason is simply that it aims exactly at this point: that osteopathic work has to be performed intuitively, not with domination of cerebral consciousness. It is only this intuitive work which creates knowledge, because it admits, rather than prevents, experience.

He writes:

"Here I want to emphasize, that the word 'treat' has but one meaning, that is to know you are right, and do your work accordingly" (Still A.T., 1986, 69).

This intuitive knowledge, which is striving, above all, to connect with the reliable laws of nature, leads straight to the philosophy of osteopathy.

As Still says:

“But as the beautiful works of Nature stand, giving us the evidence that all beings, great and small, come by the law of cause and effect, are we not bound to work by the laws of cause if we wish an effect” (Still A.T., 1986, 22).

If we as osteopaths wish to connect to the cause, we have to learn above all, as Becker thinks, to renounce all feelings of self-importance. This inclination for exaggerated self-acknowledgement again results from a misunderstood concept of the individual, which regards a human being as separated from anyone and anything else. But to be an “individuum” means to be indivisible, inseparable from the whole. If I sense this unity, I am part of the principle of cause and effect. Only in this unity the synchronicity of many diverse conditions (Schopenhauer A., s.a., 40) is possible; only here sensing is possible, because it establishes a relation to the cause – **“in obedience to some order”**.

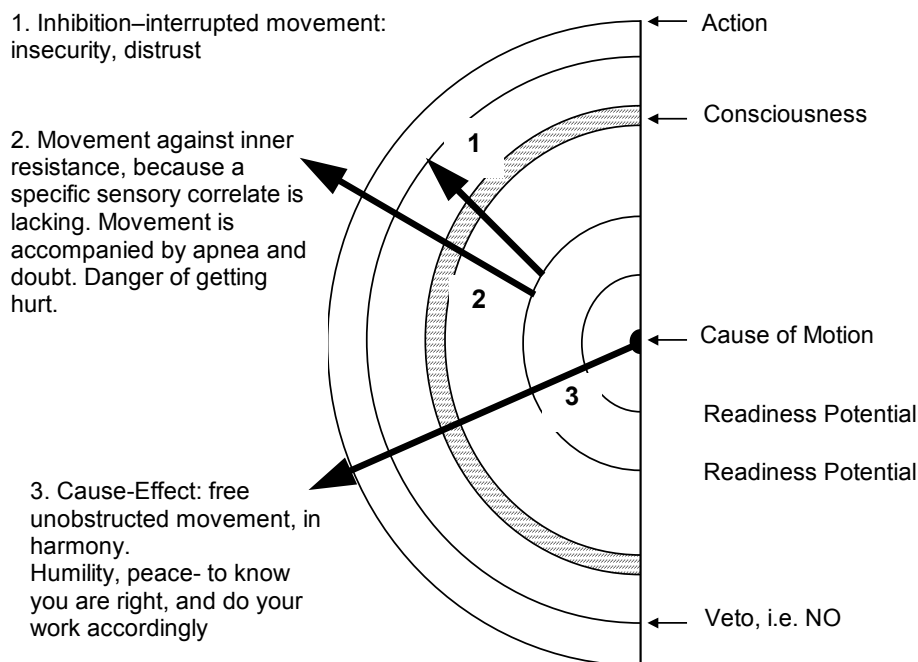


Fig. 44: Sketch of the stages from the cause of motion to the consciousness of motion.

The osteopath has to synchronize with the beginning of motion, which is precognitive and not with the beginning of thinking consciousness.

## Chapter 4: Conclusion - Osteopathic Philosophy And Sensing

**Still: If Osteopathy is not complete within itself, it is nothing.**

(Still A.T., 1996, 298)

Philosophy is a part of osteopathy which is often discussed and often passed over in silence. In a book recently published by the “Deutscher Verband der Osteopathen” (German Society of Osteopaths), we read: “Osteopathy is to be understood as a holistic system of medicine, based on a solid foundation of natural science and classical medicine. There is no place in osteopathy for philosophical or indeed religious aspects” (Newiger C., s.a., 154).

Still, the founder of osteopathy mentions in his autobiography this strange tendency to whip philosophy of the table almost by reflex. “If osteopathy is not complete within itself it is nothing.” (Still A.T., 1996, 298).

