

Flight of the Eagle - Self Care for Structural Integration Clients

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Exercise in the Context of Structural Integration Practice

Structural Integration (SI), developed by Ida Rolf, assists people with a number of musculoskeletal issues. These include (but aren't limited to) back stability, contralateral gait, and relief from difficulties in shoulder and pelvic girdles. SI works by releasing fixations in fascia and perception, primarily. Each practitioner brings to the work their own blend of other methods. Additionally, practitioners often recommend that the client participate in self care activity such as Continuum, yoga, Pilates, tai chi, psychotherapy, SE, and so on. Self help exercises can reinforce the benefits of Structural Integration sessions. Some forms of exercise may be counter productive, however. What are some ways to clarify what constitutes constructive exercise?

SI practitioners have been using recent discoveries about rehabilitation of back pain to improve their clients' self care program. The SI field has benefited from back pain research by Gracovetsky, Richardson, Lee and others.¹ Godard has integrated this research into his teaching, and Frank and Newton² have written about how this research can be adapted for SI practice. This information makes it possible to identify and correct failures in stabilization so clients can more fully regain healthy function. Godard's tonic function model incorporates this point of view³. Further, Godard has identified perceptual skills for helping SI clients restore their stabilizing function.

This article will describe one exercise solution for clients in which the wisdom of S. and the tonic function approach are brought together. This approach teaches clients to 'turn on' their stabilizing system using perceptual skills. Clients can then discover that coordination improves through strategic use of sense impression and orientation.

S.I.'s Package of Benefits

Structural Integration is typically done over a series of ten or more sessions. The ten series delivers strategic release of physical structure (fascia). The ten series also conveys perceptual information: sustained, slow touch speaks to the client's body map. As the client is able to sense a more differentiated anatomy he is able to exhibit differentiated movement. For example, sensing the bones helps improve the body map because bones have weight, articulation, and occupy space. Bones can define perceptions of directionality. Movement coordination improves with attention to weight, articulation, space, and directionality.

For some clients this is enough. A ten series, coupled with movement, offers many clients lasting improvements in well being. For others, however, back pain, hip pain, and shoulder tightness may persist, even if the client is healthy and motivated. Exercises such as those listed, can be an essential resource for these clients.

The question remains, though: If one were to invent an exercise to rehabilitate core stability and resolve chronic back/hip/shoulder pain, what would it look like? What qualities would we want to gain through exercise?

An ideal exercise would not only improve the ability to do challenging tasks, but also integrate SI work in common daily activity such as walking. The exercise should be performable anywhere, without special equipment. It should be possible for the client to experience success and to be able to enjoy it. The exercise should offer novel sensation, a novel sense of gaining power while lowering effort. Also, the exercise should work globally, on the whole body.

What kinds of exercise do we wish to avoid? Exercise that reinforces habits of effort and bracing will not be helpful. For example, if people are instructed to "stabilize" with their abdomen,

this language reinforces orientation to effort. This leads to inappropriate recruitment of the rectus abdominus, the posterior pelvic floor, and so on muscle recruitment that decreases back health and stability. Helpful exercise will, by contrast, orient the client to space, weight, and sense impression in the extremities. In short, helpful exercise will focus on strengthening perception rather than physical strength in the conventional sense.

About four years ago, I was introduced to a movement sequence that has proven to be quite helpful. At first I didn't fully realize its value. My initial experience with it wasn't inspiring. When teaching it, students didn't bubble-over with enthusiasm. Nonetheless, I persisted and practiced doing and teaching the exercise. One reason I did so was because my partner reported she experienced *pleasure* doing the sequence. I realized that if she loved doing it, I was probably missing something. Recently the process of teaching the exercise to SI clients has brought positive results. This has helped me see the value of more thoroughly learning the movement.

Flight of the Eagle

Hubert Godard used the yoga sequence, commonly called 'sun salutation,' in his early U.S. classes. He emphasized allowing a flow of movement rather than a series of poses. Sun salutation was helpful for learning about weight and space orientation, and relating the hands and feet to the spine.

