The Anatomy Trains "Recipe"

By Thomas Myers

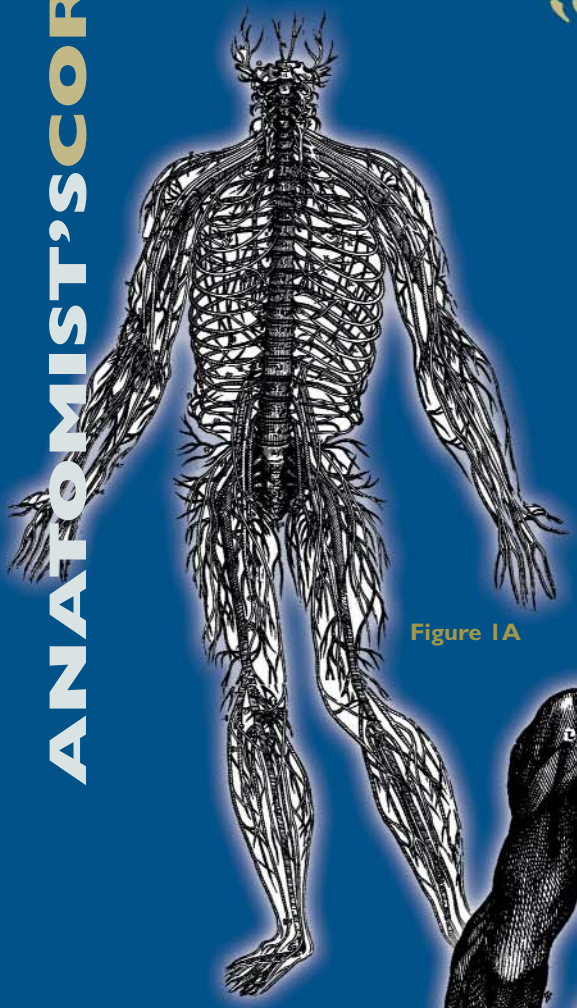

Figure 1A

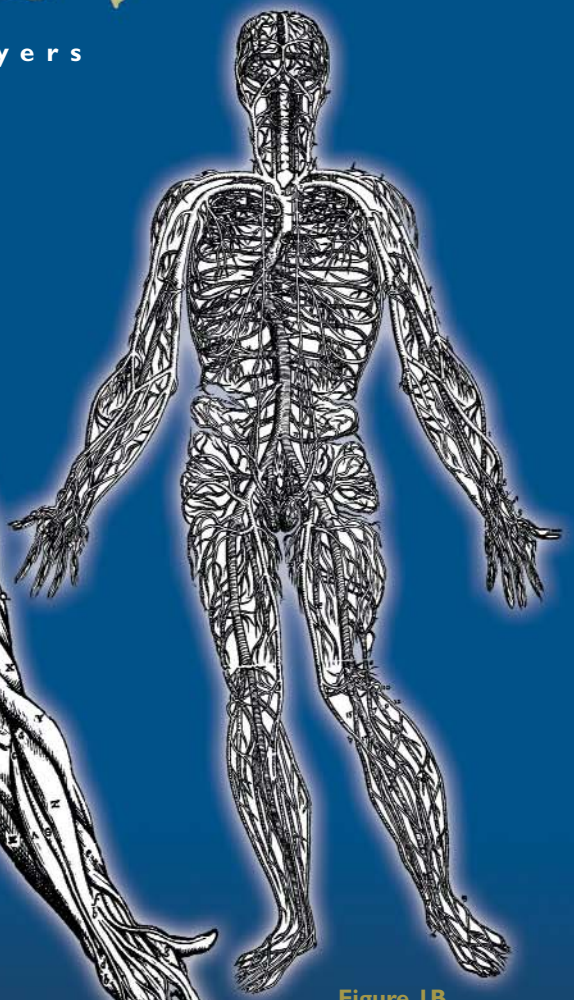

Figure 1B

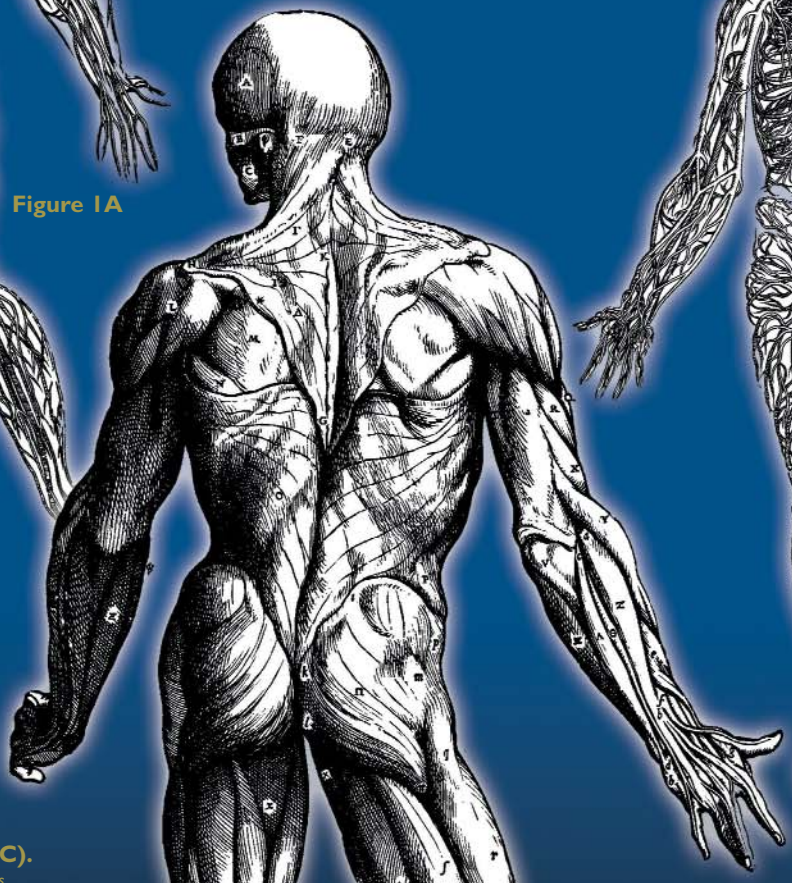

Figure 1C

Figure 1 — IQ measures the intelligence of the nervous system (Figure 1A), EQ measures the intelligence of the body's fluid system (Figure 1B), and KQ measures the intelligence inherent in the body's fibrous (myofascial) system (Figure 1C).

