

he demonstrated the use of applying tensegrity principles to better understand pelvic support anatomy and vaginal and pelvic organ prolapse. His university's multidisciplinary team is working to provide minimally invasive pelvic surgeries that reestablish pelvic support by using a biotensegrity approach.

**Paul Sercu**, a physiotherapist, discussed perceptive psychopedagogy and research into non-specific back complaints and stress-related pain.

**Ed Stiles** is the Director of Neuromusculoskeletal Medicine at Pikeville Medical Center and teaches osteopaths about taking a tensegrity approach.

**Mike Turvey**, Professor Emeritus of Ecological Psychology, discussed haptic perception, which spoke more directly to how soft matter communicates with itself and the body's perceptual systems.

The second panel was specific to functional movement and was moderated by Joanne Avison. The panel was made up of Shari Berkowitz, Leonid Blyum, Sergio Fonseca, Wilbour Kelsick, and Bill Morgan, again a diverse group:

**Shari Berkowitz** is a biomechanist and Pilates teacher of teachers who runs the website The Vertical Workshop and advocates for us to apply our theories of biotensegrity to movement.

**Leonid Blyum** is the creator of Advanced Biomechanical Rehabilitation, or ABR, which has demonstrated significant help to children with cerebral palsy.

**Sergio Fonseca** is a professor in the department of Physical Therapy of the Universidade Federal de Minas Gerais in Brazil and is the co-author, with Mike Turvey, of "The Medium of Haptic Perception: A Tensegrity Hypothesis," which was published in the *Journal of Motor Behavior*.

**Wilbour Kelsick** is a sport chiropractor who works with the Canadian National and Olympic teams.

**Bill Morgan** is also a chiropractor and acts as a consultant to the White House, the Veterans Administration, the U.S. Army, and the U.S. Navy. His interest is in understanding the 'four-bar mechanism' of the knee (a biotensegrity view) as opposed to the traditional lever model.

At the end of the day there were a number of expo tables filled with a variety of soft

matter (substitutes for human biology like Silly Putty, cornstarch in water, and other 'goos' that kids play with these days), and a variety of tensegrity sculptures that people could play with to get an idea of their function in a more hands-on way.

Of course, directly following this daylong First Biotensegrity Summit was the Fourth International Fascia Research Congress (FRC). I found it fascinating to go from a biotensegrity event into the fascia research event. The prior was entirely dedicated to understanding how we function as a whole organism, while at the FRC some (but clearly not all) researchers are still approaching it in the 'old' parts-based way where they are taking some part of fascia – i.e., not in a living person – and putting it into a highly artificial environment in order to determine some insight into how it functions.

The beauty of the Biotensegrity Summit is that there is no way around wholeness,

since that's the whole point, and so the research and clinical work there was always highly relevant. One could argue that that should be the whole point of the FRC as well, but I digress . . .

If I have a wish for the future of the Biotensegrity Summit, it would be that it is approached more like the preceding BIG – which was two days where people were given ample time to present their work, rather than just snippets of insight on a panel without an opportunity for a deeper view.

Considering the exceptional people presenting at the BIG and the wide-ranging applications for biotensegrity, I have no doubt that the summit will grow and flourish.

### Endnotes

1. [www.softbio.ox.ac.uk](http://www.softbio.ox.ac.uk) (retrieved 10/26/2015).

## Snowflakes Falling

### *A Personal and Professional Relationship with Gravity*

**By Caryn McHose, Certified Rolfer™ and Rolf Movement® Practitioner**

Snowflakes Falling  
Each One Landing  
No Place Special<sup>1</sup>

Snowflakes are light. They float unpredictably in the air. They have a bit of mass, so they do eventually land, somewhere. They offer us a chance to imagine the freedom of a body in motion and the event of falling and landing.

### What Is Gravity?

People often think of gravity as just a force that pulls them down. If you ask a physicist about gravity, you might hear a lot about space/time and relativity but probably not much about personal experience or a personal body experience. What if gravity is a relationship with the whole in which each body particle connects with support and spaciousness, a quality that feels like grace?

Gravity is invisible. It bends space/time. It is everywhere. It can be observed only indirectly, via actions it makes happen. A huge piece of the gravity in our universe represents stuff – so-called 'dark matter'

and 'dark energy' – that is itself invisible. What, then, can we know and what do we sense directly, in our bodies, with the question "What is gravity?"

