

Structural Integration - Ida Rolf's Quest for Balance between Gravity and Man

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Learning from others - better holistic understanding. A wonderful incentive to speak about a philosophy methodology which seems very antiquated in an era where developments in genetic engineering dominate the headlines

Twenty years ago in Switzerland , undergoing training to become a professional actor,

I went through one of the most difficult phases of my life. A fundamental disagreement with my parents about my choice of career led to a psychological crises in the midst of which I experienced moments of wanting to terminate my life.

Fortunately I was also suffering under pain in my right knee after a meniscus surgery. The good functioning of the knee was imperative for a young actor and so I started looking for help. Thus began my exploration of Structural Integration or Rolfing as it is sometimes called.

My first session with a practitioner in Zurich, literally blew apart any paradigm that I might have had about the physical body, its functioning or its relationship to psychological circumstances. The directness and accuracy of the physical touch felt extremely profound - this was somebody at work who knew what he was doing . For at least three days after this session I walked around Zurich not really knowing who I was anymore. At the same time I experienced a sense of new security and confidence. The constant internal dialog had quieted down somewhat and I could see a glimpse of light at the end of the tunnel of my depression.

This physical and emotional experience awakened my interest to a degree which nothing before in my life ever had and several years later I became a practitioner of Structural Integration.

Ida Rolf, whose life work we are discussing today, must have been equally surprised by the effects of her manipulations, on the psyche. In her own words: "The amazing psychological changes that appeared in individuals that had undergone a process on Structural Integration were completely unexpected. They inevitably suggest that behavior on any level reflects directly the physical energy level of the initiating physical structure. The psychological effect is far greater than one would expect to induce in the brief encounter of ten hours of work, which is the normal cycle for Structural Integration. This effect can be understood if we see it as the emergence of a different behavior pattern resulting from the very much greater competence of physical myofascial organization. Structural Integration postulates on the basis of observation that a human being is basically an energy field operating in the greater energy field of the earth; particularly significant is that energy known as the gravitational field." So far Ida Rolf.

These few, probably incredibly complicated sounding sentences, contain "boiled down to a Bouillon" Ida Rolf's quest to understand the relationship of the human being to the energy field in which he or she moves - the gravitational field of the earth.

Born in 1896 in New York, Ida Rolf grew up in the Bronx. She graduated from Barnard College in 1916. As always in times of war, our patriarchal systems calls on women to work in professions that are usually exclusively reserved for men and Ida Rolf was given the unique opportunity to work at the Rockefeller Institute while at the same time continuing her studies at Columbia University. She received a Ph.D. in biological chemistry from Columbia's College of Physicians and Surgeons and, on a leave of absence from the Rockefeller Institute, went on to study Nuclear Physics in Zurich .

Her interest in the human physical body came from concerns about her own health. As a young woman she had been struck by a horse's hoof in the chest and had developed symptoms that looked like pneumonia. Since the usual pneumonia treatments did not have any effect she tried the help of an osteopath who put a very twisted rib back into place and immediately she could breathe again. In her own words: "It was unusual to go to an osteopath at that time; there was still a great deal of controversy between the medics and the osteopaths and they were not accepted at all. I got to be friends with my osteopath and I became interested in the theory of Osteopathy - that structure determines function."

Structure - determines Function, this equation was to become her main field of study until her death in 1979.

Ida Rolf's will to further improve her health lead her to the practice of Hatha Yoga and also, during her stay in Switzerland , to the study of homeopathy.

Structural Integration started nearly accidentally. She made the acquaintance of a lady in New York who had been doing unusually inspiring musical work with children. This lady had badly hurt her arms by falling on a hole in the pavement of the New York streets and was unable to play the piano any more. " I looked at Ethel and said 'I bet I can fix that. Do you trust me to try? You can't be worse off. I'll make you a bargain. If I can get you to a place where you can teach music, will you teach my children?' She said yes. And so I started really with Yoga exercises, which I myself was using at that point. After we worked together about four times, she was in good enough shape to start teaching music. And that's where Structural Integration really started. Because of course Ethel had a friend who hadn't been able to get help, and this friend had a friend and so forth. And from then on my doorstep was pretty much filled with people who hadn't gotten help elsewhere."

