

# STRUCTURAL INTEGRATION

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Cover image: Rolf Movement® Instructor Hiroyoshi Tahata works with a high school student in Miyagi, after the March 2011 earthquake in northern Japan, using “yielding” techniques as first aid.

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# Ask the Faculty

## Strategies for Using Movement

**Q** *What is your decision-making process around the use of movement – whether movement cues, Rolf Movement® work, or any other movement? When and how do you use movement in your practice?*

**A** I always check to see if I am dealing with a fixation in perception/coordination (inhibition) or a fixation in the tissues (lesion). If it is a lesion, I proceed to do tissue work using a wide spectrum of touch and structural techniques. If it is an inhibition, I also proceed to first do tissue work for a very simple reason: the sense of touch can also present inhibitions. (So, even if we are ‘not into movement work’ we are still working with perception, one of the elements of movement work). My intention then is to awaken certain tissues from the state of diminished participation in the aliveness of that person.

Because most of the time we are dealing with inhibitions rather than lesions, I use movement in different proportions almost in every session. However, my decision-making process *always* takes into consideration the context, the basic way of being of my client, and his goals.

The question that comes next is: what approach of the functional work is the best for this specific client with his specific issue and wishes? At this point it is helpful to clarify that just as the structural work has many possibilities of approach (more towards visceral manipulation, craniosacral, nerve release, biomechanics, etc.), so does the functional work: more towards simple movement cues (in my experience not always so effective), more proprioceptive-oriented, more evocative of the motility of the tissues, more Tonic-Function-oriented, more meaning-oriented, or various combinations of those. Add to these different approaches the creativity and discoveries of each practitioner and you have a wide range of possibilities of different styles. I acknowledge, value, and employ all of the approaches, although my particular interest and passion is with the Tonic Function model, potentialized whenever possible by the meaning-

exploration model, as long as the client expresses an inclination for that.

I prefer the Tonic Function model for very practical reasons: life is about movement, and this movement is toward others and things. That means that the quality of movement is toward the outside, which requires orientation in space, which in its turn depends on perception (how we use our senses), which goes together with coordination (the sequence of firing of different muscles in a given action). I understand and value the evocation of tissue motility, but for me this kind of movement is more basic (in the sense that even a person under general anesthesia or in a coma has motility). I am more interested in movements that are under the influence of orientation, and the structures of meaning (the psychology of the person), coordination and myofascia (or if you prefer, neuromyofascia). For me, to work like this is like writing poetry: the part you see is the form, the hidden part is the substance. In the functional work, the hidden part is the APA (anticipatory postural activity) that reveals the gaps in the client’s perception and coordination. In order to fill in the gaps I find the client’s pre-movement that gives me good hints about what is missing in his coordination and perception.

Another reason why I like working with movement is a socio-cultural one. I think that the more sedentary and suburban we get, the more distant we get from our ‘animal’ or primal nature and the more cerebral/mental we get. Even though as social beings we need cerebral/mental people to provide us with technicalities that sustain our lives as civilized beings, that is not where I can offer my best contribution to society. In this business I think that the more technical we get the greater are the chances of missing the point: instead of seeing the person we see her problem. Now, I don’t mean that it isn’t valid or necessary to treat

the problem. Sometimes that’s exactly what the person needs. But it is not there that I like to work. I like to be present each instant of the person’s movement, witnessing the moment she reveals her secret to me so that I can remind her of what she already knows but has forgotten about herself. I like to look at the person with compassionate eyes and welcome her with her imperfect patterns of perception and coordination, thus evoking more aliveness and possibilities in her system, celebrating the beauty of her body that after the work is more free from the unnecessary restrictions of myofascial fixations as well as of perception and coordination.

I work with movement whenever the context is auspicious to try to evoke and promote that, which in her way of being, honors her particular physical beauty, the richness of her character, and the reality of her imperfections. All while being quite aware that nothing is perfect, nothing lasts forever, and nothing is finished.

**Monica Caspari**  
Rolfing® Instructor  
Rolf Movement® Instructor

**A** My manual interventions are always in the service of movement. I’m not very interested in structure per se, so my sessions always include functional and perceptual work, whether integrated into manual therapy or introduced separately at the beginning or end of the session. My vision of beautiful, efficient and integrated movement is a combination of Hubert Godard’s Tonic Function work and Gael (Ohlgren) Rosewood and David Clark’s Natural Walking model. I use the client’s walking to assess where she deviates from my vision, also taking into account her complaints, whether physical or aesthetic, and how she uses her body in daily life. I notice where dynamic expression of the central line is blocked, and how that affects the helical movements of locomotion. Most people have developed an ‘emergency support system’ – a set of ways to feel stable under stress. I use Rolf Movement interventions, Pilates, yoga, or anything else I might concoct to help them find alternative sensations of security. Usually this strategy facilitates freer contralateral gait.

**Mary Bond**  
Rolf Movement Instructor

**A** This question stilled my brain. It's a trick question, right? I realized my 'duh' moment was triggered by the fact that I think movement work is inseparable from structural integration. It's a bit like asking, "When do you use the holism principle?" As a Rolfer™, I shift my lens from macro to micro to macro a lot, but holism is never far from my mind. Movement is one of the ways I accomplish this. Movement addresses the whole person.

So I asked myself, "When do I refrain from using movement?" Sure, there are times in a session when I'm not asking my client to move or think about sensation. Sometimes a client comes in and due to personal problems, illness, or a bad night's sleep, it's obvious that he doesn't have a lot of resources that day. If he seems overly challenged, I may not incorporate movement as much. On the other hand, bringing his attention fully to the session and his experience might be the best thing. So I'll generally use movement, and if I'm getting a message that my client is getting overloaded, I'll request less. Additionally, if I am using structural techniques and feeling a lot of change happening, it is unlikely that I'm going to add another factor like movement cues. Obviously, the conditions are already appropriate for creating change – it's happening. To me, a lot about Rolwing work is noticing when things are working and not getting in the way.

But, if I am working manually and don't feel the softening, sliding, or release that I am looking for, before trying a completely different technique, I will add movement. Often this is the traditional approach of "put the tissue where you want it and call for movement." Any cue that gets the tissue moving under my touch is welcome, and the more of the client's whole body that gets involved, the better. And there is no rule for what type of movement techniques I use. Use what you've embodied – that's what you'll be able to communicate well, and when one approach doesn't work, be willing to try another until you see something click with your client.

But this is a myopic view of movement work. Actually any exchange with your client that addresses sensation, perception, or coordination is movement work. This is why it seems unlikely for me to do a session without some use of this approach. It rarely seems disruptive to ask the client to notice what is happening or to describe what she

is feeling. Just asking clients to observe changes in the body is causing remapping and affecting function.

So when do I use movement? I use it to:

1. Encourage tissue to shift
2. Make my job easier
3. Refine clients' sensory and perceptual skills
4. Help clients integrate structural changes
5. Interrupt long-held body patterns
6. Prepare clients for upcoming session goals
7. Help clients who feel off-balance after receiving work reconnect and reorganize
8. Respond to client requests for homework or "ways to get the most out of our sessions"
9. Work with clients experiencing post-traumatic events
10. Address balance issues, scoliosis, weak core connections, and more.

Recently, I was speaking with a practitioner who attended another school of structural integration (SI) and who had taken no movement training. The practitioner wanted my opinion regarding a new client. In the first session, the client said he had received a lot of SI work in the past, but that it didn't hold. The practitioner stated that the client's joints were hypermobile, with an anteriorly shifted pelvis, and G posterior to G' (my translation). The practitioner felt that the client was already "very stretchy," and wondered about the wisdom of doing another series. What would I do? It sounded to me like this person had been taken apart (by habits, activities, accidents, bodywork, life) but had not been put back together. I was honest that, in a case like this, my sessions would likely be heavily weighted toward Rolf Movement Integration and awareness work. Although there are likely to be structural issues still involved, it sounded like the client needs someone to help him find a different way of being in his body. Rolf Movement work is excellent for this. But I couldn't go into the details (noticing breath, feeling support, sensing lift and weight, lengthening in opposing directions, connecting through core, cross-lateral motion, etc.) because the practitioner hadn't learned how to use movement work to address function. This is where I feel the Rolf Institute® really shines. By

incorporating movement education from our basic training on, we are increasing the likelihood that Rolfers will seamlessly combine structural and functional work to address the whole person. This makes me happy: I don't want to be the only one who thinks this is a trick question.

**Bethany Ward**  
Rolfing Instructor

**A** The term "Rolf Movement" for me is synonymous with functional activation. Anytime I am looking at a client, either in her approach to my office door, walking in, or standing for the body analysis, I am asking myself, "How does this person function in gravity with every movement she makes to be a human being throughout her unique day?"

I begin these functional questions and activities from the very beginning of the session. Knowing what is relevant for the client in his physical choices all day is crucial for how I use the functional cues. I ask the client very direct questions on how he moves, how he wants to move, how he doesn't move anymore, and how he used to move. Throughout the session, I make the decision to ask for actual movements based on the effect I am looking for in my structural/fascial work. For instance, if I am working in the rib cage, I need to see arm movements to feel and see the fascial planes in the rib cage being affected or not by my structural work. There are times I ask for movements that may do nothing, so I change the movement I ask for. I am looking for span and opening most of the time. I am looking for ease, not effort. Sometimes I'm working with the functional education of the client's nervous system. This means I watch how she initiates the movement I ask for. Does she 'gear up,' overly activate many structures for a simple task, quit breathing, or any other 'gotta perform' motions? I will then work with her pre-movements, teaching ways to move with less effort and a lengthening rather than an intense contracting.

I often use grounding through the feet – knees up or feet on a wall – to keep an integrated function throughout the body. When the client is deeply experiencing an internal state I may choose to not ask for actual physical movements but rather an internal sensing and noticing – which for me is also a functional awareness. Almost

always, I will ask how the work we did can carry over into clients' lives functionally, either in the physical, emotional, or psychological realm. For me, the decision to use functional cues creates the groundwork for the permanence of structural work.

**Valerie Berg  
Rolfing Instructor**

**A** During a Rolfing session, I tend to use Rolf Movement principles and practice any time that they serve the client and facilitate my work. It is a win-win action for the client and for me. Asking the client to execute a movement helps me to see the coordination, how the body parts respond or prevent the movement, and when there is a missing direction. I can address my interventions using this information.

For the client, moving is a great tool to bring consciousness to some 'forgotten' body parts, to discover a different coordination, to release a holding tension by bringing action into the held area. For instance, a movement cue might raise these questions for the client: "where is my left ankle joint?", "does it move up and down?", "how can I keep reaching with my heel while the toes are moving up?", and, finally, "what happens to my leg when I move at the ankle?"

Movement itself helps to reduce pain in those cases where pain is due to a 'frozen' area in the body. It may also help to negotiate the interaction between Rolfer and client, and help the person to feel more engaged with what I am doing and feel more active instead of passive. When asking for movement, it has to be simple, understandable, and accessible for the client. Better to show or explain the movement in advance, or to do it passively.

Another movement aspect that I often use during sessions is breathing. The movement of the breath starts inside the body. It helps clients to perceive the inner space and to connect the outer and inner dimensions of the body, at various levels, from physical to emotional. Using the in-breath, we can reach areas that move less (for instance, the upper or lower ribs, floor of the pelvis, thoracic inlet). With the out-breath we can evoke the sense of letting go, resting, and feeling weight so as to explore the sense of support, grounding, and 'backing.'

I use movement cues also at the beginning and end of sessions: directing the client's

awareness to what I am observing and sensing during the body reading and movement analysis helps to engage him in the orchestration of the session. For example, "How do you sense the contact of your feet with the ground as you stand and walk?" could be a question at the beginning of the Second Hour of the Rolfing Ten Series. At the end of the session, movement can be helpful for clients to recognize and own the changes in such a way that they are personally meaningful. Very often placing my hands on specific parts of the body is enough to bring the client's awareness to a specific area, to integrate the changes in gravity, and to find closure for the session. Our hands can contain, or give support or direction, to reorient the client into vertical organization while embodying a new pre-movement.

**Pierpaola Volpones  
Rolfing instructor  
Rolf Movement Instructor**

**A** It does not matter whether you call it movement cues, Rolf Movement Integration, or any other 'movement.' What matters is that we do Rolfing Structural Integration to free the body, to allow an easy flow of movement through the body, a continuous and easy flow under the laws of gravity. Choosing between bringing further awareness through movement and/or doing structural work is like asking which came first, the chicken or the egg?

**Cornelia Rossi  
Rolfing Instructor  
Rolf Movement Instructor**

**A** The measure of our work is in the execution of movement. Static posture has some teaching value but is largely irrelevant to life. How does a client meet a particular demand? Does the body lengthen and become more spacious as it encounters demand, or does it contract through the application of effort? Does the walk offer all planes of movement and an axis free of girdles? Does stability occur in the context of broad orientation to weight, space, and directionality, or through repetition of defensive strategies?

I look at the client's body walking, sitting to standing, and doing the movements that she does in life. I explain from the start that we are working together to create happy accidents of coordinative improvement

by mobilizing fascia and by shifting the initiation of the movement. Each moment is a chance to bring the client's awareness to the composition of the movement. Is the client alive to the map of his body? Is the client receiving the sensory experience of his support? Is the client allowing the support to do the work? In each question come the choices about directing the movement on the table or sitting or upright. Is the client able to feel the contrast between efforted movement and movement that lengthens the body? Fascial mobilization occurs in the context of these inquiries. One advantage is that clients are less likely to have any illusions that my job is to fix their problems through manual release of tissue. Rather, I encourage clients to notice that their coordination is part of an ongoing project that includes ongoing self-care and perceptual skill.

**Kevin Frank  
Rolf Movement Instructor**

**A** The decision-making process in a therapeutic context is a fascinating and complex process. It is a circumstance in which we must decide on a course of intervention, implement it, evaluate it, and then start all over again on an ongoing basis. We are faced with unique situations in every single instance. What worked in a particular session for another client may or may not work with this client. Strategies and techniques that worked with this client in the past may not prove beneficial in every particular instance. So, when addressing when or how to use movement in a session, there is a complex array of factors to consider. Our journey as Rolfers is to progressively refine our ability to discern what is really happening and to act on it.

First, when strategizing a session, I have to consider what it is that I would like to have happen. Having a clear idea about the desired outcome of the intervention is important. In most bodies, there is more apparently stuck tissue than there is time to address. If I am clear about what the functional goal is, I can limit the amount of tissue I need to interact with to get the job done. I find it useful to remember that my touch is actually teaching the client. If I muddle the 'lesson' with a lot of red-herring touches, I find clients need more help integrating (tracking at the end of the session, etc.). So, by keeping the small and large goals of each session in mind, I can work more efficiently and effectively.

If, for example, I am looking for more extension in the leg in a Fourth Hour, I need to address what is restricting this movement. Is the leg restricted due to internal rotation (important to correct for full extension through the pelvis)? Is the leg restricted from extension by the hip flexors? I find that a liberal use of movement in my sessions is helpful to both myself and my clients. I tend to use smaller movements, at least at first, and to focus on the successful initiation of the movement with ease and length through the body.

Once my assessment is done, I choose a position of working that allows me access to the area to be addressed and also allows for the movement that I desire to evoke. Then, once I have determined the nature of the movement I want to develop and the general location of the area that I would like to participate more in the movement, I can place my hands in the tissue. At this point, I may feel that I can easily move through the tissue and release it sufficiently for the body to take over the integration process, or I may feel that the tissue will require so much input on my part that I would like to recruit my client into the process in an active way. My preference is generally to get the most function from the client with the least amount of input from me. There are times when a considerable amount of pressure is required to open an area, and I will generally have the client use movement to facilitate the process.

Sometimes, I feel there is a lack of resistance in the tissue under my hands. This may happen in hypermobile structures or in an area where the client is less present. In these situations, I take my hands off the tissue, teach the initiation of the basic movement that I want to see, and then return to the area, asking for the movement intermittently as I work. In this way, I am educating the neuromuscular system as I release (or support) the tissue. I prefer to teach the movement before I intervene with my hands because I find that people can learn more quickly without the stress or distraction of touch. I often find that teaching the movement helps the client to isolate the area that needs to be responsible for the work; then when I work with tissue that is truly stuck, I don't have to work through all the other layers of compensatory movement at the same time.

After this type of intervention, which includes a positional strategy, a movement, and some work in the tissue, I am ready

to reassess my project. This is vitally important as we can easily overwork an area, work on structures that don't need it, or miss structures whose involvement is now apparent. So, the cycle of 'set a goal, assess, intervene, and assess again' goes on and on in the course of a session and the series. It may sound as if my practice is based purely on rational thinking, observation, and experimentation; but I want to be very transparent here about the reality of my own practice, so I will also say that in conjunction with this (and I see this as being in no way contradictory), I also use my intuitive senses. By this, I mean that I notice what flirts with my attention, what techniques, visualizations, memories, or cues pop into my mind, and what the sensation is in my own system. I use these more subtle senses to guide the session as well. For example, when working the upper quads to free hip extension with the client supine, I may notice that the medial arch of the foot keeps popping into my mind; at that point, I may ask for some movement of the medial arch. Following my intuitive sense in this way, I many times find that I gain leverage in the tissue where my hands are and that the client finds some awareness of a movement I had not previously considered. I could make up a story about how the medial arch relates to hip extension (in this example) to justify my therapeutic sense, however it would simply be conjecture and would not add to the session or to my understanding of structure and function. I am not thinking

about a particular model of structure or function when I ask for a movement or place my hands, but am guided by the information that arises during the session itself. I may find also that my client will have a story about the foot/leg/hip that was triggered by the movement work, and that story will provide the richness of meaning to the movement or the session.

So, even when I am working with the intuitive senses, I use them in the context of stating a goal, assessing the situation, intervening, and then re-assessing. It is particularly important to work from a place of openness and objectivity when working with the intuitive senses. While I trust them to guide the session, I also verify whether what I am perceiving as guidance is in fact just a daydream. I believe that by keeping an ongoing check on what is happening throughout the session, I serve myself and my client. The process keeps me present with what is actually happening with my client and keeps me from relying on models, constructs, and fantasies about what might be happening. I believe that movement, both on and off the table, is a very clear indicator of the status of the session, and lets me know when I have accomplished the goals of the session and the series. To take advantage of this information, I must take the time to look for it and evaluate it before and after each intervention.

**Duffy Allen**  
Rolfing Instructor

## Research Continues on Rolfing® SI with Stanford University Medical School

Stanford University Medical School's research study on Rolfing Structural Integration (SI) for children with cerebral palsy (CP) begun in January 2009 by Karen Price, Certified Advanced Rolfer™, continues with a two-year grant from the Gerber Foundation to enroll twenty-four children ages two to three with CP for a follow-up study. A paper on the findings from the pilot study, conducted in 2009-2010, has been published in the *Journal of Evidence Based Complementary and Alternative Medicine*. The abstract of the article can be viewed at <http://chp.sagepub.com/content/early/2011/12/06/2156587211430833>.

The pilot study's poster, created for the Pediatric Academic Societies Annual Meeting in Vancouver, British Columbia, Canada in May 2010, can be viewed at [www.rolfingchildren.com/rolfingchildrenstudy.html](http://www.rolfingchildren.com/rolfingchildrenstudy.html). Price notes that "this is the deepest inroad into the medical profession that Rolfing SI has ever enjoyed, which fulfills a cherished dream of Dr. Rolf."

# Body as a Movement System – Part 2

## *How Do We Express the Rolfing® SI Story to the World and How Might the Taxonomies Better Reflect the Story?*

**By Kevin Frank, Rolf Movement® Instructor,  
Certified Advanced Rolfer™**

*Abstract: The initial success of structural integration (SI) came from a focus on fascial mobilization and an explanation that fascia is plastic. Modern science points to the brain and the postural system as being the plastic part of the equation, and this has led to improved interpretations of Dr. Rolf's emphasis on gravity and posture. The author proposes two places for reexamination of the Rolfing® SI narrative: retool the manner in which SI is described to clients, students, and the listening public; and retool the organizational model for classifying dimensions/models of assessment and intervention – what became known as the 'taxonomies.' With improvements in how Rolfing SI is described, we may envision a future in which it better distinguishes itself from second-paradigm therapies. This article builds on "Body as a Movement System, A Premise for Structural Integration" published in this journal in June 2008.*

### **What's the Future of SI?**

Does SI have a future? Fascial mobilization and myofascial release techniques likely do have a future: they are attractive and continue to spread in the body-therapy world. But does Rolf's vision of SI have a future? Does the Rolf Institute® of Structural Integration (RISI) have a future? Rolf's work is about much more than fascial mobilization. SI evokes postural evolution – changes in posture toward what could be considered 'normal.' Improvement in posture means improvement in motor control, or coordination. When we stand up with greater length and, at the same time, greater ease, we express an improvement in coordination, an improvement in being, and, at the least, greater efficiency. Further, the psycho-emotional benefits of SI set it apart from generic myofascial release. Do we communicate this effectively? How will we convey our story in a manner that does justice to the depth and complexity of the work we offer?

### **Who Answers the Phone?**

How does our profession represent itself? A potential client calls a practitioner: "How might you help me with my back and hip pain?" The practitioner answers, "I will systematically mobilize your fascia

in specific places in your body that have become fixated. As the fascia is freed up, your body can stand up more easily because it isn't pinned down by fascial restrictions."

Is this a structural integrator speaking? Perhaps. These days, it could also be the voice of any one of the many massage therapists who have taken deep-tissue or myofascial mobilization courses taught by structural integrators, massage therapists, or physical therapists. Once upon a time, Rolfers owned this territory: we had the newest technology on the block and were the ones who delivered the (exciting) news about fascia. One way or another, technology leaks into the culture and irreversibly becomes part of the public domain. Rolf's institute is a victim of its own success. We could declare victory – Rolf's mission was successful – and that's the end of it. But is that the true story?

Fascial mobilization remains a fascinating and mysteriously powerful tool to unlock body issues, including conflicted patterns of motor control. There are sound reasons for it to continue as a prime tool for somatic therapy, at various amplitudes of pressure. Fascial work can calm or excite, arouse body awareness, and relieve tensions. It's great to be a fascial manipulator. But is it necessary and sufficient to define SI, and

is it even prudent to talk about fascial mobilization "aligning the body?" Is the old message sufficient to enable SI to survive as a distinct profession in the coming decades? More importantly, what elements of Rolf's mission are the most important to survive, other than the fascia-as-plastic one?

Consider again: a potential client calls and asks: "How might you help me with my back and hip pain?" Suppose the practitioner mentions, over the course of the call, the following: "Most chronic musculoskeletal problems are the result of faulty coordination. Your body works to stand and walk and at the same time it works hard to limit itself. Your body works against itself as you stand or meet any of the activities you wish it to do. A body with chronic tension is like a car with the brake and gas pedals welded together. When you push on the gas to move, you unwittingly also push on the brakes. This conflict makes for chronic tension in the joints. Therapies that relax your muscles or reset your joints are temporary because your body recreates the problem over and over.

"The path out of this dilemma is a comprehensive approach that restores normal coordination. We do this with a combination of tools that speak to your motor control system: deep touch in the fascia that restores differentiation of your body maps; careful attention to the way you prepare to move, and practice with those pre-movements in slow motion; a set of perceptions (body-mind awareness) that liberates the body to move more intelligently; and self-care exercises for you to do at home that recreate the restored coordination you experience in your sessions. You will get a comprehensive package of education that helps your body move as human architecture is designed to. Accidents, overuse patterns, overwhelm, and trauma – these events evoke coping strategies in the body's motor control patterns. That's a good thing, but outlives its usefulness. Our job is to undo those quickly learned, but not so easily dropped, patterns – to make a lasting restoration of normal coordination. That is SI, an integration of all the elements that constitute posture and movement. An integrated body feels better because it moves as nature intends it to: when we are challenged, we feel the simple joy of a body that lengthens to meet the challenge. An integrated body lengthens in response to demand rather than becoming stiffer and shortening."



Do we present our message this way? The vocabulary of the RISI specifically, and SI in general, begs for revision. The work will not survive as a holistic proposal without an improvement in how it is described.

## The Old Message

Our old message is suspect. Robert Schleip skillfully captures our dilemma in his 2003 article on fascial plasticity.<sup>1</sup> We are on shaky ground with the old gel to sol model. We are on shaky ground to claim that any of our fascial mobilizations do what we say they do other than provoke messages in the mechanoreceptor links to the brain. The medical world has had its doubts for some time. Fortunately, we have the language and the research to support something new, as the second phone conversation illustrates.

If we drill into RISI thinking, language usage sits on shaky ground. How we describe our work is important. How we categorize the different components of our work has consequences. If our profession is to continuously innovate, the description of what we do and what we teach needs reexamination. Do our words make sense?

## Dimensions of SI: Classification (Taxonomy) of Models

Taxonomy means a system of classifications. Within any particular taxonomy are taxa (plural of taxon) that are the different units and sub-units within the system. There's nothing particularly holy about the word taxonomy other than that it's used traditionally in science, especially in biology where forms of life divide into kingdoms, phyla, families, species, and so on. Taxonomic language was introduced at RISI in the 1990s by Jeffrey Maitland, an Advanced Rolfing Instructor, author, and philosophy professor who makes frequent contributions toward order and logic in the RISI vocabulary. Among his contributions is the introduction of the word *palintonus*, from the pre-Socratic philosopher Heraclitus.<sup>2</sup> Palintonicity, the sense of dynamic bi-directionality, is a central experience of SI and one of Maitland's constitutive principles; it links our work to an age-old observation about harmony with gravity – it takes us forward.

Another concept that Maitland proposed was the organization of our work into different taxonomies: Structural/Segmental, Biomechanical, Functional, Psychobiological, and Energetic. Maitland's

taxonomies are a way of acknowledging the complexity of SI as a whole-being event; multiple taxonomies represent multiple dimensions of who we are.<sup>3</sup> Taxonomies were introduced to do justice to the various dimensions of human evolution; to encompass the complexities of evolution Rolf considered part of SI. Further, a practitioner might well consider these dimensions as he/she intervenes with a client. The taxonomies acknowledge the breadth of the SI proposition. This was a step forward in mapping our work.

Maitland mentions, in a 1996 article, that when you fill in the taxonomies with the various specific taxa – things we do, measure, or look at, like spinal mechanics, models of walking, or models of neurological integration to mention a few – the greatest number of taxa fall into the functional taxonomy. The 1995 RISI faculty meeting determined that the majority of what structural integrators do belongs to a functional taxonomy.<sup>4</sup> It's an interesting observation, but perhaps an inevitable result of a flawed premise: that structural and functional are separate taxonomies, that these terms usefully distinguish dimensions of the work. In 2012, the taxonomies reveal need for revision. It is appropriate to take a second look and see what makes sense today.

## What's a Structure?

The word 'structural,' as in the term SI, can be interpreted two ways: structure can mean a collection of parts that makes up a whole; structure can also mean function that persists over time – a system produces predictable functional behaviors according to its structure. "What are called structures are slow patterns of long duration, functions are quick processes of short duration" – Ludwig von Bertalanffy, the father of general systems theory, made this observation in 1952.<sup>5</sup> This is the modern view regarding complex systems such as biological systems – like, say, people.

The structure 'as assembly of parts' definition associates SI with professions like bridge repair, auto body services, or orthopedic surgery, where a practitioner is skilled at putting parts (back) together according to specifications. This offers an attractive self-image – it elevates structural integrator to the rank of people who re-align parts, as opposed to those who palliate symptoms. At first blush, it's a step forward from first paradigm to second

paradigm. But the more modern definition takes Rolfing SI into the future while the old one anchors it to the past. To quote Maitland, "The body is not a soft machine."<sup>6</sup> The body is a biological system event, not parts that react (exclusively) according to physics. To treat a complex system, so it improves functionally over time – so it changes *structurally* – we want to go beyond repair (second paradigm) and work in what Maitland and Sultan posited as a third paradigm approach – holism.<sup>7,8</sup>

SI makes lasting changes in terms of posture and movement patterns – even psycho-emotional patterns. Patterns of behavior change and often don't revert. In fact, they often continue to integrate and improve. That's a product characteristic. RISI marketing has always emphasized lasting change. We don't just palliate symptoms; rather, we make structural changes. In that sense we do have some overlap with orthopedic surgery, but unlike orthopedic surgery we help people with the software part of the equation, which is every bit, if not more, important to successful adaptability. We work with post-surgical clients so they actually use repaired or replaced parts in harmony with the whole-body system.