Later, Godard stopped teaching the sun salutation because he felt it was difficult for many students to do. Godard introduced a movement sequence he called the 'flight of the eagle.' He has since taught this in many classes. The flight of the eagle was easier to do than sun salutation - it didn't require as big a range of motion or as much flexibility. In addition, the flight of the eagle helps people with Structural Integration by addressing some of the perceptual and stabilizing issues important to the ten session protocol.

Learning to Do Flight of the Eagle

You need a bench or a low table to put your hands on.¹ The rim of a bathtub works. Low railings or walls in airports or malls work. A fallen tree or a rock can do as well.

You start with your body in a quadrupedal stance. Your feet on the floor are shoulder width apart. Your hands are on the bench or equivalent. Your feet are below and in line with your buttocks. Your legs are straight. Your arms are straight and your hands are about a foot beyond your head. See figure (1).

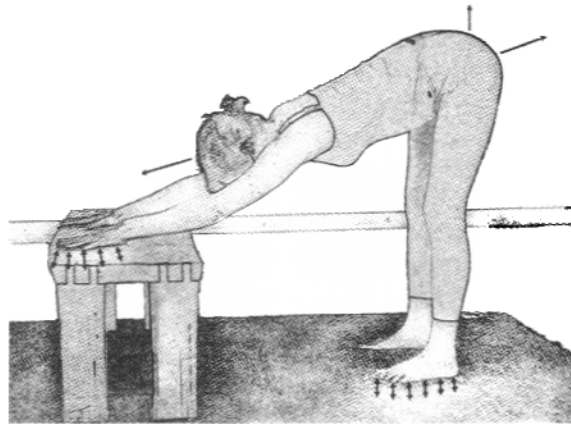


Figure 1. Double arrows indicate that hands and feet are receiving sensation as well as pressing. Single arrows indicate vectors of direction into space that one is learning to sense.

Start movement by noticing the background to what you are about to do. Take time to orient to weight. Sense where your body can load and feel weight. Notice your orientation to space, the aspects of yourself that can sense surrounding space. Each time you begin, this 'pre-movement' enlivens the sensory channels which helps to orchestrate effective movement.

To begin flight of the eagle, find and receive sense impression in your feet and hands. Allow the texture, mass, temperature, etc., of what you are touching to be received through your hands and feet. By letting in sense impression, your body starts to notice its context more deeply. The flow of noticed sensation orients the body to flow in movement.

Notice how your hands and feet press in the direction of ground. Also notice the direction of your sitting bones lifting toward the sky. Notice

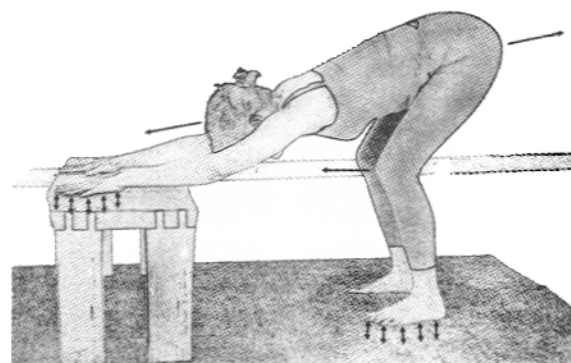


Figure 2. The knees have followed a direction forward. Single arrows are continuing to define the feeling of sitting bones reaching skyward, while feet are pressing into the ground. Similarly arrows out of the head and tail define the feeling of these two opposite directions.

your knees sensing the space in front of them. Allow the knees to amplify their sense of direction forward into space until they move that way, but still maintain the directions of the feet, hands, and sitting bones. See figure (2). Amplify your sense of sitting bones reaching to sky, and feet into the ground until your knees extend. Knees continue to feel their forward direction. No senses of direction need be lost as you amplify others.