Photos 1A-1C used with kind permission of Dover Press.

The Anatomist's Corner is veering from its usual messy paintbox of muscles to join with this issue's theme of Structural Integration (SI). This author has been joyfully engaged with Ida Rolf's work — and specifically her 10-session "recipe" — for nearly (gulp!) 30 years.

SI remains a genuine contribution to the larger endeavor we could call "Spatial Medicine" — the exploration of what can change when we alter the client's experience of inner space; in other words, actual structural relationships and their kinesthetic proprioception. The scope of inquiry within the world of Spatial Medicine is very wide, considering issues of evolution and maturational development, authentic self-expression, the relationship between spatial arrangement and physiology, and, of course, the complex details of biomechanics (Rolf, I, 1977, *Rolfing*, Healing Arts Press, Rochester, VT). Osteopaths and chiropractors, yoga and Alexander teachers, Feldenkrais workers, Pilates and dance teachers, martial artists, somatically-oriented psychotherapists, athletic trainers and coaches, bodyworkers of all stripes, and most especially the teachers of movement to children — all these and more labor in the vineyard of Spatial Medicine.

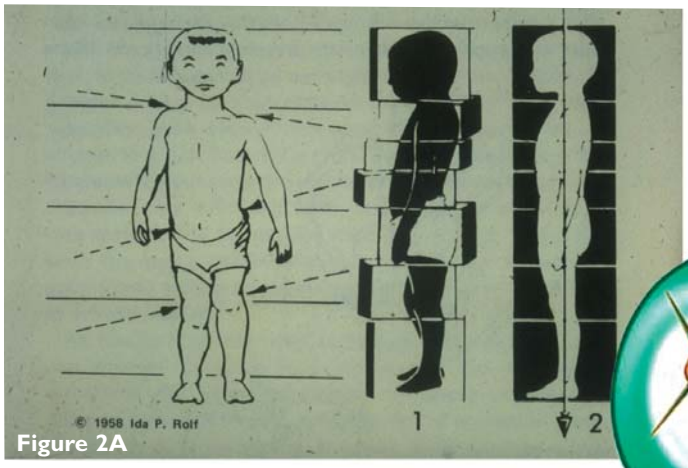

Figure 2A


Figure 2B

Figure 2 — Ida Rolf's classic recipe is taught in various Structural Integration (SI) schools, including the Rolf Institute® (Figure 2A — original 1958 logo for postural release). The Anatomy Trains recipe is taught exclusively in the Kinesis Myofascial Integration (KMI) program (Figure 2B).

All Spatial Medicine practitioners seek KQ — increased Kinesthetic Intelligence. We are accustomed to measuring IQ, and we are warming to the idea of EQ — Emotional Intelligence. But KQ — the intelligence of the moving body — has yet to be measured or mapped, with the result that, especially in our body-alienating culture, much of our KQ is wasted (see Figure 1A, 1B, 1C).


Figure 3 — Dr. Ida P. Rolf, Ph.D, 1896–1979, pioneer of Structural Integration.

SI is one experiment in generating such body-centered intelligence, with a method designed to balance and lengthen the standing body around its gravitational line. This feat is usually accomplished via a finite series of sessions of deep fascial and myofascial work undertaken over several months. The goal is to progressively move the postural arrangement from wherever the client begins toward a dynamic and hopefully more functional state of balance.

Over the last five years, I experimented with, and then began teaching, a new form of this recipe — a 12-session series that, I am convinced, brings increased clarity, logic, accessibility, and creativity to SI practice. Have a look, and judge for yourself (see Figures 2A and B).

Similar But Different

The Anatomy Trains Recipe (ATR) covers the same territory — the myofascia of the entire parietal body — as the Rolf Classic Recipe (RCR) and is based on the same principles. The Anatomy Trains 12-session recipe, however, bases itself around coherent myofascially-linked complexes called "myofascial meridians" — lines of tensile transmission within the unitary and body-wide fascial net (Myers, T, 2001, *Anatomy Trains*, Churchill Livingstone, Edinburgh).

This approach has the advantage of basing the recipe on a logical unfolding of myofascial continuities rather than a protocol based largely on "Ida said…". To me, the new protocol is easier to learn and retain, and makes the journey from postural/movement assessment to treatment plan more accessible.

On the other hand, any change in something as complex as Rolf's work runs the risk of "throwing the baby out with the bathwater" — of making some essential change in the results obtained. The changes proposed here to the SI protocol seem, to this author, to be minor, but telling, improvements, but I welcome critical thinking from my colleagues, publicly or back-channel.