## Are We a Stack of Blocks?

The RISI's 'Little Boy Logo' shows a person as a stack of blocks. It's good advertising certainly. Our education emphasizes the way in which anatomy shifts spatial positioning as people undergo the work. So 'structural' can also mean the portion of our work in which we think keenly about bone position and notice and treat fascia in various ways. 'Structural' can denote the aspect of our work in which we think about anatomy and the mechanical properties of anatomy. However, this view is not limited to work that pushes on fascia.

To return to the context in which the taxonomies were introduced, it's true that the word 'structural' in Maitland's use of the taxonomy of 'structural/segmental' is an accurate descriptor of this aspect of our being. We can experience ourselves as being a physical body, a segmental physical body. We can change our experience of this structural/segmental body in somatic work such as Rolfing SI. So far it works – two uses of the term 'structural' and each clearly delineated. When we apply the term 'structural' to taxonomies of clinical practice, the logic breaks down in a manner that is not immediately obvious.

The current RISI taxonomy, as a template for dividing up what we teach, limits the intelligence of what is taught, and the work that flows from it. More specifically, the taxonomic labels give the impression that the 'real' event is mobilization of tissue rather than revival of native movement intelligence. Why? The error follows because the assumed definition of 'structure' or 'structural' reverts to bridge repair. It's reversion to "body-as-a-soft-machine" thinking, which leads to education that fragments the holistic nature of SI. The public loves the body-as-a-soft-machine message because it's familiar; but it's not holism.

Structural/segmental and functional taxonomies were introduced to differentiate between doing Rolfing SI work that is 'structural' versus 'functional.' At first blush this offered a satisfying way to think about components of the work. It created a way to delineate the 'movement' domain (which lacked for definition) from the domain of fascial mobilization. The domains can be distinguished but there is no meaningful division between structural and functional in styles of intervention. When one mobilizes fascia, the new story – the more scientific story – is that we are communicating with the sensorimotor brain, helping these parts of our biology improves choices for movement. Our segmental quality doesn't change at a bony level. One has the same number of bones before and after a session. What changes is the body's capacity to behave in a more segmental manner. It's not accurate to call fascial mobilization a 'structural intervention' as contrasted to a 'functional intervention.' When we assist a person with her pre-movement by, for example, bringing attention to a weighted-sense in her feet before she stands up, is that a functional intervention as opposed to a structural one? Not if that intervention leads to a lasting change in posture and ease of function. The measure of a structural change is a reliable change of function over time.

It's amusing to hear the question, "Do I see a structural issue or a functional one," as part of a body reading assessment. The question behind the question is really, "Will I get better change from mobilization of tissue, or mobilization of other dimensions of the client's being (such as perception, coordination or meaning)?" The second question has merit. The first question is a faulty choice. A practitioner learns to feel the complex matrix of dimensions that body

shape represents. (And we don't necessarily know the answer to these questions until after we do the work.)

Does manual pressure on fascia make changes that last longer compared to coordinative interventions that produce a lasting improvement in, say, core stability? Or is pushing on fascia more structural because of the amplitude of the touch, and the touch (strong or soft) necessary to change coordination ceases to be structural because of lower amplitude in the touch? When fascial touch changes the quality of movement, is that not functional? If the quality of movement or posture doesn't change, what good is it? The specific use of language – dividing structural and functional – is misleading. Rather, the two interventions are both functional and structural at the same time. That is why our professional title has the word 'integration' in it.

Improvements in movement and posture, and the psycho-emotional benefits that accompany them – these changes are *structural* because they last. Structure means something that functions in a certain pattern over time. What started as a proposal to look at the dimensions of a person's being became categories of intervention that Maitland acknowledges are overlapping. But categories can become impediments to designing ways for people to learn the work.

An inconvenient truth is that it typically takes longer to teach students to make perceptive and coordinative interventions than it does to teach fascial mobilization. It's inherent to the task. The level of embodiment required is greater. At the same time, it is even harder to learn if the image in a student's mind holds that structure is affected by fascial mobilization because it's the bricks and mortar part of the work, while function is fine-tuning – an add-on. Function is the whole point.

An example: A client in her mid-sixties comes in for SI a year after bilateral knee replacement, preceded by multiple toe surgeries. She has done standard physical therapy. She isn't moving well and has lots of discomfort, trouble climbing stairs, and so on. A skilled massage practitioner refers her to SI after months of massage, cranial work, and emotional support. The SI includes healthy doses of fascial mobilization, including some that is strong in amplitude. Along with the fascial work

is vital work with usage patterns in which structural change occurs in her posture and strategies of movement and dynamic self-care: the client learns to feel her coordinative change and understand it; and then practice it on a daily basis. Structural change allows her to walk and shovel snow and take large dogs on lead along icy trails. She finds joy in doing these things. The test of our work is whether months and years after we do our manipulative work the client is better than when she left our office. This was Rolf's goal and claim. We may not always rise to this level of success, but if and when we do, that is something worthy of being called SI.

## Godard's Four Structures Tonic Function Model

Godard proposed four structures that influence human posture and movement: physical, coordinative, perceptual, and psychological.<sup>9</sup> This was another step forward in our use of language. Each of these structures satisfies the requirement that over time it contributes to predictable behaviors and postures. Godard's scheme helps remind us that we aren't dealing with bridges or car bumpers. Structure and function are two sides of one coin, and fascial mobilization is but one method for shifting any of these four structures.

## Biomechanics and Psychobiology as Taxonomies

Let's look then at our three other taxonomies: biomechanical, psychobiological, and energetic. The biomechanical taxonomy is relatively clear. It is a point of view that looks at the physical laws of the body. We need to understand these relationships to appreciate the way the parts operate. Taxa include joint manipulation and skeletal variation to name a few. It's not a finished science. Debate continues about biomechanical models of different parts of the body.

The psychobiology taxonomy is relatively clear as well. It speaks for how psychology is intrinsically interwoven with biology. It helps us see how, for example, coordinative change can be governed by the meaning of a movement, and how meaning can change as coordination changes. Our biology finds its foundation in the potency of orientation, especially gravity orientation, in reviving psychological security and stability. The psychobiology taxonomy

acknowledges that Rolfing SI work affects one's subjective experience in ways that can permit/optimize integration. Psychobiology encompasses skills for self-regulation and skills related to therapeutic relations.

How could we ground the four taxonomies discussed thus far at the RISI? How do categories of intervention make sense as categories of education? The RISI could have a biomechanical or manual manipulation department. It could have a psychobiological department, or include psychobiology within a department that includes perception, coordination, and expression – a view embraced by some of the Rolf Movement instructors.

However, to talk about a structural (Rolfing) faculty versus functional (movement) faculty is bad use of language. Would it be better to speak about fascial- or tissue-mobilization faculty and perceptive/ coordinative faculty? It's not perfect. Fascial mobilization changes perception and coordination, and is often an efficient means to do so. Focusing on coordination and perception, at the RISI, assumes competence in fascial mobilization and therefore involves that tool as well. Certainly teaching coordinative work requires a well-differentiated embodiment of anatomy and biomechanics. Where then to compromise?

## Retire the Terms Structural and Functional as Taxonomies

If the RISI retired the structural and functional taxonomies (along with structural faculty and functional faculty), and substituted for them the categories 'manual mobilization taxonomy' and 'perceptual/ coordinative education taxonomy' we would move a step forward. The words would refer to what actually happens, and note a difference of emphasis – a difference in emphasis between two approaches to the structure/function holism.

## What Does 'Energetic' (Taxonomy) Mean?

There is a fifth element to consider – the so-called 'energetic' taxonomy. Energetic work, whatever it is, acknowledges that often the 'not doing' aspect of our work is highly, if not supremely, potent. Important work occurs; the name is unfortunate. Energetic taxonomy, as a label, runs into trouble as soon as you try to think about it or use

it. And how do we link energetic work to posture and coordination?

As with the other taxonomies, we can describe a dimension of our being as 'energetic,' dimensions such as: a description of metabolic activity; or of the subjective sensory experience of flow, wave motion, bioluminescence, transpersonal resonance; or a measure of electromagnetic activity; or the conscious awareness of extrasensory perception. There are many options. This dimension is vital to a holistic picture of who/what we are. When we use the term 'energetic' to describe a category of intervention, however, what are we saying? What does the word tell us?

The energetic domain, like the domains of structure and function, is confusing as a category of intervention. Does our work become more energetic when our hands don't touch the client's body? Does our work become less energetic when our hands are on the body? Does our work become more energetic when we do it vigorously or when we slow down and enter a meditative state? The term has a provisional placeholder for a discussion of the evolutionary potential of our work. However, the phrase, 'energetic taxonomy' of intervention spawns confusion until words are found to explain it. Our work has an energetic dimension. What is it?

Chinese medicine posits that there is *ch'i* (energy) that flows through the body and there are techniques for assessing the state of this energy – is this something important to investigate? Is it essential to posture and coordination and within our domain? Some practitioners use off-body assessment or they work with clients at a distance. There are interventions that posit a sacred space or an energetic geometry or template to the space the work takes place in, or that acts as a force on our physiology. Some practitioners consider the various forms of craniosacral therapy to constitute energetic intervention.

There are specific practitioner skills involved in energetic categories of work. Ray McCall, Advanced Rolfing Instructor, says, "The idea of 'getting out of the way' is central to energetic modalities. The role of the practitioner seems to be to act as a reference between the client and the 'information' that creates, that accomplishes the healing. Goethe called that information the *Ur-phenomena*. It is often referred to as the blueprint. The challenge is to

perceive the blueprint as alive, dynamic and creative rather than as a static platonic ideal."<sup>10</sup> How do these activities fit with SI? McCall states that following SourcePoint<sup>®</sup> interventions he observes an improvement in contralateral movement in clients.<sup>11</sup>

McCall highlights the notion of what could be termed 'non-personal intelligence.' We assist people to allow this intelligence to operate. In this sense, energetic work is not far away from inherent movement intelligence (that resists an exact location, physiologically) – the 'movement brain' idea.<sup>12</sup> Presumably, what McCall refers to as the blueprint is not located in the body at all, necessarily; nonetheless, it points to a sense of agency apart from client or practitioner – thus the point about 'getting out of the way.' The positing of inherent intelligence shows up in Rolf's insistence on gravity as the therapist. Gravity is invisible but palpable. Is it part of what we mean by energetic? How do these observations affect a discussion of categories?

Much of what we call the energetic taxonomy might be categorized along with interpersonal communication and perception. Non-reactive presence is a dimension of psychobiology, as are many forms of listening to an organism's being. Some of what we call energetic work might be the way in which practitioner or client integrates sensory (or extrasensory) perception so it can become a 'known' experience, or inform non-conscious processes such as brain mapping, for example. As a diagnostic taxonomy, off-body assessment might also belong to a perceptual taxonomy, as extrasensory perception. Esoteric spatial geometry, conscious or non-conscious, is a form of orientation. Biology is founded on orientation, the act of finding spatial location in one's context. SI is interwoven with the study of orientation and its relation to coordination. Biodynamic craniosacral education addresses orientation (spatial and interoceptive) as well.

Comparisons aren't proposed here to trivialize energetic phenomena, or reduce them to mundane or simplistic explanations. Categories, or taxonomies, aren't explanations – they're a way to see relationships between parts of a larger system. A category of intervention is, in part, a look at the skill sets/embodiment necessary to be effective. Skills of embodiment are the core of somatic education.

## Why Examine Word Usage?

Why labor over words? On the basis of these words, we will be defining what we do to the world, and what to prioritize in the education of practitioners. The RISI curriculum will change over time: innovation is necessary to stay relevant. As curriculums change there will be debates about what is important and what is not; what's truly Roling SI and what's not? The argument is appropriate. It's a dialectic never finally answered, an ongoing inquiry into "what is this work about?" Questions will reoccur: what helps, and why does it work – what is the truest expression of our tradition, in this decade, or this century? As we hold this inquiry, iteratively, might we examine the premises of the debate? What is it we do? Maitland's principles and taxonomies are attempts to answer this question.

As the second phone call example illustrates, one way of representing our work is as a package of educational interventions that span multiple dimensions of a person's being, dimensions continually assessed through the lens of posture, a particularly incorruptible parameter. Posture spans complex levels of being, from gravity orientation all the way to abstracted meaning making.

## Our Message, Our Model: What's Takes the Work Forward?

Our work is complex and multifaceted. SI is a profession that has much to offer the world. Our message becomes more plausible as we consider fascial mobilization as an important, still mysterious, component that most probably assists in sorting out motor control and autonomic regulation, rather than physically adjusting the tensional cables of the body represented as a flag pole. Our message needs to emphasize the educational nature of the work. Education empowers clients to regulate their lives. Education is an ongoing inquiry into how people learn.

Our message is distinct and refreshing in the marketplace if we speak about structure and function as dimensions of people's experience rather than two styles or techniques of intervention. Lastly, energetic taxonomy, as a label, obscures the investigation. Retire it as taxonomy of intervention while preserving it as a descriptor about one's experience.

Reexamine what is it that arouses passionate interest in what is termed the 'energetic work.' Find descriptors that define that style of work in a way that plausibly links to a model of coordinative change – to posture. Once linked to posture and economy of movement, assessments of effectiveness become possible.

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# Yielding

## Engaging Touch, Presence, and the Physiology of Wholeness

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*Nothing in the world is as soft and yielding as water. Yet for dissolving the hard and inflexible, nothing can surpass it. The soft overcomes the hard; the gentle overcomes the rigid.*

Lao Tzu, *Tao Te Ching*

## Overview

For over ten years, we have been exploring the first developmental movement known as 'yield', as originally described by somatic innovator Bonnie Bainbridge Cohen in her Body Mind Centering system. This article combines contributions from both Hiroyoshi (Hiro) and Carol. Hiro's contribution and insights into working with this gentle approach for shifting structure, movement patterns, coordination, and perception are documented through client photos and an understanding of cellular biology and the

extracellular matrix. Carol explores yield in the context of embryology and movement awareness. This article presents a brief synopsis of our collaboration.

Yield is the first developmental movement. Often misunderstood as a passive surrendering or a 'doing nothing,' yielding is in fact an active coming into relationship and is the fundamental movement behavior underlying all others. Take a moment and recall an image of an infant resting securely on her mother's chest. Sense the very tangible contact between them. There

is a qualitative difference and feeling sense when an infant yields into this contact as contrasted with a collapse due to the flaccidity of an infant's tonus or the absence of maternal bonding.

*Yield underlies all other developmental movements and our basic relationship to the world.<sup>1</sup>*

The action of yielding brings us into contact with the environment so that we can release our weight into gravity. As the weight of body mass is given over to gravity, a corresponding sensation of lift rises through our structure supporting other gestures and movement expression.

Yield is key to interoception: the ability to read and interpret sensations arising from the viscera and internal tissues of the body.<sup>2</sup> It is an action that supports awareness and insures a deepening understanding and richness of our inner lives. The movement of yielding nourishes an explosion of sensation. Whether these sensations are pleasant, terrifying, frustrating, joyous, or painful we can yield into our comfort or discomfort in the moment and be with the true ground of our experience. This somatic understanding arising from yield may flow into expression. Allowing a moment of yielding, a split-second awareness of releasing into ground, begins to remap the familiar neurological pathways of movement. Yield is the essential ingredient for shifting tensional patterns dictating movement expression.

In our twenty-first century technologically 'wired' culture, our ability to yield is often absent in the movement vocabulary of our fast-paced lives. We scurry through the busy-ness of daily schedules often detached from the support of the grounding weight of our bodies and the resources of our environment. Perhaps that support comes from the *terra firma* allowing us to yield into the weight of our bones in order to push a cart, walk, or run to meet an appointment, move fascia, reach for a book, or rest into sensuous contact with a lover.

The active nature of yield, a coming into full-body awareness in relationship, is the foundation for all movement patterns. As adults, yield supports intimate contact with self, with others, and with our physical world. At the most basic level: to yield is to sense and to allow weight. This action supports the primary orienting relationship between our body as matter and the field of gravity we are embedded in.

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## Exploration

*Take a moment (a pause) and notice how you are sitting. Are you resting into the support of the chair – or are you holding your body in a familiar way or tense way – separate from the support of the chair or floor? Notice the shape your body assumes as you continue reading. Become aware of tensions in your body, your eyes, your neck, and yield into the shape of this tensional holding pattern, feel it, breathe into it, know it. Can you name the sensorial quality of your body's shaping or breathing pattern linked to the action of reading? As your awareness of this pattern deepens, does your body shape begin to change?*

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A very simple example of yield occurs daily in our working practice. A client lies on the table, yet doesn't arrive on the table – she is bracing or holding her weight. We may gently rock the client's limbs, support her weight from underneath, cue her verbally, etc., to assist her in 'yielding' into the table. Or we may engage with her to bring her awareness to the holding and use it as a moment of awareness. There are many different ways to work with it. Through allowing weight (yield – to meet/allow with awareness), we also increase our perception of proprioception, orientation, and self-understanding.<sup>3</sup>

Yielding into contact with our clients informs our touch. Touch is the earliest sense to develop in utero. *Haptic communication* is the means by which people and other animals communicate via touching. The development of the haptic senses and how they relate to the development of the other senses has been the target of much research. Human babies have been observed to have enormous difficulty surviving if they are not touched or held sufficiently, even if they retain sight and hearing. Babies who can perceive through touch, even without sight and hearing, tend to fare much better. Yielding is the basis of true and contactful touch. Touch may be thought of as a basic sense in that most life forms respond to being touched, while only a subset have sight and hearing.

Yielding is a physical expression of and support for emotional and social bonding; bonding is first experienced in relation to the body of mother, and the earth, as the infant yields her weight into

her supporting surfaces. If the support is not felt to be secure and responsive to her needs, the infant cannot yield fully, and bonding will not be complete. Adequate touch and holding are essential to the bonding process and to physical and psychological well-being; this begins in the womb at the cellular level, but continues in various forms throughout life.<sup>4</sup>

## Contributions from Embryology

Moment by moment the study of embryological development illustrates the action of primary yield. The meeting of egg (pulsating matter-gravity) and sperm (motility-electromagnetism) is one of coming into transformational contact. The fertilized egg or zygote is biologically driven to implant into the uterine wall. Hormonal flows and neurological predispositions of the mother may create a welcoming field or one that rejects the pregnancy. Either movement behavior directly imprints the developing embryo through the hormonal bath of elation or dismay. An embryo is an undulating, vibrating potential. However, if the uterine environment is one of rigidity, fear or terror, the embryo is unable to yield to its own inherent physiological motility. And reciprocally, the uterine field withdraws the secure ground of implantation. Carol notices in her Rolfing, Rolf Movement and craniosacral practice that the capacity for a client to yield to her own internal state of vulnerability, softness, and internal knowing often speaks to these pre-verbal, intrauterine dynamics.

### *The Embryonic Membrane: Where Am I?*

Primary yield initiates the development of the embryonic membrane as container or envelope. Initially the skin boundary of the embryo is just one cell thick; however, its continuity cultivates the feeling sense of wholeness, and security. We experience our first orientation to gravity through our mother's relationship to gravity. The mother's sense of orientation becomes the orienting imprint for the embryo's body mass in gravity. In utero, nourishment flows or is thwarted in the exchange from her body to the embryonic body. Autonomic tonus is set through this primary relationship. The membranous continuity of this envelope forms the linings of the viscera, lymph, cranial membranes,

connective tissues, and more. Internally, this membranous layering feeds internal sensation and the interpretations we give to those sensations (interoception). Externally, our skin forms a boundary of self and other and our world. Our skin envelope offers a sense of protection and safety. Yet this boundary is porous and affords a dynamic exchange between ourselves, another, and the environment.

As a practitioner cultivates her sensory experience of yield and receptivity of this embodied state, a ground of support rises within the therapeutic field. This engages the field necessary for a client to engage a deeper stilling and settling within himself. In this way, the membranous layer that engenders both a sense of continuity and safety may be accessed more easily within the session. The membranous 'envelope' of the adult reaches into the embryonic origins of the primary membranes of development. The loosening field and limiting tissues form the boundary of the developing embryo. A practitioner's decision to work with this membranous layer may arise from a client's need for personal boundaries, which involves broadening his somatic understanding of settling into and containing the intensity of internal sensation. Working with the movement of yield supports deepening a client's capacity for self-regulation, in relationship to self, other, and his world.

A practitioner may find the client's 'envelope' defended or too porous; this spectrum of internal awareness can be addressed with yield as a pathway to transforming the early imprints and 'set points' within the autonomic nervous system. After any type of invasive event (surgery; assaults, whether physical, verbal, emotional; etc.), yield assists a client in moving through a repetitive cycling of specific events. Yield supports a client dropping beneath his 'story' and into sensation. As both client and therapist engage the movement of yield, a new relationship with gravity as primary therapist arises. Out of a deepened and embodied sense of weight and mass, there is emergence, a lifting out of the depths. Interoception gives meaning to the sensations of intensity. Sensation fills the connective-tissue substrate with conscious presence feeding back through the scarring. The membranous envelope is a medium for a whole-body flow of sensation, embodied presence is three-dimensional.

## *Anchorage Dependence and Cellular Growth*

To introduce this section, Hiro wants to highlight that the anchorage dependency of cells is one of the essential characteristics of life. From a macroscopic viewpoint, we can recognize this as yielding. Life needs a matrix to yield into, and yielding into and interacting with that matrix can produce cellular motility, which can mean 'movement.' Our first primitive movement for growth is the embryo yielding into the matrix of the uterus. The cell/embryo yields into the matrix to survive. It is well known in cellular-biology that the cultured cell needs the *extracellular matrix*<sup>5</sup> (ECM) as an anchorage for survival and growth. If the cell is isolated from the ECM by the enzyme trypsin, the cell cannot survive by itself, in spite of the presence of enough nutrition and growth factors in the culture medium. In cellular biology, this is called *anchorage dependence*.<sup>6</sup> Normal cells need to contact and interact with the matrix as an anchorage. During embryonic growth this matrix is the womb. The question arises, what is 'movement'? Studies on the cell as a minimum unit of life reveal that not only is cell growth dependent on anchoring substrate but also on cellular motility.

The molecular cell biologist reveals that for cells to survive they need to extend over enough area of the anchorage. Interestingly, when there is not enough area of anchorage to connect through and around the cell, the cell cannot express cytoskeletal dynamics. This lack of anchorage results in apoptosis or cell-death. Basically, the cell can only move in the direction of anchorage in vitro. The cellular movement of anchoring into the matrix is the action of yielding. It appears that cell motility is dependent on the matrix. Therefore, the behavior of yielding into the matrix induces the expression of cytoskeletal dynamics, which means motility, and facilitates interaction of the cell with the ECM as its surrounding. The reciprocal relationship between the growing cell and the anchoring matrix not only orders cell growth but speaks to the reciprocity between uterine ground and seeded zygote as well as the local environment and individual.

A prediction could be made that particular cells in tissue that is holding trauma may have lost cytoskeletal dynamics, or have less potential to extend to all dimensions. Consequently, partial cells in an individual organism may conserve some

pattern of *polymerization-depolymerization* on the cytoskeleton, possibly affecting the fluctuation as a whole in the individual organism like a 'breath.' (In chemistry, polymerization is a reaction of monomer molecules to form three-dimensional networks or chains.<sup>7</sup>)

## *Fluctuations through the Cellular Matrix*

Molecular cellular biologists<sup>8</sup> seek to understand how order in multicellular systems emerges from randomly moving cells as they interact with their surroundings. The movement of individual cells is inherently affected by biophysical fluctuations. The human embryonic stem (ES) cell as well as the embryo is very sensitive to its surroundings.

It has been shown that it must be important *for the individual cell to fluctuate randomly to a certain extent for that collective movement to be efficient*. The system actively utilizes the fluctuation of individual cells to self-organize. For example, researchers<sup>9</sup> revealed that the Brownian movement between actin and myosin as a random fluctuation could be used for muscle contraction. The cellular slime mold as a model of multi-cellular organism can be transformed into a collective form with organized movement by accumulating random vibration on individual cells.<sup>10</sup> This could be an orientation to order when the individual cells randomly fluctuate, followed by interacting with surroundings. Therefore, *the order of the organism depends on how much the cell fluctuates*. As the fluctuation of the cell may reflect cellular motility, one fluctuation of the individual organism is like a 'breath.'

A long time ago, the ECM was dismissed as merely a substrate providing a "cell recognition site."<sup>11</sup> But in studies of recent years, scientists are recognizing that the ECM provides information to the cell. The ECM interacts with the cell in the context of self-organization. The cell fate (proliferate - differentiate - death) can be controlled by the physical strength or geometry of ECM (see Figure 1). As Rolfers and Rolf Movement practitioners we know how important the order of ECM (collagen matrix) is for structural integration. In a similar way, the condition of the cell should also be considered important to produce and organize the ECM. Intervention with yielding can affect the condition (motility-growth) of the cell. The movement of

yielding may be able to enhance the fluctuation of the cell and facilitate the interaction between the cell and the ECM as a way of promoting continuity and order.

On a cellular level the ECM promotes the growth of cells, and aggregations of cells forming organs, tissues, and other life-sustaining functions. What is consistently noted is the reciprocal action between internal growth and the external environment. Throughout the eight weeks of embryological formation, the surrounding fluid environment is forefront in shaping the embryo. The field of epigenetics recognizes the environmental forces or metabolic fields that shape the embryo and precede the action of genes. From an osteopathic point of view, these fields continue to shape and promote the health of the adult. According to John McPartland, D.O., "the forces of embryological development persist as the forces of healing in patients."<sup>12</sup> We are as much a product of environmental shaping as we are of what we might imagine to be our strongly willed and genetically linked directives.

## Exploration

Take a moment and imagine yourself in a large and riotous crowd – perhaps you're at a rock concert or getting on the subway during rush hour in New York City. What happens to your breathing, what sensations pour through your body?

Do you contract, expand, or run toward the nearest exit?

What happens to your body-shape when you imagine yourself sitting in a beautiful garden on a lovely summer day? Does your system contract, expand, or neither?

We are embedded in a dynamic relationship with our environment. The world that we call 'home' shapes our bodies and beliefs and gives meaning to our actions. The local environment is part of a larger world with its often-dominating cultural or religious beliefs, politics and legislation. Our movement behaviors express a continual exchange with our surroundings. Imagine a setting that supports your experience of yielding into the sounds and feeling tones of your surroundings. Notice the whole-body sensation of being embedded in this world.

## Birth: An Initiation to Gravity

At birth, if he is lucky, a baby is placed on his mother's belly and literally wiggles up her torso in search of her nourishing breast. The capacity to creep up the mother's belly is dependent on the innate neurology of the vestibular system, informing the infant which way is up (or down) in the field of gravity. The infant finds the nipple, roots, and sucks by yielding through his throat and tongue in order to swallow. The survival gestures of sucking, swallowing and breathing all require the underlying action of yield.

Yield, push, reach, grasp, pull, and release are movement behaviors that continue throughout a lifetime. As the infant matures, coordination grows through these gestures. A sense of safety underlies the flow of expression. Is it safe to yield to our own instincts and into relationship with the

people and environment around us? Hypervigilance charges muscular tonus and action with a sympathetic urgency to run, fight, or be on constant alert for danger. Or a lack of containment and a sense of insecurity may have clients in a perpetual gesture of reaching – for safety, for contact, or escape. As a client learns to yield into a matrix of safety and membranous containment within the therapeutic relationship, her own sense of inner security and self-regulation can transform an earlier autonomic nervous system imprint.