His most important work is therefore entitled **Philosophy and Mechanical Principles**, and Still dedicates the first sentences in this book to his authorities.

He begins by saying: “I quote no authors but God and experience” (Still A.T., 1986, 10).

It is especially this statement which demonstrates how diverse the opinions about osteopathy have become in the meantime, because Still's philosophy resembles a religious confession. If we go back to the literal meaning of the word religion (from Latin, re-ligare, link up with God), this corresponds exactly to his intentions. But experience, mentioned as the authority next to God, is not given a high rank in our scientifically oriented classical medicine, because it cannot be objectified. If we juxtapose these two statements, Still's introduction to his main work and the passage

from the book of the German Society of Osteopaths, we get the impression that they are talking about two totally different subjects. Here we may conveniently put in a short reflexion about the development of the sciences.

Dr. Herbert Pietschmann, Professor of Theoretical Physics in Vienna, philosopher and writer, distinguishes in his book **Das Ende des naturwissenschaftlichen Zeitalters** ("The end of the Scientific Age") two different directions within the sciences. In the beginning, there was the Aristotelian science of perception, whose only criteria of reference is information transmitted by the sense organs.

As we all know of course, our senses may deceive us, and they are sometimes liable to mistakes in the realm of extremely crude observations. For this reason, a new modern natural science was established at a later age by Galileo Galilei, which differs from the Aristotelian science of perception in a crucial point. According to this theory, everything which can be perceived empirically by the senses is outside the range of scientific examination, because sense perceptions may be subject to misinterpretations. Since Galilei, the new criterion of science is measurability.

According to this new concept, everything which can be proved in the laboratory by simplified experiments is true.

Galilei's attitude was following: "Measure everything which can be measured, and make measurable that which cannot be measured."

Pietschmann clarifies the difference between these two scientific concepts by giving an example:

"According to Aristotelian physics, heavy bodies fall to the ground faster than bodies of lighter weight, and 'fireshaped' ones even ascend, as is easy to prove by letting hotair balloons fly. This certainly corresponds to our every-day experience. Everyone can pick up a stone or leaf and drop them, and he will be able to confirm

at once that Aristotle was right. But this description of our experience cannot be quantified; it is not exact enough to be accepted as a model of the world. Therefore Galilei says: 'All bodies fall equally fast', and he consciously renounces experience. There is also a reason why our every-day experience is too complicated: air resistance. A system in which a leaf falls under the influence of gravity and air resistance, is too complicated. Therefore Galilei demands that his 'theory' be tested in vacuum" (Pietschmann H., 1995, 21).

Pietschmann draws the conclusion that modern natural science will simplify the world, until it can be presented as objectifiable. The problem of this simplification is that essential elements of being may get lost. As a matter of fact, all objects fall to the ground equally fast, if the air resistance is eliminated, but then we enter a laboratory world where the essential thing is missing.

**Still: I hold in my hands the power of life and death, acquaint now thyself with me and be at ease.**

(Still, A.T., 1986, 145)

Pietschmann, very wisely, draws the conclusion that it is especially this remote contradiction which represents the crucially important element of life. He quotes renowned writers and philosophers, such as Angelus Silesius: "I am not a sophisticated book, but a human being with its contradictions"; or Georg Wilhelm Friedrich Hegel: "If, however, some being does not carry contradiction inside, it cannot be a living unity" (Pietschmann H., 1995, 21).

This is precisely the difference between osteopathy and classical medicine. For all its impressive achievements, scientifically-oriented classical medicine evades all problems which it cannot explain and measure.

Thus, it attempts to evade death and dying, simply because it doesn't know what they essentially are. This is the reason, among other things, why it is estimated that almost 80% of dying population in a "highly" developed society end their lives in the bathroom of an anonymous hospital.

Osteopathy, on the other hand, corresponds to the Aristotelian science of perception, and Still accepts this **essential** contradiction, which is an integral part of every living thing due to the fact that all life is subject to death.

**I hold in my hands the power of life and death, acquaint now thyself with me and be at ease** (Still A.T., 1986, 145), he writes at the end of the chapter about the diaphragm, and he articulates precisely this contradiction-loaded primary fear of human beings, manifest in respiration. Still's idea of grasping the essence of life is to approach death by breathing, that is, trusting. This has nothing to do with provoking death, but to bring every moment forward to the future, not to stop it prematurely by fear of death.