For those already familiar with Ida Rolf's recipe, let me alert you to a few things before going any further:
1) Please remember that this version is offered in the context of the beginning student — how the student

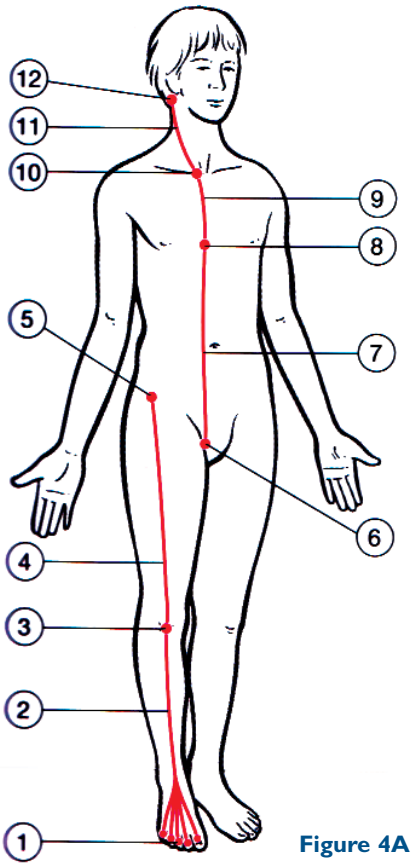

Figure 4A

BONY STATIONS		MYOFASCIAL TRACKS
		Scalp fascia
Mastoid process	12.	
	11.	Sternocleidomastoid
Sternal manubrium	10.	
	9.	Sternalis/sternochondral fascia
Fifth rib	8.	
	7.	Rectus abdominis
Pubic tubercle	6.	
Anterior inferior iliac spine	5.	
	4.	Rectus femoris/quadriceps
Patella		
		Subpatellar tendon
Tibial tuberosity	3.	
	2.	Short and long toe extensors, tibialis anterior, anterior crural compartment
Dorsal surface of foot and toes	1.	

Figure 4 — Each Anatomy Trains line can be portrayed as a one-dimensional geometric line (Figure 4A), a two-dimensional plane (Figure 4B), or a three-dimensional volume of fascial and myofascial structures (Figure 4C). In the following summary of the recipe, the illustrations are drawn from various sources to show the variety in which the lines have been mapped. *All pictures not otherwise attributed are drawn from* Anatomy Trains, *Elsevier 2001.*

practitioner can most easily attain a working understanding of the myofascial system as a whole and her intent within it; 2) the lower leg work that is concentrated in Session 2 of the RCR is spread throughout the first five ATR sessions; and 3) look for the addition of a Spiral Line Session between RCR Sessions 3 and 4, plus a session devoted entirely to arms and shoulders near the end.

For those unfamiliar with the Rolf series, look at the following as a map to unwinding the myofascial layers of the body.

The Anatomy Trains Recipe in General

The SI recipe based on the Anatomy Trains is designed to give the beginning student an accurate and inclusive map to the body and the progression of the sessions without stifling artistic or experimental inquiry.

The ATR defines a territory and a set of goals for each session, leaving the specifics of application to the individual practitioner interacting with the unique pattern of each client. Following is a skeleton of the ATR, without the questions or palpatory assessments that are essential before developing an individual strategy for any given session. These assessments determine where to start, what to emphasize, what are the specific goals, and how to know when you are done. Any recipe, in other words, is only a shell that needs to be filled with the client's details before it comes alive.

Another general point is that these myofascial meridians can be understood in three ways:

1) **As a Line** — They can be portrayed as a simple geometric line (See Figure 4A) — the most economical line of pull, from one end of the line to the other, attachment to attachment.
2) **As a Plane** — Each line — especially the cardinal (front, back, and side) lines — extends into the surrounding investing fascia blended into the specific myofascia of the line. (See Figure 4B)
3) **As a Volume** — The three-dimensional actuality of the muscles and fascia named within the line. (See Figure 4C)