Yielding into one's inner sensations and reflections throughout a treatment session supports the practitioner in responding from instinct, heart and knowing, thereby cultivating an honest and embodied relationship with a client.<sup>13</sup>

Yield supports the process of attunement between practitioner, client and the surrounding environment. Attunement from a biodynamic craniosacral understanding means being able to 'meet,' contact, or settle into an awareness not only of one's self and another but also of the space immediately around our bodies and office perimeter. Holding an awareness of these dimensions of orientation requires the practitioner to slow his own working tempo and pace. Attunement supports expanding perception and one's sense of the whole. More often than not, by working at a slower speed, Carol finds that sessions deepen and the transformative process heightens.

Through the action of yield, Carol is able to remain in contact with her own somatic sensibilities and work more easily and gently. This in turn helps a client to sustain an awareness of her own internal sensations. Client and practitioner entrain to the spaciousness emerging from attuned relationship. Perception of the surrounding space is heightened. Carol might notice the song of birds outside, or the movement of the traffic, or hear children at play. All of the sounds emanating from the environment can nourish the session and open both practitioner and client to the somatic reality of being embedded in their world. When Carol attunes to her own whole-body sensorium, rather than directing her focus solely toward the client, she is able to interpret her body sensations as information, which in turn supports the therapeutic relationship.

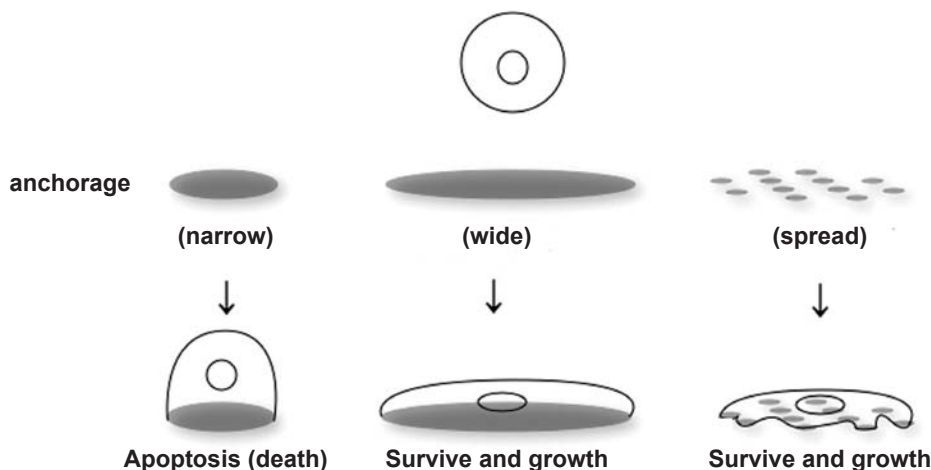


Figure 1: The cell needs sufficient ECM contact area. If there is sufficient contact area with fibronectin (an ECM protein), the cell can spread to survive and grow. Diagram drawn by Hiro Tahata referring to data in *Science* Vol. 276, May 30, 1997.

## Exploration

*Imagine yourself in a recent session. Were there moments in the session where you consciously brought your awareness back to yourself? Or – was the focus of your attention placed almost solely on your client? Resolve to take pause. Allow yourself a moment to become aware of your own internal state. This might be your heartbeat, or a sense of pleasure in the work that you are doing, or frustration that something is not changing, or your breath. Whatever aspect of your sensorium speaks to you, listen. Perhaps something from your own body understanding needs to be expressed to your client.*

## A Case Study: Sessions with Eleanor

Eleanor is a twenty-six year old graduate student, majoring in philosophy. Bright, alert, and yet subject to binge eating and purging which in the aftermath collapses her structure and diminishes her sense of self. Beginning with her initial session with Carol, we began addressing the difficulty she experiences in sensing the physical support of her back (particularly through her heels, the area behind her heart, and the back of her cranium). She was initially unable to yield the weight of her body into the table. Her comment was that if she let go of her back, she would feel too much. Her vision was often very focused and she was unable to sense the wider field around her. Her orientation was upward and forward in space. She described feeling being pulled ahead, often feeling as if she was out of control.

When she was five years old, Eleanor witnessed the death of her mother in a brutal traffic accident. This memory plagues her, and to escape the pain and horror of these memories, she suppresses her feeling state by smoking, binge eating, and purging. Initially, we explored the movement of yielding as a way to settle and slow the fast tempo of her nervous system. By tracking states of activation and pausing to gently touch, see, and feel the heart-wrenching moments of history (as they arose spontaneously in her memory), she was gradually able to recover a fuller sensory experience of settling into her own body. She began to yield into the pain of memory rather than suppress and psychically run from it.

A new sense of safety and support emerged as we strengthened her embodied sense of her envelope of containment. She began to explore a new feeling sense and security from the field around her. As Eleanor continues to gain a whole-body sense of her skin boundary, her capacity to orient answered the question plaguing her: “where am I?” She now speaks of her mother’s death as it is held in the context of the larger field of space and time. She is able to see the continuity of her own life and direction in it. Although the memory of this early trauma will never be forgotten, and she will continue to unravel the psychological complexities of this early loss, her ability to connect to deeper resources within herself affords her the support to continue traversing her own life path. This work took place over eight sessions.

## Incorporating Primary Yield in a Therapeutic Session

Hiro has developed and refined a way to teach and work with primary yield that integrates this essential and fundamental ‘power’ into Rolf Movement work. (See also his article “Case Studies with Yielding” on page 31.) When this movement is embodied, the actions of push, reach, grasp, and pull emerge in an amazingly organic way. His use of the concept of yield has helped students to understand the difference between an ideal posture/movement based on an image and a dynamic posture that rests and moves in relationship with gravity.

Hiro has also incorporated yielding as the basis for a movement-based Rolfing Ten Series that does not incorporate tissue-release work. As we see in the client photos in Figure 2, this work based in yielding can have a profound and lasting affect on structure. After her first session, the client could not come in for another five weeks due to her schedule, yet we can observe

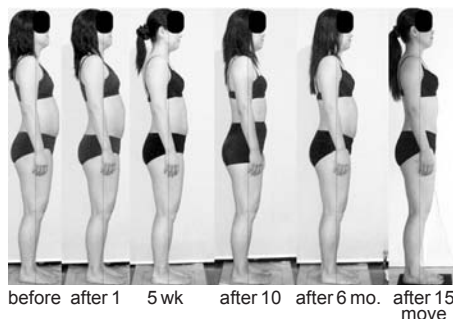


Figure 2: Here we see how yielding work supports a sustainable effect on structure.

how she has changed further without any intervention – the photo of “five weeks later” was taken before the second session. After ten sessions, the client could let go of chronic tension in her shoulders, and reported that her belly dance performance was improved. A total of fifteen sessions facilitated integration.

## How to Work with Yielding

The movement of yield meshes well with the Principles of Rolfing Structural Integration, as illustrated in the schematic in Figure 3. Yield is not a technique but an embodied state of awareness. With this understanding, a practitioner does not ‘do’ yield. It is a place of three-dimensional sensory awareness of self in relation to other and the environment. With this awareness as background, the sensory state of yield can be threaded throughout any session – whether it is structural, movement, or craniosacral – or even to events within one’s life. Cultivating receptivity to the moment as it arises allows a practitioner to engage in the process of a session with embodied presence. Here’s our guidelines for working with yielding.

1. *Provide a safe matrix and sensation through touch in places where the client is unable to yield or rest into the table.* Watch for decompression of the joints, etc., as the body begins to be ready to transform.
2. *Enhance fluctuation where the body cannot express motility.* Have the client follow his body’s own fluctuation pattern with breathing. When the practitioner facilitates the client bringing awareness to areas that have lacked motility, there can be a transmission of vibration to those places, which may promote some process like discharge or a motile response.
3. *Synthesize the fluctuation into the whole ‘water cube.’* Hiro uses the image of a water cube as a model for seeing, where it may be useful to perceive the individual cell as bubbles that are closely related to the whole structure. Figure 4 gives an evocative image for this.<sup>14</sup> Hiro worked on the client discussed above, and shown in Figure 2, without any tissue-release work; the work was based on coherency (collective fluctuation).
4. *Trust the self-orchestrating system of the body.* Wait for change and integration to occur by itself. Do not intervene as it expands. Listen for the pulsation of the body through your touch. You can



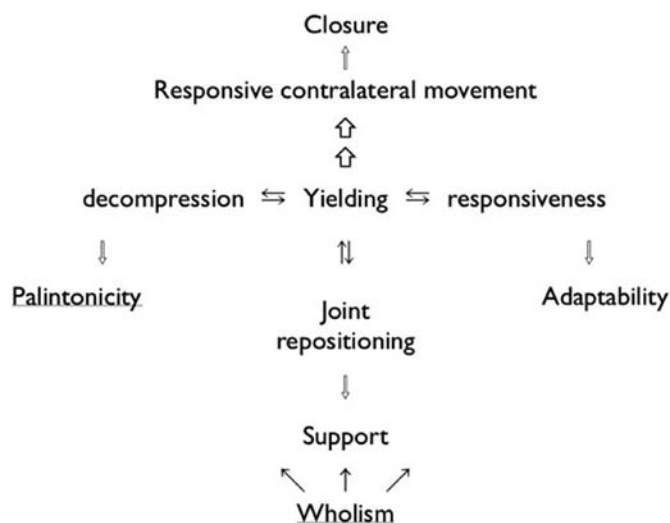


Figure 3: The relationship of Yielding with the Principles of Rolfing SI. Diagram by Hiro Yoshi Tahata, 2011.

enhance the wave of breathing. The pressure employed should be very gentle. Very subtle touch as an input has the potential to transmit a large amount of energy when it is with a self-excited (resonant) vibration.<sup>15</sup> As practitioners, we can track the rhythm of the pulsation of the body structure by our awareness and ‘listening.’)

## Trauma Applications

Yielding touch offers a specific quality of contact to individuals who have experienced trauma. The practitioner’s presence also functions as a bridge to reintroduce a sense of safety and contact with one’s surroundings. After the tsunami/earthquake in March 2011 in Northern Japan, Hiro offered workshops in yielding as ‘first aid for trauma’ sessions in Sapporo for a network of professionals including clinical psychologists, nurses, and bodyworkers. The intention was to support their recovery and ability to help others. Hiro was assisted in this endeavor by Certified Rolfers and Rolf Movement Practitioners Kotaro Ogiya and Yasushi Fujimoto. Workshops were also offered on somatic first aid with yielding in Tokyo. Participants were able to regain a sensation of safety and relief by yielding their feet into his hands as the matrix for settling and safety.

In May 2011, two months after the tsunami/earthquake, Hiro visited the tsunami disaster area in Miyagi with Rolfers Shigenobu Kitabatake and Ale Duarte (team leader) and clinical psychotherapists (a group practicing Somatic Experiencing®). Hiro had several opportunities to offer

sessions with yielding. One woman had a leg broken during the tsunami, and had lost sensation in the sole of the foot on that side. Work with yielding and tracking sensation allowed her to rediscover sensation in that foot. She also began to regain ease in hearing the sounds of nature around her and then suddenly became aware also of the smell of the pine trees and leaves. She was able to feel relieved and grounded. Most people can regain a feeling of safe sensation with yielding. Traumatized tissue begins to heal with yielding contact within the safety of the supporting matrix offered by the practitioner using a yielding contact.

Another client was the high school boy shown in Figure 5. He lived in Miyagi and was brought by his mother to a symposium on support for the disaster that was meeting near where our team was working. I invited him to try the work. Although he did not relate to me any story of personal damage from the disaster, he lived in the disaster area and had seen TV news about it. Feeling



Figure 5: Hiro working with a high school boy in Miyagi after the 2011 tsunami/earthquake.

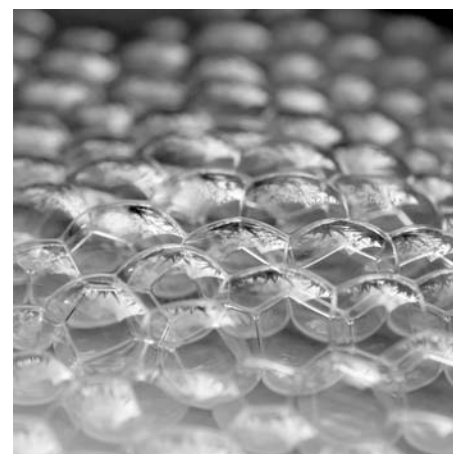


Figure 4: Perceiving the water cube as a way of sensing/feeling cellular relationships. Dreamtime Photo image 11675780 used with permission.

that this may have impacted his system, for example breathing, my intention was to help him to breathe easily. After his yielding and settling down into the chair in sitting, he could breathe more comfortably.

## Conclusion

*The breathing sensing body draws its sustenance and its very substance from the soils, plants and elements that surround it; it continually contributes itself in turn to the air . . . ceaselessly spreading itself out of itself as well as breathing the world into itself.<sup>16</sup>*

The dynamic movement of yield can be observed from the very beginnings of life. Whether we are speaking about the dynamics of cell growth, the receptive ground of the womb, embryonic growth, or the stages of development, yield is fundamental to all aspects of our existence.

Yield underlies our ability to know ourselves and bond in relationship with others. By deepening into a whole-body sense of this movement, we become part of our surroundings. Yielding weight into gravity supports the essential need to bond. Our relationships are colored by the cellular memories of how we were touched and held through the ground of our mother’s womb and the loving contact of caregivers. We are able to hold another as we were held. Yield teaches us about the surrounding matrix, the field which continues to ‘in-form’ formation, whether it is the anchorage of the living matrix, the womb, this earthly ground, or the space-time continuum permeating our lives. We are always in a dynamic relationship to self, other and our environment.

We might imagine our bodies as a second placenta, and thus we are intimately connected within the womb of our surroundings. Yield is an essential action for coming into relationship with the ever-shifting tempos, rhythms, and tumultuous or peaceful events of our lives and our world.

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*Hiro Tahata is a Certified Advanced Rolfer and Rolf Movement Instructor living in Tokyo. He worked as a research biochemist at the Hayashibara Biochemical Laboratories for nine years where he studied megakaryocyte potentiating activity. He can be contacted at rolfgang.eukinesis80@gmail.com. Carol and Hiro will offer a five-day workshop "Interception: The Primordial Roots of Sensation, Tonus, and Gesture in Boulder, Colorado in August 2012.*

## Endnotes

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14 See also the Water Cube constructed for the Beijing Olympics for more expressive images.

15 An example of this is the resonant undulation that developed in the original 1940 Tacoma Narrows Bridge (a suspension bridge, or tensegrity structure) when high winds provided an input that synchronized to the natural frequency of the bridge; see the archival video at <http://www.youtube.com/watch?v=j-zczJXSxw>.

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## Rolf Movement® Integration

### *An Historical Overview through an Interview with Heather (Wing) Starsong and Gael (Ohlgren) Rosewood*

**By Kevin Frank, Rolf Movement® Instructor, Certified Advanced Rolfer™**

I had the pleasure of several conversations with Gael (Ohlgren) Rosewood and Heather (Wing) Starsong – I wanted to find out more about the history of what we call Rolf Movement Integration. At the end of her 1982 article/pamphlet "Rolfing Movement Integration, an Introduction," Heather wrote a brief history of Rolf Movement Integration as far as it had developed at that time. It is appended to this interview. Other movement instructors have recounted their recollections and experiences in previous articles. This interview is not meant to be the definitive word on who did what and what happened, but rather to capture the story as told by two pioneer movement teachers who were part of what was happening starting in 1968. After speaking with Gael and Heather I drew some inferences about the nature of the story. They encouraged me to add my comments to their account:

Ida P. Rolf (IPR) synthesized a new way to look at the human body; her method evoked lasting shifts in economy of function and, in particular, changes that manifest in the way we stand and move through space, with consequent shifts in psyche and emotion. At the same time, she had a hard time teaching what she knew because there was no pre-existing language for it. There were few people, including trained dancers, who could recognize or define what 'normal' looks like, let alone tell you the particular change of coordination that had taken place. A new language was needed, as well as a new set of hallmarks for normal. This is still a work in progress. IPR was additionally hampered because she was not able to demonstrate what she was looking for with her own body. She needed others to do that. After speaking with Heather and Gael, I got the impression that Rolf Movement work started as an answer to these missing dimensions within Dr. Rolf's project. Rolf

Movement history, as told by this interview, starts in 1968 when Judith Aston was in practicing training and Gael (Smith at that time) was auditing.

**Gael (Ohlgren) Rosewood:** Dorothy Nolte had been given the task of developing patterning exercises, which she then taught to Judith Aston. I'm not sure where these patterning exercises started. Amy Cochrane was certainly one of the sources for arm rotations and leg rotations and so on. Dorothy Nolte was someone that IPR had trained years before. Because Judith was small and also a dancer, Ida asked Dorothy to mentor her. At that time, both Judith and I were being trained to work on children only. So we would both go into another room with Dorothy for mentoring. IPR loved Judith's ability to mimic movement patterns that were being observed.

**Heather (Wing) Starsong:** IPR demoed and spoke about many movement goals during her sessions, asking for movements in the fascial work. Many of those movements were then adopted as some of the basis for the movement work. We also defined goals for the session in terms of movements we wanted to see, and did see at the end of a session. Early on, in the movement work, we were thinking about the tracking of knees. We were being taught to lead with knees; lead with elbows out and head up . . . things like that. This was the nature of what Dorothy Nolte was teaching to Judith Aston.

**GR:** Some years later, Dorothy Nolte organized her movement exercises into a cassette series called Structural Awareness. By then, Judith had taken the movement work in a different direction and was teaching for the Rolf Institute®. Dorothy mentored and trained one student named Rachel Harris who helped to create the Structural Awareness tapes. The following summer, after my practicing, Ida asked Judith to develop the movement work. Judith gave her first movement training in 1971. Annie Duggan was there. I was there as well. The movement work suffered from a lack of defined terms and language, so people experimented. But those early pioneers had their own deep experiences, and had their own interpretation of what was important to evoke via Rolf Movement Integration. Further still, Judith and Ida had different leanings in what they saw as the predominant impediment to normal. Ida apparently was keen on pointing out excess of lordosis as a problem. What became known as 'the psoas walk' was considered

the hallmark of a Ten Series. Judith saw that people could use less effort if they allowed the upper body to come forward, to harness rather than fight gravity. She described grace and ease while transitioning through different planes via spirals and arcs, while IPR looked for the centerline to maintain throughout transitions, against a grid of horizontals and verticals.

**Kevin Frank:** Your descriptions evoke the image of two blind people describing an elephant – both are correct, and neither is perhaps 'seeing' the whole picture. Describing 'normal' function has been elusive hasn't it?

**GR:** Yes. How do we define the organizing principle of better function? Ida wanted the Line and efficiency. Judith saw the strain that occurred as a result and so went with ease and responsiveness. The danger with any ideal imposed on the body is what Don Johnson labeled 'somatic Platonism.' This translated into the narrowing of options and the exaggeration of tendencies according to prescribed hierarchies of values. Ida's ideas hurt quite a few dedicated bodies with her emphasis on long lumbar. Her desire to stay as close to a midline as possible also did not always serve. I think some of us were drawn to investigate the spiral movements in the body, something Ida wasn't as focused on . . . .

**KF:** Do I hear maybe two important points of view in what you say: that the work needed to find a way to revive healthy regulation of lordosis without making a new strain pattern, without using secondary stabilization to accomplish it? And over time the Rolf community has put more store in the expression of change that isn't a pose, but a capacity to adapt to circumstance without thinking about it. We have aspired to embody ease and strategies for ease. We have also looked to include transverse movements of the spine as part of what distinguishes humans from primates – upright bipedal locomotion – spirals and counter-spirals.

**GR:** Yes, even today the definition of efficiency in movement is not a firm agreement within our work and you will find contradictions to our sense of efficiency and those within martial arts. The movement work continued to suffer from lack of plausible, accessible explanations for why we ask people to do the movements we teach. Some students said, "This is profound. I now feel empowered to embody the wisdom of

Rolfing principles." Others said, "This is a mechanical imposition of 'shoulds.'" This jumps ahead in the story, and yet, there was always a restless desire for more clarity: what works and why? How do we define our values in a way that encompasses the full scope of our work? However, there was, I think, a necessary struggle that continued to develop with different personalities attempting to what? – systematize the work so it could be taught? – create a language to describe the mechanisms of the work, the scope of the work, the training necessary to do the work? Judith took the movement work beyond a series of exercises and taught ergonomic principles for sitting, standing, walking, bending, lifting, Rolfing [work], etc.

**HS:** In 1978 things were suddenly a little tough for me because I had to choose whether to follow Judith, who insisted that you go either her way or with Ida.

**KF:** Two strong personalities.

**GR:** Let's back up. In Judith's lead-ins for the (Rolfing) training she was paying less attention to (Ida's template of) posture and more attention to ease of function. She also began teaching indirect hands-on fascial technique because she thought it was helpful to work that way. Students were confused when their Rolfing instructors were saying something different. Faculty asked Judith to toe the line and Judith walked. It all happened in one meeting.

**HS:** I remember that after a training in 1976, Judith was fuming – so it was building slowly for a long time. It's maybe important to observe that they were both alpha women (Ida Rolf and Judith Aston).

**GR:** And Judith was taking movement in a new direction.

**HS:** Judith's split meant that the people she had trained had to choose to go with her or no longer have her as a teacher. I didn't have trouble choosing. I was devoted to Rolfing [SI] and the Rolf Institute. Tom [Wing] and I both choose the Rolf Institute. Emmett [Hutchins] and Judith had been close. The split with Judith and the Institute was really about as big as the 'Guild split.'

**GR:** I got a call and Peter Melchior tells me "There's a lead-in training in two weeks." What did I think of teaching with him? I had never considered teaching. I still felt myself to be a student. But that was the beginning of the incorporation of movement lead-in classes post-Judith.

**HS:** In 1978 some of the [Aston] Patterners came to my house and worked in my studio and talked about what to develop. It was a very creative collaboration. We all pooled the expenses: the plane tickets, etc., whether we lived in Boulder or traveled to get there. We had several more of these 'movement exchange workshops.' Some of the structural Patterners, Sharon Wheeler, Richard Wheeler, Gael Switzer, Roger Pierce, and Megan James would meet to discuss and explore the work. Jane Harrington was not trained as a Patterner at that time but sat in with us at these workshops.

**GR:** There was discussion about what are the principles of Rolf Movement [Integration], what are the goals and how to teach it? There was an eight-session series that came out of this. It was an exciting and gratifying time to share and organize what had been implicit in Judith's teaching.<sup>1</sup>

**HS:** Megan and I put together the first Rolf Movement Integration training in 1979. Jane and Vivian [Jaye] were among our first students. There were two phases of the training. In the first phase we would start with spending the morning in the Rolfling [SI] class. In the afternoon we would then go into the skylight room to demo the movement sessions and have the students exchange with each other. In the second phase the students worked with outside clients. The advent of Janie French and Annie Duggan came right around then, like 1979.

**GR:** During those years when the movement work was being defined and the training developed, another group, Penny Crow, Annie Duggan, Janie French, and Gleah Powers, had continued to study with Judith as her work expanded to include hands-on work. This group came to the Institute saying "we have the real work" – basically "choose us not them." Essentially the Rolf faculty replied, "you girls go work it out." There followed various meetings of the two groups. We tried co-teaching in order to synthesize. Two movement trainings occurred with various couplings. It was quite political and very uncomfortable.

**HS:** Actually it was devastating. Without going into details, there were struggles about ownership and power. Then there was a further meeting with Neal Powers at Annie Duggan's home on Bainbridge Island near Seattle. It was another disaster. The non-Judith group broke away and met on its own at this point. So we had a group that broke away, that stepped back, and

Janie and Annie went on to do the trainings at the Institute.

**GR:** Another issue that was problematic was the psychological piece. This was about seeing patterns and exploring the emotional expression within the pattern . . . and the question about how much to bring this kind of thing into movement work. Some of the push/pull within the structural community has been the issue of the body as an expression of the psyche. The movement work became icky to quite a few people when it was perceived to be fishing around for emotional causes to structural pattern. This quandary mostly gets dropped within trainings because the line between insight and inept therapy gets very tricky. Hubert Godard found a great way to bring in an awareness of lost channels of perception and resource that did not lean on therapy. It is clear that the emotional body informs the physical body in stance and response. IPR spoke of this often. The pioneering of different approaches to make a place for the psyche rather than ignore it took courage. Jane and Vivian contributed to this piece, as well as Peter Levine and Hubert.

**KF:** You mention Peter and Hubert. Maybe we should point out: they both helped our community see the link between psychology and body posture/orientation. Hubert, especially, grounded the 'gravity orientation' idea as the foundation to the human orientation process, that psychological security, at the biological level, is interwoven with gravity response and orientation. This clarification effectively gives Dr. Rolf (posthumously) a chance to update her gravity message and psychology message at the same time. What happened next for the two of you?

**HS:** In the late 1980s the Rolf Institute faculty began exploring new formats for the Rolfling [SI] and Rolf Movement Trainings. That's when Gael and I were more involved again. We experimented with a two-week lead-in taught by an anatomy teacher and movement teacher. I did this both with Ron Thompson and Michael Murphy. Then it was deemed too expensive. Gael and I co-taught a combined Rolfling and Movement training during that time. Students still remember it as very successful. Then we added an adjunct movement training after the Rolfling training. This separated the two trainings again – with an extra two weeks after Rolfling training, but that didn't work well. People were tired after the Rolfling training and just needed to go home. In 1991

Gael and I co-taught a movement training in Brazil, the first one there, actually. Lael Keen and Monica Caspari were in that training. I retired from the faculty in 1994. Vivian Jaye and Jan Harrington were there to pick up the slack, and carry the work forward. I still work with Phase 1 students: sometimes they come and say they had a movement session and the movement was more about hands-on 'structural' work than it was educational as far as I can tell. I am concerned about that.

**GR:** I got very interested in walking after the Brazil training. Ever since I have been watching walking, and functional patterns that show up in walking and how that affects structure. And I have written about it and teach it but I'm not sure it has landed. However, the discussion about walking is clearly in the picture now. Hubert brought in exciting aspects of movement work that had a more specific language and was more scientifically grounded. And yet I am not sure how well his contribution has been integrated, [between] the former movement curriculum and the pieces from Hubert.

**KF:** I think the different phases of the work may actually be integrating; at least with some of the movement instructors now – that's my impression.

**HS:** The movement history has been stormy from the beginning. IPR both appreciated Judith and would not empower her to contribute her own work to the field. And there was a gender thing. Roger Pierce was there at first but then went with Joseph Heller. So, at the beginning, the movement teachers were all women and almost all the Rolfling [SI] teachers were men.

**GR:** Historically, to take the whole picture, we struggle with questions about manipulation versus education. There is still a split between students who want the functional/ educational part and those students who want to learn hands-on manipulation but not movement. As well, how much is [Rolf Movement work] a conglomeration of techniques and exercises versus embodiment awareness and a guided journey of self-discovery, I feel that we have been tracking down a trail that is so valuable in bits and pieces. And yet, how do we truly honor that the body is physical, emotional, the unconscious, and the vehicle for the soul? How do we find the marriage of awareness and developing new habits without trying to control what is not meant to be controlled?

**KF:** Heather and Gael – you provoke vital questions. I am struck by such a vigorous

epoch in the evolution of the work. As you point out, the product is far from finished. I do think we have a specific message for those who are ready to hear it. We can now define our work in terms that make it clear the difference between ego body-building and something that is healthy and that carries Rolf's imprint. I think we can define it and we can teach students about it. I am optimistic about the technology we have and the way we can now speak about it. Thank you so much for being willing to share your history with us.