**Still: Allow me to say that inhibition is almost universally the cause of disease.**  
(Still A.T., 1986, 146)

The great Austrian writer Robert Musil observes in his novel **The Man Without Qualities** this fearfulness at going into the future and the dramatic effects this has on behaviour. He says:

"Everything we feel or do somehow occurs 'in the direction of life', and the smallest movement away from this direction is difficult or frightening. This is exactly the same as when we simply walk: we lift our center of gravity up, move it forward and let it drop, but some small alteration, a little fearfulness at allowing oneself to drop



into the future or just wondering about it, and we are no longer able to stand up straight!

One should not reflect about this. And it occurred to Ullrich (the protagonist of the novel) that all moments which signified something of crucial importance in his life, had left a sensation similar to this one” (Musil R., 1981, 128).

This passage from Robert Musil’s *Man Without Qualities* points out with unspeakable clarity this superior creative power, which can be considerably disturbed by human consciousness.

**Still: Why not assert yourself, and stand upon this ground?**

(Still A.T., 1986, 71)

Here Still is asking the question why people have so much difficulty relying on the powers which produce such great achievements, and keeping - as Robert Musil puts it – ‘in the direction of life’. Still cannot fathom the inscrutability of the world any more than many modern scientists, but he understands that this incredibly complex universe is shaped by an intelligence that makes no mistakes. The observation of nature gives him security, because here he recognizes a creative power that doesn’t fail.

In his autobiography, he says:

“Should one quarter of a second’s time be lost in the velocity of Jupiter, what might be the result? Increase the electric force of the whole system and fever will be the result in the whole planetary and solar system. If Jupiter in his rounds should lose one - quarter of a second’s time on his circuit, what effect would it have on the

whole planetary system? You would see such planets as Mercury, Venus, and the earth dancing a jig of confusion” (Still A.T., 1996, 259-260).

Still observes that the same intelligence which is responsible for the smooth movement of planets in the sky also guides the destiny of man, and this leads him to the next question:

“If you think an unerring god has made all those necessary preparations, why not assert yourself, and stand upon that ground” (Still A.T., 1996, 259-260).

If some benevolent force is at work here, which does not make a mistake, then why is it so difficult to allow yourself to be guided by this force? This phenomenon is explained by Mr. Harris, a friend of Still. He gives an unforgettable answer to the question why it takes human beings so long to be able to accept certain truths? As Still reports:

“It was not a wordy harangue of Greek, Hebrew, French and Latin adjectives, but plain and sensible: ‘Man naturally dreads to travel a road he has never been over and fears that which he does not understand. He does not understand **life nor death**, therefore **he dreads to think or talk** on such subjects.’ He ended with ‘Only few men allow themselves to think outside of popular ruts.’” - and he continues: “Some men are by truth as a Texas steer is by corn; he dreads to go near it because he does not understand it” (Still A.T., 1996, 110).

**Paracelsus: “A physician is someone who knows the invisible, which has no name, no material body, and yet takes effect.”**

This paradox of life is precisely the point Pietschmann was getting at his analysis of the development of science (Pietschmann H., 1995, 30-33). Contradiction itself is the element which engenders life, and this is the reason why attempts to eliminate this quality are ultimately doomed to failure.

Only one person who has to come to terms with death can affirm life. Developing trust in area which has endowed us with life, but also with death, is not easy for exactly this reason, because we are pleased to accept life with gratitude, but would rather do without death. This inhibition of thoughts concerning trust is rooted in the desire for security, but it leads to constraint because they brake up the unity of time and space.

Here, we are gradually approaching the point where the differences of these philosophical-scientific orientations become very clear. On one side, **the thinking ego** is in the center to create security, because there is a lack of trust in the invisible creative power. **Cogito ergo sum - I think therefore I am** (Descartes R., 1904).

On the other side, there is an invisible creative force, which I can accept **on trust, not by knowing**, as **the** agency which is creating security for me. **Cogitor ergo sum- I am being thought, therefore I am**, or: **Somebody is thinking about me, therefore I am**. This ancient way of thinking was revived in the eighteenth century by the German philosopher Franz von Baader (Baader F., 1998, 423). Actually, what we are dealing with here is the localisation of the quality Still calls the Mind. Some locate the mind in their heads, more precisely, in their brain (CNS), others locate it in the realm wherefrom the head or the CNS is influenced in all its thinking. This is the **outside**, whatever it may be understood to mean. But openness is the prerequisite that Mind may move without obstruction from outside to inside.



