Start at the Front of Spine, Go to the Back Body

Find the Backbones, What a Journey!

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ABSTRACT *This article considers the spine metaphorically, embryologically, and as a location for chronic pain. Faculty member Pierpaola Volpones discusses the journey of learning about backs, doing Rolfing SI back work, and teaching others how to help vertebrae find their way home.*

In symbolic language, since ancient times, the spine is often depicted as a tree, in which the vital lymph flows, and connects the Earth with the sky: the breath of the spirit is embodied in the body, to create the path of life. It's very common to consider the spine as a sacred place, the yogi tradition teaches of kundalini and chakras, that they are positioned along the spine. The Kabbalah speaks of the tree of life with three pillars, the middle one being the reflection of the spine. For humans standing on two feet, the vertical spine is a metaphor for the evolution of our organism: this is what was stated by Ida P. Rolf, PhD.

The back is easily identified with strength and power; also, metaphorically speaking, it is the place to store things and to leave things. We want to get rid of elements that no longer serve us, we want to let go, and the spine is the designed place of the past: we walk forward facing the future, carrying the past at our back. Conversely, in some cultures the past is located in front of us, because we know it, we can recall and see it, and the future is behind us, because we don't know yet what will happen. We humans sense the flow of life with our bodies, the timeline of existence is perceived with the front and the back of our bodies. In family systems therapy, our

Figure 1: Bust of the god Janus, Vatican Museum, Vatican City. Photo by Fubar Obfusco. This photo is in the public domain and can be found here, https://commons.wikimedia.org/w/index.php?curid=177247.

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ancestors are behind us, supporting our backs. They are our roots.

Consider this: *"In ancient Roman religion and myth, Janus is the god of beginnings, transitions, gates, time, duality, doorways, passages and endings. He is usually depicted as having two faces, as the god can look at the future and the past" (*Wikipedia 2021, see Figure 1). Janus is divine . . .

As embryos, we develop from three tubes: the motor, the visceral, and the neural; the spine is the place of beginning of our differentiated development (see Figure 2). The shape of the spine continues to change from the moment we are born. Humans start in the primary kyphosis, over time we develop the cervical lordosis and the lumbar lordosis. This is driven by the vital instincts aimed at preserving life, the ones that push us to explore and to move into the world outside, looking for nourishment and pleasure. The dance of the curves of the spine is accompanied by the growth and development into verticality. We learn balance by falling, surrendering to gravity, and getting up; we become stronger and stronger in our muscles, refining their motor control.

Figure 2: Primary c-curve of the embryo, the spine develops in this primary kyphosis.

Back and Back Pain

The spine and the vertebral column: these names describe the axial-complex characteristics of being pointed, peaked, spired, jagged, and layered. The spine speaks of the bones, the skeleton, and its bony collection of many pieces stacked on top of each other. I reflect on the meaning of 'column', that is to say that it's a column in the sense of a vertical, longitudinal organization, but not in the sense of being a weight-bearing structure, it is not like temple columns. We know that the human vertebral column is designed as a tensegrity structure where the load is transferred and distributed along its solid and tensile structures of muscles, fascia, ligaments, and tendons. Hidden within the word 'vertebral' is the action of moving toward, to orient toward as the Latin word *vertere* infers. Our spine is a set of piled-up little bones, designed to move, to *vertere*, to orient. The spine is designed to move, to carry, and to protect the spinal cord that is an extension of our brain into the body via the spinal canal. When the spine's motion and capacity is limited or restricted, we run into troubles: back pain.

Back pain is one of the most common issues that brings people to knock on our office door. They say, "I have back pain," and they might mean a number of different aches: lumbar, lumbosacral, sciatic, sacroiliac, and/or dorsal pain. Even shoulders and upper thoracic pain can be the region of their intense sensation – all these areas can lead a client to say they have *back pain.*

Because of this variety of presentations, I have learned that when a client arrives with back pain, I ask: "Show me with your hands where you have pain." And the gesture they do is useful information for my interventions. For example, if they move their fingers horizontally from right to left in the area of the base of the sacrum, it's most likely related to the sacrum. With this information, I will focus on checking mobility of the sacrum during the session, specifically the mobility of the sacrum with the iliac bones and the lumbar spine, I will test the mobility of the coccyx, the resiliency of the sacrotuberous and sacrospinous ligaments. When they stroke their lumbar area, next to the spine, with the palm of the hand, most probably it is a low back pain. Does this mean that I concentrate on the lumbar spine? Not really. I have learned in years of practicing as a Rolfer® that lumbar pain can be related either to articular vertebral issues, or to happens below or above