*Heather (Wing) Starsong, and Gael (Ohlgren) Rosewood are both Certified Advanced Rolfers and Rolf Movement pioneers/instructors.*

## Endnotes

1. Heather's 1982 pamphlet (and article in *The Bulletin of Structural Integration*, Spring/Summer 1982, Vol. A, No. 1) summarized seven basic principles for Rolf Movement Integration: Core, Dynamic Balance, Support, Responsiveness, Lengthening, Integrity of Movement, and Harmony with Gravity)

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## Evolution of Rolf Movement® Integration

By Heather Wing (1982)

Although Roling Movement is a recent development in its present name and form, movement education associated with Roling has a long history.

Dr. Rolf began to develop Roling in the early 1940's working in the beginning as much with movement as with manipulation. Always, as Roling evolved, she insisted that it was an educational process. When she began to train Rolfers formally, she defined the goals of each Roling session primarily in terms of movement. She developed a series of balancing exercises to be done after Roling to continue and maintain the changes made, and taught these exercises to all her graduating Roling practitioners.

Dorothy Nolte, coming out of a background of nursing and human relations, trained as a Rolfer in the late fifties. She soon saw that her clients wanted to do something for themselves after their Roling sessions. Working closely with Dr. Rolf, she developed Dr. Rolf's movements into an independent educational system called Structural Awareness. She began teaching Structural Awareness in 1962 in both classes and private sessions; and during the past twenty years has taken Structural Awareness into

a wide variety of educational settings. Her work is carried on by Rachel Harris, who trained extensively with Dorothy and has recently developed research evaluating the effectiveness of Structural Awareness and a self study program composed of cassette tapes and booklets.

Judith Aston, a dancer, teacher and movement facilitator for Gestalt Therapy, trained as a Rolfer in the late sixties. Working with Dr. Rolf, Dorothy Nolte, and then independently, she created a system of movement education called Rolf/Aston Structural Patterning. She began training teachers of Structural Patterning (called Patterners) in late 1971. For several years Judith worked closely with the Rolfers and Roling students, as well as training Patterners. However, by the mid-seventies, her work began to take a direction which she felt was not compatible with Roling, and in 1977 she resigned from the Rolf Institute and renamed her work Aston-Patterning.

Roling Movement Integration began in 1978 when two former Patterners, Gael Switzer and I, collaborated with Roling Teachers Peter Melchior and Emmett Hutchins to create a movement curriculum for Roling students. In the fall of 1978 five other former Patterners gathered with Gael and me to share work and sort fro[m] all our varied approaches those concepts and techniques which would best evolve Roling in the movement modality.

By June 1979, we had formed the Movement Committee. Our group had grown, as other former Patterners joined us. We had been

teaching classes for Roling students for more than a year, had created a place of ourselves in the political structure of the Rolf Institute, designed a training program for new Movement Teachers. That fall we launched our first training program. Membership in the Rolf Institute was granted to ni[n]e Movement Teachers on Jan. 1, 1980 and to nine others within the next year, six of whom were graduates of our first Training Program . . . .

. . . Roling Movement is an alive and growing art. It is nourished by all three of the forms that preceded it. Dr. Rolf's vision is the root and source of work. Dorothy Nolte was the first to develop an independent system of Roling-based movement education that could be taught to people new to Roling as well as those who had been [Rolfed]. We are indebted to Judith Aston for her rich development of the concept of responsiveness, for her work in helping Rolfers use their bodies more effectively, and for her application of Roling principles to daily life activities.

Our work continues to develop as we gain more understanding of human movement in the gravitational field. As individual teachers, we continue to explore Roling concepts in our own bodies and activities. We dialogue and exchange work with each other, our Rolfer colleagues, and teachers in related body-work and movement disciplines. Most of all we listen to the teaching in whatever form it comes, of each client who comes through our doors.

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## Three Functional Paradigms

By Chris Hayden, Certified Rolfer™

**M**ost Rolfers probably have at least passing familiarity with Jeff Maitland's concept of "the three paradigms."<sup>1</sup> As students in the basic Roling® Structural Integration (SI) training, we were introduced to them to help us understand how the goals of a holistic therapy, i.e., Roling SI, differ fundamentally from therapies oriented toward either relaxation or correcting diseases or other problems.

This concept seems to me to be clear and concise, capable of basically defining the scope of our work both to ourselves and to outside audiences. However, as the domain of Maitland's *holistic paradigm* is broad enough so as to include such arts as homeopathy and acupuncture as well as Roling SI, it does not relate concretely to the actual process of integration that occurs in our offices and classrooms.

Considering this, it occurred to me that students of Roling SI might be served by an additional set of paradigms, which would mentally organize the variety of functional approaches we use during sessions. This set would need to be more concrete than abstract, and flexibly oriented toward the intentions and assumptions behind specific interventions, while maintaining the integrity of each of its constituent paradigms. It would help the beginner to understand the array of options available in the service of our Roling SI work. Here is a basic sketch of three paradigms designed to fill this order, which I term the *functional paradigms*.

**The fixing paradigm:** This is work undertaken to fix a problem or imbalance, either as an end in and of itself or as a means to a holistic end. Examples include de-rotating a vertebra, waking up a sleepy motor nerve, or having a client actively stretch a tight muscle. The underlying mindset is that something is 'wrong,' or out of balance, and is to be corrected. Using fuzziar parlance, phrases like 'could find more ease' replace 'is to be corrected,' but the basis of linearly exploring a possibility for change is consistent. The types of interventions that accomplish this end are, therefore, often applied by therapists working in Maitland's *corrective paradigm*, but in the employ of the holistic paradigm they become means to change the 'whole' by changing one or more of its particular parts. Therefore, this and the corrective paradigm are not at all synonymous.

**The exercise paradigm:** here 'exercise' is not defined as corrective exercise, for instance as prescribed by physical therapists, but as any practice undertaken to improve health in a more general sense. The premise here is not that something is wrong, but that things could be better or prevented from going wrong down the road. Exercises are done according to a more-or-less defined routine and often are repeated on a schedule. Examples include t'ai chi, weightlifting, running, and some types of massage. Active participation of the client is a common trait, but engaged awareness is not always a major component, especially when an intervention is used within Maitland's *relaxation paradigm* or corrective paradigm. The exercise paradigm seems by far the least commonly employed by Rolfers. (In my Roling SI practice, I often recommend to clients that they undertake some practice such as yoga for their general benefit, but rarely work in this paradigm myself.)

**The exploratory paradigm:** this approach is exclusively somatic, and depends upon and develops the client's self-awareness. The idea here is not to fix problems or even to improve general health as a direct goal, but to work with self-perception through somatic explorations, potentially improving physical functioning in turn. Interestingly, the client's body is now expediently considered to be adequate for the task at hand; it is awareness that is considered inaccurate or 'less-than-complete' in some way. Sometimes techniques are employed that even temporarily make the body look worse from the point of view of the fixing paradigm; i.e., encouraging a client to embody a caricature of her pattern in order to feel it more completely. Work is not linearly repetitive, and can actively engage the client creatively, mentally, emotionally, and perceptually. Examples include Rolf Movement® Integration, dance therapy, and Feldenkrais Method® somatic education. Manual Roling SI work could also be included, and does fall more predominantly into this paradigm toward the end of the Ten Series. Due to its nonlinear, system-

wide nature, the exploratory paradigm is strongly correlated with Maitland's holistic paradigm. However, the functional paradigms are not hierarchically organized, so while Maitland considers his holistic paradigm to be of a higher level than his other two, the exploratory paradigm is not considered to be above the other two functional paradigms – we Rolfers often flit between them like hummingbirds.

From this brief sketch, I hope that it is apparent that various therapies and even specific interventions will often correspond with more than one functional paradigm, and that the boundaries between the paradigms are rather loose and messy. However, in order to provide the neophyte Rolfer with a working understanding of the approaches available to him/her, it may be of some use to lay these functional paradigms out in such a fashion.

## Endnotes

1. Maitland, Jeffrey, "Roling: a Third Paradigm Approach to Body-Structure." *Rolf Lines*, April 1992, Volume 20, no. 2, pp. 46-49.

## Evolutions in Rolf Movement® Integration

### *An Interview with Jane Harrington*

By Robert McWilliams, Certified Advanced Rolfer™, Rolf Movement® Practitioner

*Author's Note: This interview with Rolf Movement Integration and Roling® Instructor Jane Harrington was conducted in November 2011.*

**Robert McWilliams:** What is exciting in the Rolf Movement field for you right now?

**Jane Harrington:** One of the books that we all read when I first trained, and that much of the early Rolf Movement work came from, was *Focusing*<sup>1</sup> by Eugene Gendlin. I have a good friend Gillian Kok, a Rolfer and a movement practitioner who is studying at the Focusing Institute, which is based on Gendlin's work. It's so wonderful to hear a fresh perspective from her concerning what was much of the foundation of my early training and its evolution. Very inspiring!

In the early days, much of the movement work was around body knowing, access to that sensing, the living body, and sensation. Body attention was so much of what we did, often to a fault, inviting the loss of other aspects. It is fun to see someone re-excited about that aspect of our work.

**RMcW:** Is this renewed excitement showing up for you now in your work and life?

**JH:** Yes, absolutely. I am no longer doing structural Roling work. I stopped just about a year ago, closing my private practice last January. I realized it wasn't inspiring me

any longer, and my body feels a lot better for not doing it. I am doing my private practice in movement work again, and also some teaching. It's so much fun to be doing functional work only. After so many years of divided attention, I am now only doing the movement piece with some cranial and touch that I've developed over the years.

**RMcW:** Will you be teaching CE classes related to the Rolf Movement syllabus again?

**JH:** I just scheduled one in Scottsdale for early March 2012 and I'll be teaching a 'Principles' week in April. I love Principles weeks! That brings up for me how I was first trained, which is key to how I see the work. I first trained in 1979, and my first training was in movement integration. I was a movement practitioner for maybe eight years before I trained in structural Rolfing work; I had a straight movement practice for that period of time. Our training was organized (with Peter Melchior as the instructor) so that the eight of us doing movement study went to the structural Rolfing class in the mornings and we would hear Peter's lectures about the series and see his demos. In the afternoons, when the other students were working with each other, we would be on our own. We would explore what, given the session, are the concepts of that session, and how do we translate them into function. The two teachers we had for that were Megan James and Heather Starsong. It was a long training! It was incredibly valuable, though, because I got such a blend of understanding of Dr. Rolf's work. We were still making the movement work up as class was going on. I think I'm the only one still practicing from that group. Vivian Jaye was in it, and this was when our long teaching relationship and friendship began.

**RMcW:** Was it all women?

**JH:** It was. We had a week-long admission class, and that was all women too. If I remember correctly, Gary Weidner was the first man to train in [Rolf] Movement, just a year or two after my training. [Jane's later addendum: Jason Mixter may have come earlier, according to Heather Starsong.]

**RMcW:** How much of this was based on the work of Dorothy Nolte, or did Judith Aston have anything to do with this training?

**JH:** Dr. Rolf farmed out the original movement work to Judith Aston. Dorothy Nolte and Rachel Harris were also doing some of the early development. Judith Aston taught the early movement work

within the Rolf Institute®. At that time many Rolfers were involved and the work was taught in a workshop format, much like it is being done now. Judith Aston left the Rolf Institute to develop her own things. Then there was a group of people, including (but not limited to) Gael Ohlgren [now Rosewood], Heather Starsong, and Megan James and Janie French, who are no longer living. Gosh, all these people are dead! Anyway, after Aston's group went off, these folks said "wait a minute, we're interested in movement as it relates to Ida's work, and we also want to stay within the Institute with the work!" There were about two or three years of symposiums. I went to some of those before I trained. Louis Schultz was very involved in this. The inquiry was: what was the movement work that directly related to Ida's vision? There were many people influencing it.

**RMcW:** Can you talk a little bit about your background as a dancer in relation to your later Rolf Movement work?

**JH:** Like others, I came to the Rolf Institute from the field of dance. This background gave me a passion for function and a deeper toolbox. Because of my dance background, I was very curious about how each of us organizes movement. Some of us have a more basic tendency towards inner sensation and proprioception, while some have more interest in perception and the space around us. I really think this is key in how you read and interpret different peoples' work. People tend to teach and write from their own basic preferences. Hubert Godard has brought some wonderful pieces into the work, and he's very space-oriented.

**RMcW:** It seems as if a lot of his concepts have percolated down through Rolfing trainings, and they do seem to be space-oriented.

**JH:** The movement work in the beginning was much more about sensation, or the felt sense, and then the spatial piece got added. I now see them coming together with equal value as both are needed in the work. My dance background has a lot to do with the fact that my basic preferences are for the felt sense, sensation, and proprioception. When I went into dance I studied Hawkins technique, which is often more intrinsic in orientation, where something like Cunningham technique is more about how we move in space.<sup>2</sup> So it was a very natural direction for me to study movement with the Institute. I was also a single parent

and starving, teaching dance. You know the story!

**RMcW:** Yes!

**JH:** At that time I had a good friend, my roommate, who was a Rolfer, who told me the Institute had this new movement-oriented training, and suggested I do it. At that time I was doing a lot of Continuum, and also Body-Mind Centering®, Bonnie Bainbridge Cohen's work, so it was a logical next step for me.

**RMcW:** I would imagine that if you had a tendency to being interested in sensation and felt sense, you would be naturally attracted to those kinds of movement practices.

**JH:** I also studied Laban Analysis and Bartenieff work. This is probably where I learned to see through movement. I remember sitting in the chair watching video, and analyzing it frame by frame. All of these hours of focus really taught me the skills of movement analysis. Unfortunately, our trainings don't allow that kind of focus. What's really important and interesting with this new movement certification training is that it is being done now in a series of workshops. The training is designed so that you take the workshops with different teachers. The training segments can be done as the Rolfer is ready. This lets people go where their interest is. That's pretty neat. For instance, Rebecca Carli enjoys working with sense of self in space, and relationship between self, others, and objects in space. That's a brilliance of hers. Mary Bond has done this incredible job of clarifying the educational piece, and has really updated and brought that forward. Each person on faculty has, in my view, real gifts. What's wonderful is the format allows for each of us to teach from our gifts, rather than try to fit into something that's not our passion. We have all have done different things. Carol Agneessens, for instance, has done wonderful work in embryology, and in using subtle touch relating to function. It's exciting what's going on right now.

**RMcW:** For people who are not movement certified, and even for those of us who are, could you frame any thoughts on a movement intervention, thinking in terms of 'what's first, what do you do next, and how do you know when you're done?' Does that question speak to you?

**JH:** Absolutely, because before all else, I'm practical. I really value the people who do the research and develop this amazing

work, but it's just not my way. I prefer to just jump in and get my hands dirty. So, I assume your question, Rob, refers to people involved in structural integration [SI].

**RMcW:** Yes

**JH:** Regarding 'movement certified or not', the practitioners who are movement certified, and who also grab ahold of that work, are those who have a natural inclination towards it. Yet we want to see all of the people in the Rolfing [SI] field able to gain some basic familiarity and experience of the work, because it is essential for the client's embodiment. The first thing to remember is that every session, just like every series, has a beginning, middle, and end. That's true regardless of which modalities you're using, whether structural or functional, light sensing or deeper structural touch – it doesn't matter. These are the components. The first thing for me, when I'm working with someone (and I am now thinking of your 'functional session' question), I need to know: what are the basic preferences of this client; how does he gather information about himself and his world (this relates to that whole discussion we had earlier about 'inner' versus 'outer' preferences); and how much does this client have the ability to remain in present time, or are there places that are still held historically?

**RMcW:** Do you mean by that places that are held historically in [his] way of relating to [his] own world?

**JH:** If a person is beautifully organized in [his] way of relating to the gravitational field, then when [he moves] we're going to see beautiful spinal response, we're going to see the girdles of the body relating well to each other, and we're going to see a person who is scanning the environment – for lack of better words – in an appropriate way. So [he's] present with the right amount of energy; no more, and no less than is appropriate. Occasionally we see that, and most of us have had moments in time where we've experienced this in ourselves. So when a client comes, I begin by looking to see how [he is] doing that, and where are the gaps? That would be the 'beginning' – analysis, essentially. Some of it is done with touch and some is done with listening. Some of it's done watching the [client] move, functionally. When watching functionality, I mean sensing into [his] movement with all of my inner senses. True seeing involves all of our senses and trust. When working with possibilities for the

client, as you know, it's my belief that you always start with [his] preferences. This lets [him] begin with success. [He] goes "oh, this is what I naturally do! This is what's already working for me." Then it can be taken and expanded into new options. So there's a beginning, middle, and an end, be it in a session or a series. Where deeper changes happen, we call these the core sessions; or, the heart of each single session.

What I am curious about at this time is, how can I assist this client with the parts of [him] that aren't really responsive? Sometimes it's like "oh! – this right psoas is jammed." But oftentimes it's a functional question for [the client], like "what happens if I really stretch down through that leg, or reach through that cylinder, and allow my arm to move," or whatever it is.

Regarding techniques, there's not one technique. The technique may be as simple as how exploring how the cranium and eyes track as the arm or leg is reaching. It may be spending time with how [the client moves] from sitting to standing and take in more special awareness. The point is, we can't do [clients'] work for them. Sometimes it would be easier if we could just distract them, do the work, and go "here you go!" But we can't!

So, if they want change that is about having more vitality in their lives and more joy, it takes touching the places that weren't congruent with the rest of themselves, and that's what I see as the middle sessions, or the heart of a session. That work then needs to be integrated into something that's functional. Why is it we even bother to work with a structural integration client? It is my belief that we work to give clients more function in the world. This is the reason that I am attracted to this work. It allows me to assist someone in changing his sense of how [he] moves through [his] world. [He] may feel – "Oh! That knee is tracking better now so that it doesn't hurt." Or it may be on more of an emotional or belief level, "I can now trust my knee to support me." I am always looking to create more functionality with this person, so that together we invite more ease, so [he] can actually apply and use it in [his] life.

Daily life is really what matters. That has to do with the educational piece I referred to before. This has to come, in my view, from their preferences. I had a wonderful experience years ago, before I had the privilege to study with Hubert Godard. Because I am very ground- and sensation-

oriented, I would do tracking with clients at the end of a session. I remember saying to one woman "just push into the floor as you straighten," blah blah, and it never worked! So then after study with Hubert, I realized that her preference was about space, so I said, "bend your knees, and as you straighten, allow yourself to feel the space around your head." Total magic happened because I matched her preferences, rather than coming from mine. So, the more we can understand ourselves, the better off we are.

I'm always looking at transmission through the body. What is connecting, and what isn't? Interestingly, now that I have gone back to doing purely functional sessions, I have also gone back to Ida's original repatterning sequences. These sequences work with each region of the body to help anchor the awareness and begin the shift in the neurological pathways. I'm not teaching Ida's work as a set of exercises that people go home and do, because it won't happen and it won't work. I'm using them while I've got my hands on the person to guide [him] to an opening in a particular joint or aspect of pelvic response [he senses] it – that would be more the middle part of a session – and then take that into sitting and standing, so that [he has] a bridge from the old way to the new.

**RMcW:** So it's as if a movement intervention, by creating this new connection between movement and sensation, gives people a new percept, a new idea that they can also take out with them from the session, just as they take fascial release with them.

**JH:** Absolutely, Rob, and for that to work, for them to take that with them, the piece around space and relating to the environment has to be addressed. That's a large part of what happens in the integration part of the session or series.

**RMcW:** Are you saying that if you keep the session focused on sensation and sense of weight without introducing the spatial element, that people have a harder time integrating it and taking it out with them in the world?

**JH:** Right. It won't work. The other thing that you'll lose is span. You'll lose length. I don't know if most people will understand this, but I studied Hawkins Technique when I did my masters degree in dance, and I loved it, but when you watch a Hawkins dancer move, there's no lift, there's no length, and it's really boring! It's very satisfying, however, to do! Part of our



principle of palintonicity is about using two directions, or span, and that's what you lose without the space element. Hubert brought fabulous insights on this to our work.

**RMcW:** Wasn't span from Dr. Rolf? Wasn't it already inherent in the work?

**JH:** It was, absolutely, but the piece we didn't really have is: how do you give someone the ability to move through space with span, when they got up off the table? How can [the client] be taught to be able to consciously come back and recreate it? It is essential for the client to have a sense of weight and space to utilize span. I got a lot of great Rolfing [SI] early, working with some wonderful people, and I remember I would get up after a session and it would be truly magical with shifts and changes, but as I went through the next day or two, I couldn't always find it again for myself

**RMcW:** So you're saying that using some of that connection through sitting, standing, walking helps to get that spatial element integrated. It seems to me that Rolfing [SI] bench work has inherent spatial aspects in it. When did people start doing bench work?

**JH:** I didn't study with Dr. Rolf. I had the privilege of meeting her, but she died in May of 1979, and I started my training in August that year. Other than a brief meeting, I didn't know her, or study with her. People were certainly doing bench work when I was around. When we watch the early class videos of Ida working, we often see her using bench work. You're absolutely right, bench work is one of those wonderful transition places that bring structure and function together. That's part of why I love the tracking aspect of our work. Years ago, I taught a three-day that was straight tracking. It was really fun!

**RMcW:** Would it be correct to say that a lot of ideas that became Rolf Movement [Integration] came out of the earlier tracking work?

**JH:** I don't know. The early tracking work that I experienced was much more structurally oriented than you might be thinking of. I can remember the early days of teaching movement workshops, when Vivian Jaye and I put together the trainings to certify Rolfers in movement work. I remember that in those early workshops you might see that while a practitioner was focusing on the lower body, the client's shoulder girdle and head might not have

a relationship to the rest of the body. You know, the client would be bending over and looking at you! In the bench work, sometimes, if someone was doing something with the upper body, you'd look down and the feet wouldn't even be in contact with the floor.

**RMcW:** It sounds like there's been a change in the overall idea of tracking and embodiment in Rolfing SI, then. It's gone from looking at individual bits – for example making sure the tibialis anterior tendon is allowing fold at the ankle in lower leg flexion – to these more global ideas, such as re-mapping. It's been an amazing development, it seems to me.

**JH:** Yes, and it's ongoing. It's been an evolution. Re-mapping is not a term I tend to use, but it's a good term. It's a lot about how we take new options, new potential and possibility, and bring it into functional reality for the client.

The work that is taught now in all phases of the Rolfing training has much more information about the awareness of the

client, [his] responsibility for [his] own change and how it is for [him] to make use of that, than there was ten years ago. Certainly all the faculty members that teach basic classes are Rolf Movement-certified, now, and that was not always true. Big changes have happened in the work.

## Endnotes

1. Gendlin, Eugene, Ph.D., *Focusing*. NY, NY: Everest House, 1978.
2. Erick Hawkins, 1909-1994, was a leading American Modern Dance choreographer. A former main performer for Martha Graham (and briefly, her husband as well), he went on to develop his own brand of somatically-informed training and choreography. He believed that each movement or gesture was initiated with the psoas. Merce Cunningham, 1919-2009, was another leading light of American modern dance who started off with Martha Graham only to diverge completely from her myth- and story-based approach to his own abstract, ballet-influenced and non-narrative style.

## The Ground of Movement *The Embryonic Growth Gestures of the Lower Limb*

By Carol Agneessens, M.S., RCST®, Rolf Institute® Faculty

*If you can see your path laid out in front of you step by step, you know it's not your path. Your own path you make with every step you take.*

Joseph Campbell

**H**ave you ever heard the joyous shrieks of parents as their infant child takes her first steps? The "oohs," "aws," and digital recordings of these moments quickly become treasures in the familial archive. For an infant, rising-up to standing in the field of gravity is a feat of coordination and evolutionary impulse. However, the first steps taken by an infant are performed long before he or she rises to upright on baby feet. The gesture of alternate stepping begins in utero: prior to any kicking, stretching, or other motions an expectant mother feels pushing against her belly wall.

A developmental continuum exists between the first growth gestures and the later use of the legs. The activity or movement of growing shapes the means for the later activity of stepping. At every stage of its development, the embryo is performing expressive gestures out of which specific structures congeal. In fact, all patterns of behavior have embryonic developmental processes as their precursors.<sup>1</sup>

This article explores the slower growth and oscillatory movements of the embryonic limb buds, and specifically the hip joints and legs. These gestures are pre-exercised by the human embryo beginning at the

end of the fourth week post-conception. These early formative patterns imprint the movement styles of the adult and are directly linked to some forms of hip dysplasia.

These movements define the formative patterning of the lower limb and occur at specific times in embryonic development. Imagine watching these movements in time-lapse sequence. We would see that the very growth of the embryonic lower limb mirrors the movement patterns necessary for walking.

Positional changes in the embryo's limb anlage (precursor) can be detected as the limb grows in volume. These movements include growth-adduction toward the umbilical cord with a folding across the embryo's genitofemoral fossa. This is followed by growth-flexion, the bend being the anlage of the knee. Subsequent embryonic events in the development of the lower limb include growth-extension of the knee, growth-flexion in a region that then becomes the ankle, and growth-everision of the foot.<sup>2</sup>

Erich Blechschmidt, Ph.D., an embryologist, made serial dissections of embryos at every stage of development. He realized that genetics alone could not account for the precise formation and maturation of the fertilized egg. Instead, he cited the existence of metabolic fields of formation that shape the organism from outside to inside. The burgeoning field of epigenetics is developing an understanding of the external forces working in embryonic development. In other words, there are forces outside of the genetic markers activating gene expression. One of the 'in-forming' fields or kinetic blueprints is the ring torus<sup>3</sup> (see Figure 1).

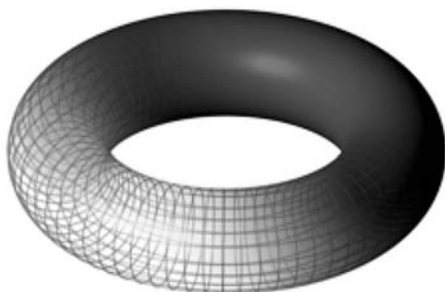


Figure 1: A torus (source: Wikipedia Media Commons).

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### Sensorial Inquiry: A Spiraling Torus

- *Imagine a spiraling 'tube' torus existing as an informational field or template generating embryonic form.*
  - *Allow your senses to imagine the sensory pulsing and spiraling of this ring of formative information.*
  - *Imagine the in-folding and unfolding flow of vibrating protoplasm in synchrony with the biokinetic fields and fluid gradients shaping and 'in-forming' both function and form of the leg buds.*
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In the four-week-old embryo, the torus form shapes the caudal ring of ectodermal tissue that is pre-forming the pelvis, pelvic floor, and arising limb buds.

### Oscillation: Streaming into Formation

Our limbs (and cortex) develop through slow oscillatory movements. Everything is vibrating with resonant intelligence. The body is movement. This shift in understanding challenges archaic beliefs that man is a machine and structure is inert. Mechanistic ideas about the body inhibit a leap into quantum understanding about the nature of physical reality, intelligence, and our transformational capacity. When thinking is sequestered by century-old ideas, it is easy to forget that all living systems emerge from oscillating and vibrating protoplasm. Our bodies are intelligence awakening. Most texts on embryological development depict static animations sequenced on linear timelines that omit reference to the continuum of gesturing life that informs and guides development. Embryonic growth is pulsing and alive; bursting forth like a garden in summer.

It was Blechschmidt who developed the concept of embryonic growth gestures, noting that we don't have to remain fixated upon the static, lifeless forms of dissected embryos. "Nothing prevents our reckoning with the fact that the meticulously recorded positions and structures of the embryo are frozen records of what are actually developmental movements . . . These movements are always more than just measurable changes of shape. They are always *also the expression of living formations.*"<sup>4</sup> [Italics added by this author for emphasis.]

The embryonic arm buds begin growing moments before lower-limb formation. The physical structures of adult arms and legs arise from identifiable gesturing. The future arms and legs of the embryo function in different capacities and their growth gestures mirror that difference. For example, limb-bud growth of the hands and arms displays a gesture of flexion and extension. Flexion speaks of a taking in or receiving while extension mimics giving or reaching out. The leg, led by the embryonic precursor of the paddle-shaped anlage of the foot, opens caudally from the oscillating torus of the lower body, pelvis, and lumbar plexus, with a functional gesture of stretching and extending.