Fig. 45: Trustful, open attitude

A dislocation of this mind, however, will lead to a genuine osteopathic lesion, which Still calls a “strain of mind” (Still A.T., 1986, 43).

### **Different views how Mind originates**

1. Mind originates in the head by intellectual work - Man invents Mind
2. Mind already exists and surrounds us  
Mind invents Man

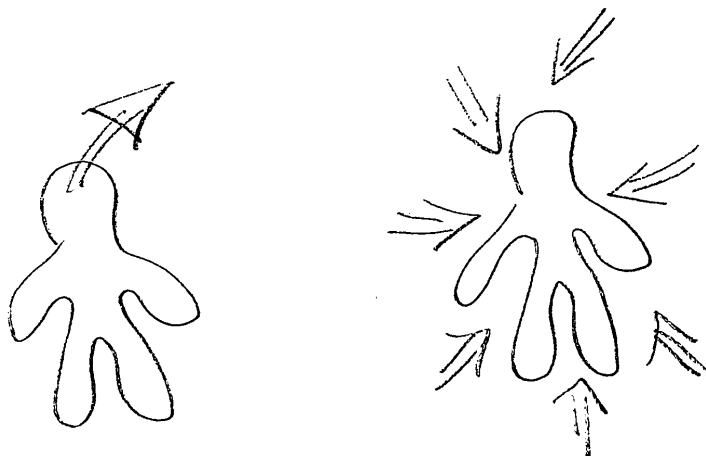


Fig. 46: Desynchronisation- 0,5 sec. Delay    Synchronisation



Fig. 47: Paul Cezanne: Bathers like the clouds and the light, they are part of nature

The ability to **let something happen to oneself** can only be developed if one has the trust that health exists a priori and that the body knows exactly what to do when it is ill. I am talking about self-healing, which is not an invention by Still, but a natural condition, and therefore a human fact.

**Still: And when completed was pronounced not only good, but very good.**

(Still A.T., 1986, 14)

One of the most important discoveries of Blechschmidt was, that man is a complete human being from the beginning. This refuted Haeckel's basic law of biogenetics, which postulated that man passes through phylogenesis during his own ontogenesis. I shall try to sketch briefly the difference of thinking based on these two distinct points of view. In a video series published by the BBC about the development of man – "Das Wunderwerk Mensch" – "The Miracle of Man" the statement is made that man is a recycling product of the animal world and certain problems, such as back pains or

pains in the hip, can be traced to the fact that man has not yet succeeded to complete his separation from the animal.

Although Blechschmidt's studies were carried out much earlier and although many embryologists use his well-founded and unique embryological reconstructions for scientific purposes, they often passed over his philosophy in silence for inexplicable reasons. Blechschmidt postulates, on the basis of insights gained from embryological reconstructions, that humans are human from the beginning and that man is healthy at the end of the embryologic period. If there is no health at this point of time, there is no further development into the fetal period.

“The development of the organism, the becoming of a human, is always preceded by being, by his existence. Being, the specific wholeness, is not a consequence of development, but its essential precondition. This Being, as wholeness of body and soul, is indivisible, in-dividual, in every stage of development, and therefore exists from the beginning. Man does not develop into a human being, but as a human being. He is human from the moment of impregnation” (Blechschmidt E., 1982, 21).

Considering these two points of view, I maintain that it is impossible to find health, if I had to believe that my back pains are a necessary evil, because I am a faulty construction, a recycling product. In osteopathy, we try to make this “specific wholeness”, which is health, perceptible again.

“Let us study man, who was made after wonderful plans and specifications, and when completed was pronounced not only good, but very good, by that scrutinizing Inspector who makes all and omits nothing” (Still A.T., 1986, 14).

This is the essential philosophical foundation, upon which Still's osteopathy is built.