The next thirty years of her life Ida Rolf spent working with people and developing the ideas and methods of Structural Integration before she systematically started teaching first at Esalen and then at her own institute in Boulder, Colorado.

To understand the basic ideas behind Structural Integration, we have to investigate the make up of the human organism. In utero the fertilized ovum quickly differentiates into three functional systems - the ectoderm, which will later become the skin, the spinal canal and all nerve components, the entoderm which will make up the intestinal tract and the mesoderm from which evolve blood, bones, cartilage, muscle, tendon, ligament and fascia. The structures deriving from the mesoderm will enable the human baby to slowly develop from a completely flexed fetal position into the upright stance of a grown up. It will take a baby quite some time to be able to balance on two legs and even as a mature adult something as simple as standing comfortably, poses for most of us considerable difficulty. Several disciplines have taken this upright stance, as a diagnostic tool and the striving for balance in it as a meditation.

Apart from Structural Integration, we could name Alberto Pessó and Diane Boyden's psychomotoric approach: they call their exercise in standing "species stance", or Hatha Yoga where the fundamental Asana is called Tadasana, the mountain pose, which is simple standing. The challenge of the human being within the gravitational field of the earth has been beautifully described by Johann Wolfgang von Goethe in his poem Limitations of Man. Speaking about man Goethe says:

**With the gods
No man should ever
Seek to compare.
If he rises upward
There to touch
The stars with his crown
Nowhere can rest
His uncertain feet
And storm clouds and tempest
Will make sport of him.
If he stand firm
With sturdy robustness
On the well supported
Permanent earth sphere,
He will fall short
So much as to vie
In vain with the oak
Or with the vine.**

This "KOAN" every human being works on throughout his or her entire life. Elements deriving from the mesoderm determine this balance between up and down in three dimensional space. Specifically one of these elements, fascia is the material that we work with in Structural Integration.

Fascia resembles to the cellular walls in an orange. If you cut an orange in half you will see these white walls that contain the pulp of the orange. It is this part which my seven year old son does not like to eat at all and he insists on stripping away the "fascial layer" of the orange completely before putting it in his mouth.

Fascia encases all elements of the human body. Every Muscle, every muscle fiber, every organ, the brain, the eyes has it's protective fascial wrapping. All these wrappings are themselves contained in a larger wrapping the superficial fascial layer just under the skin.

This completely continuous webbing from the little toe all the way into the brain connects as well as separates, and protects all functional units of the body.

The Fascial webbing shares this property of being completely continuous and covering the last millimeter of the human body only with two other systems - the circulatory and the nervous system. Neither bones nor muscles offer that continuity.

Using a model we could say that the structure of a human body is made up of a myofascial webbing draped around a bony structure. Since the skeletal structure is not continuous e.g. the foot is made up of twenty six little bones, the ribcage consists of individual ribs, the spine of individual vertebrae etc. it is up to the organization of that webbing and the intelligence of muscles adjusting the tensions within it, to determine the position of the bones, the functioning of joints and even the well being of organs. If you are surprised by this last statement, that structure may determine function even at an organ level, just consider these two examples:

1) extreme cases of scoliosis where the curvature of the spine can lead to a life threatening compression of organs and which can only be remedied through a stabilization of the spine - OR

2) foot-reflexology. Foot-reflexology offers a map of the sole of the foot where different areas correspond to other parts of the body especially organs – the better the myofascial web is organized, specifically the better the heel stands and the better the arches of the feet function, the fewer hardened and painful foot-reflexology points you will find. Or conversely: in order to counteract the downward pull of gravity, a malaligned body will create, it will have to do that, additional elements of support. These can then be felt as thickenings, shortenings and hardenings in the myofascial webbing of the body, to stay in our example, in the sole of the feet. These hardenings then indicate to the foot reflexologist a non optimal functioning of a certain organ. From here we could easily formulate the hypothesis that the meridians used in the Chinese system of acupuncture are “autobahns” within the fascial webbing.

Approaching wholeness from the point of view of Structural Integration or Hatha Yoga means working towards the optimal structural organization of that webbing.

This organization would allow all joints maximal movement within their designated functional parameters as well as maximal protection against compressional components, An organization that at any moment in time has an optimal sense of balance relative to its position in three dimensional space, an organization where the gravitational field of the earth is not perceived as a threat, but as an ally.