In the early embryonic stages, a significant proportion of the leg's inner tissue consists of nerve fascicles of the lumbar plexus. Thus it would appear that the nervous system is participating morphologically – and also functionally – in the growth-movements. "Given the improbability that any developmental process is exactly symmetrical, the growth stepping of one lower limb can be conceived as alternating with changes in position and form of the other limb. In this way, the cyclical patterns of fetal stepping are seen to be triggered by the embryo's earlier growth-movements. On the other hand, the muscles arise initially as the passive elements of the limb's musculoskeletal system, and it is only during late embryonic and early fetal stages that 'spontaneous,' more evident, patterns of muscular activity emerge."<sup>5</sup>

Stephen Talbot writes that living organisms are gestured into existence, and are distinguished from other organisms by the character of this gesturing. With novel attitude, he suggests that this character does not disappear from the mature organism, but comes to expression at a different level. He reminds us that fixed form is always the end result of process and movement. Given our current habits of thought, we tend to start by conceptualizing already formed 'things,' which we then bring into movement or make into the causes of movement.<sup>6</sup> Recognizing the origin of gestures as pre-forming structure inspires a shift in understanding and practice for both movement and body therapists.

We all believe it is we who move our own arms. And if we can catch within ourselves at least an inkling of that shaping inner gesture and impulse of will through which we

bring our arms into outer movement . . . we may realize that the inner activity by which we move our arms is akin to the creative activity that first “gestured” the arms (or legs) into physical form.<sup>7</sup>

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## *Sensorial Inquiry: Sensing the Oscillatory Patterns of Early Stepping*

- *Settle into a quiet and comfortably supportive place.*
- *In this state of conscious rest, allow yourself an easy breath, sensing your diaphragm descending as you breathe in and gently rising as you exhale.*
- *Allow your attention to include the subtle movement at your hip joint, and settle your awareness into the tissue matrix of your spacious fluidity.*
- *Slow your breathing, let your self settle into a sense of the spaciousness of the environment surrounding you.*
- *Imagine and sense the vibratory pulsations and slow formative movement alive in your hip joint and legs.*
  - *The slow oscillation of a limb bud folding across the genitofemoral fossa toward the umbilical midline.*
  - *The movement of bending, which pre-forms the knee.*
  - *Growth-flexion in a region that pre-forms the ankle.*
  - *Growth-everision of the foot.*
  - *Sense the continuum of these movements as you weave them together through your own body.*
- *Imagine and sense these formative gestures while sitting or lying down, Next bring yourself into gravity, sensing the fluidity of your joint spaces – including the open spaciousness of your toe hinge and adaptability of the bones of your foot as you engage the surface you are standing on. Let this adaptability travel to your hip joint and through your body.*

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## **Hip Dysplasia**

Rosemary Feitis and Louis Schultz write that we are embryos throughout our lifetimes. In their book *The Endless Web*, they show that the way the embryo-fetus lies in utero determines the ultimate pattern of

the spine.<sup>8</sup> This understanding applies to all aspects of formation. Hip dysplasia in adults can be traced to early limb-bud and bone development, or the lack of movement throughout a pregnancy (that is, the fetus’ ‘birth-lie pattern’; asymmetrical pressures and twists shape the embryo-fetus’s pliable body and mirror the mother’s alignment). Thus, the way a mother carries her body in pregnancy imprints the developing infant in utero. All of these factors and more may contribute to the malformation of the leg-acetabulum relationship.

Allow the following understanding to permeate your body-knowing: even before embryonic limb buds appear there are rotations, oscillations, and pulsations around a midline or longitudinal axis of orientation within the endocyst disc (the precursor to the embryo). “The surface growth of the ectoderm (a motor function) is already left-right asymmetrical. Perhaps an early event in limb asymmetry could be different surface growth rates in the ectoderm of the left and right.”<sup>9</sup>

The protoplasm of our beginnings is pulsating with the movement of life.

An understanding of embryology and the postnatal growth and development of the leg, hip, and pelvis contributes to a more complete understanding of hip dysplasia. This information can live in the back of your thinking mind, behind your study of adult anatomy and physiology, and it can inform your touch with the knowledge of the formative gestures shaping this the pelvic-hip-leg constellation.

Limb buds begin to appear in the fourth week post-conception. Hip formation begins in the seventh week. A cleft separates the tissue that will become the femoral head from the tissue that will become the pelvis. Through the oscillatory movements previously described, the femoral head begins to shape the cup-like recess of the acetabulum. If the head of the femur is not positioned properly in the acetabulum, or if movement of the femoral head is reduced, a shallow hip socket may develop. As mentioned previously, the intra-uterine environment also shapes this development.

By the eleventh week of gestation, hip formation is complete. However, at this moment of growth, the pelvis and femoral head are composed of cartilage that is soft and subject to the pressures and stresses imposed from the outer environment as well as within. Cartilage can be imprinted

with these and other mechanical stresses, and the shape of the femoral head and acetabulum can be altered as well as the entire pelvic dynamic.

Oscillatory motion is implicit in formation. At twelve weeks post-conception, the lower limbs begin to rotate nearly 90° medially, so that the knees point anteriorly and the hips assume their normal position in the pelvis. Dislocations can occur at this time. Interference with the completion of this motion or the lack of rotation medially often occurs. In addition, as muscles develop they may exert varying pulls on the right alignment and positioning of the femur and acetabulum.

At birth, the hip joint is only partially developed, with less than 50% of the femoral head being covered by the acetabulum. The combination of these two factors can result in spontaneous subluxations and/or dislocations from normal activity and kicking in some susceptible infants.

## **Embryological Understanding in Practice**

When I first began studying embryology, I had no idea that it would profoundly affect my understanding of the human body. Initially, I felt detached from the pictures I studied in books or prepared for slide presentations for the classes I teach. With dedicated study and meditation, I began to understand the implications of what I was seeing and eventually sensing. Adult function and anatomy can be facilitated by studying the way our human form develops. In exploring this thread of our primal beginnings, embryology is a portal to witnessing the ‘origin of being,’ or consciousness arising and manifesting in the density of our form.

When an individual presents hip problems, gait problems, coordinative difficulties, or other distresses, I work with the formative patterning beneath the complaint. There is a prevailing belief in osteopathic medicine that the fields that generate the embryonic body continue to sustain our health and well-being throughout a lifetime. The embryo, as an archetype of perfect form and wholeness, serves as a blueprint for our body’s ability to heal itself. The formative and regenerative fluid forces that organize embryological development are present throughout our lifespan, available for harnessing of their therapeutic potency. In other words, the forces of embryogenesis become the forces of healing after birth.<sup>10</sup>

Through dedicated study and incorporating the perceptual understanding of a biodynamic practice, I have had the palpable sensory experience of the vast and interconnected matrix in which we are held. This matrix is a vital force of healing and is the resource for the transformational process we engage in with others and with ourselves. Appreciating the implications of embryology in our therapeutic practices may require a 'quantum leaping' beyond cherished belief systems, Newtonian mindsets, or linear space-time perceptions. The questions that I continually ask myself are: "What is a body?", "What are the multiple dimensions that nourish and sustain physicality?", and "Are we, as practitioners, able to open ourselves to the informational field in which we live?"

*The linking back to the origin not only restores strength, but also creates the possibility of recognizing and bringing into play ever new chreodes (a biological pathway or habit) and new developmental lines.<sup>11</sup>*

*Carol Agneessens has been practicing Rolfin® Structural Integration for over thirty years and has been a member of the Rolf Institute faculty since 1993. Carol also offers trainings in Biodynamic Craniosacral Therapy. Visit her web site [www.holographictouch.com](http://www.holographictouch.com) for more information.*

## Endnotes

1. Freeman, Brian, "Newborn Stepping and Embryonic Growth-Stepping." *Developmental Medicine and Child Neurology*, 1988, 30, pg. 126.
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## The Wisdom of Uncertainty in Movement

By Yuki Ojika, Certified Advanced Rolfer™, Rolf Movement® Practitioner

Sensation is not something we can grab onto and hold. Sensation is vague and absolutely essential at the same time. Have you ever been frustrated by not being able to do a movement today that you accomplished easily yesterday? Have you ever felt "now, I got it!" one day and then lacked that feeling another day? One day you feel so sure, and the next day you are not. In my Pilates practice (I mostly see people who have received the Rolfin® Structural Integration ten-session series) and Rolf Movement work, I face this issue all the time.

After I became a Rolfer, I studied Pilates, and I now teach it incorporating ideas from Rolfin Structural Integration. In the Rolfin community, it is common knowledge that quality and coordination of movement can be changed by perception. Through my

Rolfin and Rolf Movement trainings, I theoretically understood why sensation and perception are important in order to change movement, but it took a while for me to really feel that in my body. During my Rolf Movement training with Hubert Godard, I had a hard time not to 'think too much.' This same tendency had been a challenge in my dance career – although I was very successful as a dancer, I tried to 'think' how I could use my body correctly and couldn't open my perception enough. Taking what I learned in the Rolf Movement training, I just kept practicing the movement exercises and kept taking classes in Pilates, yoga, The Gyrotonic® Method, The Gyrokinesis® Method, *qigong*, dance, and so on until I 'got it.' I don't even remember when I started feeling sensation (it probably happened gradually), but I now can feel and say that

the best possible coordination happens when you are really open to perceive and sensing from that place. What I have learned from my experience is that the best possible coordination happens in *uncertainty*. As soon as I try to grab the sensation with certainty, the movement and moment is gone.

Sensation is tricky since it is only in the moment and cannot be held static. When I work with movement to lead my clients to move with less inhibition, the most difficult thing is how to help them feel that better coordination happens when you just let your body 'go for it' with sensation. I am still exploring the way I teach, but I have found one of the easiest ways is to let clients experience the comparison between how they feel when they 'move from thinking' and how they feel when they 'move from sensation or perception.' Most of the time, they notice it is easier to do a movement with sensation.

However, many say, "I didn't feel like I was doing anything when I moved from sensation." Even if they understand that moving with sensation is easier and the way we want to use our bodies, they feel better when they move from certainty rather than uncertainty.

The best coordination happens when someone can move from sensation. As soon as we start thinking, the quality of coordination changes. Through my experience of teaching movement in Rolfing sessions and public workshops, I observe that people feel more comfortable when they feel like they are ‘doing’ movement: they feel certain when they feel muscle tension, because then they feel like they are doing something. I think that’s fine if you are happy with it and not having any pain or body issues. However, most of the people I see come for change, so I really need to teach them that it is not about ‘doing’ but about ‘being.’

In order to teach this *wisdom of uncertainty*, I explore with my body first. Without my own experiencing of good coordination with sensation and orientation, speaking about it is going to be unreliable. Through my own movement explorations, I have learned that the best coordination is in uncertainty, and you may never feel certainty; you just completely open to perceive and trust yourself and then your body moves with the best possible coordination. As soon as you start thinking, “I’m doing good! I’m going to try doing this again,” muscles tense. If you want to maintain the best coordination, you have to be present to perceive sensation and orientation. It is such an unsure sensation when a movement has the best possible coordination; you want to grab onto the sensation because you want to let successful movement happen again and again, but the best possible movement goes away as soon as you try to grab it to make it certain.

When I teach Pilates, I notice that people like to feel they are using their muscles. They tend to tighten their abdominals because they think they are using their abdominal muscles correctly by doing so. However, core coordination happens with sensation, whether for Pilates or any other movement method. The goal of Pilates is not about working the abdominals but about the spine. I didn’t know that until I really started studying Pilates. In some basic Pilates exercises, people in good coordination with sensation won’t feel that muscles are being used – they’ll commonly say, “I didn’t feel like I was doing anything!” That is the wisdom of uncertainty. If they try to do the same thing again, they easily lose it. However, if they perceive fresh sensation, they have more chances to ‘get it’ and maintain it.

To stay in a fresh place of always sensing anew, rather than thinking or trying to recreate the last moment of sensation, you must be present. To be present, it is necessary to have a sense of your body and your environment. People with Rolfing experience usually have good awareness in their bodies, but they tend to stay in internal sensation. Being only ‘inside,’ you cannot stay present; we also need to be aware of the space around ourselves. One of the ways to bring students/clients into more awareness of their environment is to ask them to do a movement at regular speed, as too-slow movement makes it easier to dive into deeper internal sensation and forget about the world around them. Another way is to open other perceptions such as seeing, smelling, hearing. . .

In summary, feeling a sensation once doesn’t mean you can ‘lock it in’ forever. Things around us and inside us are always changing. What we can rely on is our sensation and perception because they are

flexible with the changing external context. I think it is important that we know that happens, and it is important to teach many ways of perceiving and orienting so that our students/clients can believe in the wisdom of uncertainty, thereby activating better coordination and freedom of movement.

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## Excruciatingly Slow Motion Movements

By Deborah Weidhaas, Certified Advanced Rolfer™, Rolf Movement® Practitioner

**D**r. Rolf’s primary ‘how-to’ in our work is: “put it where it belongs and ask for movement.” In the full range of possible movements and motions, using excruciatingly slow motion (ESM) movement is a highly productive technique. This article will explain: what it is; how to find it; things to be aware of with your clients; how to help your clients do it; and some of my perspectives on why this technique is so meaningful for the tissues, the client, and me.

### What Is ESM Movement?

You might think that ESM movement is the same as ‘micro movement,’ but it isn’t. ESM movement is a highly effective and efficient *how the client is to move* within the context of “put it where it belongs and ask for movement.” ESM movement is so much slower than you might imagine, and it is

this slowness that allows for consciousness, embodiment, precision, sometimes twitchy releases, and always highly productive, global, results. Since the word ‘slow’ is such a relative term, our question of what this is might be more easily understood by knowing how to find it.

### How Does One Find ESM Movement?

Here’s the bottom line for ESM (and, yes, sometimes I use this cue to help a client find it): “If you think you’re moving, but you think maybe you’re not, but it seems like you are, but you’re not completely sure, then you’re doing it exactly right.” ESM, for me, has three components. The first two – slowness and quality – are almost inseparable. The third is the direction.

**Slowness and Quality:** I use many descriptors to help people find the slowness

and quality necessary for ESM movement because moving this slowly is not normal. Nearly all my clients don't come anywhere close to moving slowly enough when they first try to do it. My standard descriptor to help people find the slowness and quality of ESM has been: "Imagine a plate with a small blob of honey on it. Imagine tilting that plate ever so slightly. Now, imagine how slowly that honey will move. That's how slowly you are going to move." Even with this, many clients don't move slowly enough to be doing ESM. With each attempt, however, you can cue them with, "Now, do it even more slowly." If a few cues to move even more slowly don't help the client do ESM, I'll tell the client to think of 'oozing' instead of 'moving.' Oozing is a really good cue. It takes people out of an habitual "I know how to move." I've also said things like "move one hundred times slower than a snail, or float as softly and gently as a feather floats on the air." Once clients get the pace of the ESM, they have it. You may need to remind them to do it, but they will remember how to because it is a specific quality of motion.

**Direction:** ESM movement is not an arbitrary motion. It can be done as an arbitrary motion; but, most times, ESM movement is more productive when it fits within the context of living and being. Give your clients the big-picture – the overall direction of the movement. In my experience, when the client knows the overall direction of movement, the whole system is participating. This is akin to the concept that a tiny motion anywhere creates response everywhere. Consciously knowing the overall direction activates and engages the whole system so ESM movement can travel responsively, and with learning, through the whole body. An ESM movement within a knee bend might have the overall direction of knee-to-nose, or it might be heel-to-butt. Other examples are: "Bring your whole arm toward (or away) from the side of your body," or, "stretch your fingers out." Sometimes a direction can be externally oriented rather than body-centered. Examples of this are: "reach toward the clock," or "let your knee float toward that spot on the ceiling."

Here's an unusual cue I used recently to get ESM movement, which contains all three elements: slowness, quality, and direction (both body-centered and externally oriented). My client was lying on his side. He was having great difficulty doing ESM movement. I asked if he was familiar with fabric and how the cotton

threads are woven tightly together to make this sheet he's lying on. Then I said, "The overall direction of the motion you will be doing is knee-to-nose; however, you are going to move your knee toward your nose on this sheet one thread at a time." With this focus, he did ESM movement perfectly.

## Using ESM Movement: Things to Be Aware of with Clients

Moving excruciatingly slowly reveals the imperfections and restrictions to a movement. In general, people don't like to show, or experience, their imperfections. It is as if there is a natural impulse to override the slow motion so we won't feel exposed. If this is true for your clients, compassion, coaching, and explaining (that tissues want to move slowly in order to change) can help the client over this hurdle. My clients engage even more precisely in finding ESM movement once they realize that there are fewer repetitions to be done and much more productive work accomplished based on how truly slowly they can go.

The great thing about ESM movement is that the process itself (learning how to do ESM movement) is already putting learning into the tissues and the client. Remember that clients might take your repeated coaching as an indication that they are doing something wrong. Remind yourself, and remind your clients, that each of the client's attempts to accomplish ESM movement allows the tissues to learn and to change. It is all productive; there are no mistakes.

## How to Help Clients Do ESM Movement

Clients understand immediately when I tell them that if you move fast, your tissues can only grab what they already know and so they learn nothing new. I also tell clients that tissues are very willing to change but that you have to ask for it slowly. I tell clients that the slower they go, the more productive work we will get done; and the faster they go, the less we will accomplish. These concepts help clients understand more of what we're doing and why. These also help clients refine their awareness and have patience in those moments when they don't yet have ESM or haven't yet experienced the changes, results, and benefits of it.

One extremely important concept for clients to know is that every motion in the body is important, relevant, and purposeful.

Sometimes we move as if we don't know this, as if some movements have meaning and others don't. I can feel it in the tissues when a client has this kind of orientation. It is as if the client's thought processes have decided that bending an elbow or knee is purposeful because it is accomplishing something and unbending it is irrelevant. Clients need to know that to the physical body every motion has value. In the body, bend and unbend are equally important, equally managed, and equally experienced. Feel for this type of imbalanced orientation or meaning within the client's movements as you use ESM movement. You may find you need to explain this concept to some clients.

Often you'll find that there is more productive change occurring when the client is doing an ESM unbend. In this case, direct the client to pay even closer attention to the movement during the unbending phase or, perhaps, have the client do repeated unbends. That might not sound logically possible. How can one unbend if one hasn't first bent? Believe it or not, if there's value in the unbend phase, then there is a lot of unbend that the client hasn't yet accessed within the tissues and will find through ESM movement. If this isn't the case for your client, then begin by passively putting the client in a slight bend and then ask for a continued unbend.

## Perspectives on Why This Technique Is So Meaningful for the Tissues, the Client, and Me

1. I believe tissues are very willing to change, but you have to ask for it slowly.
2. I believe if a movement is done normally or done quickly, the body and tissues can only grab what they already know, so they learn nothing new.
3. I believe far too many people, in general, are living in their large superficial muscles. I call these muscles the 'bulldozers' of the body. They heave, hoist, haul, punch, grab, and run. They move big, and they want to do their job quickly and be done with it. When we live in our bulldozers, there's little room for effectiveness, efficiency, and integration, or for core and fluidness to participate. We're stuck in 'sleeve' and, perhaps, we become convinced this is the only world that exists or is possible. Bulldozers try to do it all. It's as if the body and the bulldozer muscles think

every aspect of moving and being is their job. They can even have quite an attitude, like “this is right,” “I know how to do it,” and “I am the only one who can do this job.” Underneath the bulldozers is a world of motion not available as long as the bulldozers dominate. ESM movements will allow you to immediately notice when, where, and how those large superficial muscles are dominating.

4. ESM movements are nearly impossible for the large superficial muscles because the motions are too refined for those muscles to accomplish.
5. During a client’s session, ESM movements keep the action in the tissues under the radar of the large superficial muscles so the bulldozers can’t and don’t engage. This allows new options for movement to be learned within the system without being overridden or drummed out by the bulldozers.
6. ESM movements make it easier to notice when a bulldozer has engaged (both easier for me and easier for the client), so we can find ways to disengage that part of a pattern.
7. ESM movement lets you feel, within the tissues, the nuances, hitches, glitches, and improper function of a movement or pattern. When we move fast, or move normally, these hitches and glitches remain mostly unnoticed. ESM structural work causes the glitches to be noticed. It also lets the tissues begin to resolve these restrictions. By the same token, ESM movement allows you to feel the fluidity, effortlessness, and integration (what I call the ‘deliciousness’) of those tissues when they are well-functioning.
8. ESM movements create room for deep, refined, efficient actions/integration to wake up, shake off the habitual tensions, and begin to contribute/participate.
9. ESM requires that the client pay attention in order to accomplish the movement.
10. ESM also helps me (and the client) find that exact little range in which a particular restriction might exist. ESM movements back and forth through a minuscule range, can release the restriction. It often reminds me of what we do when we try to wiggle a rusty screw back and forth in order to get it to move.

11. ESM movement lets the practitioner, and eventually the client, perceive so much more accurately what is really going on.
12. ESM movement lets the tissues begin to resolve some of the dysfunctional patterns that have remained unperceived and unresolved (and yet fully functioning) within the system.
13. ESM movement lets clients experience a fluid and effortless world that they hadn’t previously known was possible. This, in turn, amplifies how habitual movement had been robotic, hard-working, and painful. Some clients will expand this physical experience into life learning. They will project this learning onto many other aspects of life by questioning old beliefs and seeking new ways to be.
14. ESM can be applied to the motion of a few fibers, to a joint, across joints, or to the full structure. An example of full structure is one client’s recent session. The client was on his side and well-supported with pillows. The ESM movements were ipsilateral arm/finger reaches and leg/foot reaches as I worked the spinal groove of that same side. I felt through my work for those exact moments when he needed to discontinue an ESM arm reach, maintain the arm effortlessly in its reached position, and begin an ESM leg reach. Then, I felt

through the tissues for those moments when he needed to discontinue the leg reach, maintain the leg effortlessly in its reached position, and do a further arm reach. We continued alternating ESM arm and leg reaches, reaching further each time, until one side felt complete. Then the client turned onto his other side and, supported with pillows, we repeated this. The session finished with a slight amount of neck work, just to make sure all our changes could travel through it.

## Conclusion

When it comes to Rolf’s primary ‘how-to’ of “put it where it belongs and ask for movement,” consider ESM movement as the preferred approach. When I am connected into a client’s tissues, eighty percent of the time the movement I ask for is ESM movement. I do this for all the information it gives me, for all the awareness it gives the client, and for all the change it produces in the structural system’s capacity to release, move, function, and integrate.

*Deborah Weidhaas has just completed twenty years as a Rolfer. In addition to structural integration, movement integration, and visceral manipulation, she is highly skilled in the mental, emotional, and spiritual aspects that arise for clients from our work. She lives and works in Los Gatos, California.*

# Recollections of a Post-10 Rolfing® Intervention

## *A Client’s Report on the Outcome and the Practitioner’s Perspective on the Process*

**By Richard Melton and Sally Klemm, Certified Advanced Rolfer™ and Advanced Rolfing Instructor**

*Introductory Note from Sally Klemm: When Richard Melton, sixty-four years of age, first came to me as a client, I learned he was an avid reader and a writer. Still, I was amazed and gratified to receive, some months after our work had concluded, his commentary on the experience and the results he had achieved. As Richard so eloquently describes, through awareness and attention he bridged the gulf that divides good static structure and joyous dynamic function.*

## Richard's Report

Up until an accident at age twenty-eight caused my fourth and fifth lumbar to go into subluxation about fifteen degrees, I was very active in sports. I loved running, swimming, body surfing, and snorkeling, so I was always trim and sinewy. The accident gave me a significant scoliosis, both from side to side and front to back, in addition to a twist in my spine. Two back surgeons told me that the only thing that would relieve my severe sciatica would be to have a surgery that could fuse the last four vertebrae together. Two other back specialists referred as 'second opinions' by my health insurance plan both said there was absolutely nothing wrong with me, and that I was faking it. I didn't trust the surgery track record of the time (mid 1970s) so I was left with the only other standard treatment available, which was 'wham bam thank you ma'am' weekly chiropractic, which was of no help at all.

After a year of constant, severe sciatic pain I heard about Roling Structural Integration (SI) and started the standard ten sessions. I could only afford the twenty-five dollar charge once per month so it took ten months for me to complete the series. With each session, one-tenth of the pain was released, until, at the end, there was no pain. The scoliosis was gone. I had gained three-quarters of an inch in height. And there were several other dramatic changes that straightened me up in terms of not fighting gravity. However, I was not given any hint from any of the doctors, the chiropractor, or my Rolfer about how to re-strengthen the atrophied muscles of the low back so that they would hold the vertebrae in place. As a result, my back would go out frequently, just from a sneeze, or picking up something, or even just getting out of bed too quickly. The low back would snap and I would be in agony for three or more days until the spasms relaxed.

This went on for many years, during a time in which I was getting almost no exercise, not even jogging, because it would make my low back ache. If I had to do any physical work, like maintaining my yard or picking up or carrying anything, I would always first put on a weight lifter's belt and cinch it up tight. Without aerobic activities, I gained about fifteen pounds and lost almost all of my muscle tone. After about twenty years of this, the back slowly started to stabilize and I started walking daily for exercise; just a little at first, like once around the block. Over about five years, I slowly added distance and

built up the speed until I was power walking about six blocks daily. Then I tentatively started doing a little jogging. I was so happy I could jog again that I bragged to a couple of friends who were soccer players. They said, "That's great, why don't you come play soccer with us?" I was stunned by the suggestion because I had been unable to run for so long and I didn't know anything about soccer. Finally I said, "But I don't know how to play soccer." They offered to teach me, so we started meeting weekly to do drills, which usually ended with a pickup game with others who came out to practice at the same field. I always wore my weight lifter's belt cinched tight, as a sort of exoskeleton, to give added protection for my low back, just in case. After a year or so of this training, at about age fifty-five, I joined a team on an over fifty, non-competitive, co-ed soccer league, playing on a small field. Then, the weekly soccer drills with my buddies shifted to weekly three-mile runs on the beach. About five years later I added playing weekly on the big soccer field in 'over fifties,' organized scrimmage games. By then I had lost all the excess weight that was gained when I had been inactive.

A few years ago I twisted my left ankle and it never seemed to heal completely. So I wore an ankle brace to play soccer. Then, my left knee started aching, so I started wearing a knee brace, in addition to the weight belt I was already wearing. I kept thinking the ankle and knee pains would go away, but they didn't. They were slowly getting worse. Then my wife had an accident and decided to get some Roling SI, so I decided to go with her and get some too. We went to Sally Klemm in Honolulu. After only four sessions, the ankle and knee pains were gone and several other interesting things happened. A couple of times each session, Sally would have me walk across the room and ask me to notice various things. What I noticed was that the way I walked and the way I stood had changed. Before, my knees would sort of lock back with each step, and when standing my knees were locked back. Now, while walking or standing, my knees never completely straighten. Instead, there is a slight relaxed bend in the knees. She also had me notice that my jaw might move slightly from side to side with each step.

Then I noticed that when I ran on the beach, the same thing was happening: my knees were no longer locking back with each stride, and if I paid attention I noticed my jaw moving slightly side to side with each

stride.<sup>1</sup> Also, I was no longer hitting down on my heel as hard as before. I was running more on the front part of the feet, and my feet were sort of rotating from along the outer sole to across the ball of the foot with each stride, and I was pushing off with my toes at the end of each stride instead of running flat-footed. I stopped wearing the ankle and knee braces. Then a couple of weeks later, it occurred to me that each part of the body is designed to flow with, and counter-balance all the other parts. So I decided to stop wearing the weight belt when I played soccer, thinking it was restricting that subtle balancing throughout the body. Now, at sixty-four, I am happily playing soccer twice a week, running the beach weekly, and I recently started running mountain trails, for the sheer joy of it, and all with no braces and no pains.