**Still: There is one addition (plus soul and body) that is indispensable to control this active body, or machine, that is mind.**

(Still A.T., 1986, 17)

This, however, is the point where one way of thinking differs from the another. The precondition of sensing is the trust in a creation which has not forgotten anything and has left everything finished. The other opinion assumes that man from the very beginning is a faulty construction, which has to be improved by human intervention, because genetic determination does not offer any better possibilities. Naturally, in this case, every sensing procedure which tries to find an agency in the body to relieve pains, must from the outset be considered absurd.

In brief, we may state that sensing-into-the-body is meaningful, if we hope to find something which according to the plan of creation has to be there: its specific wholeness, in other words, its health.

But if I assume that a misconception will be a priori lead to dysfunctions, any sensing is irrelevant from the start, because a sensing-into-the-body will encounter nothing but human material not yet sufficiently in order, which requires further ordering. This mental attitude leads to an incessant mania of improvement, which is permanently trying to induce corrections by doing and adding something.

Blechsmidt describes very clearly the differences in thinking: "What we call 'culture' - or, with another word, 'cultivation' - is never characterised by 'doing', but always by 'guarding' or 'protecting' from disturbing influences" (Blechsmidt E., 1982, 90).

It is not surprising that the development of osteopathy by Still and Sutherland, mainly characterised by eliminating the inessential, is aiming at a healing power which Sutherland has called "Breath of Life" in accordance with Genesis.

He quotes:

“And the Lord God formed man of the dust of the ground and breathed into his nostrils the breath of life and man became a living soul” (Genesis 2:7 King James Version).

Sutherland placed much emphasis on the differentiation between “Breath of Life” and “Breath of Air” (Sutherland W., 1998, 209). Because breathing cannot be reduced only to an intake of oxygen, but it inhales above all that what Still calls “mind”. This mind or spirit is all around us, and by respiration is brought inside from outside and incorporated. For Still, mind is the only responsible power which meaningfully controls the movements of the body and at the same time the only power which effects healing or self-healing:

“There is one addition (plus soul and body) that is indispensable to control this active body, or machine, that is mind. With that added, the whole machinery then works as man. The three, when united in full action, are able to exhibit the thing desired- complete” (Still A.T., 1986, 17).

James Jealous says that health without this triune wholeness is not possible:

“He has a body, soul, and mind. People do not feel a well - being unless these three aspects function as a unit, unpartitioned!” (Jealous J., s.a., 100).



**Still: There is much evidence that knowledge is imparted to the corpuscles of the blood.**

(Still A.T., 1996, 185)

How this mind blends with the body via respiration, and how it forms the body most intelligently, is described by Still in the following words:

“God’s intelligence is immeasurable, and there is much evidence that knowledge is imparted to the corpuscles of the blood before it does its work.

Every corpuscle goes, like a man in the army - who has full instructions where to go, and with unerring precision does its work - whether it be in the formation of a hair or in the throwing of a spot of delicate tinting at certain distances on a peacock’s back.

God simply endows the corpuscles with mind, and in obedience to his law each one of these goes with full instructions as to the duty he is to perform” (Still A.T., 1996, 185).

This miraculous precision of formation, which does not admit a single mistake, is described by Blechschmidt in a very similar way, but also as a force working from outside to inside:

“Human embryology has no difficulty to ‘derive’ the muscular system from the development of the cartilage skeleton. As described above, the differentiation inside the extremities is a result of the growth of the outside surface, and therefore the development of the prior cartilage, as for example the disposition of the arm skeleton, is always phaenogenetically defined by the skin. Under the disposition of an upper arm, there will always be provision for an upper arm skeleton, under the skinned disposition of the forearm always an ulna and a radial bone, and a

corresponding forearm muscular system. In the forearm, there can never be found a skeleton of a hand, or a forearm muscle in the thigh, although the genetic disposition (the DNS) is the same in all cells" (Blechs Schmidt E., 1982, 56).

Like Sutherland and Still, Blechs Schmidt assumes that the creative intelligence is located a priori outside the human being, especially outside the genes and the CNS.