Refresh the sense of hands and feet on their contact surfaces and your sitting bones into space until the body feels itself potent and activated in whole presence to space around it. Allow your eyes to be soft and receive peripherally. Shift your ground contact slightly, from the heel into forefoot, and allow a little more press of the hands into the bench. Continue to transfer weight forward from the feet into hands. The sitting bones still feel their reach toward sky. The head is

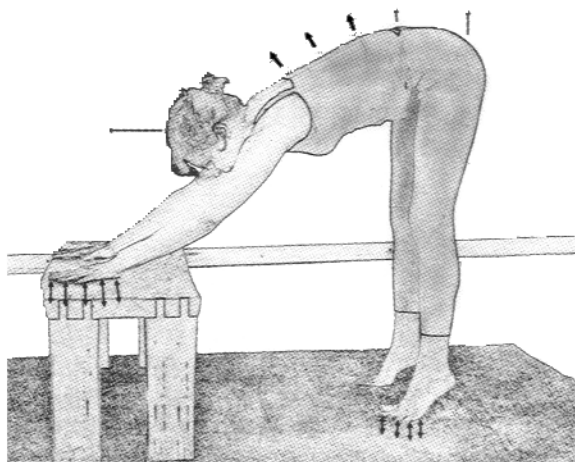


Figure 3. The direction of the sitting bones skyward and pressing of the toes are sufficient for heel to lift and for the trunk to raise and travel on to the hands.

sensing omni-directionally, alive to space. The body will lift off and be supported in the toes and the hands. See figure (3).

Your weight is mostly on your hands now. Perhaps, though, you feel your trunk lifted as if from some 'other' force, not your own. Refresh your hands' sense of bench and then push into the bench, making maximum skin contact with your fingers and palms. Pressing the hands should press the spine back, releasing the spinal segments to emerge behind you. Pressing your hands will also allow you to amplify the toe pressure into the floor. Pressing hands and feet together allows the spine to feel like a bent spring as it presses out on its convex surface. See figure (4).

Feel your spine as a bent spring. Feel hands and feet and their contact to bench and floor. Feel a broad sense of space. As you press a little more

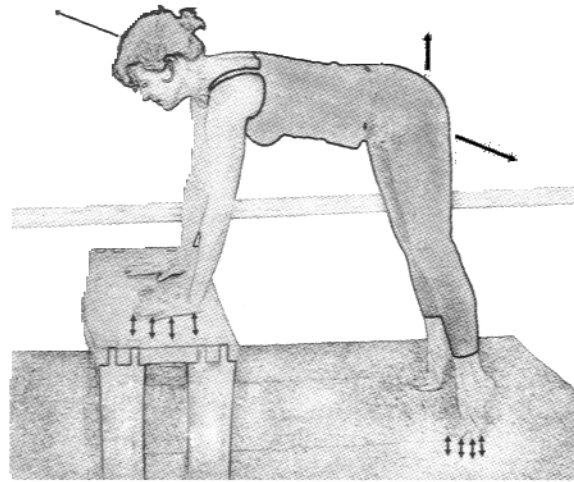


Figure 4. The hands and toes are sensing and pressing, and the spine is lifted and pressed toward the sky.

with hands you will deliver weight to your feet and land back on the whole length and breadth of your feet. Repeat the process of establishing hands and feet contact and knees and sitting bone directions into space. Raise your weight on to your toes by amplifying your sitting bone direction toward the sky. When you have lifted up and forward on to your hands, let your knees drop down toward but not touching the floor. You will end up looking like figure (5).

You are supported by hands and feet but your body is allowed to hang as a slack anteriorly convex sling. Now activate sense impression in your hands again. Over and over you are refreshing sense impression and this is a moment to feel and see the power of doing so.

With fresh impression of hands feeling bench, press the bench strongly with the skin of

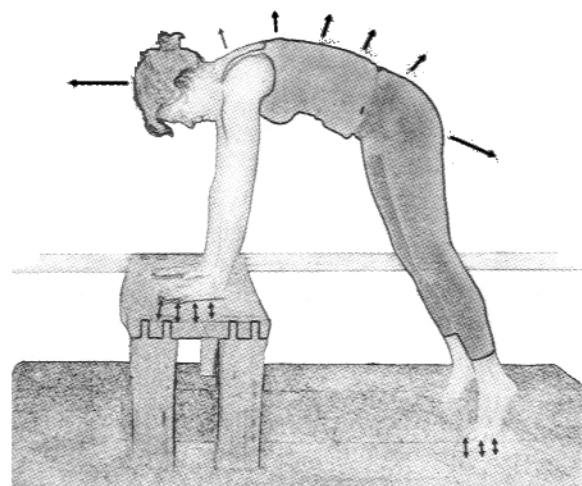


Figure 5. The hands and toes are sensing and pressing, now giving the spine support so that it can lengthen in the front.