## Sally's Perspective

Despite having had a basic SI series years ago, Richard first came to me wearing a weight belt and knee and ankle braces, his manner taciturn until he described how he learned to play soccer, which brought with it a memorably radiant and joyous smile. Four sessions and only a few months later, he had both discarded the braces and recaptured "running . . . for the sheer joy of it." *How did that transformation happen?*

Based on his history, it seems that when Richard finished his basic Roling series, though his pain was relieved and he had avoided surgery, he wasn't integrated in a functional sense. In particular, nobody had taught him how to rehabilitate his back. While his basic series stacked him up well, he lacked internal support sufficient for vigorous movement. After twenty years of inactivity had stabilized him somewhat, this motivated fellow with good instincts knew that to get back in the game of life, he needed bodily support. He went for the best external support he could find, which was the weight belt. Though it allowed him to resume activity, it got him only so far; perhaps because the external support was not integrated, he injured other body areas – and then supported those externally, as well.

When I work with a client who received the basic series from another practitioner, though I want to respect and appreciate the basic structural order established in the past, I also want to offer the client something more than release from compensatory adaptations to past injury. In particular, I would like the client to experience dynamic function. Often, I want to see how much can happen



in a single session tune-up. This was the case with Richard. During our first session, I worked to give him a sense of fascial continuity throughout his body, rather than a sense of segments on either side of braced joints. I used lots of movement cues, calling for movement through major joints while my fingers were in the fascia. My practice is to get clients off the table frequently and ask them to notice and describe any differences in sensation. Though Richard wasn't used to this, he was willing to try it. He seemed pleased and satisfied enough with the single session that I thought we were finished with the intervention.

When Richard called some weeks later, having strained his back crawling under the house, I proposed an additional intervention consisting of three sessions. The first was axial first aid – in this case, biomechanical work to release articular restrictions at the sacroiliac junction and lumbar spine that brought him into my office. In the second, I addressed the old injuries, mobilizing Richard's feet and lower legs, working through the fascial buildup around both fibulae, and attending to the injured left ankle and corresponding compensatory restriction around the right. Besides 'rolling the bones' of each foot, we re-patterned the articular action through toe and ankle hinges. The final session was much like the tune-up in its goal of continuity throughout the fascial system, but with a much greater demand on Richard's somatic awareness, participation and engagement; e.g., initiating alternate psoas engagement while allowing response to transmit through the spine, shoulder girdle and mandible.

But the work was not over yet. The transformation took time, as well as Richard's individual effort, made possible because he had noted the significance of the session walkabouts. He grasped how important it was for him not only to observe, but also to take his observations out into the world and apply them to his daily activities, to integrate the new sensory experience and make it one with his way of being in the world. When he did, he built for himself the internal support that allowed him to dispense with the exoskeleton, and his whole being became congruent with that joyous smile.

### Endnote

1. From Sally Klemm: Clients who lock their knees often brace their mandibles. Teaching a client to release the mandible for an unencumbered stride yields rewards throughout the articular system.

# Case Studies with Yielding

## *Application for Joint/Lordosis Involvement*

By Hiroyoshi Tahata, Certified Advanced Rolfer™, Rolf Movement® Instructor

*Author's Note: Carol Agneessens and I have been exploring how to apply yielding to Rolfing® SI and Rolf Movement Integration since my first Rolf Movement training with Agneessens and Rebecca Carli in 1999. Please refer to the article "Yielding: Engaging Touch, Presence, and the Physiology of Wholeness" that Agneessens and I have published in this issue (page 10).*

**W**hen working with a client who is sensitive to the pressure of touch – as in the case of rheumatoid arthritis, connective-tissue disease, osteoporosis, pregnancy etc. – the practitioner should touch her or him in a careful way. In traditional Chinese medicine, from the perspective of *yin-yang wu xing* thought, there are five *zheng* (syndromes or presentations). My acupuncturist said to me that one *zheng* of mine has a tendency to be in functional imbalance in the respiratory system; people with this presentation – roughly one-fifth of the population – have sensitive skin and a highly receptive sense to outside pressure stimuli. For people with this presentation, or such as the cases described here, it might *not* be helpful to use intense pressure as a tool for intervention from the point of view of the safety and effectiveness of our work. More indirect and interventions like movement or a motility-oriented or energetic approach would be helpful instead. 'Yielding' technique falls in this category.

Below I describing three case studies with severe symptoms that were improved using yielding incorporated into Rolfing® Structural Integration and Rolf Movement work. I discuss the use of yielding in each case, and then in broad strokes in the discussion after the case studies.

### Case One – Client with an Injured Knee

This fifty-one year-old year female had a meniscus injury in her left knee due to playing tennis with a damaged knee ligament. Needless to say, she had severe chronic pain in the knee joint. She went to see doctors at five major hospitals; each, including an orthopedic and medical knee specialist, diagnosed that her knee would never be fixed, judging from x-rays and

MRI analysis. One doctor recommended a knee replacement. Her range of motion in the injured knee was limited: flexion only up to 90° and less-than-full extension (in the supine position, there was a tennis-ball-sized space underneath the knee). She limped with every step because of the narrow range of motion. She began weightlifting to attempt to rehabilitate her knee, had frequent joint injections with hyaluronic acid, and resorted to taking an analgesic (Loxoprofen).

### Intention and Intervention

My intention in working with this client was to increase space in the joints. As preparatory work, the other lordotic curves needed to decompress and yield into the massage table. (Hubert Godard uses the term 'lordosis' to describe the curves of the feet, knees, lumbar spine, cervical spine, and hands and their functional dynamic.) In this case, her cervical lordosis needed to be decompressed prior to work on the knee. When all the joints resonated coherently, it would be easier for the restricted or damaged joint to decompress, followed by it finding its natural position. Once this was achieved, the knee was educated to counterrotate; external rotation of the femur and internal rotation of tibia in flexion.<sup>1</sup> This helped to lessen the pain in the knee joint. The five Rolf Movement sessions following the Ten Series helped her to keep length in the lumbar and the lordotic curves free from the compression pattern on the lower and upper back.

### Results of the Work

After the sessions, the range of motion of the injured knee was improved. She recovered her ability to squat on her heels. Finally, the left knee could extend straight when she lay supine. I could observe her

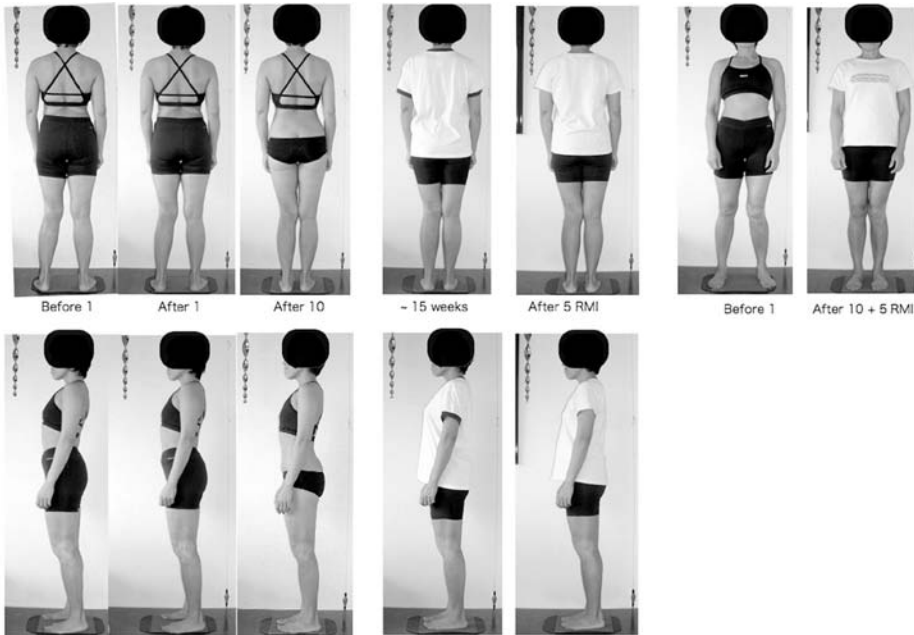


Figure 1: Before and after photos for Case One.

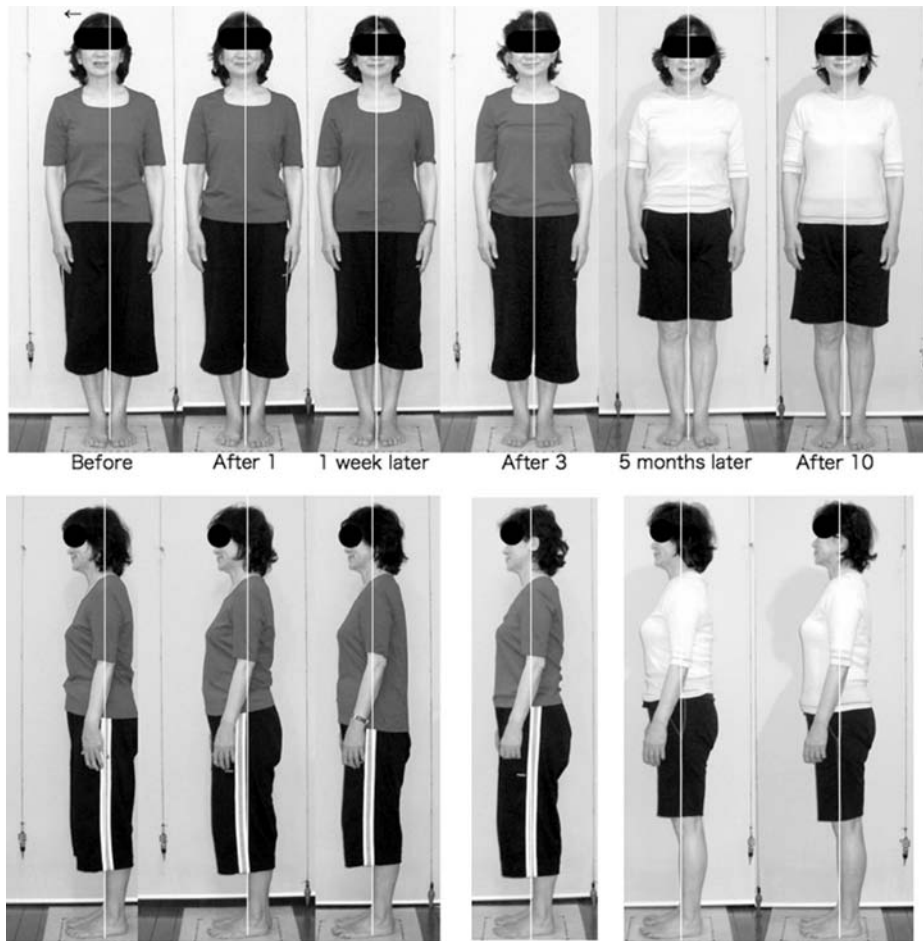


Figure 2: Before and after photos for Case Two.

using her left knee in a similar way to her right knee in walking. She acquired the ability to descend stairs normally, and she was no longer reliant on Loxoprofen. Figure 1 shows her progress through our work together. Interestingly, after the work she was able to eat bell peppers for the first time in her life, which might mean some change of instinctual perception. Also, she gained confidence in herself since she is no longer reliant on regular acupuncture and massage treatments for her well-being.

## Case Two – Client with a Hip Replacement and Meniscus Removal

This sixty-five year-old female had chronic pain in her whole body from rheumatoid arthritis. She had her left hip replaced after the femur was fractured in a fall on a rainy day, and then the left meniscus was removed. Her doctor advised her not to over-abduct her left femur because of the risk of dislocation of the artificial hip joint, and worry about this led her to support that side with only the medial line. In Figure 2, the “Before” photo, you can see that she gets less support through her left leg. Her walking also looked unstable.

### Intention and Intervention

Starting in the first session, in supine position, yielding work allowed the body’s five lordotic curves to decompress internally, followed by a natural repositioning her hip joint. Since the client suffered from rheumatoid arthritis, I worked on her throughout the Rolfing series with quite a gentle touch, listening to and following her body’s motile response in safe surroundings. This is an example of a case where yielding work was the necessary approach for the client’s bodily condition. The Ten-Series work with this client was based on the series goals (in terms of function) but was entirely movement and yielding work, no tissue work. (This has become my style of work in my practice.)

### Results of the Work

From her series, the client has gotten more support from her extremities and more core space. She reported feeling more vital. Her walk became more stable with contralateral movement. The photo labeled “1 week later” was taken before the Second Hour, and already we can see a differences from “After 1” as her body integrates the work; particularly, she has more horizontality in each diaphragm. There was about a five-

month break between the Third Hour and Fourth Hour due to her schedule, yet the photo data clearly shows sustained balance during this break.

## Case Three – Opening Lumbar Lordosis

This seven-year-old boy's first session was shortly after his father passed away. His mother was concerned about stress caused by the loss of his father, as well as the possibility that he had suffered head trauma in what had been hard labor for his birth. Additionally, every winter he suffered from asthma. He presented with prominent lumbar lordosis and no curvature in his neck (see Figure 3). His walk had no dimension side to side.

### Intention and Intervention

Yielding can be a very powerful tool for lordosis. The Ten Series work with this boy was again done using yielding and other Rolf Movement work, without any

tissue work. After ten sessions, there was still potential for change in his cranium, where it might have been traumatized at birth. I suspect that this cranial issue may have affected the rest of the body – i.e., his spinal curvature – because the shape of the back of the cranium, as a kyphotic curve must be closely related to the five lordotic curves in the body. I thus felt that the head should be the focus of advanced sessions. Fortunately, his mother continued to bring him for work, so I could follow and see how he was changing over more sessions. My intention with his head was for him to regain his kinesphere by allowing his cranium to yield into my hands from all directions, thinking that it would help him to reach different directions.

### Results of the Work

The photos in Figure 3 show clear structural changes, even though no tissue work was done. Through the course of the sessions, the cervical area developed

more secondary curvature and dynamic followed by more horizontality in each diaphragm. Further, the client reported that his running performance improved (after the fifth session, he could overtake the runner in first place in a relay race) as did his gymnastics score. Since receiving the sessions, he has gone through three winter seasons with no asthma attacks.

### Discussion

The main issue in all three case studies was to enhance support. I paid attention to all joints in the lordosis patterning even when I was concerned with a particular joint or juncture. Yielding was beneficial here as it helps compressed areas to open and spontaneously develop more space. In each case, I was careful not to force change on a damaged area; I did this by avoiding use of intense pressure. With Cases One and Two, I allocated appropriate time for tracking between table work and standing to bring coordination in gravity. In all the cases, I feel it was key to provide a safe field for the client, which can facilitate change from within.

Yielding can be used in many situations, including pregnancy. In 2010, I held a Rolf Movement workshop with yielding, which one pregnant Rolfer attended as a student. In the nine weeks between her seventh month and full term she exchanged weekly yielding sessions with another student. She had no trouble giving and receiving the sessions and we were able to observe her body develop a more dynamic integration. On the second day after the workshop, her water broke, and two days later, right at high tide, she delivered her baby. To her the timing seemed in accordance with nature. This suggests that adopting yielding into one's practice may benefit the practitioner as well as the pressure-sensitive client.

### Endnotes

1. Regarding counter-rotation of the knee joint: I learned about this normal motion of the knee in my advanced Rolfing training with Michael Salveson, Jan Sultan, and Tessy Brungardt in 2002.

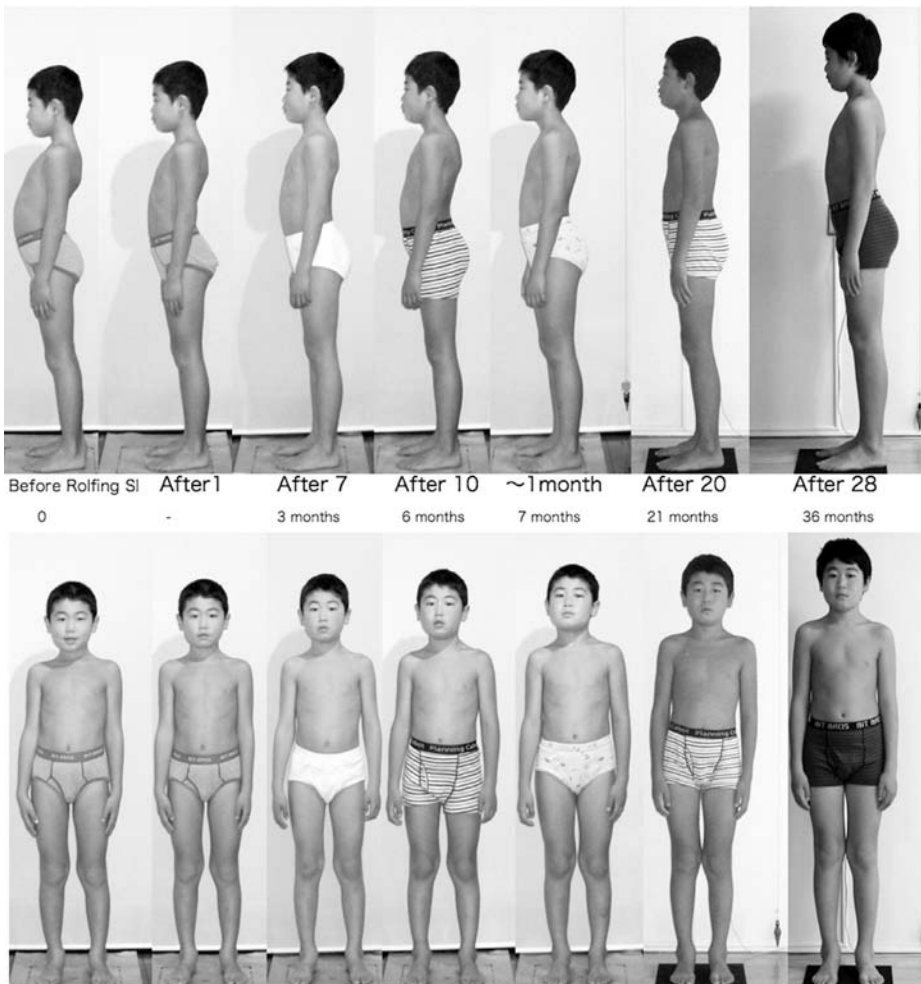


Figure 3: Before and after photos for Case Three.

# Contact Improvisation and Rolwing® SI

## *A Journey into the Joy of Movement*

By John Smith, Certified Advanced Rolfer™,  
Rolf Movement® Practitioner

*Contact Improvisation is a dance of improvising and partnering based on the physics of touch, balance, weight, momentum, flow and resistance. . . . Sometimes quiet and meditative, sometimes wild and athletic, it is a form open to all bodies and enquiring minds and is suitable for all with a love of playful physicality. . . (it is) a shared, non-orchestrated, non-choreographed dance.*

Robert Anderson<sup>1</sup>



Wild and athletic. (All photos courtesy of Alejandro Rolandi.<sup>2</sup>)

**C**ontact Improvisation (CI) is an improvised conversational dance between the gravity centers of two dancers. Rolwing Structural Integration (SI) at its best is the same, only in a slightly different context. Many of the physical elements are identical: an appropriate depth of touch, a deft commitment in the application of physical force, a sure sense of the vector of my force, a deep sensing of the other, a feeling for, a waiting for, an expectation of the response. There is a huge crossover in the skill set required in CI and Rolwing SI; there is the same kind of mutuality.

I have played with the art of CI for several years and it has deepened the structural aspects of my Rolwing practice and expanded my vocabulary of movement, making me a much more assured movement practitioner. Through this practice I have developed a greater range of ‘end-feel’ connections in my clients; I can listen more deeply to their response to all my interventions, both the myofascial and the educational. I have come into a more direct understanding of

the physical forces I employ, and a feeling for the qualities of movement I would wish to evoke in my clients. As a movement practitioner, I am always interested in finding new ways of pacifying habitual patterns in my clients (as well as in myself). The very nature of improvisation is that of constantly playing that edge between the habitual and the novel – the same field of enquiry as Rolf Movement Integration.

### **A Journey into the Joy of Movement**

In my journey as a Rolwing practitioner, there have been many times when the work has lost its interest to me. The unflinching remedy during these dry spells has always been to seek out, then explore, new means of deepening the work. Once, when I felt I was becoming a ‘serial meat processor,’ I undertook an exploration of cranial work, and though deeply skeptical of the rationale given for this work, I found it greatly extended and deepened my listening touch and gave me impressive results. Then I had a long and deep romance with the work of Dr. Hans Flury, which challenged me conceptually and led me to explore just what it means when we Rolfers speak of ‘structure’ and what we are doing when we attempt to ‘integrate’ this structure. Then I discovered the brilliant work of Hubert Godard, whose broad erudition in movement studies inspired me to explore other ways (beyond structural) of bringing lift to my clients. Before this, expressions from movement teachers such as “Allow your femur to lengthen towards the knee” would drive me to distraction! My perverse, sarcastic, left-

brained inner dialogue would go something like “No, the femur being bone is not likely to lengthen merely because I allow it!” I was yet to realize that there are many vocabulary sets around movement, and that the language of dance and the language of anatomy do not intersect perfectly. Godard’s work has allowed me to drop this over-analytical thinking and realize that expressions like “allow the femur to lengthen” are entirely valid in a movement context despite their anatomical improbability; expressions such as these work wonderfully well as ideokinetic suggestions that can have real effects on tonus. The next big discovery to deepen my Rolwing work was the practice of CI.

Part of my journey into the joy of movement was a visit to Kevin Frank and Caryn McHose at their beautiful Holderness retreat. There I did a workshop that explored Godard’s work of sensorial and perceptual awakening and how this can be applied to the work of SI. At the end of the workshop Caryn, a deep explorer of the somatic realm, gave me a very significant ‘debriefing’ which changed the course of my work and life. She said that, from her observation of my process, I had gone very deeply into the interior space (the space explored so profoundly in Continuum and Feldenkrais®) and that I was attracted to (she could almost have said ‘addicted to’) that luscious, deeply internal exploration of movement. In this interoceptive enquiry, the basic impulse is towards finding an internal sense of self; it is a deep exploration of our inner space, the space Godard has called ‘the territoriality of the flesh.’<sup>3</sup> What I needed next, according to Caryn, was to bring a sense of *the other* into my movement work, a referent *outside* of myself; this required an attention to and exploration of vectorial space – an exploration of my kinesphere and all objects within that range. This was salutary advice as I was already sensing that there can be something quite self-indulgent in the exploration of ‘the territoriality of the flesh’ – after all it is all about me, me, me! Caryn recommended two practices to explore – Authentic Movement and CI; Authentic Movement because it entails an external witness, CI because the process requires constant interaction with one or more fellow practitioners (if not with a partner, then with the floor, one’s ever-present partner). Deeply delving into both practices has enriched my Rolwing practice in extraordinary ways.



The floor as the constant partner.

## Contact Improvisation

Arriving back in Sydney, I found a thriving CI community in Newtown, an older and rather bohemian suburb. The group had a regular practice in a dance studio within an old industrial space that had once been a flour mill. Like many places where there has been a lot of concentrated meaningful activity and focused attention, this room had that special feeling of a sacred space; it calmed you as soon as you entered. The teacher, Alejandro Rolandi, guided us through a profound somatic warm up, and I began to sense that this work contained a somatic intelligence of a very high order. As a Feldenkrais practitioner I had done a lot of somatic work and thought I understood the scope of this form of enquiry, but here I was to discover that this little dance community had completely assimilated the work of Feldenkrais, Body-Mind Centering®, capoeira, parkour, Aikido, 5Rhythms®, yoga, Laban/Bartenieff – and any other discipline they could lay their hands on! – and had embodied and owned them.

In the first session, we were taken through a process of grounding, of orienting to space and to others within that space, of expanding the peripheral vision, of activating the proprioception of the feet, and of work with balance – all the kind of suggestions you would expect from movement practitioners familiar with the work of Godard. There was even the recognition of Godard's 'up' or 'down' types – dancers with a preference to sky or earth. Later I realized that these prolonged and detailed 'somatic warm ups' were the main reason why injuries in CI are so rare;

they prepare the body but quicken the perception as well.

It soon became apparent that CI has all the elements I required for my own continuing health – work on stamina, flexibility, core coordination, balance, expanded spatial awareness, improved timing, aesthetic appreciation, and great fun. And people attracted to the form are generally very decent people – improvisational forms tend to attract people who have no problem with dropping an agenda!

## What is CI?

CI is a postmodern dance form in which there are shared, shifting points of physical contact between the practitioners. This contact initiates a mutual exploration of movement that transforms into an improvised dance. Dancers maintain this sensed, living point of contact with their partners; all are engaged in listening to or following this point of contact without holding an agenda as to how the trajectory of the dance should unfold.

CI began in the United States as an exploration of all the physical forces that can be experienced by the body – momentum, torque, impulses of falling, rolling, spiraling, lifting and flying, giving and receiving weight, catching, moving with gravity and through it. It calls for the giving and receiving weight from your partner and maintaining a balanced relationship – or if unbalanced, allowing yourself to fall freely and to follow the new and unexpected trajectory. Like other forms of improvisation, it will lead to completely unexpected places. There is a yin-yang aspect to this kind of improvised partner work – who leads and who follows? Do I initiate/lead or do I respond/follow? Can I do both? Can I do neither? Mysteriously, a third element arises in which neither partner assumes the role of leader or follower; instead, both lead/follow and traverse the unknown path where the rolling point of contact will lead – which means that this form is inherently unpredictable.

CI is said to have originated from a highly dynamic dance piece called Magnesium (1972), which was performed by Steve Paxton and dance students at Oberlin College in Ohio. Later he was joined by dancer Nancy Stark Smith, who became a co-developer of this form. I heard an apocryphal story that Paxton, who was both a gifted dancer and an Aikido master, had the idea of reframing the essence of



A rolling point of contact.

Aikido in order to create a new approach to dance. The essence of Aikido is to use your opponents' own momentum to *unbalance* them; why not instead create a dance form in which you constantly try to *balance* your partner? A fascinating documentary, *Fall After Newton*<sup>4</sup>, documents the rise of this dance form. In it, Paxton narrates:

When an apple fell on his head, Isaac Newton was inspired to describe his three laws of motion. . . . Being essentially objective, Newton ignored what it feels like to be the apple. When we get our mass in motion, we rise above the constant call of gravity, towards the swinging, circling invitation of centrifugal force. Dancers ride and play these forces.

CI is typically practiced at meetings call 'jams.' Usually there is a long somatic warm-up often followed by some work around a particular skill. Learning a skill may seem at odds with the concept of improvisation, but skills in CI are viewed as pathways of exploration, rather than highly choreographed movements to be practiced and mastered in a precise way, as in classical ballet. Then comes the jam, the actual dancing with one or more partners, sometimes accompanied by music, sometimes without. Newcomers are usually informed of the unwritten rules of CI:

- You dance with the body you have – never feel obliged to do anything you are uncomfortable with – whether going into a movement that feels dangerous, or dancing with someone with whom you are not comfortable.

- Do not grip your partners, as this immediately limits their options – especially the option of getting away from you!
- Feel free to break the above rules if you are ready.



A moment of poise between earth and sky.

## The Underscore – A Somatic Treasure Chest

Since the inception of this dance form, Nancy Stark Smith has formulated a profound practice called ‘the underscore.’<sup>5</sup> This arose from her many years of observing people’s process and it formally outlines aspects of individual and group process during a jam. It is a monumental achievement that encapsulates an enormous amount of somatic intelligence. The practice has almost a liturgical feel. It contains sub-practices such as ‘the small dance’ – a seemingly simple standing meditation in which participants listen to the ‘reflexive dance of the bones,’ the constant activity of the tonic musculature involved in balancing us in gravity. There are periods of orienting to the space and people around you – to the space of the room, to the floor, to the ‘skinesphere’ (one’s own surface), to the kinesphere. Then there are moments of ‘grazing,’ of having mini-contacts and mini-dances with the other dancers, followed by lengthier partner dances. And like a good Rolfing session, there is time for an appropriate denouement, a winding down, a sense of when to stop, gather and share.