Perhaps it is no accident that the contact with this creative power is made via inspiration. Pietschmann quotes in his book **Das Ende des naturwissenschaftlichen Zeitalters** ("The end of the Scientific Age") the idea of the composer Johannes Brahms concerning inspiration as essential precondition for the art of composing. This subject was held sacred by Brahms, and he did not speak about it to anyone until the end of his life. Only after the death of Clara Schumann did he confess to his friend Joseph Joachim:

"To realize, like Beethoven, that we are one with the creator is a wonderful, awe-inspiring experience. Very few people attain to this insight, and this is the reason why there are so few great composers or creative spirits in all fields of human endeavour. I always think about all this before I start composing. This is the first step. When I feel the urge, I first turn directly to my creator and put to him the three questions which are most important for our life in this world - whence?, why?, whither? Immediately after that I feel vibrations completely penetrating me. They are the spirit which illuminates the intrinsic powers of the soul, and in this state of rapture I see clearly what in my normal state of mind is obscure; then I feel able to let myself be inspired from above like Beethoven. Above all, I become aware in such moments of the tremendous significance of the highest revelation of Jesus: 'I and my Father are one!' These vibrations take the form of mental images, after I

have stated my wish and decision relating to my desire, namely, to be inspired for a composition which will uplift and stimulate mankind - something of lasting value.

Immediately, ideas are pouring into me, directly from God; I do not only see certain themes in front of my mental eyes, but also the right form in which they are clothed, the harmonies, the orchestration. Measure by measure, the finished work is revealed to me, when I find myself in this rare, inspired state of mind.....

I have to be in a state of semi-trance to get such results - a condition in which conscious thinking is temporarily suspended and the subconscious prevails, because it, as part of omnipotence, is responsible for inspiration. I have to watch out, however, not to lose consciousness, or else the ideas disappear” (Pietschmann H., 1995, 10).

This wonderful description of how these invisible vibrations completely penetrate the composer, is one of the clearest images how this creative power of the “Breath of Life” expresses itself.

As I stated in the first chapter, osteopathy is an art, a science and a philosophy, whose task it is to recognize the nature of the patient. The nature of every patient is wholeness and therefore indivisibility. As Blechschmidt says, it is the precondition for development.

Individuality can only be understood in this sense. It can only come about when body, soul, and mind are united, and this is only the case when the mind has realized that it is a dependent part of an enveloping creative power which, however, does not manifest as tangible matter. Not before individuality has been generated on this plane, can communication, also with our patients, develop. Then, the inhibiting fear of the other is eliminated, because the other is part of the same indivisibility. Thus, we experience this enveloping spirit as the bonding agent in relationships, and this is the

meaning of Still, when he says: “I love osteopathy, I see God in the form and faces of my patients” (Jealous J., s.a., 118).

Only in this wholeness, and only here, are human contradictions resolved. We have to be aware that our osteopathic sensing ability does not only lead us to anatomical locations of higher or weaker tension, but that these states of tension are filled with the greatest pain the patient has ever felt. If we refuse communication at this point by turning away inside, because we seek protection ourselves, healing cannot take place.



Fig. 48: Pieta by Michelangelo: Position of Mary's hand, shows the accepting (sensing) attitude



Fig. 49: Pieta: Accepting without clenching fists or biting lips

But the key to overcome these contradictions, in order to enter into the sacred space of wholeness, is the trust which comes from the knowledge of “philosophical-religious” insights. This trust is the only effective power against the inconsistencies of life. In this trust, the opening towards the creative power is existent in such a degree that both patients and osteopaths profit from it, according to Still’s guiding principle:

“So be still, have faith in God, as an architect and the final triumph of truth, and all will be well” (Still A.T., 1996, 95).

The nature of sensing is the comprehension and proclamation of the unknown in order to widen the meaningful scope of action.

Therefore it has to be unrestrained (3.1) by stress, (3.2) by patterns of flight, (3.3) by fear, (3.4) by incorrect concepts of thinking and (3.5) by egoistic consciousness. Consequently, a philosophy is necessary which creates a frame for sensing exceeding these conditions and conveying confidence.

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## **ABSTRACT**

### **OSTEOPATHY: SENSING AND PHILOSOPHY The Philosophy of Osteopathy as Prerequisite for Sensing and Meaningful Treatment**

by Karl-Heinz Weber

**Purpose:** Some osteopaths see no space in osteopathy for philosophical or religious aspects. It is the task of this thesis to work out the importance of philosophy as a prerequisite for wise sensing provided that sensing is the precondition necessary for a meaningful action by physiological fundamentals and quotations of A.T. Still.