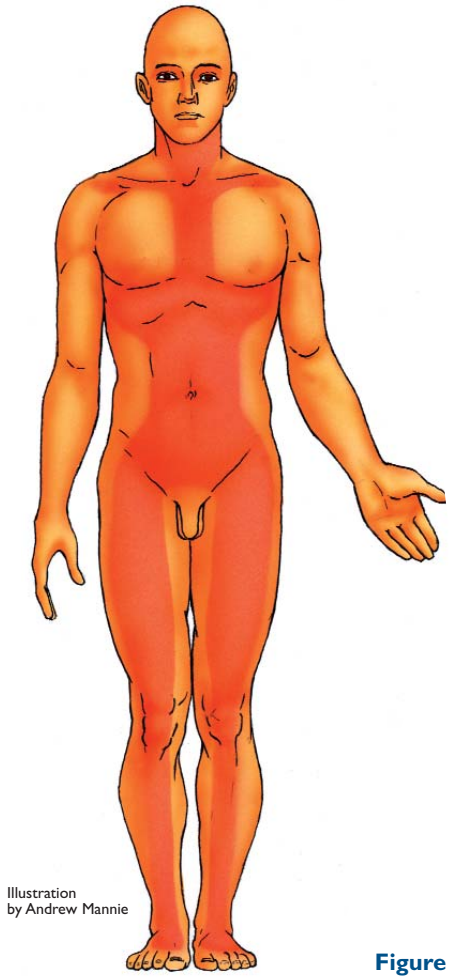

Illustration
by Andrew Mannie

Figure 4B

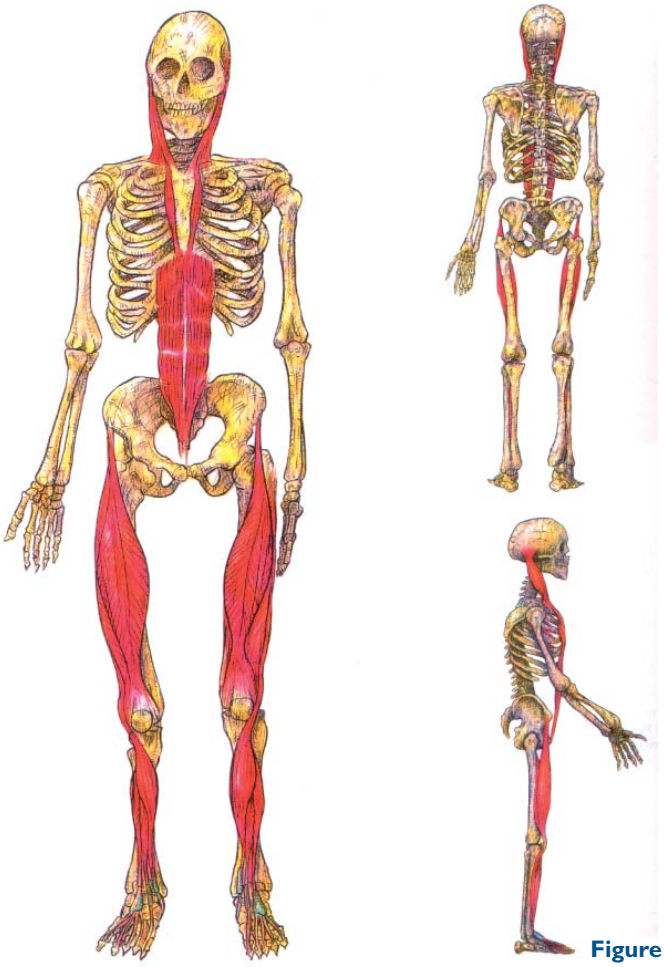

Figure 4C

In other words, the Superficial Front Line (SFL) — the main territory for the first session — can be viewed 1) as a geometric pull from the top of the toes to the anterior hip, and from the pubic symphysis to the skull, and/or 2) as the muscles and associated fascia of the anterior compartment of the leg (tibialis anterior, long toe extensors, tissue on the anterior surface of the tibia, and so on up the body), and/or 3) as the superficial fascia (deep investing fascia — crural in the lower leg, fascia lata in the thigh, etc.) extending around the outer aspect of the structures listed in the tables, blending away from the line's myofascial specifics.

In practice, these three views of the line are combined, and the style and order for working with structures and tissues within the line vary enormously from client to client. In the first session, for instance, one person might require a strategy of working from the feet up, another might focus on the rib cage, with only minimal work being done elsewhere. One client might call for really deep movement of tissue, while another may need a sensitive introduction to their own interior space. The method lies in unfolding the tissues as outlined below; the skill in the method involves deeply sensing and understanding the client and their immediate, long-term, and even their unexpressed needs.

All bodywork is a conversation between two intelligent systems. Any recipe — ATR, RCR, or any other methodological approach — must defer in the end to the specifics of the "conversation" between practitioner and client.

Put in its most simple form, following is a summary of the Anatomy Trains.

Superficial sessions:

Session 1: Open the SFL, differentiate Superficial and Deep Front Arm Lines from axial body. (See Figures 5A and 5B)

Session 2: Open the Superficial Back Line (SBL), differentiate the Superficial Back and Deep Back Arm lines from axial body. (See Figures 6A and 6B)

Session 3: Open the Lateral Line, differentiate all four Arm Lines from below, and open lateral aspects of the Deep Front Line at either end of the rib cage. (See Figure 7)

Figure 5 — The Superficial Front Line, plus the two Front Arm Lines, form the territory for the first ATR session.
Computer graphic from Anatomy Trains *video by Videograf.*