We know that when our connection with gravity feels lost, someone who has learned gravity's song can help us find it again. We can restore intimacy with wholeness in life, an intimacy continually perceived as receptivity to this force we call gravity. How might we describe this intimacy in a way that will capture people's imagination? What feeling, what vision, motivated Ida P. Rolf to say that "gravity is the therapist"? What makes gravity compelling to you? For many people, gravity remains elusive, vague, and seemingly not knowable.

### Relationship with Gravity – Our Development

This article is one person's experience of gravity – personally as a mover and professionally as a movement teacher, Rolfer, and Rolf Movement practitioner.

For me, gravity is a meditation that began as a child each summer dancing on an outdoor studio deck in the mountains of central Pennsylvania. We were told to do things like “explore making two dimensional shapes with [our] bodies,” “explore curvilinear flow represented in Eastern dance forms,” “explore the up and down feeling of tree,” or “learn from the solidity of rock.” After this body research, the work of choreography followed. With childlike curiosity and the backdrop of the natural world, these initial explorations always astonished me. I felt myself change as my feet and legs joined the ground or as I gestured and reached up to the sky, the distance thrilling. I was transformed as I lay on my belly, looking through the cracks in the deck, seeing the damp, mossy earth and feeling my body get heavy and sink.

It was simple stuff, explorations that I liked a lot. At the time, I had no words for the experience except ‘well-being’. The way I would describe those early experiences today is ‘connection’ and a feeling of ease and body intelligence awakened. I now understand this was an exploration of gravity. This was a feeling of lengthening easily in all directions and of stability and strength without effort.

## **Babies Are Held, Rocked, and Carried**

Instinctually, we support, rock, and hold babies. From the world of developmental movement and infant physiology we understand the importance of vestibular/proprioceptive stimulation as well as kind human contact.

At a certain developmental stage, children love to fall. They delight in being tossed in the air or suspended between two people. They will take off, fly, and land over and over again. They enjoy rolling down a hill. They imprint to the body sense of ‘here’ through simple movements in gravity. It arouses surprise and delight at any age.

Falling and landing tells us, “I am here.” You feel the bits of yourself in a body form, and the form keeps falling or yielding and landing in a new form.<sup>2</sup> Can you imagine falling and feeling that as joyful ease?

Crawling begins with practice in pushing. We connect with support to push, and then we reach to something ‘out there’, swimming our limbs in different motor patterns. When we crawl, we learn about

different kinds of support and then gain enough adaptability so we can reach beyond our support point. This triggers the opposite knee to flex forward. It catches us from the tiny bit of falling that occurs by reaching out so far.

As we begin to reach out, we do so with our hands and our chests, but equally importantly we reach out with our minds. Reaching out is an evocation of distance, a reaching out with imagination toward something that entices us. We fall in our mind; we land in our mind. The body knows falling, and the falling feeling can be experienced in any direction. We find spaciousness through a sense of location or ‘here-ing’ that is always changing and moving. In other words, there is No Place Special – or, each time we fall and land, our ‘here’ changes yet again.

Then the form called ‘walk’ emerges. We totter and then walk. We feel the thrill of being a tottering biped.

## **SI Qualities**

Clients bring us their troubles – interruptions to the flow of support, interruptions to push and reach and to the rhythms of walking. These troubles take many forms. How do we offer our clients a chance to revive their willingness to fall and land? We start in the imagination with tiny places of flow, places that allow fall and land to be a restoration.

### **Support**

I effectively began my practice of SI long before I became a Rolfing® Structural Integration (SI) practitioner, in a dance studio in the winter and a dance camp in the summer. I had an unusual teacher, Betty Jane Dittmar, who practiced the belief that all children are born with inherent creativity and created a context for us to discover it. She also believed that the experience of wholeness is possible in every moment. I was five when Dittmar became my mentor, ostensibly to teach me to dance.

We spent equal time learning technique and learning to compose. Our choreography was sourced in art styles, other cultures’ movement forms, and world folk traditions. I saw how different cultures have a set of traditional dances, and each evokes movement based on the work patterns of that culture. At first these movements are a means of survival. Then work patterns become dances of the community members’ relationship to each other and to nature.

Folks dancing together ignite the synchrony of gravity’s body.

Years of Dittmar’s training led me to believe in this inherent creativity and healing capacity of everyone. When I was sixteen, Dittmar directed me to start teaching movement. I saw that, through no power of my own, people come alive to the joy of their bodies moving freely and feeling integrated and whole.