## CI and Rolfing SI

My practice of CI has deepened my Rolfing practice in a number of ways. It has helped me to:

- expand my understanding of the mechanics of movement and to widen my vocabulary of movement, which has made all my movement work with clients more fruitful and deeply interesting,
- improve my own body mechanics, such that I can do a lot of deep manual work without stressing my own body,
- sense the vectors of my own input into the client’s body and (most importantly) more clearly sense the client’s response to this input and thus gauge the depth of my work,
- navigate the boundary issues that are common to both CI and bodywork,
- enhance my ability to listen kinesthetically and respond in the moment-to-moment practice of SI, and
- enhance my peripheral sensing and the dexterity of my attention.

What is the simple aim of Rolfing SI? – To help our clients function well. And in order to do this, we help them deal with the long-term and short-term results of harmful patterns. We help our clients to:

- find greater efficiency of movement,
- eliminate or pacify harmful habits,
- explore new ways of moving and being, and
- find pleasure and joy in movement.

Rolfers are given many structural and educational tools to assist in this process. I would like to suggest that improvisational techniques and approaches, including CI, could certainly be added to this toolbox: these practices have enormous potency in helping us escape the tyranny of habit. Improvisation of any kind is never pure, never unrelated to its context, never without some form of constraint; otherwise, there would be simply too much choice – and too much choice is another way of describing chaos. Recognizing this fact, many improvisers are drawn to consciously selecting their constraints as a means of limiting the scope of the improvisation. But even within these constraints it is possible to be highly creative and innovative. In CI and other forms of movement improvisation, these chosen constraints are called ‘scores.’ Such scores channel the trajectory of the improvisation without removing the element of the unknown. Thus, even following a score, it is impossible to predict

where the improvisation will lead. There is obviously great potential for using cleverly constructed scores in movement practices of all kinds, finding new ways of challenging our clients to discover new options within themselves. Feldenkrais was a master in calling for such constraints – to oblige the client to find another way.



Quiet and meditative.

## We Have Two Bodies

Godard, with one of his extraordinarily potent simplifications, says that we have two bodies: (1) the body of vectorial space (Pilates, Rolfing SI, etc.), in which there is an outward reach both of one’s attention and the physical forces emanating from us; and (2) the body of ‘the territoriality of the flesh’ (Continuum, cranial and visceral work, etc.), in which the flow of attention is more inwardly directed.<sup>6</sup>

This is a wonderful image and helps differentiate movement practices according to where the center of gravity of the practitioner’s attention is placed – inwardly focused as in Continuum, or externally as in Pilates. With this shift in the vector of attention comes the reshaping of one’s kinesphere, and by reshaping the kinesphere we deeply affect tonic function, usually in ways that will increase movement efficiency by reducing parasitic muscular activity. This is the goal for our clients, yet as practitioners we need to understand this in our own bodies. As practitioners, we need to understand our own habits of attention, including where attention is habitually drawn (inside or outside) and how we selectively shape our own kinesphere. We also need to see the attentional habits of our clients, as this can be a big factor in deciding how to work with them. Ultimately we need both ‘bodies’ (depending on the environmental context), and to be really efficient in the world, one needs to be able to shift quickly between these modes of

attention and even perhaps to have both at once. This dexterity of attention has come as the great gift from my study of CI and is possibly the most potent factor in influencing my SI work.

I would encourage anyone in the bodywork field to explore this art form as a way of expanding their understanding of human function and indeed expanding their own potential for action.

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# Evolving the Actor's Neutral Body

By Heather Corwin, M.F.A., Certified Rolfer™

**A**s a Rolfer who has worked with bodies since 1993, I have observed that holding patterns and alignment in the body are a result of body structure, how we are taught to move, any injuries we have sustained, and what energy level we may have on a given day. Our parents or caretakers teach us how to move in our developmental years of infancy.<sup>1</sup> If one leg is longer than the other, as is true for many polio survivors, a limp will result. If a person falls from a tree or sustains an injury through a car accident, any internal and external scars will inform how a person moves. If the primary caregiver has a structural challenge, the child will most likely take on or imitate the parent's movement even if he does not have a physical challenge.<sup>2</sup> If an individual did not get any sleep the previous evening because she was running a marathon (metaphorically or literally), she may be exhausted the following day and slump when she normally is erect. Or if a person receives the devastating news that his mother just died, he may round her shoulders and collapse physically. Life happens.

But what about actors, those who train to portray life realistically? Because of inevitable events in life, an actor must train the body to be ready to work as well as the mind. "You can't just get up and do it and hope that miraculously your psychophysical mechanism is fully operational. You need daily, regular actor-training as the ideal accompaniment to rehearsing a play."<sup>3</sup> Actors need to develop a 'neutral body' to successfully chameleon into any role *and* to succeed in playing any character from a time period other than our own.

As an actor, an educator, a Rolfer, and a student of somatic psychology, I find blending modalities effective and successful to create a neutral body. Let me introduce you to some history and application of movement training for the actor, define somatic psychology, and how these can combine to cultivate a neutral body.

## History of Movement Training for the Actor

*An integral being knows without going, sees without looking, and accomplishes without doing.*

Lao-tzu

Let's look at seminal advancements to actor training in the recent century and how those methods intersect. Konstantin Stanislavsky (1863-1938) is the father of modern acting,<sup>4</sup> *the method*, based in the idea that art echoes life rather than the centuries-prior practice of actors using prescribed motions or gestures to match an emotion. Along with this new way of acting at the turn of the century came other methods of training for the actor that prime the body for performance.

Playwright Anton Chekhov worked directly with Stanislavsky. Anton introduced his nephew, acclaimed young actor Michael Chekhov, to Stanislavsky.<sup>5</sup> Michael Chekhov's method includes what he calls the *psychological gesture* also known as PG, which encourages the actor to *use a gesture to discover the essence of a moment or character*: "A PG needs to be strong, clear and simple. Initially, it is an exercise to awaken us to our willpower and to prepare us for creative work."<sup>6</sup> From this preparation and exploration of gesture, the actor has an essence of what she needs and can infuse that essence into her work. Another movement innovator of the time, Meyerhold,<sup>7</sup> broke down the parts of an action so the actor can increase her awareness around each detail of what she is doing to be able to augment any part of the motion.<sup>8</sup> In Rolf Movement® Integration, breaking down the parts of a motion is helpful to be able to identify where the challenge in motion occurs.

After these great innovators extended their knowledge to Europe and the United States, their methods inspired and informed the growth of other movement training such as Feldenkrais® and Alexander Technique that later became popular to incorporate into performance training.

A distant relative of the type of training inspired by Stanislavsky is present in somatic psychology; specifically, Gendlin's Focusing<sup>9</sup> and Selver's Sensory Awareness.<sup>10</sup>

## History of Somatic Psychology

Sigmund Freud is known as the father of modern psychology and is often credited for beginning a new science. According to Hanna in his book *Bodies in Revolt: A Primer in Somatic Thinking*, "Freud taught us that we are much more than the aggressive, fractional part of ourselves which is the conscious mind."<sup>11</sup> Somatic psychology may best be understood through understanding that "'Soma' does not mean 'body'; it means 'Me, the bodily being.'"<sup>12</sup>

Once the somatic channels for the satisfactions of the primordial human core become blocked, twisted or diverted, then the manner in which the inner energies of the human flow out an express themselves in conscious, active behavior will be deviated, inefficient and will be continually felt within the human as actual organic tension, anxiety and unhappiness. In its simplest statement, this is the psychopathology of Freud.<sup>13</sup>

What's more, somatic psychology "is a holistic form of therapy that respects and utilizes the powerful connection between body, mind and spirit. How we are in this world, how we relate to ourselves and others, is not just purely about the mind or our thoughts, but is also deeply rooted in our bodies and our spirits."<sup>14</sup> So somatic psychology differs from traditional psychology because the process is not talk-centered, it is body-centered. In Rolfing® Structural Integration (SI) sessions, I have found myself naturally using this body-centered process in sessions with clients. Sometimes I notice motions or gestures of the client that help integrate the event or sensation being explored.

## Neutral Body and Awareness

Now let's look at the definition of a neutral body, awareness, and then explore how to cultivate awareness. I define neutral body as a *body that does not give any clue to the inner life of the person*. We live in a continuum of evolution; a neutral body is highly adaptable and aligned, a body that employs economy of motion and is agile, with freedom to make

new choices through motion at a moment's impulse. These are the core principles of Rolfing SI. Simultaneously and inclusively, "[An actor] must have courage, but not merely the courage to exhibit himself – a passive courage, we might say: the courage of the defenseless, the courage to reveal himself."<sup>15</sup> A neutral body is a body in ideal alignment that functions absent of affect. A neutral body is free of obvious injury and does not imply a point of view. An actor needs to cultivate a neutral body in order to liberate the actor from being typecast in roles that echo the routine and modern life lead by that actor. Can you see how valuable Rolfing SI is for actors as a tool to cultivate the neutral body?

Awareness is defined as *being mindful to sensations as they happen*. "The first base is to make contact with your own skeleton and muscles."<sup>16</sup> An actor needs to be able to know where his or her body is in space before any selection of adjustments to facilitate acting choices. Sometimes patterns in the body impede other choices for body carriage because the musculature simply cannot lengthen or shorten to make the desired change. "An actor's habits are not just physical habits leading to disorganization of the body, commonly thought of as 'bad posture' or 'extraneous gestures,'"<sup>17</sup> these habits are most commonly born from how we are taught to move or as a result of a trauma in the body that consequently decreases motion. On a side note, "One of the goals of trauma therapy is to help those individuals understand their body sensations."<sup>18</sup> Releasing trauma is often necessary to cultivate a neutral body and may require specific applications of movement, bodywork, and therapy. In much the same way, by spending time increasing awareness, strength, and flexibility, an actor is tending to his or her garden of possibility. Prior to being able to tackle the rigors of a role like Queen Victoria, an actor must first have a basic understanding of her instrument (her body), before advanced techniques of body movement or acting can be explored. However, young actors often push to force a result. "Once an actor forces any sound or movement, it is an opportunity missed to breathe deeper and find the energy to solve a problem."<sup>19</sup>

The road to the neutral body is not easy. "The actor [has] to be willing to work extremely hard in order to develop any apparently 'natural' talent."<sup>20</sup> In other words, the neutral body for the actor is an

empowering tool for artistic evolution, and developing it requires great courage, effort and perseverance. Neutral is not a new idea in theater. Jacques Lecoq created a form of neutral work for the actor using his model of the neutral mask:

Unlike a character mask, which has its inner conflicts, the neutral mask aims to achieve a state of calm without tension or contradiction. Since this mask aspires to being open, available and ready to respond to the world it encounters, the actor must be prepared to engage willingly with that world – a world that moves and will move him. Each encounter with the world creates a state of off-balance, since we experience something new and unknown. Human beings seem to possess a strong inner dynamic that creates a tension between a desire to enjoy the provocation of instability, and a fear of what this state of off-balance may bring. The neutral mask allows the actor to recognize – in a playful way – that the experience of calmness and openness can be achieved only by accepting the perpetual motion between balance and off-balance. The neutral mask invites the actor to enjoy the pleasure of going off-balance so as to find a new balance.<sup>21</sup>

At the inception of the historic and celebrated Group Theater in the 1930s, each member of the ensemble agreed to focus on self-awareness so that "a better understanding of himself would inevitably result."<sup>22</sup> Awareness is the first step to that understanding, the first building block of the neutral body. "Awareness has to be a constant. It is through awareness that we learn essential things about the body, its resistances, points of balance, its potential plasticity."<sup>23</sup> When an actor is able to discern what's happening in her body, she can then make choices to change or enhance her areas of awareness. Knowing the body better allows more choices when creating a character because more of the body's motion and nuance is available to the actor. "The separation of impulse from movement, action, gesture, sound, word is an analytical tool enabling us to break down the process of acting, rather as articulation breaks down an action in order to better understand the physical process."<sup>24</sup>

Discovering what *triggers* inefficient holding patterns in the body is vital to



increase awareness. "At war against an ideal state of freedom to choose how we shall use ourselves and embody our intentions, are our various predilections and aversions; it is as if we are prepared to use parts of our make-up and not others, and nowhere is this seen more strongly than in the attitudes and emotions which we choose to exploit, or reject, as actors."<sup>25</sup> Triggers are situations or sensations that inspire visceral reactions. "Sensory messages from muscles and connective tissue that remember a particular position, action, or intention can be the source of a trigger."<sup>26</sup> An example of a trigger might be the smell of bacon being cooked in the morning, which reminds the person of fun Sunday breakfasts with family. If the person also recently suffered the tragic loss of one of her parents, the trigger would have several layers.

Rolf encouraged clients to systematically establish awareness by checking into feeling or sensations in the body: "You start at the periphery. You start at the outside of the body and you start more or less at the ends of the body." Movement training to create the neutral body (for the actor) begins the same way. Regardless of the movement method employed, classes often commence with an awareness check-in – each actor standing, looking at his or her body in the mirror. Awareness questions are asked of each student to internally acknowledge: Are you balanced right to left? Do you feel you're leaning forward? Is one shoulder higher than the other? What about your hips? And so on. "Yet many actors, particularly in America, ignore the need to focus on and control the use of their physical being, both voice and body. This leads to severe limitations in their work, and by the time they become bored with the narrow spectrum of roles they are to able to play, it is usually too late."<sup>27</sup>

## Neutral Body in Performance

*It takes courage to grow up and become who you really are.*

e.e. Cummings

If the body is the focus of awareness, the mind can follow. Thomas states this clearly: "I had created a place of understanding, where body, voice, and mind, and feeling (hopefully, soul, as well – I have to say it) could link and transform themselves into art."<sup>28</sup> For some actors, staying in the mind is the way they prefer to work, which often leaves the audience with a vague sense of unease because they have

chosen to dismiss the clearest instrument the audience can perceive: the body. "On stage, movement is sometimes visible, reaching the audience through their eyes. Other times, the movement is invisible and directly penetrates their hearts, such as in the case of sensations that flare out beyond the stage."<sup>29</sup> Ideally, an actor is working to make seamless the melding of the body and mind when pursuing the action of her character. Only through the facility of a neutral body can this journey be supremely successful.

We...need to be able to ensure that even our smallest movements reverberate energetically throughout our whole body. We also need to be able to do this with a sense of ease. In order to awaken our will and develop our ability to energize the smallest movement, Chekhov suggests that certain gestures can help, and [his exercises] are about awakening the whole psycho-physical organism that is the actor.<sup>30</sup>

Lee laments, "it was difficult for me to believe that I could accomplish more with less effort."<sup>31</sup> This *less effort* comes from years of training and years of doing. The same idea could be applied to the practice of Rolfing SI. The body is a mirror of the mind. A neutral body requires dedication and years to cultivate. I wish I could point to an actor like Fred Astaire (who Rolf was known to hold up as the example of the only human who did not need Rolfing SI) as the prime example of how a neutral body looks. The truth is every person has his or her individual ideal that cannot be measured by comparison.

When employing Meyerhold's system of Biomechanical actor training, the goal "is to acquire *skills*, skills which are fundamental to the craft of acting: precision, balance, coordination, efficiency, rhythm, expressiveness, responsiveness, playfulness and discipline."<sup>32</sup> Most methods of movement training would claim to have many of these skills as their goals.

## An Example of Rolfing Sessions for an Actor

When I worked with an actress who performs on both stage and screen, we found many breakthroughs leading to alignment in her body through the Rolfing Ten Series. For example, freeing her breath in the first session was tantamount to her articulating some of her feelings around family and her years growing up. What

she and I did was informed by somatic psychology, what she brought into the room, and the curiosities I had throughout our sessions informed by her physical and emotional responses. One of her goals was to open her shoulders laterally so her head could be balanced on her torso. By the end of session three, we had met that goal. Prior to our working together, she had come out of a mild depression that mirrored this change in her body. She reported feeling a new sense of optimism.

Around session five, she had an important audition for a guest-starring role on a hit network show. She was preparing to play a tough-as-nails cop who has someone break into her home. Her character had to be prepared to shoot the intruder. It was a great role that made the actress more anxious to do a good job in the audition, which was the very problem in her preparation. As we worked in the session the night before the audition, her anxiety was in the room. We talked about what was happening in her body. I made the suggestion to focus on the breath. I urged her to know she'd done her homework on the role, that the breath would allow and support emotions, and to see if coming from a place of relaxation and ease might be more effective when approaching the audition. We had a great session. Her pelvis was freed, she was walking with an engaged and lengthened psoas, and her low back was long.

She called me the next night to tell me that this audition was the first where she could remember actually feeling relaxed *and* feeling like she did a great job. She didn't think she booked the role, but she felt great about what she did in the room – and that's all an actor has control over. This actress said she had never breathed through an audition before. The world was opening to her in a new way because she was evolving with her body.

## Conclusion

*Art is the most intense mode of individualism that the world has known.*

Oscar Wilde

Through movement and somatic psychology methods, an actor can discover processes that refine her ability to notice her experience, physically and mindfully. Applying methods of somatic psychology and movement training with Rolfing SI will increase an actor's awareness.

Awareness deepens potential creative expression, moment to moment. Through awareness cultivated by Roling SI, Sensory Awareness, Psychological Gesture, or breaking down the elements of a motion, a neutral body is cultivated. By evolving a neutral body, an actor is investing in her potential as a creative artist as well as her potential as a human being.

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# Thoughts on Tensegrity and Hydrostatics in Human Architecture

By Sherri Cassuto, Certified Advanced Rolfer™

**Abstract**

The gravity force results in the human structure having weight. The skeleton supports this, but speculation regarding tensegrity as the human structural strategy brings up new questions. This article attempts to develop this conceptualization and offers a framework of thought to better understand how humans hold their shape and move about. A working model is built using both the research to date as well as the general application of the principles of tensegrity and hydrostatics to human architecture. An attempt is made to explain why and how the skeleton, as a rule, is not intended to sit on itself. The possibility that many degenerative symptoms, including joint wear, are actually the result of structural system failure is considered.

**The Elephant in the Living Room**

*Fascia is the organ of posture. Nobody ever says this; all the talk is about muscles. Yet this is a very important concept, and because this is so important, we as Structural Integrators must understand both the anatomy and physiology, but especially the anatomy of fascia. The body is a web of fascia . . . For example, why, when we work with the superficial fascia does this change the tone of the fascia as a whole?*

Ida P. Rolf, Ph.D.

Structural integration (SI) practitioners are constantly confronted with the medical evaluative and treatment histories of their clients and, sometimes, things just don't seem to stack up. For instance, a review of the literature on the biomechanics of bone reveals that although many biomechanical

properties have been measured (e.g., compressive, tensional, shearing, bending, and torsional strengths), the skeleton is primarily investigated as a defense against gravitational force. Also, the mechanical properties of bone as a material and a tissue have been intensely explored and reported on, but many of the conclusions admit that these results are only suggestive of conditions *in vivo*. Individual bones are complex aggregates of tissues and properties and are variable along their length and breadth. Whole skeletons, as groupings of different bones, are therefore more difficult to make generalizations of. This so confounds scientific evaluation *in vivo* that biomechanical studies of bones have been mostly done on individual bones or pieces of mineralized bony material. How forces are transmitted through and across the human structure remains something of a frontier. This discussion, admittedly, faces the same obstacles, but the system as a whole can and needs to be conceptualized functionally.

Compression, tensile resistance, bending resistance, torsional strain and stresses on bone have all been investigated. Absent are abrasion or wear resistance studies on bone although cartilage has been analyzed this way again and again. This author has found no evidence of inquiry into why cartilage wears out, although it might be assumed that these studies have been done because cartilage wear is common.

Cartilage is understood to be miraculously smooth, with a frictional coefficient so small that it has yet to be successfully mimicked with prosthetics. This is the only protection for joint surfaces, and for many people lasts a lifetime. In others, it wears prematurely. It would seem that regardless of how smooth the cartilaginous surface and how effective a lubricant is synovial fluid, constant rubbing over a lifetime would wear it out. One must wonder why all hips and knees don't wear out. Is it simple genetics? In those who require replacements, how come bilateral replacements are not always necessary?

The evolutionary path of prosthetic joints as extremely hard, abrasion-resistant appliances points to the expectation of high compression and frictional loads. Assuming that abrasive wear is normal, this is a reasonable response to the presentation of many orthopedic patients. Obviously, titanium is far more resistant to wear than mineralized bone. Why, then, are titanium

prosthetics expected to last on the order of only ten years while bones are designed for a lifetime of effective use? It is a matter of logic to see that in a normal situation, joint surfaces must not rub against each other; ideally, space exists between opposing cartilaginous surfaces, but these must approximate with unusual load (jumping, for instance). Perhaps the need for a prosthetic is not normal, but indicative of a structural system failure whose most prominent measurable symptom is joint wear. Once the joint is replaced without attending to the system failure, the load and abrasive wear continues unchecked – or is even increased as a consequence of the replacement, hence the need for materials like titanium.

### The Tensegrity Component

The exploration of tensegrity as the architectural strategy for life has been increasing. It has been shown to be the case on a cellular level<sup>1</sup> and has been speculated to be operative on an organism level as well.<sup>2,3</sup> By definition, the stiffer elements in a tensegrity structure are in approximation, but not in direct contact. The real question is: How does this work in a living body? In other words, if human structure is indeed based on tensegrity, then how do the bones stay apart?

We know that the application of the tensegrity model to cells has resulted in a much more precise and satisfying understanding of the architecture of life, thanks in large part to the work of Donald Ingber. We also know that in nature, the smallest design forms are generally repeated in larger format (fractal patterning), so it is a natural progression to see that human beings are also designed on this basic structural principle. This notion, basic to structural integration, has been catching on in the larger scientific community.<sup>4,5</sup> Classically, in SI circles, the debate has been between tensegrity and hydrostatic models for human structure. As time goes on and more research is published on the biomechanical basis for movement and support in life forms, the apparent conclusion is that both are operative.

The tensegrity model requires a pre-stressed, continuously tensile, discontinuously compressive structure. It is simple to imagine the bones of the skeleton as representing the stiffer elements on the classic tensegrity design and the connective

tissue (CT) as the cable-like elements. Muscles are enclosed within the cabling in order to provide for dynamic motion in a short time frame.<sup>6</sup>

From an inquiring perspective, there are some big, lingering questions. Tensegrity masts and spoked wheels are all very nice as design models, but it becomes necessary to understand how to make the leap to human form in a way that empowers us to work with precise intent. Wheel hubs maintain a consistent distance from the rim when the spokes are balanced, but applying that to human form is not satisfying. Something is missing. Making this harder to grasp, or even accept, is the reality that when muscles contract, they impose mostly compressive forces across these joint spans until motion begins. As the joint changes position, the proportion of compressive force generally diminishes, but that it is a powerful force at initiation is impossible to ignore. Even those considering tensegrity as a whole skeletal system design assume the joints are in direct compressive contact.<sup>7</sup> One would think this doesn't fit with the system. (NB: many tetrapods, e.g., felines and ungulates, have no bony attachments connecting the axial skeleton to the shoulder girdle, yet these limbs accept and utilize movement loads quite well). Besides, remember that cartilage is too soft a substance to withstand a lifetime of compressive contact, even lubricated by synovial fluid. It is known to have a tremendous capacity to withstand hydrostatic pressures, but seems not to have any adaptive response to compressive forces.<sup>8</sup> This article suggests that the joints are generally floating in delicate approximation. They are indeed lubricated, and for that lubrication to be effective, light, non-compressive contact must be the case. Joint capsules help to maintain the higher hydrostatic pressures necessary for this arrangement. The nature of tensegrity design principles would have these stiff elements held in approximation in precise place by the balance of the whole system. Our understanding of the human strategy of tensegrity needs to address this in order to be taken seriously and for our work to progress.

### The Hydrostatic Component

The molt stage of crustaceans (e.g., crabs) is a good example of hydrostatics. During the molt, or growth stage, crustaceans lose their hard skeleton, so have to briefly rely on hydrostatic pressure for motion. Triggered by hormones, the molt-stage crabs pump

themselves full of fluid to increase their size (to allow for growing room), their shell opens, and they climb out. Very vulnerable in this stage, they hide until their cuticle hardens to become a new, larger shell.

It had been believed that crabs were like rag dolls at this stage, unable to move at all, since their hard exoskeletons were gone. However, more recently it has been shown that during their molt phase crabs are indeed capable of moving about, but their reduced speed and agility renders them more vulnerable to predation.<sup>9</sup> Besides, if they were really like rag dolls, how would they have climbed out of their shells in the first place? Their hydrostatic skeleton 'works' without the hard parts, but not well enough for their lifestyle. Defending themselves with this softer cuticle would be ineffective at best. In fact, the soft-shell stage cuticle has been shown to have the same tensile strength as the hardened shell, so is able to resist hydrostatic forces in motion.<sup>10</sup> The cuticle, resistant to tension, acts as a hydrostatically powered skeleton, enabling movement while it hardens. The basic hydrostatic model works (very well in caterpillars, for example), but skeletal struts give animals more options. Crabs can move more quickly and efficiently with less energy with a hard exoskeleton than they can during their hydrostatic molting phase.

**Putting It Together**

It is simple to see cells as bags of fluid. Less simple to imagine, but equally true, is that whole human beings are bags of viscous fluid as well. If we didn't have compression-resistant struts, then when we jumped from high places, we'd flatten (as with Ingber's cells) like pancakes, springing back to shape when the forces were relieved. In fact, when we jump, we do deform a little and return to 'zero' when the forces are relieved, but our shapes remain remarkably the same. This is the genius of the system.

Bone is known to be almost equally resistant to compressive and tensile forces.<sup>11</sup> If we add hydrostatic pressure to the tensegrity model of struts held in place by the balanced, dynamic tension of the fascial system, there is a very good argument for the maintenance of relative position of the bones to the rest of the system, no matter how we move and how we change our shape and load profile. Perhaps the network of all fascial structures defines boundary containers, from joint capsules to superficial fascia, which acting together provide for

whole-structure stability and balanced suspension in dynamic motion. This web provides for the extensive use of hydrostatic pressure, arguably a requirement for living tensegrity structures.

**Superficial Fascia as a Superficial Connector**

Superficial fascia (SF), seen classically in structural integration as a 'body stocking,' covers our bodies, but how exactly is it connected everywhere otherwise? The answer to this goes in several directions by necessity.

Imagine the external layer of fascia, the SF, and deep, or investing fascia (DF) as a double-walled tube. The outer layer is an areolar, more elastic layer. Connected to it by extensible fibers is a deeper, stiffer layer that dives even deeper, or invests, in strategic places. The fiber direction of the deep fascia runs at right angles to those of the muscles, so is clearly set up to resist expansion.

In a cross-section of this model, the bones appear suspended within the tube (see Figure 1). Occasionally, these diving layers, or septa, connect to the bones of the skeleton, surround the bones as periosteum, and/or maintain space between parallel bones as an interosseous membrane. This constitutes a completely continuous network, both communicating and distributing load.<sup>12</sup> The fascial compartments so defined are packed in place primarily with muscle tissue. The high water content of living tissues results in an internal fluid pressure which presses against the septa, generating tensile force everywhere and adding great stability to the entire design (see Figure 2).

Frei Otto suggested the hydrostatic nature of fascial compartments long ago.<sup>13</sup> By imagining the structural system this way, it is clearly obvious that muscular contraction communicates across and through all the septa and that any muscular contraction increases the internal pressure locally, further stabilizing the position of the CT tensegrity elements. Huijing and Baan have proven such coordination of muscular contractions many times.<sup>14</sup>

The pre-stress in the SF combined with the hydrostatic nature of our mostly fluid tissues keeps our entire structural system, including its individual compartments, whole and under pressure. This internal pressure maintains reflexive tensile load in the SF, so the system is necessarily

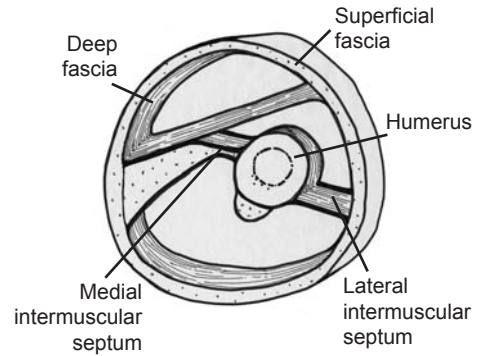


Figure 1: Stylized section through the upper third of right arm, showing connective tissues. Drawings by the author.