The research of the last decades in the field of Somatic has started demonstrating the interdependence of body and mind, the step to the assumption that if we improve physical structure we will also improve psychological well being, is not very far. The yogis were on the right track. They did not know the word psychology. If we demystify their approach we could sloppily say that what they noticed was, that somebody with a reasonably well organized body is a reasonably nice person, hence a set of physical exercises to improve structure. Or taking this argument one step further and now I am quoting Ida Rolf again: “The way a reasonably good body behaved became for the Yogis a touchstone for morality. When morals are built from the body’s behavior, you get a moral structure and behavior which respects the rights and privileges of other individuals. This is a very interesting concept; it has surfaced every once in awhile down through the thousands of years that man has been on earth. It went completely out during the more rigid Christian era, when the church began to dictate morals from above rather than from within. In doing so, a rigidity came into the concept of morals which people are now rebelling against and have been for the past century.” More about this a little later in this presentation.

At this point it becomes increasingly important to define the word balance in reference to the myofascial webbing.

A fascinating definition, implicitly confirming many of Ida Rolf’s assumptions, was offered, just over a year ago by Donald E. Ingber, associate professor at Harvard Medical School . In an article published in the January 99 issue of the Scientific American, called : [The Architecture of Life](#) he described the results of his research concerning the architecture of human cells. He discovered a universal set of building rules that seem to guide the design of organic structure. These building rules were prior described by the American philosopher Buckminster Fuller in his work on [geosedic domes](#). The key principle is Tensegrity, meaning tensional integrity. “Tensegrity structures are mechanically stable not because of the strength of the individual members but because of the way the entire structure distributes and balances mechanical stresses.

Tensegrity structures continuously transmit tension across all structural members. In other words an increase in tension in one of the members results in increased tension in members throughout the structure - even ones on the opposite side . This global increase in tension is balanced by a an increase in compression within certain members throughout the structure. In this way, the structure stabilizes itself through a mechanism that Fuller described as continuous tension and local compression.”

Donald Ingber discovered that all cells are constructed like geodesic domes or tensegrity structures. In an experiment two of his colleagues quote “forced living cells to take on different shapes - spherical or flattened, round or square - by placing them on tiny adhesive islands composed of extra cellular matrix. Each adhesive island was surrounded by a teflon-like surface to which cells could not adhere.. By simply modifying the shape of the cell, they could switch cells between different genetic programs. Cells that spread flat became more likely to divide, whereas round cells that were prevented from spreading activated a death program called apoptosis. When cells were neither too extended nor too retracted, they neither divided nor died. Instead they differentiated themselves in a tissue specific manner: capillary cells formed hollow capillary tubes, liver cells secreted proteins that the liver normally supplies to the blood, and so on. Thus mechanical restructuring of the cell and cytoskeleton apparently tells the cell what to do. Very flat cells, with their cytoskeletons stretched, sense that more cells are needed to cover the surrounding substrate- as in wound repair-and that cell division is needed. Rounding indicates too many cells are competing for space on the matrix and that cells are proliferating too much; they must die to prevent tumor formation. In between these two extremes, normal tissue function is established and maintained.”

Thus simple mechanics appear to influence biochemistry. Structure determines function.

If every cell in the human body is built like a tensegrity structure then it is safe to speculate that the whole human body works like that. In a human body the 206 individual bones would be the compressional struts and the myofascial webbing the tension bearing members. This model stands in stark contrast to the common perception of the bony skeleton being a continuous structure, and functioning somewhat like a pillar supporting the ceiling or roof of a house.

Ingber goes even further and poses the question: "Are these building principles universal . Perhaps there is an underlying theme to nature after all. As suggested by early 20th century zoologist D'Arcy Thompson, who quoted Galileo, who in turn, cited Plato : the book of nature may indeed be written in the characters of geometry."

This approach gives credence not only to Ida Rolf's quest to improve the balance in the body by adjusting the tensional string of the human tensegrity structure, but also the ancient claim of Hatha Yoga being able to improve organ function.