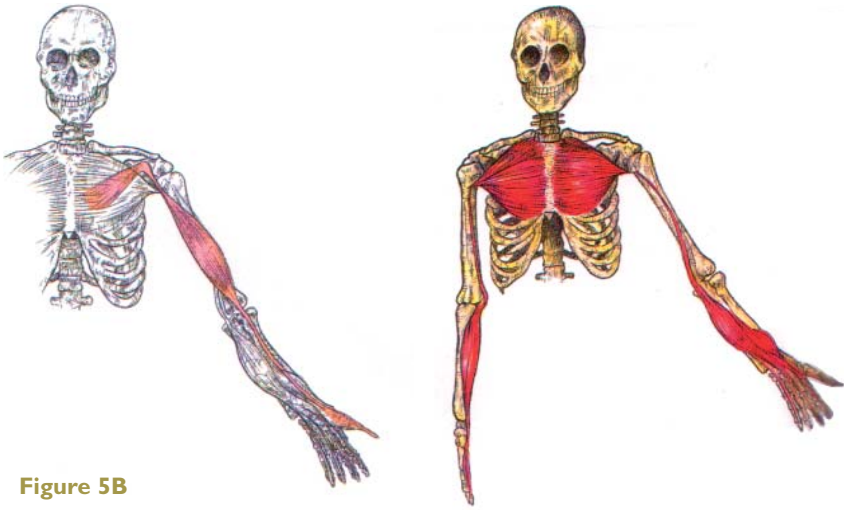

Figure 5B

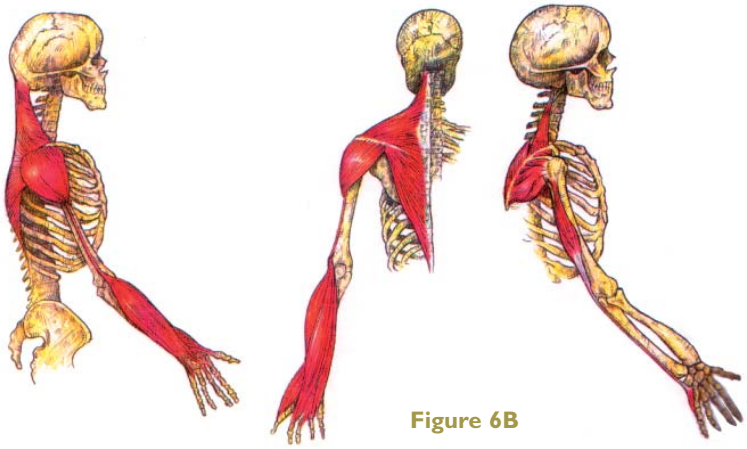

Figure 6B

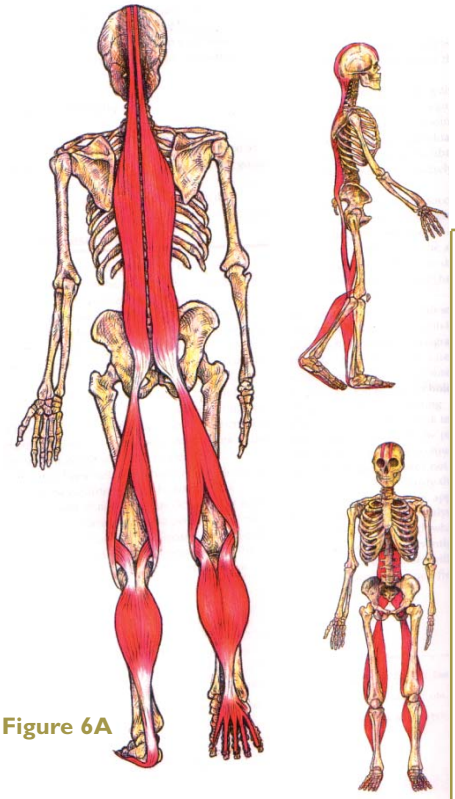

Figure 6A

Figure 6 — The Superficial Back Line, plus the two Back Arm Lines, form the territory for the second ATR session.

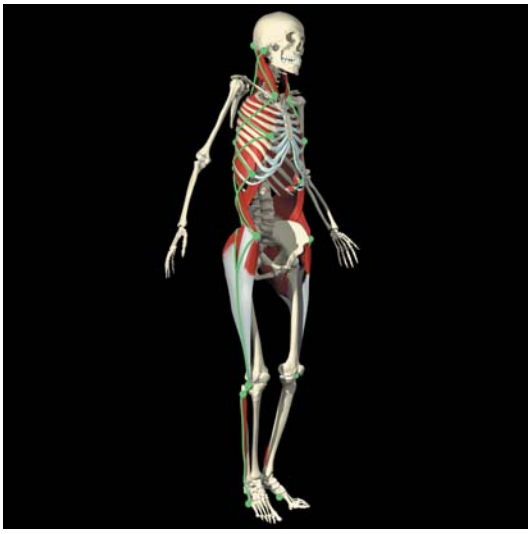

Figure 7 — The Lateral Line, plus all the Arm Lines pictured above, form the territory of the third session. This depiction of the Lateral Line structures comes from a forthcoming collaboration between the author and Primal Pictures (*www.PrimalPictures.com*).

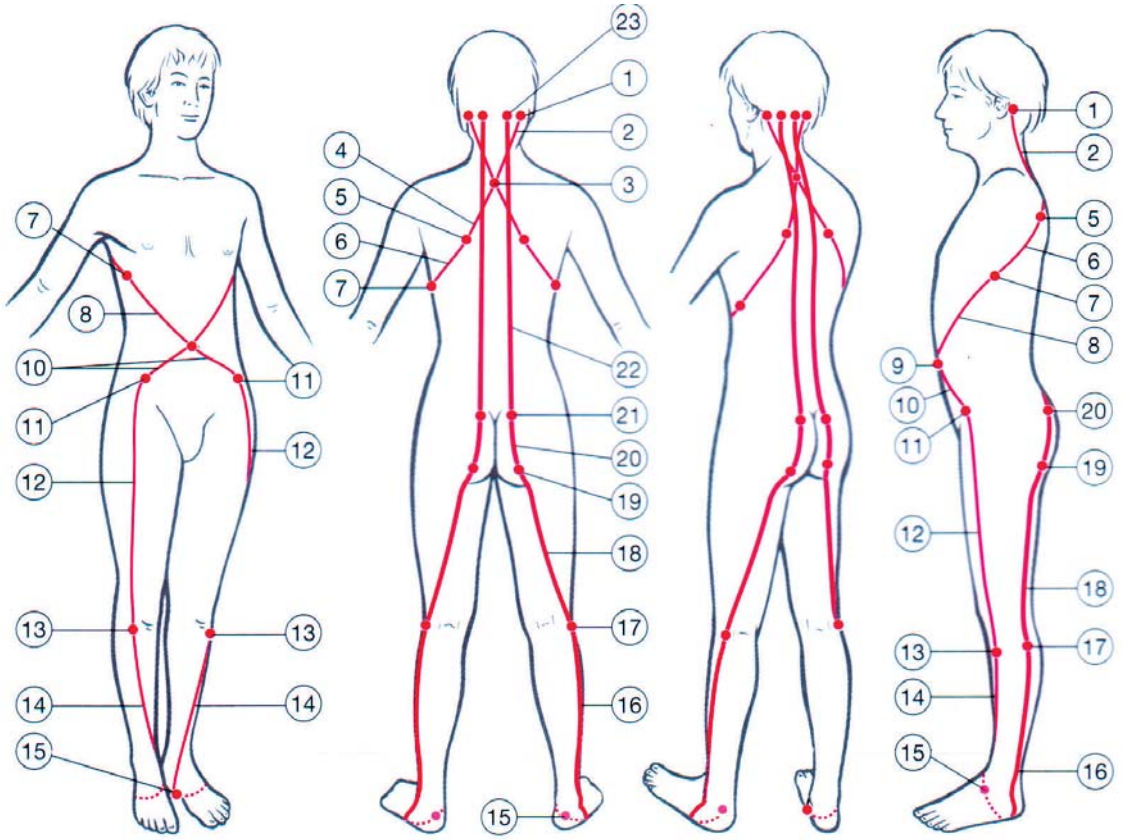

Figure 8 — The complex loops of the left and right Spiral Line form the territory of the ATR Session 4, shown here as a diagram and in list form.