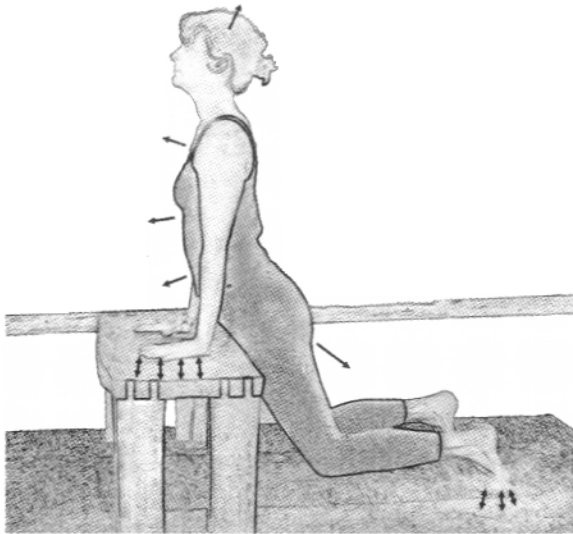


Figure 6. This is the beginning of pressing fingers to lift the cervical segments skyward. Toes are sensing and pressing as well.

your hand, so the hand surface area is active and contacting. Emphasize your finger tips and then sequence your pressure proximally down your fingers. See if it is possible to link the sense of fingers to the cervical segments as you begin the sequence through the spine. Press your toes into the floor and allow your spine to articulate its vertebral segments starting with the atlas and sequencing each spinal segment from top to bottom. Each segment of the spine is allowed to notice its sense of sky, lifted toward the sky, as the hands and feet supply the ground. See figures (6, 7, and 8).

Allow your hands to deliver the differentiated spine back to the feet which now allow loading back to the heel. You have now 'roughed in' the basic shapes of flight of the eagle. The shape provides a context for you to learn about the

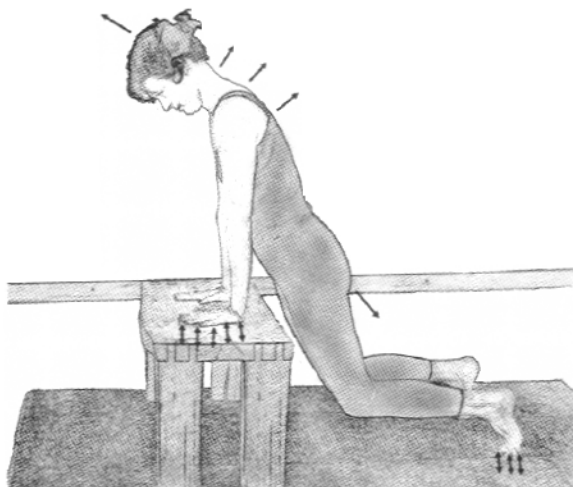


Figure 7. Continuing to use fingers and hand pressure to articulate and lift additional segments of the spine.

body's stabilizing system.

Contrasting Concentric and Eccentric Styles of Movement

Try this exercise two ways. To feel a 'concentric' version, do the movement with an intentionally contracted belly wall and consciously thinking about 'being strong and stable.' This is a more concentric style because the body appears to contract towards its center—muscles are recruited consciously leading to stiffness in the appearance of the movement. Rest for a moment and take a walk. Then move in the manner first described,

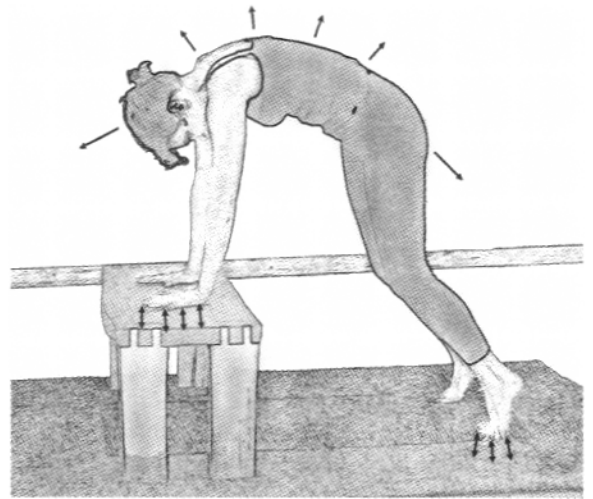


Figure 8. Here you are continuing to relate hands and toes to lifting the spine.

with hands and feet making contact with ground, sitting bones and knees finding a sense of direction, and the whole body feeling aliveness to space. Sense impression empowers the body to lengthen in movement. Movement that emphasizes lengthening can be termed eccentric since the body appears to lengthen away from its center.