It also gives us a new view of the psychological effects of a process like Structural Integration. It may simply be that one of the effects of greater overall myofascial balance is reflected in a normalization of biochemical processes in the human organism processes that also effect emotional well being. Or in Ida Rolf's words: "The psychological effect can be understood if we see it as the emergence of a different behavior pattern resulting from the very much greater competence of physical myofascial organization. "

What would an optimal balance of the tensegrity structure human body look like . Let us investigate the diagnostic tool of simple standing. In a side view most practitioners of physically oriented therapies would agree that ideally one should be able to draw an imaginary line through the centers of the foot, the knee , the hip and the shoulder joints and place the ear on this same line. If we shift the weight bearing in the foot for instance to the toes the head drops forward and the tensional integrity is lost.

Looking from the front it would be nice if we could draw imaginary horizontals at several key junctures: at the ankles, at the knees with the patellae facing forward and especially at the ASIS and the clavicles. In a back view I would look for a straight calcaneus, for a horizontal at the ischial tuberosities and check if the scapulae are in line with the ear.

Anybody can stand that way if they concentrate you say ? Maybe, however their effort to hold these elements in that position will soon show and here we encounter an important distinction between posture and structure. Good posture can only be assumed once there is a reasonable amount of structural integrity. Chronically shortened myofascial units will soon yield to the gravitational pull and the individual will fall back into the old pattern. The German word "Haltung" or "Haltung annehmen" is very revealing. Good structure does not have anything to do with holding, "halten" or "festhalten", - on the contrary it has something to do with trusting to allow everything to let go - trusting the gravitational field to carry you.

In every human being the reflex to stand upright has developed through millennia of evolution, anti gravitational muscles have developed, we just need to allow them to work. A human being is evolving as an upright animal. How upright he or she will be as an individual will depend on the degree of balance between flexors and extensors, which specifically means the capability to place more and more responsibility on the extensors.

The extensors break down and give up first. As a result the fascial layers around them rigidify to prevent further collapse.

Good Structure can best be described as a personal quest for internal balance, a meditation on what Ida Rolf called the Line. To facilitate this meditation myofascial units need to be balanced.

An important centerpiece of this balance is a horizontal pelvis with a stable lumbar spine above it.

Many types of philosophies have drawn attention to the importance of the pelvis. The Hindus believed it to be the seat of the soul,, with the “Kundalini” energy rising from the base of the spine, in the Chinese and Japanese traditions the hara or kikei tanden is located in the pelvic area. This center of this “magical” area where physics and metaphysics join hands is the front surface of the sacrum, the “holy bone,” where the center of gravity lies. Stabilizing and bringing awareness to this area seems utmost important. Ida Rolf’s advice with respect to this question was very simple: “The goal of every session of Structural Integration is to horizontalize and mobilize the pelvis.”

“Practically all spines, unless they’ve been injured, compensate in the same way: the lumbar goes forward. To restore balance you must bring the base of the sacrum back and the apex of the sacrum forward. The lumbar will then go with the sacrum and so will everything that is attached to it- that is to say the whole extensor mechanism of the back.”.

What disturbs the tensional integrity of the human body ?

Leaving out many, I would like to focus on 4 main categories of reasons, which very often do not receive enough attention.

1 Physical Trauma 2 Emotional Trauma 3 Societal Conditionings and 4 Habits.

1 Some somatic disciplines firmly believe in a psychological trauma as the sole root cause of physical problems in the human body. Structural Integration and Hatha Yoga approach this problem from a different angle. They do not necessarily attempt to trace the origin of the problem.

They acknowledge a fundamental interdependence between the body and the psyche and then go on to slowly and continuously improve the physical structure thus creating more and more stability in the organism, so that the body and the mind can heal themselves. This physical body constitutes, as Ida Rolf used to say ' "What I can get my hands on."

She loved to challenge the consensus wherever she could, sometimes brilliantly and philosophically sometimes somewhat humorously as in the following argument : "Endless psychological problems have been blamed on insecurity. Unnumbered mothers have wept on being told : Johnny is insecure. You didn't give him enough love as a baby. This means that mama should shoulder the guilt. But Johnnys without number have felt insecure, because they were insecure.