Session 4: Balance superficial myofasciae for tonal balance of both right and left Spiral Line. (See Figure 8)

Core sessions:

Session 5: Open the lower portion of the Deep Front Line (DFL), balance with Lateral Line. (See Figure 9)

Session 6: Open the trunk portion of the DFL, revisit Front Arm Lines, especially Deep Front Arm Line. (See Figures 10A, 10B, and 10C)

Session 7: Open the Deep Back Line (DBL), relate to DFL, attention to "inner bag" (peri-articular) issues of support from calcaneus to ischial tuberosities to sacrum to the mid-dorsal hinge (around T6 — see Figure 11).

BONY STATIONS		MYOFASCIAL TRACKS
Occipital ridge/mastoid process/atlas/axis TPs	1.	
	2.	Splenius capitis and cervicis
Lower cervical/ upper thoracic SPs	3.	
	4.	Rhomboids major and minor
Medial border of scapula	5.	
	6.	Serratus anterior
Lateral ribs	7.	
	8.	External oblique
	9.	Abdominal aponeurosis, linea alba
	10.	Internal oblique
Iliac crest/ASIS	11.	
	12.	Tensor fasciae latae, iliotibial tract
Lateral tibial condyle	13.	
	14.	Tibialis anterior
1st metatarsal base	15.	
	16.	Peroneus longus
Fibular head	17.	
	18.	Biceps femoris
Ischial tuberosity	19.	
	20.	Sacrotuberous ligament
Sacrum	21.	
	22.	Sacrolumbar fascia, erector spinae
Occipital ridge	23.	

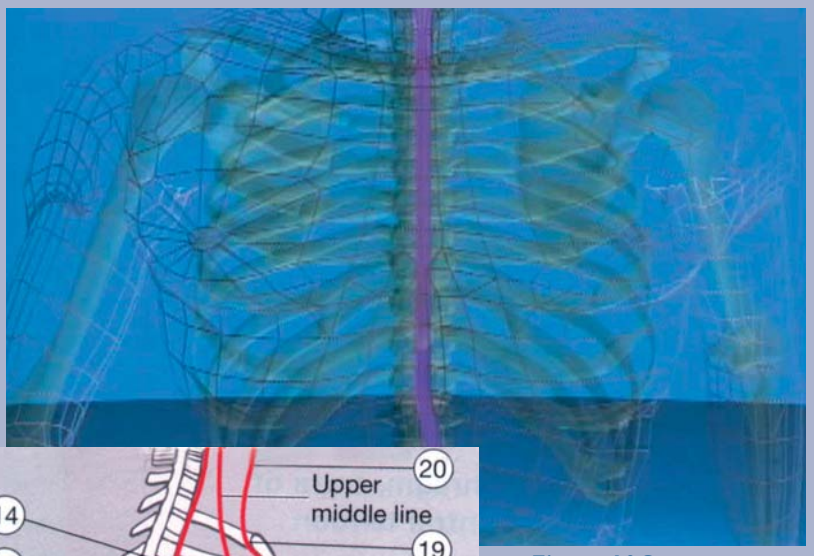

Figure 10C

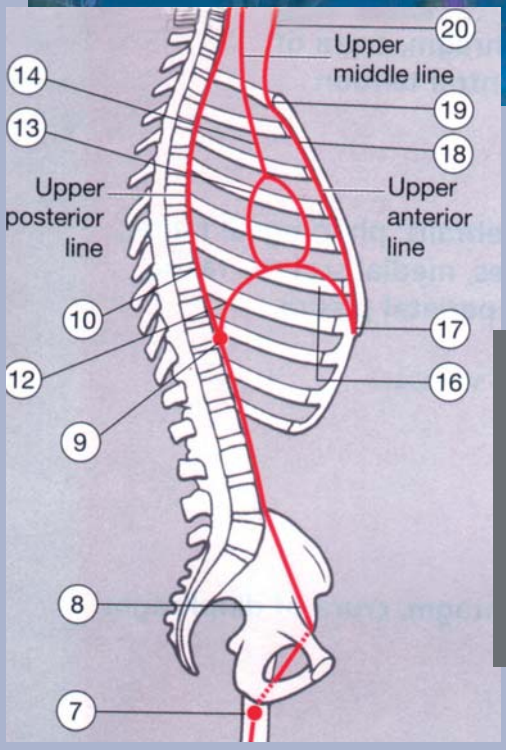

Figure 10A

Figure 10B

Figure 9 — The lower part of the Deep Front Line (the myofascial core, consisting of the deep posterior compartment in the lower leg, the adductors in the thigh, and the intrinsic muscles within the pelvis) is the territory for ATR Session 5. This depiction of the Deep Front Line structures with a "tracks and stations" overlay comes from a forthcoming collaboration between the author and Primal Pictures (*www.PrimalPictures.com*).