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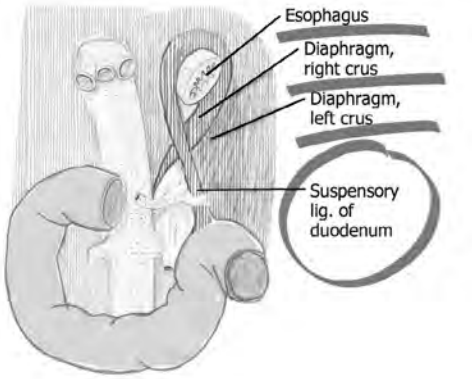
or in front of the lumbar spine. Among the 'below' possibilities there could be tissue restrictions, specifically a lack of continuity at pelvic floor, hips, hamstrings, knees, feet, and ankles. There are various regions of support from below that draw my attention to the lower limbs and the related diaphragms of a person with back pain. Among the 'above' possibilities I would include the thoracic spine, ribs, shoulders, and arms as areas of interest to consider tissue restrictions and misuse.

The space in front of the spine is occupied by fascial layers that are in close relationship with the visceral organs; think about the crura of the diaphragm that attach at the bodies of the lumbar vertebra and how the duodenum

Figure 3: Anterior view of esophagus entering the visceral space, stomach dissected away. Notice that the crura of the diaphragm is at the anterior aspect of the lumbar vertebrae and is continuous with suspensory ligament of the duodenum.



is connected to the diaphragm (see Figure 3). Notice the suspensory ligament of duodenum wrapping around the esophagus and melting with the crura of the diaphragm. Don't forget that the psoas shares the same space as the crura of the diaphragm, and is also attached at the lumbar spine. The different rhythms of breathing, walking, and digestion make the lumbar vertebrae reverberate in relationship to each other, and any out-of-tune functions may show up as *pain*.

Back Work in Rolfing SI

The back work of Rolfing Structural Integration (SI) practice has undergone various transformations. Traditionally by 'back work' we meant bench work, working the back in sitting. And even more traditionally, bench work was performed using both elbows stroking down the back while the client was slowly bending forward. When I was a new Rolfer, I remember doing Second-Hour bench work with a client who was a man in his sixties with lumbar pain, and this moment taught me a crystalline lesson that this kind of back work is not always a good strategy. The guy could not come back up from flexion – posterior lumbar vertebrae don't like positions that push them even more posterior. They don't like that at all, particularly if there is no support. You might be curious what I did with the client; in my shame and fear, I helped him to sit and to stand up, and I invited him to come back the next day for another session. Then I gave him a Third Hour that saved his back, and my self-confidence! I *trusted the* Recipe*.* Looking at him, it was obvious to me that balancing the front and the back, with length and space along the lateral line, was a good solution for him. I used the tools I had at that time.

We have experimented with back work that could be done supine, from underneath; prone, therefore from above; sidelying; and sitting. All these positions help us to reach different goals and layers of the myofascial and articular system. We have learned to use hand and feet activation with seated work to free the spine, and we play with the support of the sit bones to impact the axial complex. The direction of the interventions is not always from top to bottom; in fact, in the lumbar area it is helpful to move upward instead of the traditional downward back work. It takes off some pressure at the lumbosacral junction, and it encourages a restoration of the natural lordosis, when that is part of the mobility that has been lost (see Figure 4).

Teaching Back Work

Teaching back work fascinates me particularly. Rolfing instructors spend little time teaching back work during the Basic Training. There is so much to do that back work occupies very few days within the eight weeks of Phase II or III. Even when we know that we don't chase symptoms, being able to address back restrictions, either myofascial or articular, is an important tool to add to our toolbox that allows new Rolfers to meet their clients' needs and requests.