To Johnny one leg felt longer than the other, not because the bones were longer, but because the time he fell down the stairs(or off the bicycle or of the roof), he rotated his pelvis. One hipbone therefore is slightly forward than the other and slightly higher, one leg seems longer. In addition to the primary problem, compensatory distortions have occurred throughout the body - he is round shouldered and perhaps knock-kneed. Papa's communications to him are predominantly: 'For god's sake boy can't you stand up straight?' In point of fact Johnny can't. For when your legs are not properly under your body, you are insecure and you'll act like it and feel like it. Inevitably, the bedeviled individual will cope with this insecurity by some kind of compensation. Whether he becomes brash, loud mouthed, and resentful, or apathetic, withdrawn, and timid depends on other factors. The remedy can be found only at the level of the insecurity, namely in the structural deviation of the pelvis." So far Ida Rolf. So physical trauma be it an accident, a broken bone, a surgery can be named as potential disturbances of structural integrity. If the myofascial web is cut open and reconnected the scar and the scar tissue pull the whole structure in its direction.

2 But let us start at the beginning of life. Everybody has a certain genetic predisposition - some would argue that this is a result of result of karma. For some people the quest for balance appears to end here already: "My grandmother already had flat feet." becomes the mantra and the excuse for not being able to choose a personal and individual path in life.

To what degree early childhood patterns are determined by the DNA structure or have been established in utero or are copied behavior in the early stages of a child's life is hard to say. What we observe is that a great deal of change in that pattern can be accomplished.

The body is a “plastic medium”, the shape of which can be changed. To some degree the origin of the pattern is not all that important, since the striving for balance through structural Integration or Yoga induces a process of individuation which will undoubtedly have some positive result.

After conception we have a human being first in utero and thereafter for several years fairly helpless and at the mercy of the caregivers and the surrounding world. The potential psychological impact of maternal stress, anger, fear or frustration on a child in utero has already been well described. But what is the impact of prenatal or early childhood emotional trauma on our tensegrity structure.

Moshe Feldenkrais called attention to the fact and I believe him to be correct that all prolonged negative emotional experience is accompanied by a shortening of the flexor muscles of the body. This flexor shortening disturbs the built in program of becoming upright at a very young age and as this person grows older he or she will have to use increasing amounts of energy just to counteract gravity.

Such chronic flexion may at some point in life lead to a feeling of being “depressed”. The shortened flexor pattern can of course kick in at any time. We can observe a general favoring of flexors in our culture. For one we have the speed that many of us operate in. Speed will in general tend to favor the flexors. They are faster in their response than the reliably continuous workhorses, the extensors. If the same movement was done slowly the extensors would have a chance to participate. The paradigm: when flexors flex - extensors relax needs to be revised. In a well executed movement when flexors flex extensors extend! Apart from the speed, our culture offers many more constant flexions: depression is a flexion, greed is a flexion - sitting most of the time flexes the knee and the hip joint. We are a society of flexors, - no wonder everybody is running around depressed.

Back to our childhood development.

In its search for identity a growing child will more often than not unconsciously copy behavior patterns, e.g. the gait or even the breathing pattern of the caregivers. In German you have the saying: “Der Apfel fällt nicht weit vom Stamm” (the apple does not drop far away from the tree), so if daddy has bow-legs little Johnny will tend to unconsciously imitate his gait thus also creating bow-legs. This physical identification may well contribute after puberty to the enormous rebellious energy against parents. The young man or woman feels the need for individuation.

He or she does not ever want to become like the parents, yet on a very deep level the structure of the body feels very similar as theirs. This antagonism can become very frustrating - hence the rebellion. And the young adult's rebellion has merits: He or she really wants to be unique and an individual.

3 Evolving from early childhood patterns would seem of utmost importance in order to become a competent, mature and upright adult. The person who was constantly angry as a child and whose stance now shows a head drawn forward and into the shoulders, with literally no neck or the woman who hyperextends her knees in defiance of parental authority still carry in their adult bodies the pattern of the five year old they once were. Any psychotherapists' work will become a lot easier once the physical reaction to a given situation has been changed and the angry man finds a new support for his head and the defiant woman relies on her feet rather than her knees to save her in awkward situations.

The societal structures I am familiar with have practically no tools to facilitate this imperative individuation process of the physical body. On the contrary. In school at the latest, our educational or societal concept of structure is introduced. So instead of working on resolving the first pattern of strain in our myofascial webbing we simply superimpose it with a new one.