Figure 10 — The middle part of the Deep Front Line is the principal territory of ATR Session 6. Here we see A) a diagram showing the different tracks up through the torso, B) an interesting side (opposite) view of the relationship of the psoas and the diaphragm (developed by Rolfer® Jeff Linn using the Visible Human Data Project data), and C) a view of the anterior longitudinal ligament through a computerized "translucent" skeleton, drawn from the Anatomy Trains video/DVD series.

Session 8: Open the neck and head portions of the DFL and DBL, relate to Arm Lines. (See Figure 12)

Integration sessions:

Session 9: Promote tonal balance, complete movement and integration in the seven lines that run through the pelvis and legs, with an emphasis on stance and walking. (See Figure 13)

Session 10: Promote tonal balance, complete movement and integration in the nine lines that run through and around the rib cage, with an emphasis on breathing. (See Figure 14)

Session 11: Promote tonal balance, complete movement and balanced integration in the four lines of the arms and shoulder girdle, with an emphasis on balanced shoulders. (See Figure 15)

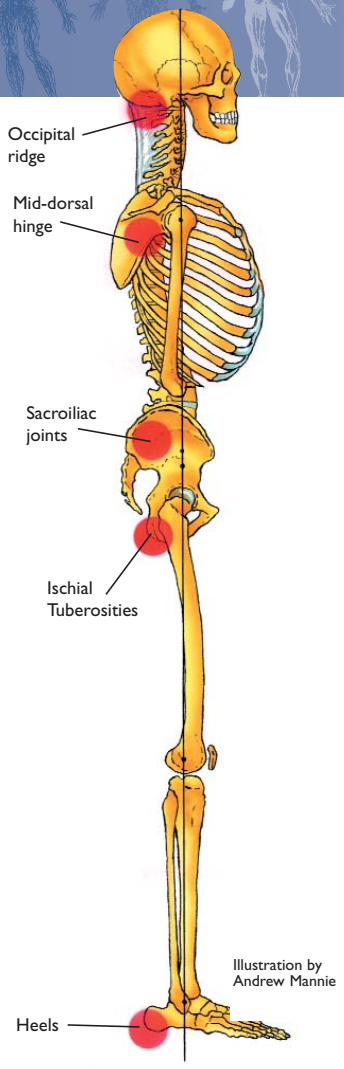

Figure 11 — The concern of ATR session 7 is the relation of the bony supports up the back of the body, the heel, the back of the pelvis, the mid-back, and the occiput.

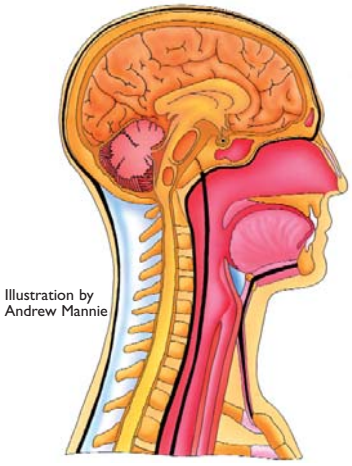

Figure 12 — Session 8 asks us to "put the head on" — balancing the neurocranium (those bones surrounding the brain) with the viscerocranium (the bones of the face, jaw, and voicebox).

Session 12: Promote the balance of the deep muscles of the spine, and complete "fascial tensegrity" balance across the entire body, with an emphasis on deep adaptability in the spine (see Figure 16). Obviously, the ATR is presented here only in skeletal form. In training, the details and the techniques are filled in on many other levels.

Some Questions

"OK," I hear some of my SI colleagues saying, "if I look at the anatomy of the lines, this seems fairly similar to what I learned, but I have some questions."

1) Why add a Spiral Line session into the series?

The Spiral Line loops around through the tissues of the Front, Back, and Lateral Lines, and therefore is a summary completion/integration session for the superficial myofasciae before heading into the core.

More importantly, Ida Rolf's recipe strongly emphasizes "hinging" (flexion/extension) actions in the body at the expense of rotational patterns. By loosening and resolving rotational/spiral patterns in the superficial myofasciae, the deeper patterns in the core become much easier to see and resolve. Without the Spiral Line session, the subsequent core sessions are less organized and more random.

2) Why spread the lower leg work throughout the first five sessions instead of keeping the whole region in one session?

The ATR is designed to deal with longitudinal myofascial continuities. Each compartment of the lower leg is linked with its myofascial partners in the body above. Thus, the anterior compartment is linked to the quadriceps and Front Line, the peroneals and the lateral compartment to the entire lateral line, etc.

The lower part of the Spiral Line addresses the sling that runs from the

Figure 13 — Session 9 is about balancing all the lines around the pelvis and legs.

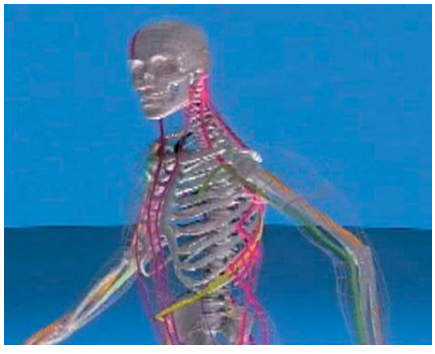

Figure 14 — Session 10 is about balancing the lines around the torso in search of an easy breath.

Figure 15 — The ATR Session 11 addresses all the Arm Lines (Figures 5B & 6B) plus their functional extensions to the contralateral hips, pictured here.

pelvis under the arches, allowing for increased support from the foot arches before entering into manual dialogue with the body's core tissues.

3) Why add an arm session into the integrating sessions?

Why not? The arms have always gotten short shrift in the Rolf series. This minor addition simply allows time to give breathing integration and the trunk its due, and the hand, arms and shoulders their righteous time as well.

4) What's this about "fascial tensegrity" in the final session?