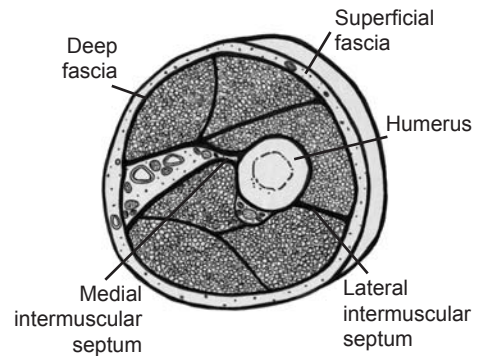


Figure 2: Stylized section through upper third of right arm as in Figure 1, also including muscle tissue and major vessels.

reciprocal. It is not possible to overstate the importance of this quality. This is not a new idea. When cutting skin or CT (as in surgery), the tissues immediately give way due to the tension stored within.<sup>15</sup> This tension is global.

**Muscles = Motion Engines + Packing**

When thinking of muscles, one is accustomed to imagining the origin, insertion, and muscle belly of a particular muscle as an individual gross motor unit. Here, attempt to see muscles in cross-section acting not individually, but in groups, part of a complete network of mechanical balance. Imagining them this way, they become not only motors for motion, but generators of the internal fluid pressures necessary to both drive and stabilize body position and movement.

Muscles, anatomically not CT themselves, but units whose very fibers are invested with CT, are surrounded by envelopes of fascia. These, in turn are in close association with adjacent envelopes and septa. Having proper tensional balance and resiliency in each fascial envelope allows the motor/

muscle unit held within it to function optimally and to produce motion with no lag time. As an individual muscle contracts, its fascial container, or 'envelope,' expands and therefore its tendons approximate. This results in an action that both provides for and regulates motion about a joint. What is less obvious but equally vital is the action of muscles on their adjacent fascial compartments (including other myofascial units) and CT structures to influence the precise tensioning of intermuscular septa. It is clear that the expansion of muscle compartments yields precise increases in internal pressure and tensile loading of CT (the neurological implications of this will be considered later). The surrounding SF contains and is strategically joined to the deeper structure at specific places, creating a whole-body balanced, tensional environment.

### Physical Implications

The bones, suspended within fascial compartments, are held in place by sub-compartments, which are themselves casings defined by septa and packed with muscle (please refer back to Figure 2). The same pressures resulting from muscular contractions between these septa that cause venous blood to return to the heart also stabilizes bony and CT position within structural 'tubes,' and by extension, the whole body. Given this conceptualization of bones, it follows that a failure in balance will result in structural symptoms. Bodies have an exceptional capacity to self-regulate, by adjusting tension as necessary, and even in extraordinary circumstances, to distort certain bones.<sup>16</sup> If even this adaptive threshold is crossed, however, what follows must be a system-wide failure of the tensegrity network.

Thanks to the gravity force, tensegrity degenerates toward compression. In the human body, as tensional balance is lost, the spaces so brilliantly maintained between articular surfaces are diminished enough to wear cartilage and then the bony joint surfaces proper. Seeing things this way, it seems far better to intervene early and restore balance than to allow irreparable degeneration to progress, ultimately requiring joint replacement. If the nature of structural balance in life were more generally recognized and restored when necessary, there might be fewer such traumatic interventions required and perhaps, when joints did need replacing, they might only need to be replaced once.

### Neurological Implications

By regulating internal pressures between deeper fascial tissues, our tensional CT balance makes precise regulation of our position in space possible at any moment and in any 'shape.' It has long been established that CT, including bone, is innervated and that proprioception is at least one of its functions.<sup>17,18,19</sup> If fascia is seen as a passive tissue, the proprioceptive nervous system function within it can't be recognized for the powerful tool it is. Rather, there has been speculation as to why these nerves are involved at all. Assuming human structure is tensegrity/hydrostatics based and, therefore, in system-wide constant communication, it is easy to imagine these neurological elements as being proprioceptive in nature and maybe even the basic nature of our proprioceptive system. Loading of any type, from any direction, stimulates these nerve endings and delivers precise information, which in communication with the rest of these tissues tells us where we are in space. An organism-wide tensional balance must be communicative, if even to simply remain in balance. How else would such self-regulation otherwise be possible? CT is a perfect medium for this. As well stated by Helene Langevin, "... the connective tissue matrix is a key participant in mechanotransduction, or mechanisms allowing cells to perceive and interpret mechanical forces ... one can envisage the whole body web of connective tissue involved in a dynamic, body-wide pattern of cellular activity fluctuating over seconds to minutes reflecting all externally and internally generated mechanical forces acting upon the body."<sup>20</sup> Currently, there is great interest in the nature and function of nervous system communication within the CT. The conclusions of work done exploring myofascial force transmission also support this possibility.<sup>21,22</sup> What a perfectly obvious way to determine exactly where we are in space.

### Interventional Implications

Structural therapists look for and attempt to achieve something often referred to as continuity or flow. Colloquially, this is not a conscious physics or engineering notion, although the preceding discussion proves that it clearly physically exists. The therapist's senses are educated over time to perceive this quality in his/her clients. It is sought after through intentional intervention in the tissues and the whole living system.

When contacting the fascial system with a precise touch, but also with a deep, bony intent, this tensional framework allows the facilitation of major positional shifts that are of very deep origin. This is accomplished with even a vague conceptual understanding, but by using educated, informed touch while knowing the anatomical relationships of the tissues in detail, a practitioner becomes able to determine which fiber groups in which vectors are strained and can use these attachments fluently. The physical and neurological capability of CT, mated with the properties of tensegrity and our structural system's pull toward equilibration, provides overwhelming potential for therapeutic intervention. Precise, informed touch lights up not only mechanoreceptors, but also neuroreceptors, and is communicative system-wide. When working with clients, the quality of informed presence is ultimately the most powerful tool a practitioner has.

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# Healing the Trauma Body

By William Smythe, Certified Advanced Rolfer™

**W**e have all been traumatized, some more than others. Trauma is not special . . . it's part of the lived experience. During my thirty-two years of clinical experience, I have witnessed that traumatic wounding is at the heart of most human suffering and that everyone in the field of structural integration (SI) needs to know how to work with it. My hope is that this article will evoke a deeper understanding of what trauma is while providing strategies for its resolve.

## What is Trauma?

Trauma is a Greek word for injury, wound, pierce, damage, or defeat. Sigmund Freud, in 1914, defined trauma ". . . as a breach in the protective barrier against stimuli leading to feelings of overwhelming helplessness."<sup>1</sup> *Susto* is an ethnomedical condition common to Latin America and is described as an illness or 'fright paralysis,' also known as soul loss resulting from a traumatic experience. We have all witnessed the 'deer in the headlights' frozen look or experienced feeling 'scared stiff.'

## Kinds of Trauma

**Generational trauma** may be passed from generation to generation in self-perpetuating cycles that are hard to break. It can be transmitted by social learning in the family and community, and growing evidence shows that it may also be inherited epigenetically in the expression of the genes and from before conception in genomic imprinting. Family Constellation Therapy developed by Bert Hellinger and shamanic rituals from various indigenous cultures may provide an opportunity to liberate oneself from the suffering of the ancestors.

**Conception shock**, or first union, occurs when the sperm (issues of the father) penetrates the ovum (issues of the mother) creating the potential for a new human identity. One's conception could be unwanted by both or either parent due to a myriad of circumstances.

**Implantation trauma**, or second union, occurs seven to nine days after conception as the ovum attempts to 'attach' to the uterine wall. The degree to which the

mother desires a child (how much her body aids and/or resists implantation) and any attempt to abort the embryo will leave an imprint on the whole being.

**Intrauterine trauma** can take place during the full term of uterine life (nine months). The mother's psycho-emotional life directly imprints the developing embryo/fetus for better or worse as does any toxic or noxious substances that she ingests.

**Birth trauma** is damage to the tissues and organs of an infant caused by mechanical forces during childbirth, often accompanied by impaired blood circulation and organ functioning as well as hypoxia. The most frequent and significant birth injuries are to the skull, brain, and spinal cord, the severity of which usually distinguishes spontaneous birth traumas from those of an obstetric nature such as injuries from the use of forceps or vacuum extraction.

**Attachment disorders** take place during the pre- and perinatal phase of development. This is also known as the 'maternal attachment period' when the developing human requires the full attention of the primary caregiver for survival (last trimester until two years of age).

**Emotional, psychological, and physical traumas** are persistent throughout one's life.

**Soldier's heart**, also known as war trauma, leaves the warrior with symptoms of post-traumatic stress disorder (PTSD), anxiety, cognitive impairment, etc.

## What Causes Trauma?

As Freud said, the cause of trauma is a breach in the protective barrier against stimulation. What is this protective barrier that Freud refers to? According to traditional Chinese medicine (TCM), all living bodies generate an external field of energy called *wei chi*, which translates as "protective energy." The definition of *wei chi* in medical qigong is slightly different than that of TCM. In classical TCM texts, the *wei chi* field is limited to the surface of the body, circulating within the tendon and muscle tissues. In medical qigong, however, the *wei chi* field also includes the three external

layers of the body's auric and subtle energy fields. This energy originates from each of the internal organs and radiates through the external tissues. There the wei chi forms an energy field that radiates from the entire physical body. This field of chi protects the body from the invasion of external pathogens and communicates with, as well as interacts with, the surrounding universal and environmental energy fields. This wei chi is also referred to as the superficial fascial network and called the "whole body immune system" and is the transitional phase where energy is becoming matter, and matter is becoming energy.

Dr. Rolf was very much aware of this field of relationship in the body. "Rolfing® [Structural Integration] is an approach to the personality through the myofascial collagen components of the physical body. It integrates and balances the so-called 'other bodies' of man, metaphysically described as astral and etheric, now more modernly designated as psychological, emotional, mental, and spiritual aspects."<sup>2</sup>

Common to all types of trauma is this "breaching" of the protective envelope and leaking out of our vital nature and stream of consciousness. Dr. Peter Levine refers to this fracturing as the trauma vortex, and you may read about it in his books *Waking the Tiger* and *In An Unspoken Voice*. What Levine and others have stated is that trauma is in the nervous system and not in the event or the story of what happened.

## Polyvagal Theory

The polyvagal theory, born from the research and writings of Stephen Porges, Ph.D., is a new understanding of the autonomic nervous system (ANS). His groundbreaking work provides an elaborate mapping of the psychophysiological systems that govern the traumatic state and illuminate the pathways for recovery and integration from these deleterious states of mind and body. Prior to the polyvagal theory, we had been taught that the ANS was organized by a paired antagonism between the sympathetic and the parasympathetic nervous systems, which functionally competed by either increasing or decreasing activity of neurophysiological states. Porges proposes:

Phylogenetically, a hierarchical regulatory stress-response system emerged in mammals that not only relies on the well-known sympathetic-adrenal activating

system and the parasympathetic inhibitory vagal system, but that these systems are modified by myelinated vagus and the cranial nerves that regulate facial expression which constitute the social engagement system. Thus, phylogenetically, self-regulatory development starts with a primitive behavioral inhibition system, progresses by the evolution of a fight-flight system, and, in humans (and other primates), culminates in a complex social engagement system mediated by facial gestures and vocalizations.<sup>3</sup>

The most primitive of these regulatory systems is over 500 million years old stemming from its origin in early jawless fish species. Its primary function is immobilization, metabolic conservation, and shutdown. This is the unmyelinated dorsal vagus, and its target of action is the viscera. Next in development is the sympathetic nervous system (300 million years ago), mobilizing the organism by activating the adrenals providing fight or flight by way of the limbs, as witnessed in amphibians, frogs, sailfish, etc. The last-developing system (90 million years ago) exists only in mammals, with its greatest refinement in primates, mediating complex social and attachment behaviors. This system is neuroanatomically referred to as the "smart vagus" and is linked to the cranial nerves regulating the muscles of the face, throat, middle ear, heart, and lungs. It is the myelinated ventral vagus and is associated with emotional intelligence.

Our nervous systems are continuously evaluating potential risks in the environment – a non-conscious detection system termed *neuroception* by Porges. The detection of a person or circumstance as being safe, dangerous, or life-threatening triggers neurobiologically determined prosocial or defensive behaviors. In essence, Porges has defined two defense systems, fight/flight or freeze – a great contribution to all of the social sciences but particularly of importance for somatically based therapies such as Rolfing SI. Practitioners of bodily-based therapies witness states of hyperarousal (sympathetic nervous system) and hypoarousal (dorsal vagal parasympathetic nervous system) in their clients everyday. Here's a general schema of the two:

### Hyperarousal

Sympathetic NS

"Charged" (rigid)

Adrenals

Controlling

Psyche's way of saying: "This a lot . . . I must hold on!"

### Hypoarousal

Dorsal vagal parasympathetic NS

"Undercharged" (flaccid)

Immobility – frozen

Numbness – 'waxy flexibility'

Dissociation

Death-feigning

Escape when 'no escape'

Resignation

Psyche's way of saying: "This is too much . . . I give up!"

There are many factors determining whether a person will go into hyper- or hypoarousal. Obviously, the intensity of the stress (i.e., is it dangerous or life-threatening) is one element; but perhaps most critical is the person's 'window of tolerance.' Dr. Daniel Siegel proposes that between the extremes of sympathetic hyperarousal and parasympathetic hypoarousal is a 'window' or range of optimal arousal states in which emotions can be experienced as tolerable and experience can be integrated. Exposure to threat or trauma challenges one's window of tolerance with ANS-activated states accompanying animal defense survival responses such as fight, flight, or freeze (submission). Once the threat has passed, many victims stay in their hyper- and hypoaroused defensive states. Thus, traumatic experiences result in an array of cognitive, emotional, and physical symptoms: fear, shame, rage, terror; numbing of feelings and body sensations, overactivity of the stress response, and painful and negative beliefs about oneself. With a dysregulated nervous system that can't modulate heightened emotional states or states of depression and numbness, a person reports an inability to tolerate arousal without being overwhelmed. Somatic responses become frozen, collapsed, or driven and action becomes impulsive or impossible.

## Trauma and Loss

Trauma leads to loss. What do we lose? Firstly, we lose our instinct. Intuition has its seed in ancestral instincts for survival and adaptation. Our ancestors' responses had to be instantaneous; original instincts

(now identified as intuition) were based on a rapid-access fast-track system separate from conscious thought and unencumbered by hesitation and doubt.

In cases of early traumatization, one may lose the ability to say “no” and experience difficulty defining personal boundary space. Recall my previous analogy to the wei chi . . . a leaking out of vital nature, a breaching; the person has lost the ability to protect him/herself. In addition to losing touch with instinct and the ability to say no, the traumatized person loses his/her sense of gut knowing – that settled feeling in the belly of personal safety – that everything will be okay and becomes chronically disoriented and confused while being caught between feelings of hyper- and hypoarousal.

Perhaps most importantly, a traumatized individual has lost his/her felt sense. The felt sense is the medium through which we experience the totality of sensation creating an integration of what has happened. It’s how we know that we are alive, a whole perception of where we are in our life at this moment. It’s a super-consciousness that’s non-cognitive. It arises out of the more primitive brain structures that are associated with a person’s early relationship with the mother or primary caregiver – the maternal attachment phase. A leading proponent of this relationship was Dr. Donald Winnicott, a pediatrician and psychoanalyst who described the mother’s ability to create a “holding environment” in which the infant was contained and supported in his/her experience of life. One of the elements Winnicott considered could be lost in childhood was what he called the “sense of being.” For Winnicott, the sense of being is primary, the “sense of doing” an outgrowth of it. The capacity to “be,” to feel alive . . . the baby’s lifeline, what Winnicott calls its “going on being” is essential. This holding environment is ruptured with traumatic wounding.

## Affects of Trauma

What is affected by trauma? The whole organism! Merriam-Webster’s definition of *organism* is “a complex structure of interdependent and subordinate elements whose relations and properties are largely determined by their function in the whole.”<sup>4</sup> It’s not just muscles, bones, ligaments, blood, or fascia. It includes brain tissue, thoughts, beliefs, ideation, self-image, attitudes, and worldview – body and mind, emotions, intellect, and spirituality.

In essence, trauma creates a ‘fracturing’ of our coherence in navigating life and leaves us fragmented and disembodied.

## Resolving Traumatic Wounding

Structural Integrators have a special opportunity in providing resolve from traumatic wounding for our clients. The father of somatic psychology, Wilhelm Reich, was a protégé of Freud; unlike other psychodynamic analysts who focused on the ‘talking cure,’ he was most interested in the underbelly of relationship between patient and analyst. He was emphatic that there were two bodies/two animals in the treatment room and that the human animal is what is prone to psychopathologies (not the human mind). He used breath work and manipulation of the patient’s body to elicit strong emotions and release neurotic behaviors, a way of working with ‘shape to affect state.’ He was well aware that body armor or defenses were at the root of psycho-emotional dysfunction; through his methodologies, many patients were liberated from their chronic suffering. He stated that one’s body shape indicated how the person handled or organized his/her charge . . . meaning his/her instinctual drive and life force, which he called “orgone.”

I’m sorry that Rolf and Reich did not meet and collaborate on their findings. Although Rolf emphasized the need to organize human structure (form), she did not elaborate on the psychological and emotional history that would arise from her manipulative techniques. Furthermore, classical Rolfing work oriented toward mobilizing the tight and bound structures (hyperaroused) with little, if any, guidance on how to work with the numbed and collapsed structures (hypoaroused). In my early days as a practitioner, I was overwhelmed with the issues that arose in my clients that my Rolfing training had not prepared me for – strong feelings and emotions, memories, thoughts, fantasies, body contorting, involuntary gesturing, etc. I needed help and sought support and guidance from Levine.

A practitioner’s ability to resolve trauma requires one to know his/her own states of hyper- and hypoarousal. This view is supported by Rolf’s saying, “The Rolfer’s ultimate laboratory is his/her own body.” My masters’ thesis “Intersubjectivity and the Practice of Rolfing” examines and confirms that the Rolfer is working within

an intersubjective field of relationship, whereby the practitioner is feeling the client as the client is feeling the practitioner. A primary component of this alliance is the emotional bond that is formed and the regulation of feelings between client and therapist. We can no longer objectify our clients as needing fixing but rather establish a rapport of explicit and implicit communication, whereby there is a co-regulation of dysregulated states.

The idea of co-regulation has its genesis in the study of mother/infant behavior and is described in the maternal attachment literature as where the caregiver provides safety, containment, attunement, and resonance for the infant’s sensory and feeling needs so that it may go on being. Dr. Allan Schore, one of my mentors in graduate school and a pioneer in the field of psychoneurobiology (mind/brain/body), and Siegel, a pioneer in the field of interpersonal neurobiology (intersubjectivity), concur that the regulation of emotion is the essence of self-organization. Siegel further elaborates on this notion when he says, “Lack of mental well-being may often be a result of emotion dysregulation.”<sup>5</sup> According to their findings, a therapist (practitioner) serves as an external psychoneurobiological regulator of the client’s disavowed body/mind states. In simple language, we as Rolfers ideally empathize with our clients while providing a co-regulatory field of relationship: “Perhaps the most striking evidence of successful empathy is the occurrence in our bodies of sensations that the patient has described in his or hers.”<sup>6</sup> The ability of the practitioner to empathize with the client’s highly charged emotional state and/or a state of dissociation and numbing collapse may not be easy. That is why I urge all those in the helping professions to do their own therapy, to know their inner states of suffering expressed as hyper- and hypoarousal. Otherwise, a practitioner will become confused, disoriented, and activated in working with dysregulated affective states of their clients. Remember: “. . . it is the response, not the traumatic event, that is critical.”<sup>7</sup> Healing and resolving traumatic wounding requires a ‘witness,’ one that can meet the person and guide him/her through his/her survival mechanisms. I contend that trauma theory is a regulatory theory.

Trauma provides an opportunity, a re-direction from the path we were walking. Levine describes a portal, the trauma vortex, one needs to go through in order



to attain the transformative influences that trauma can provide. "Trauma sufferers are so frightened of their bodily sensations that they recoil from feeling them. It is as though they believe that by feeling them they will be destroyed or, at the very least, make things worse. Hence they remain stuck."<sup>8</sup> The key to unlocking one's 'stuckness' requires one to feel the physical sensations of paralysis without becoming overwhelmed by the fear associated with the immobility. This must be done gradually, in a titrated manner, so that the person can surrender to the underlying feelings that lead to transforming trauma. "In addition, the 'awe-full' states of horror and terror appear to be connected to the transformative states such as awe, presence, timelessness, and ecstasy. They share essential psychophysiological and phenomenological roots."<sup>9</sup>

Prior to my plenary talk at the Rolf Institute 2011 Membership Conference, Levine said to me, "Let's not forget to remind them that Dr. Rolf gave us a blueprint, a map, of getting the person's chassis, his frame, balanced, connected, and unified with the field of gravity so that he may have a container to tolerate more of what may be arising at any given moment." Good Rolfing work creates more space in the body, providing an opportunity for the client to meet his/her issues of holding. It is natural for feelings, sensations, emotions, and memories to arise during a session. What can a practitioner do to meet these unfolding processes? I suggest following these simple guidelines:

- Meet clients where they are . . . . Don't try to change them or fix them!
- Give clients space while providing a holding environment – a kind of mothering.
- Ask at every level: "What does this moment need?" . . . And be willing to expand your window of tolerance.
- Stay open . . . You don't know where healing is going to come from!
- Let go of control . . . so that power can come through.
- No two sessions can be the same; know that there is an ongoing continuum of change.
- The key to resolving our clients' traumatic wounding is by guiding them to self-regulation.

There is a classical shamanic motif that embraces the death and rebirth of the old self to permit the emergence and integration of a higher-order self. The shaman knows that The Hurt of One Is the Hurt of All! I can't think of a more poignant description of what the healing of trauma can provide than: 'From the One to the Many and the Many to the One.

*With over thirty years of teaching and clinical experience, William Smythe, M.A., is a pioneer in the fields of somatic psychology and Rolfing SI. Throughout the years, he's taught somatic therapy and Rolfing workshops and trainings internationally. As an early collaborator with Dr. Peter Levine, the originator of Somatic Experiencing®, Bill has a diverse resume of the traumatic healing arts. He holds a masters degree in somatic psychology with extensive training and influences from Somatic Experiencing, biodynamic craniosacral therapy, visceral manipulation, Ericksonian hypnotherapy, and Native American shamanism. Please visit his website: www.williamsmythe.com.*

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## In Memoriam

*Structural Integration: The Journal of the Rolf Institute®* notes the passing of the following members of our community (in alphabetical order):

**Holly Howard,**  
**Certified Advanced Rolfer™,**  
**Rolf Movement® Practitioner**

**Leah Rothman**  
**Certified Rolfer**  
**Rolf Movement Instructor**

**Radames Silvestri,**  
**Certified Advanced Rolfer**

## Congratulations to the New Graduates

U.S. – December 2011

**Faculty:** Valerie Berg (Instructor), Wanda Silva (Assistant)

**Students:** Erin Farley, Richard Ennis, Constance Karas, Carol Koch, Nina McNeill, Kelly Moore, Richard Paterson, Roberto Rosolen, John Shinsato, Mariusz Solpa, Anna Timmons, Aline Wachsmuth

ERA – March 2012

**Faculty:** Harvey Burns (Instructor), Andreas Klingebiel (Assistant)

**Students:** Siegfried Bethke, Udo Lehmann, Louis Ludek, Monika Michalikova, Thompson Pober, Daniela Scaglione, Silke Thieme, Dhayang Toon, Marie Zahn

**Faculty:** Pierpaola Volpones (Instructor), Carla Van Vlaanderen (Assistant)

**Students:** Massimo Argnani, Monica Arnone, Matteo Bertella, Andrea Brighi, Maurizio Di Benedetto, Alessia Di Noia, Ranieri Frana, Camilla Gotta, Maurizio Lain, Francesco Parisi, Giovanni Rampazzo, Barbara Valaguzza

## Class Schedule

### BOULDER, COLORADO

#### *Phase I: Foundations of Rolfing® Structural Integration*

**June 11– July 23, 2012**

Coordinator: Adam Mentzell

**September 3 – October 15, 2012**

Coordinator: Michael Polon

#### *Phase I: Accelerated Foundations of Rolfing Structural Integration*

**July 29 – August 11, 2012**

Instructor: John Schewe

#### *Phase II: Embodiment of Rolfing Structural Integration & Rolf Movement® Integration*

**August 20 – October 11, 2012**

Instructor: Russell Stolzoff / Michael Murphy

Principles Instructor: Rebecca Carli-Mills

**October 22 – December 20, 2012**

Instructor: Larry Koliha

Principles Instructor: Carol Agneessens

#### *Phase III: Clinical Application of Rolfing Theory*

**June 11 – August 3, 2012**

Instructor: Kevin McCoy

Anatomy Instructor: Michael Murphy

**October 22 – December 21, 2012**

Instructor: Bethany Ward

Anatomy Instructor: Juan David Velez

### NEW PILOT MENTOR TRAINING PROGRAM

*Note: These classes are part of a new pilot training program. While completion of these classes qualify a student for certification as a Rolfer, these classes are not part of the accredited training that is only offered at the Boulder, CO campus.*

### Wisconsin Training

**Starts September, 2012**

Contact Kevin McCoy

### Vermont/New Hampshire Training

**Starts September, 2012**

Contact Kevin Frank

### California Training

**Starts October, 2012**

Contact Valerie Berg

### DAVISBURG, MICHIGAN

#### *Rolf Movement® Certification: Focus on the Functional Aspects of the Series*

**July 13-15, 2012**

Instructor: Jane Harrington

### CHARLESTOWN WEST VIRGINIA

#### *Rolf Movement® Certification: Our Spine in Motion*

**July 16-20, 2012**

Instructor: Tessy Brungardt & Rebecca Carli

### Certified Advanced Rolfer™ Training

**September 24-29, 2012**

**November 28 – December 3, 2012**

**January 21-26, 2013**

**March 25-30, 2013**

Instructor: Tessy Brungardt & Ellen Freed

### HOLDERNESS, NEW HAMPSHIRE

#### *Rolf Movement® Certification: Embodying Rolf's Structural Integration Recipe*

**August 22-28, 2012**

Instructor: Kevin Frank

### SANTA CRUZ, CALIFORNIA

#### *Rolf Movement® Certification: Interoception: The Primordial Roots of Sensation, Tonus and Gesture*

**October 9-13, 2012**

Instructor: Carol Agneessens.

with Hiroyoshi Tahata

### BALI

#### *Dual Training Phase III: Clinical Application of Rolfing Theory & Rolf Movement Certification*

**October 1 – December 7, 2012**

Instructors: Jörg Ahrend-Löns, Raquel Motta

Anatomy Instructor: Fernando Bertolucci

### Advanced Training

**March 26 – April 27, 2012**

Instructors: Tessy Brungardt

### GERMANY

#### *Rolf Movement® Training*

**Phase II: June 9-19**

Instructors: Pierpaola Volpones &

Giovanni Felicioni

### Advanced Training

**Phase II: July 16 – August 1, 2012 in  
Germany**

Instructor: Peter Schwind

with Christoph Sommer

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Ellen Freed  
Sally Klemm, Advanced Faculty  
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Pierpaola Volpones, ERA

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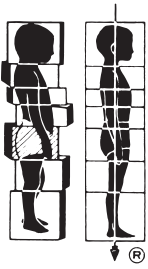
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