This societal concept seems to be mainly influenced by a Judeo-Christian philosophy and a military approach to physical education.

The way Judeo-Christian philosophy has been interpreted for many hundreds of years by a majority of people, implies the existence of an omnipotent male god. The physical body in this concept is at best a mere vehicle for the soul at worst it is sinful. A human being is incapable of salvation through own work - the individual needs to give up his or her identity to god in order to be saved. This is symbolized by the arms turning into a position with the palms forward and the elbows facing backwards. We can see this position of the arms in most depictions of Christ especially of course at his death suffering on the cross. I suspect these images are deeply ingrained in our psyche. If this rotational pattern is chronic the individual is unable to choose voluntarily the openness and good will, that can also be felt with the arms in this position. Some myofascial units have become so short, and others so incompetent that any other home position of the arm produces a painful response. The long-lasting experience will tend to be victimization and powerlessness.

This arm position has also found its way into our anatomy books as the so called anatomical position thus unwillingly legitimizing it.

This problem can be observed wherever the philosophy of a culture looks for salvation outside of the individual, most Hindu Gurus whether they are called Rajneesh or Iyengar, require the same sacrifice and the same arm position, thus rendering the individual powerless. It is very hard to move the arms from this position.

By contrast, the Buddhist approach, where there is no outside god and everything is to be found within, shows a meditation position with the elbows pointing outwards and not backwards. This is not to promote Buddhism, there are other problems with that, but to illustrate how different philosophical systems demand different physical responses, which lead to different holding patterns in our tensegrity structure in turn shaping our psychological responses to our environment.

In its physical consequences chronically rotated arms tend to push the shoulder blades up and consequently the head forward resulting in those 5-7 kilo hanging much too far forward and at the mercy of the gravitational pull.

The second aspect of cultural conditioning is shaped by our military style of physical education. The underlying idea can be briefly summarized: the bigger the muscles look and the bulkier they appear, the stronger the muscles are - the stronger, by this definition, the individual appears to be, the better he or she will be able to function in society. A society which appears to see the human being more and more as a machine than as a thinking and feeling mammal, if we judge by the outpour of movies in the action genre.

What does this do to our tensegrity structure? The idea might come up, that it doesn't make any difference since we appear to be tightening all members of the web equally. That is however not the case. The integrity of the myofascial webbing is maintained by a delicate interplay of superficial muscles which we need for big movements and deeper lying structures which allow subtle adjustments and are important in maintaining structural integrity. Remember: any disorganization of the web will translate to all other parts. In the hip flexion e.g. the deep lying structure the psoas initiates the movement which is then taken over when it gets bigger by the rectus femoris.

The difficulty with the military approach lies in a constant overuse of superficial muscles, the sleeve of the body, at the expense of the finer muscles closer to the bone, the core.

These core muscles will slowly atrophy away until our tensegrity structure is only held together by, what Wilhelm Reich called the "Körperpanzer", superimposed over an early childhood pattern.

A vicious circle has started in the body. Since the core becomes progressively weaker, making the whole system unstable versus the gravitational field, the need for more and more armoring is created, leading in extreme cases to the completely controlled soldiers, whose psychological patterns have been extensively described by Klaus Theweleit in his book *Männerphantasien*. All military education has as its fundamental movement the willful pulling up of the body against gravity. *Haltung annehmen, Brust raus Bauch rein, sit up straight*. These instructions demonstrate a deeply felt distrust in the gravitational field and in the human species' evolution into an upright stance. Every attempt is made to pull yourself together and upwards, using superficial muscular structures. This distrust is possibly often experienced versus any kind of evolution. What is known and familiar is embraced, letting go and risking change is perceived as a big threat.

Most people of the cultures I am familiar with find their place somewhere between these two extremes.

In my experience the military pattern will show up more if the societal structure is or has been very militaristic. In my work in the Czech Republic I have encountered it in practically all male clients.

Some people choose as an alternative, the rebellion against the military approach. If no other concept is introduced one will usually find in their bodies total unawareness and randomness. The childhood pattern will simply continue and very often result in collapse of all order leading to a feeling of being victimized.