Alternate the two styles. Do this enough so you feel the contrast. If you feel the contrasting responses in your body you will gain insight into the mechanism of core stabilization. Thinking about stabilizing provides a form of stability but with the addition of stiffness and shortness - a loss of adaptive capacity. Engaging sense impression in hands and feet, feeling weight and space orientation evokes stability that is economical and adaptive. The body feels strong with, at times, a miraculous freedom from effort.

Flight of the Eagle, Adaptive Capacity of the Trunk

Flight of the Eagle teaches us that the spine can flex and extend, bend forward and back, while remaining flexible and strong at the same time.

Our spine changes from lordotic to a more kyphotic shape without contraction of the belly in the conventional sense. The belly may lift and hollow out, the curve of the back may change from concave to convex - yet we are not thinking about doing something with the belly wall. The telltale bulge of the rectus abdominus doesn't show up. The costal arch isn't pulled down. The deep layer of the belly wall - the transversus abdominus is triggered to contract because the body senses a call for stability from the hands and feet. Hands and feet are saying, in effect, "Trunk, back me up so I can press against the floor and the bench with great power and by so doing power the body in space."

Lordosis gets regulated naturally through active contact with the world. However, spinal stabilization gets interrupted following back injury. The body's natural capacity to stabilize itself must then be restored. Flight of the Eagle is a way to revive natural stabilizing capacity.

Flight of the Eagle also teaches us that the trunk is stabilized by the shoulder stabilizers - serratus anterior muscles. The serratus anterior is a part of the body's stabilizing system. The shoulder blade travels forward on the rib cage through the action of the serratus shortening and the rhomboids lengthening. In the Flight of the Eagle exercise, the serratus is essential for pressing the trunk (and spine) into the air and catching it again as it drops toward the floor. Sense impression in the hand stimulates recruitment of the serratus. When we trigger the serratus, we make it easier to trigger other stabilizers such as transversus and multifidus. Turning on intrinsic shoulder and upper trunk stabilization makes it easier to turn on other parts of the stabilizing system.

A Client's Experience

A number of my clients have learned Flight of the Eagle. I'm impressed with the results. One client's reports serve to show how perception-based exercise plays a role in the Structural Integration process.

I will call my client Bob. Bob came for help with an episode of acute back pain and disability. In starting to work with him, typical SI work with fascia and movement helped but wasn't sufficient to return him to normal activities. I had worked with Bob on several occasions over the previous 15 years. He liked the SI work. He had found tonic function cues particularly helpful. For example, he had reported that bike cadence increased without additional effort simply by feeling two directions in his spine.

The first two sessions with Bob were about establishing support in the limbs and relating the

movement of the spine to the extremities. I use a wall at the end of my table so there is always an opportunity for movement to start from the feet.

I also taught Bob to trigger transversus recruitment supine, prone, and standing, by using his feet and legs pressing into the table. After he learned basic stabilizing from his limbs, I taught him Flight of the Eagle. In his first trial of the exercise he was surprised at the aliveness he felt in his hands and the comfort in his shoulders. He had the following comments after practicing the Flight of the Eagle for several weeks:

"A small amount of the Eagle means I can bend over at the waist (without difficulty). It's nice to get length in my hamstrings without focusing on them. Sometimes you don't know where to put your shoulders, where to put your body. This takes care of that. This feels like 'guiding' for your spine and that you feel it's (the spine) attached to your legs. You feel young again. Everything is in its place, rather than the old man thing. [He mimics the posture of someone bent over because of back pain or old age.] When the spine goes forward and backward it feels like a 'cleaning' out of the spine. It's like a bellows with the front of the spine fattening up and then blowing out and then the back of the spine fattening up and blowing out. Everything gets cleaned out. Staying with both feet and hands allows me to transfer my weight with confidence. There is a sense of how little it takes to go up into that position."