**Design of the study:** Literature study

#### **Results:**

- The assimilating parasympathetic part of the vegetative nervous system correlates extensively with the assimilating sensorial processes of the nervous system. The rhythmical synchronisation with this part of the vegetative nervous system by the Osteopath supports him in improving his capacity of sensing.
- Also in posture, there are two opposite body systems, one that is receptive, the tonic system, and another which is productive, the phasic system. Osteopaths who synchronize with the tonic system and avoid synchronisation with phasic muscular movement-intentions as far as possible can improve their capacity of sensing.
- The free floating uninhibited breath during inspiration as well as during expiration is a precondition in order to gain a clear image of reality by sensing.
- Thinking can cause a false fulcrum for sensing and distort the process of treatment.
- The osteopath has to synchronize with the beginning of motion, which is precognitive and not with the beginning of thinking consciousness.

**Conclusion:** The nature of sensing is the comprehension and proclamation of the unknown in order to widen the meaningful scope of action.

Therefore it has to be unrestrained by stress (Chapter 3.1), by patterns of flight (Chapter 3.2), by fear (Chapter 3.3) by incorrect concepts of thinking (Chapter 3.4) and by egoistic consciousness (Chapter 3.5). Consequently, a philosophy is necessary which creates a frame for sensing exceeding these conditions and conveying confidence.

**Key words:** osteopathy, philosophy, sensing, autonomic nervous system, respiration, posture, consciousness, thinking

## KURZFASSUNG

### **OSTEOPATHIE: SPÜREN UND PHILOSOPHIE** **Die Philosophie der Osteopathie als Voraussetzung** **für Spüren und sinnvolle Behandlungen**

von Karl-Heinz Weber

**Ziel:** Kenntnisse über osteopathische Philosophie werden von manchen Osteopathen als nicht wichtig erachtet. Das Ziel dieser Arbeit ist es, unter dem Konsens, dass Spüren die Vorbedingung für sinnvolles Handeln ist, anhand von physiologischen Grundlagen und Zitaten von A.T. Still, sowie Wissenschaftlern und Philosophen, die Wichtigkeit der Philosophie als Vorbedingung für sinnvolles Spüren herauszuarbeiten.

**Studiendesign:** Literaturstudie

#### **Ergebnisse:**

- Der aufnehmende parasympatische Teil des vegetativen Nervensystems stimmt weitgehend mit dem aufnehmenden sensorischen Prozess des Nervensystems überein. Die rhythmische Synchronisierung mit diesem Teil des vegetativen Nervensystems durch den Osteopathen unterstützt ihn bei der Verbesserung seines Spürvermögens.
- Auch in der Haltung gibt es zwei gegenläufige Körpersysteme, ein aufnehmendes, das tonische System und ein produktives, das phasische System. Osteopathen, die sich mit dem tonischen System synchronisieren und die Synchronisation mit phasischen muskulären Bewegungsintentionen so weit wie möglich hintanhaltend, können ihr Spürvermögen erhöhen.
- Der frei fließende ungehinderte Atem sowohl während Ein- als auch Ausatmung ist eine Vorbedingung um ein klares Bild der Wirklichkeit beim Spüren zu erhalten.
- Denken kann ein falsches Fulcrum für das Spüren erzeugen und den Behandlungsprozess stören.
- Der Osteopath muss sich mit dem Bewegungsbeginn synchronisieren, der präkognitiv ist und nicht mit dem Beginn von denkendem Bewusstsein.

**Schlussfolgerung:** Das Wesen des Spürens ist das Erfassen und Bekanntmachen des Unbekannten um den sinnvollen Handlungsrahmen zu vergrößern. Es muss aus diesem Grund frei sein von Stress (Kapitel 3.1), von auf Flucht ausgerichteten Bewegungsmustern (Kapitel 3.2), von Angst (Kapitel 3.3), von falschen Denkkonzepten (Kapitel 3.4) und von Ich-bezogenen Bewusstseinszuständen (Kapitel 3.5). Aus diesem Grund ist eine Philosophie nötig die über diese Zustände hinaus Vertrauen vermittelnd einen Rahmen für das Spüren schafft.

**Schlüsselwörter:** Osteopathie, Philosophie, Spüren, Autonomes Nervensystem, Haltung, Atmung, Denken, Bewusstsein