Thus we could summarize, that an adult structure is made up of a mix of genetic predisposition/karma, early childhood patterns of physical or emotional trauma, societal conditioning, societal imperatives related to the orientation towards flexion and last but not least simply and trivially habits.

4 Obviously any one position that a person needs to hold for extensive periods of time will likely create imbalance. In a sitting position e.g. both the knee and the hip joint are in flexion, so the tissue around hip and knee flexors tends to be short. In a cross legged sitting position, which has become very fashionable again in the wake of the new age movement, the femur is rotated all the time in one particular direction - with the obvious consequences for the tissues involved.

Which brings us to the most important question.

Can we really change that ?

My experience is yes. Of course the degree of change will depend on many factors, age being one of them. A physical pattern that has had 60 years to ingrain itself will be harder to change than one at twenty years.

But how ?

In any disorganization we will find myofascial units that are too short and that are pulling the myofascial web into their direction. These tissues will need to be lengthened again. We all have the experience that tissue changes as a result of external pressure . For example: wearing high heels for many years will result in a very different kind of foot shape than walking barefoot all the time : the plantar fascia will become hard as a rock thus compressing the 26 bones of the foot and the achilles tendon will become very short. On the other hand most of you will have the experience of stretching exercises, a typical one being the stretching of the back of the leg - the hamstrings or ischiocrural muscles. If you do this exercise for some weeks the connective tissue surrounding these muscles becomes longer. The body is a plastic medium and its shape can be changed.

Thus it is not a question of principle but a question of persistence . In Structural Integration we use physical manipulation, with fingers, knuckles or the forearm depending on the size of the territory needing to be covered to lengthen a persons shortened fascial layers again. Since the web is continuous this is done systematically through the whole body. The educational part and movement exercises ensure that they don' t come back. In Hatha Yoga Asanas something similar is achieved. Great care has to be taken with two things while practicing Yoga : not to compress any joints and not to twist more into the pattern. The last statement is maybe difficult to understand. Consider this: the only thing your body has known is a knock-knee, so every time you practice e.g. a forward bend and have to extend the leg there will be a tendency to twist more into the knock-knee than actually out of it - so beware. In both disciplines it is imperative not to omit any part of the body. Every part is completely dependent on every other part.

We can readily demonstrate what drastic consequences a twisted calcaneus, heel bone , can have on structures as high up as the neck. The head will drop very far forward and feel very heavy on the shoulders. The person involved will start feeling as if they were carrying the weight of the whole world on their shoulders. In such a case it does not make any sense to work on the pain in a person's shoulder or neck unless you restore a reasonable amount of balance in the heel.

Understanding the reasons for a shortening in tissue can be important, more important however is the new direction of changing it. Thus Structural Integration will listen to the many stories that people bring with them, but rather than getting involved in the questions of cause and effect with the assignment of blame or guilt, we work towards balancing the physical body with compassion but impartial, comparable with the attitude of a "Yogic no-mind".

The beauty of this work lies in its architectonic ideas. The surprises a human body brings with it are endless. Some people change drastically, some people not as much. Practically always there is a net gain resulting in a feeling of greater ease, of balance and usually greater emotional stability and individuation. Structural Integration or Hatha Yoga allow you to transgress the limitations imposed in childhood or due to societal conditioning, leading to a greater sense of self, and a motivation to follow your true calling in life. The excuses, my grandfather was already like this or I can't do this because my parents would not approve and the like are often removed.

Heinrich von Kleist's in his famous text "[About Marionettes](#)" asserts the soul being in control of the human marionette's strings.

"Grace" he concludes "is greatest in those whose bodies are totally devoid of self consciousness or where self consciousness is infinite, that is the mannequin or the god." Ida Rolfs quest was to find the perfect adjustment of all the marionettes strings, so that a person does not just have a body, but is the body and lives in it as simply and easily as possible - truly divine. Even if it is impossible to achieve the perfection, as Goethe and Kleist have pointed out, the striving for it will bring all the results. The goal is in the path.

A practitioner of Structural Integration just as a Yoga teacher should not be considered a therapist. The gravitational field of the earth is the therapist. We are investigators of this phenomenon passing on our acquired experiences to our clients in an educational process - Thank you !!