Stabilizing activity is a system dynamic. We need to know how to turn on this system and how turning on the system feels. Turning on the system is a natural consequence of sensory engagement with our environment, with ground and sky, with handles and tree branches, with animals, people, plants and water. Sensory engagement and orientation to the world around us stimulates the

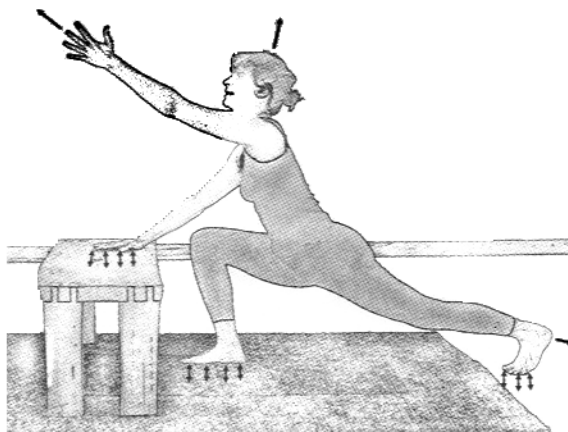


Figure 9. Hand and foot define opposite directions of reach. Other hand and foot support and give contact.

body's stabilizing system. This is an aspect of Rolf's legacy that is articulated in the tonic function model.

Flight of the Eagle, Part II

After gaining some confidence with the first sequence, there are additional moves.

Start with the basic stance: feet on ground and hands on bench. Bring one foot forward close to the bench and bring the other behind you so that leg is extended fully with your toes on the ground and your heel in the air. Reach forward and up with the hand on the same side as the extended leg. Reach behind you with your heel as you reach forward and up with your hand, all the while maintaining weight and stability with your other hand and foot on bench and floor respectively. One side of your body is thus deeply lengthened along the front with a reach in two directions. See figure (9).

Transfer weight onto your stance foot and hand. Your back leg stays straight and rises into the air. Your outstretched hand and arm is in line with your back extended leg. You are in a contralateral moment.ⁱⁱ You are supported by your hand on the bench and foot on the floor. You are also supported by your extended leg, the extended heel that reaches behind you, and your extended hand, also reaching into space. Your head is another limb reaching into space. Your body is supported by the array of vectors into space and ground. Support means the body's coordination is effective but with little or no sense of effort. Support derives from sustained sensing of directions into space, and sustained sense of loading into the hand and foot that are touching ground.

Rotate your head and trunk and extended

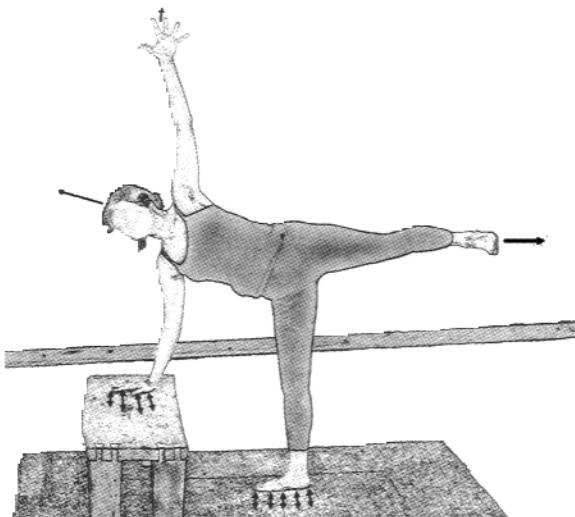


Figure 10. Body is supported by contact with ground and vectors into space in all directions.