### **Small Fallings**

A dance injury at the age of twenty-one led me to lie down on the floor for long periods of time – to dance lying down in ever more internal and tiny ways. It was during this time that I was introduced to *The Thinking Body* by Mabel Todd and to the power of perception through ideokinesis, ideas put in motion.

I learned to feel each one of the bones in my body individually and to separate them from each other. Some bones were held together strongly! I was surprised at what I called ‘small fallings’ – the natural separation of bony parts that, in turn, led to flow and recalibration of the felt sense. I was surprised at the amount of effort I had been using to hold myself together. I was surprised at the amount of effort I was using to make the smallest movement! So I started to allow falling and landing and to meet the touch of the ground. Each bone began to land, no place special, abiding in the flow of gravity.

### **Holism**

Any one bone that the body senses as distinct and individual is often sufficient to remind the entire body of elongation. Why is that? Why does the reawakening of one bone to its separateness, its falling and landing, mobilize a reawakening of the whole body? This is the nature of holism. One small part speaks to the whole thing.

### **Free Float**

When a bone feels its falling and landing and the separateness that feeds and is fed by the whole, it offers us the experience of ‘free float’. In physics, free float is the condition of a body falling in a frame of space/time. In a body, each bone is floating within the body’s frame of space/time.

A practitioner offers to unlock a client’s bone from the captivity of a fixed place. She offers this because she feels the falling and landing inside herself. And her ability to perceive free float in her own body

allows her to offer awareness and touch to another's bone, so it too might wake up to feel free float.

After lying on the floor and noticing that the bones of my body could be perceived in free float, I started teaching others to feel this, talking them into it, essentially. I was speaking from body experience. And then, inevitably, I put my hands on them in an eagerness to communicate in another channel, more directly and more clearly. That led to my being curious about touching others and to see/feel what was willing to meet me in conversations with bodies in gravity. I got used to asking myself things like: What can land? What is able to allow free float? What is flowing? My touch explored these questions in ways that enlivened the person's experience of free float.

### *No Place Special*

What does No Place Special mean? First, consider what 'someplace special' means. It means that there's not enough support! In moments of overwhelm, our nervous system 'tunes' itself. The body reacts to an interruption of flow. Prolonged or extreme reactivity patterns the motor system to hold a particular position, a 'special' position, long past the moment of its usefulness. 'Someplace special' becomes a fixation.

Rolfers learn to unbind the fixed-action patterns that make one place – one choice – special. How do we unbind the special? We start by finding available flow in the system. We find a place that cannot feel its potential to fall and land, and we support it in the discovery necessary to fall again, to land again, as one learned to do as an infant, over and over.

### *Directionality*

We build a sense of direction as we build the sense of 'there'. Here and there are physiological events in the body. I know 'here' because I know the sense of weight and landing. I know 'there' because I know the feeling of distance into which I have fallen. One can feel a fall up, down, sideways, any direction at all. Falling is a learned feeling that connects us to distance and spatial volume as much as it does to the 'fall down' feeling.

We know the experience of acceleration. It is part of the way any body behaves in gravity (on this planet at least). Physics reminds us that we fall 32 feet per second, per second (32 ft/sec squared). This rate

of acceleration we know, physiologically, from proprioception – from our vestibular system, our mechanoreceptors, and our peripheral gaze. We know it as reaching out into the world on our hands and knees or being swung in someone's arms. When we reach out, we accelerate the feeling of distance in the proprioceptors of our joints, muscles, and connective tissue.

Directionality is the sense of falling in a direction, even if it's up. Directionality can proliferate into omni-directionality, like a sea urchin's spines aimed everywhere. The relevance to SI is the experience of expansion. For instance, the cranium can feel like it separates and becomes bigger. Bones separate. The body and space interweave. Expansion is a form of falling, since we allow it to happen without work and we are supported by the embrace of gravity. To the observer, it looks like we have expanded or grown taller, like our movements are not compressed but are soft and flowing into the space around.

### **Rolfing SI and Rolf Movement Practice**

Eventually, I was drawn to the fascial work. The Ten Series 'Recipe' was also intriguing. It reminded me of other sequences of development I had encountered. I found that working with the fascia helps bones notice their landing and falling, just as touching the bones reminds them of their capacity to do so. Mobilizing the fascial matrix excites the body to wake up. It awakens to free float, directionality, and falling and landing surprisingly quickly. And the Recipe has logic to it. It is about unlocking the obstacles to wholeness. It offers a set of priorities for leading the body back to the place that is not special, that can respond more fully to whatever presents itself.