I have struggled to find a way to teach spinal mechanics. Even with the useful book *Spinal Manipulation Made Simple* (2001; see Figure 5) by Jeffrey Maitland, PhD, it's not simple to remember where the vertebra is fixed (open or close) and what to do accordingly. He writes, "Keep practicing this shotgun approach until you gain confidence with feeling rotation and releasing facet restrictions . . . you will learn how to apply the test so you don't waste time trying to release what is not restricted" (Maitland 2001, 25). He is also concerned that *we don't waste time* and that we find an easy and efficient execution of back work. Maitland and Michael Salveson were my teachers at my advanced Rolfing training; both were very dedicated in teaching us how to grasp vertebral-biomechanical tests and interventions. *Understanding* the biomechanics and *practical application* of the knowledge can each take their own time to acquire confidently. Ultimately, as Maitland writes, continuing to practice is a must.

Since there is so much for new Rolfers to acquire during Basic Training, and the back work is introduced in a limited amount of time, it is good advice for our new colleagues to keep learning

Figure 4: Pierpaola Volpones demonstrating back work with client.

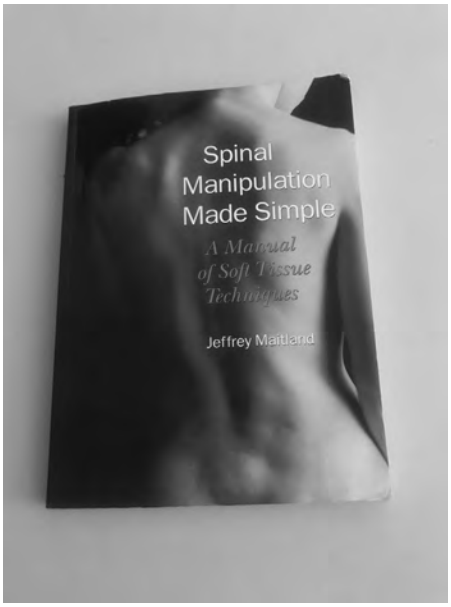


Figure 5: Jeffrey Maitland's 2001 book, *Spinal Manipulation Made Simple*.

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back work from Dr. Ida Rolf Institute® (DIRI) continuing education instructors. This is what I did as practitioner, before becoming a teacher. I attended several workshops to improve my skills. It is initially frustrating testing each vertebra's motion, trying to understand if it is fixed open or closed, then to remember where to work accordingly, but it is worth it in the end. I found it very cortical and brainy at first, of very little help in my practice.

So, I decided to take a different route. I studied back work with my clients, I taught myself by looking for mobility where I felt restrictions, I used direct and indirect touch, I followed the tissue and listened to the tissue, which led me to encouraging the vertebra to find its place. But teaching requires more precision. It worked in practice, but I had no theory to support my findings.

Then something I read about Fryette's laws of vertebral motion was a turning point that opened a new perspective for me. While there is agreement that Type I is universally true for all bodies, there is debate whether Type II applies to all backs, all the time. If I had only memorized these ideas and not trusted my touch and my training, I would have been stuck thinking about rules. The agreement for the Type I says, *sidebending of the thoracic and lumbar vertebrae is accompanied by a rotation toward the opposite side of the sidebend – when the vertebra has started the motion from neutral.* There is not common agreement about the Type II vertebral motion, *in flexion or extension (not in neutral), the vertebrae rotate and sidebend toward the same side*. Several authors disagree on this Type II law (Legaspi and Edmond 2007). Another glimmer of light was to learn that unilateral fixation is often due to visceral restrictions; only bilateral fixation is most probably due to articular issues. Thus, my choice to look for vertebral restrictions and finding ways to restore mobility was not so off track! This approach leaves me free to touch a specific place along the spine, listening to the tune the vertebra plays, and gives me time to start dancing with the vertebra, following and leading, until the whole spine and the whole back become part of the entire organism. *Vertebrae, and bones in general, want to go back home*; this is what my teachers used to say. Let's find the way home.

Pierpaola Volpones discovered Rolfing SI through bodywork and her research into well-being and somatic expression. She studied in Munich with Stacey Mills and Michael Salveson in her Basic Training and with Michael Salveson and Jeffrey Maitland in her Advanced Training. Her Rolf Movement training took place in Italy with Janie French and Annie Duggan. She began her Rolfing SI and Rolf Movement teacher training almost twenty years ago, and she has been teaching since 2005. She runs a practice in Rimini, Italy, and teaches for the European Rolfing® Association. Her website is www.volpones.it.

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