Given that the ATR is based around these fascial continuities, and emphasizes helical spirals as much as hinges, the idea of going up the body balancing only the hinges (as in Rolf's classic recipe) seemed very limited. We look instead for even tonus along all these lines of transmission, the Anatomy Trains (see Figure 17). You can explore the idea of "fascial tensegrity" at AnatomyTrains.net, and the idea is also very similar to what Ed Maupin (in a forthcoming publication) calls "Expansional Balance" and Rolfer Jeffrey Maitland calls "Palintonos" (Maitland, J, 2004, *IASI Yearbook 2004*, The International Association of Structural Integrators; visit *www.theIASI.org* for this new publication).

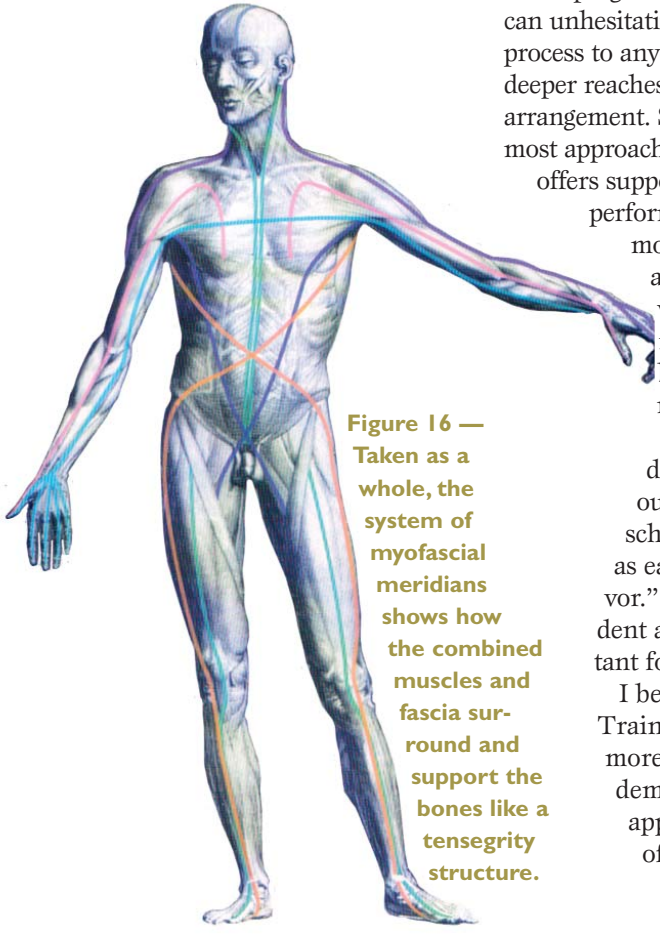

Figure 16 — Taken as a whole, the system of myofascial meridians shows how the combined muscles and fascia surround and support the bones like a tensegrity structure.

Some Final Notes

Whatever recipe is used, Structural Integration is a fabulous immersion course in the structural body, in Spatial Medicine, in developing Kinesthetic Intelligence. I can unhesitatingly recommend the SI process to anyone interested in the deeper reaches of their body's inner arrangement. SI is compatible with most approaches to the body and offers support to athletic training, performance-based arts, and most forms of psychotherapeutic intervention, as well as the more common and global goal of biomechanical stress reduction.

Any prospective student of SI should scope out the dozen or more schools (see pages 18–19), as each has a different "flavor." A fit between the student and program is important for successful training.

I believe that the Anatomy Trains Recipe presents a more accessible and academically acceptable approach to the unfolding of the SI process — both in training and in practice. More experience and documentation will be necessary to determine what approach works best. I look forward to the ongoing process. M&B

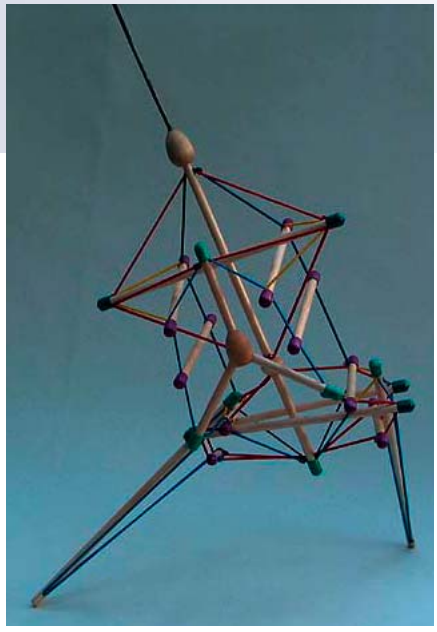

Figure 17 — "Fascial Tensegrity" sees the bones as compression-resistant struts, balanced and floating within a continuous "sea" of restraining tension from the myofasciae. More researchers are working with modeling the body in this way, and these models have interesting properties that mimic those of bodies. Although general forays into tensegrity geometry as the basis for living systems have appeared in the scientific journals (Ingber, D, *The Architecture of Life*, Scientific American, Jan 1998), few have braved the challenge of actually creating tensegrity models in our own image and likeness. One researcher who has taken the plunge is the indomitable geometer Thomas Flemons, who lives on Saltspring Island in Vancouver, and whose company, Intension Designs, has been working with tensegrity applications for more than 25 years. This is one of many models available via *http://saltspring.gulfislands.com/tflemons/intension.html*. Used with kind permission.

Thomas Myers *has practiced integrative bodywork for nearly 30 years. He teaches workshops internationally on anatomy, movement, and soft-tissue work. His book,* Anatomy Trains, *was published by Elsevier in 2001. He lives, writes, and sails on the coast of Maine.*