The question remains: How do we encourage people to be more awake to their ever-present relationship to gravity? How do we assist people in catching a moment of spacious creativity? How do we point to what is invisible?

### *Catching the Imagination of Another – The Mystery of Gravity*

Ida Rolf declared that "gravity is the therapist." But what does that mean to the average person? Not much. As we speak to a prospective client, or just casually to a friend, what can we say or demonstrate,

very briefly, that might plant a seed of curiosity? What part of "Snowflakes Falling / Each One Landing / No Place Special" in our experience can be conveyed to another?

What experience of gravity speaks to *you* in this moment? What part of you is able to allow some tiny bit of falling and landing and enjoying No Place Special right now? Perhaps you feel the spreading of your tarsal bones, the weight of your elbows, or the deep relief after a full exhale. Maybe you feel some elongation and articulation of segments of the spine.

How do you invite another's attention to this simple experience in a way that is not special, in a manner mostly conveyed in the way your voice and posture express falling and landing and free float right now? How are you 'here-ing' now? It's an inquiry. There is no single correct answer, only the enduring value of rediscovery. The answer that has some aliveness is the answer that occurs out of your experience. You watch in this moment for the availability of the listener, some place in him or her that you can imagine falling, landing, or feeling free float, as you observe and as you empathically feel the places where his or her system is already in wholeness. When you imagine such a place, you may have a chance to invite that person to notice it too.

### **Endotes**

1. Unattributed verse, based probably on the recorded words of a Chinese lay Buddhist named Layman P'ang (740–808), whose words about snowflakes are the subject of Case #42 in *The Blue Cliff Record of Zen koans* (Cleary 1977).

2. 'Yield' and 'yielding' are terms that Bonnie Cohen (1993) introduced in the 1970s as part of her work with developmental delays. Cohen's work, called Body-Mind Centering, teaches practitioner embodiment of foundational developmental and physiological processes for the purpose of helping children and adult clients to rebuild missing functions. Carol Agneessens and Hiroyoshi Tahata have written on their use of yield and yielding, and Tahata's development of his Art of Yield, as a basis for Rolf Movement Integration. Their work links to the importance that yielding plays as babies encounter gravity (Agneessens and Tahata 2012). [Editor's note: see also the interview with Tahata in this issue's Rolf Movement Faculty Perspectives column on page 3.]

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# The Three-Dimensional Foot, Part 2

## Evoking Pattern-Consistent Competency

By Michael Boblett, MA, MDiv, DMin, Certified Advanced Rolfer™

This is a follow-up to my article "The Three Dimensional Foot: The Role of the Toes and Metatarsals in a Typology of Transverse-Arch Rotations" (Boblett 2014). I presume readers will enter this with a knowledge of the previous article's contents. Very briefly, I presented five types of foot patterns: two presenting in Internal clients, three presenting in External clients. [My definitions of Internal and External (IE) are those of Jan Sultan, as far as I have understood him correctly.] I then presented a few strategies for increasing function in each of the five types of feet.

In this article, I respond to a single question. Several colleagues contacted me to ask: "In your typology, can a client's two feet present two different patterns?" Answer: "I never saw that, but the difference between two feet often points to a difference in their respective levels of *competence* in their shared pattern." This in turn leads to intervention strategies that seem to contradict what I wrote in my previous article.

Visually, palpably, and in motion, a foot can present as consistent and even classical for its type, yet require treatment that seems more appropriate to a different and even opposite type. In fact, I suspect that this is particularly likely when a foot presents with either of the most common two patterns: Long-arch Internals or Short-arch Externals.

### How Does This Happen? And What Can We Do?

Let's study a single example. Looking at Figure 1, this right foot (shown in stasis) belongs to a strongly Internal client: pointy occiput, high-amplitude spinal curves, anterior sacrum, internally rotated femurs, strong agility, weak stability. Not surprisingly, this foot in isolation follows the most common Internal pattern: long arch, long Achilles, tight retinaculum, stuck-up cuboid, strong abductor digiti minimi (ADM), and good separation of metatarsals one and two. In the figure itself, we see healthy separation of the toes.



Figure 1: Left and right feet, stasis.