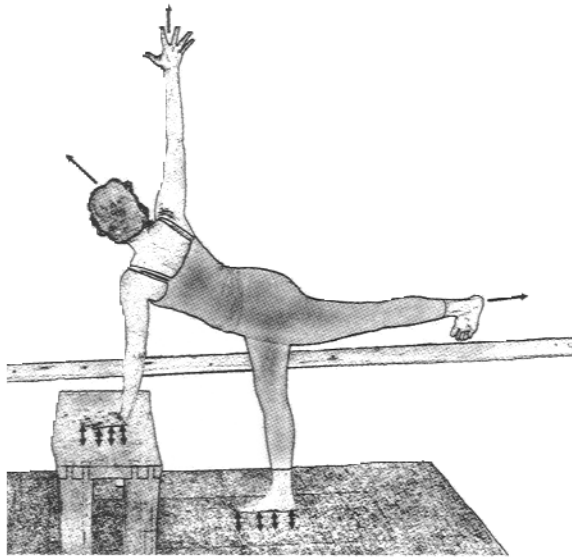


Figure 11. Body supported by contact and directions into space with twist of hip and head to opposite side.

leg and arm to face toward the same side. You will look like the illustration in figure (10). Then transfer your support to the opposite hand and rotate the trunk, head, and leg to face the opposite direction. See figure (11) Your body is in a homolateral pose.ⁱⁱⁱ

Standing on one leg can be made simpler and easier if you keep both hands on the bench while rotating your hip to one side and the other. Though less physically demanding, the challenge to sustain perception is similar, and the form is just as effective.

Bob subsequently reported:

"It's amazing how the body calms down when you feel the 'spiderman' suspension to space in different directions all around you. And every time you move you really have to start with the places touching the ground. It empowers you to move this way."

This man is in his late 40's and has had back pain since he was seven years old despite being very active. His life revolved around athletics. In college he competed in hammer throw. For the last 15 or 20 years he has worked as a builder and stone mason. He has also been a serious bicyclist. He is a large man. Bob's fascia seems only gradually responsive to manipulation. Using Flight of the Eagle, together with some preliminary instruction in stabilization, he was rehabilitating his back in a new way. He reported later that his back had never felt this strong. He went on to say:

"I used to have to bend my knees while bending forward to reach for my toes and now I don't need to. I feel relaxation. I feel a sense that there is air in back, a buzzy pleasant sensation like there is some menthol product on my low back."

My observations of Bob included the following: The Flight of the Eagle shifted Bob's gait. As he walked, his upper trunk and shoulders naturally counter-rotated the lower trunk with a larger range of motion and softer in superficial musculature. Toe push-off and landing were more articulated, the landing exhibiting a momentary lag coupled with greater knee extension. Hip extension increased. These hallmarks can be the product of a variety of fascial and perceptual interventions. In this case Bob doing Flight of the Eagle was the intervention. Improvement was greater than after other SI interventions. Additionally, it is my opinion that self-discovery and self-empowerment were key factors in Bob benefiting from this approach.

Goals of Structural Integration

Ida Rolf asserted that structure integration is a goal rather than a technique. One can achieve this goal in any manner that speaks to the self-organizing potential of human beings. Although there are a variety of ten session protocols for accomplishing structural integration, SI protocols do not define the goal of SI.

What is the goal of SI, in terms of functional change and client experience? What kind of language captures the essence of Ida Rolf's vision? Jeff Maitland⁴ has coined the term 'palintonic,' a 'unity of opposites,' to describe the dynamic span that SI attempts to elicit. The idea of palintonus reminds us that human biology and movement are wired to respond automatically, and sometimes surprisingly, to gravity.

Tonic function theory articulates the link between movement and gravity response. It is a functional model for Structural Integration that begins by considering gravity orientation. Integrated movement begins with optimum orientation to weight and space. Improved orientation supports regulation of lordosis and core stability, and improvements in contralateral gait. Improved orientation also results in strength and effectiveness in daily life accompanied by a diminished sense of effort. Flight of the Eagle is an exercise that supports these goals and can enhance a program of Structural Integration.

Footnotes

- i I find that putting a bumpy rubber door mat on the floor under the feet and 'sticky mat' on the bench helps clients feel their feet and feel and see the impression of their hands.
- ii Contralateral because, as with normal gait, the arm is forward on the same side as the leg is back.
- iii Homolateral because unlike normal gait, the

arm is forward on the same side as the leg is forward.

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Most of these references can be downloaded or linked to by visiting the Resources in Movement web site: www.resourcesinmovement.com