

~~clients from our work. She lives and works in Los Gatos, California.~~

Endnote

~~1. For a good overview of sacred geometry including its esoteric and practical roots, structure and consciousness, the natural world, science, math, and embryology~~

~~watch "Sacred Geometry Explained Part 1 of 2," and "Sacred Geometry Explained Part 2 of 2" at www.youtube.com.~~

~~kyphosis. I submitted my report but never heard anything back. At that point, busy with a full practice in Los Angeles, I concluded that the Rolf Institute was either too busy or not interested in following up on this opportunity for collaborating with the medical community. I let the subject drop until now.~~

RolfMap: A Call to Action

By Richard Wheeler, Certified Advanced Rolfer™, Rolf Movement® Practitioner

Over thirty years ago, during Neal Powers' first term as president of the Rolf Institute®, the Board of Directors approved and funded my proposal to attend a conference in Oxford, England. The conference theme was anatomical surface topography and contour evaluation, a topic of great interest to the conveners: surgeons and biomedical researchers who worked with patients suffering from the extremes of scoliosis and kyphosis.

The primary reason for the conference was that the conveners were perplexed by the dramatic difference, at times, between pre-surgery surface evaluations of their patients' contours and the actual internal anatomical configurations they discovered during surgery. Imagine the dismay of a surgeon as he cut open a patient to discover that his carefully measured struts and rods did not fit, or that the attentively palpated lump was not L4 after all.

Moiré Contourography was one of the analytical techniques for surface contour evaluations that was being evaluated by some of the participants in the conference. I was initially very enthusiastic about using Moiré-based analysis for evaluating the results of Rolfing® Structural Integration (SI) sessions. However, I soon learned that while Moiré patterns intuitively seem to resemble contour maps, at that time they could not accurately measure surface topography at the level of resolution our SI community needed.

Early Recognition of Rolfing SI as an Effective Method of Structural Change

I'd brought with me to Cambridge a copy of Ida Rolf's "photo book" that the Rolf Institute was using back in the 1970s to

show people the benefits that could be gained by our work. This was an 8.5x11-inch manual, with a blue cover, that presented before and after photographs of our clients. I figured the so-called "Blue Book" would make it easy for me to do a "show and tell" for anyone who expressed interest.

My show-and-tell moment came near the end of the conference, over a pint of ale in the Cambridge pub. One of the conference organizers, a surgeon, asked me what I did for a living; in response, I pulled out the Blue Book. He flipped through it slowly, with obvious interest, often going back to look at an earlier photo. He got very quiet. It took him a long time to go through the mere fifteen- to twenty-page booklet. Finally, he looked up at me intently and said emphatically, with a very British accent, "Where the *hell* have you people been? If these photographs are real, then we've been barking up the wrong tree entirely!"

This physician clearly had the best interests of his patients at heart. He knew through direct personal experience that surgical intervention was – and should be – the very last choice for someone whose structure was in serious trouble. Thanks to the simple photographic evidence in Blue Book, he saw that Rolfers were achieving phenomenal results and that our manipulative strategy had huge potential for helping patients avoid or delay surgical procedures that all too often led to serious medical complications.

On my return to the States, I wrote up a complete report for the Rolf Institute's Board of Directors. In it I documented the current state of Moiré Contourography and described how I'd encountered enthusiastic interest in Rolfing SI as a possible adjunct therapeutic strategy for scoliosis and

An Idea Whose Time Has Come: Improved Objective Feedback of SI's Effectiveness

Back in the early days of her training classes, Dr. Rolf routinely used "before" and "after" Polaroid photos of clients to give students and practitioners more objective visual feedback of the clients' structural changes. I'm confident that all of her students will remember her insistence that we rely on "what your eyes see and what your hands feel" to guide our work, as well as her assertion that "seeing is touching at a distance."

Obviously, Polaroid images have their limitations. Today, a question that we SI practitioners need to be asking ourselves is, "What information will best expand our understanding of our work and help us develop even more effective strategies for transforming human form and function?" In my view, we need precise tools that provide us with objective, real-time feedback to help us better evaluate the visible effects of our work, both with "normal" people as well as with those who have clinically significant issues. Both static images and high-resolution motion imaging will help us document the changes we make in static contours, breathing dynamics, and regional-segmental motion patterns.

To record change, we must first establish a baseline by documenting the client prior to any SI work. As we introduce changes with our manipulative strategies, we need to document *each* session (with before and after documentation, since changes continue to take place between sessions). This judicious documentation will make clear the effects of our work. This will help us move beyond the all-too-common perspective that Rolfing SI simply offers symptom relief, as well as beyond the notion that SI, like massage, has only temporary effects.

I am convinced that this proposed documentation would dramatically

improve both the practical development and effectiveness of our work, as well as accelerate the far wider acceptance of SI by the medical and academic communities, as well as by the general public. After almost forty-five years, I eagerly await the day that our work is clearly differentiated from massage. I strongly suspect that other SI practitioners feel the same.

And here's the good news: modern technology has now developed to the point that it can be employed to help us map the territory of the human form with far greater detail and accuracy than the images in the Blue Book I showed to the British surgeon in that Cambridge pub back in the 1970s. In the next section of this article, I list some of the imaging tools that we Rolfers might use to demonstrate the effectiveness of our work.

Modern Tools to Provide Better Objective Feedback

As you read through the list of technologies below, keep in mind that all of these tools are continuously improving. Also consider ways we might encourage further development of these tools in a direction that will better serve our SI community's needs.

- **Structured lighting technology** projects a grid or a pattern of dots over the body's surface. This is then photographed. The projected pattern's distortions (caused by the body's shape) can be measured and evaluated before and after sessions to give useful insight into the body's changing form and function.
- **Laser scanning** measures the distortion of a laser beam on contoured surfaces to create image maps. A disadvantage of this method is that scans currently take time and generate relatively low-resolution images. While in the future these limitations will no doubt be overcome, at present laser scans are best used on stationary subjects.
- **Stereo imaging** uses two cameras or an image splitter to create a linked "right-eye / left-eye" pair of images. These linked pairs can then be computationally integrated to generate contour maps. Good three-dimensional (3D) photographic image creation requires stereo images taken simultaneously from multiple positions. This involves a twelve-camera photo booth, cabling or wi-fi interface, and software for graphic display, for analysis, and for output

to printers of various kinds. One consumer-level product, GoPro® cameras, fills these requirements. The downside to this setup is its expense: a complete setup capable of whole-body imaging can cost \$10,000 or more – not viable for most individual practitioners, without research grant support.

- **Ultrasound** provides a medium-resolution view of the anatomy underlying surface contours. With the collaboration of a physician trained in using ultrasound equipment, Certified Advanced Rolfer and Rolf Movement Practitioner Sharon Wheeler has successfully used ultrasound to document the results of her manipulative strategies for changing scar tissues.
- **Acoustic imaging** research has recently demonstrated the ability to image the shape of a room with an accuracy of millimeters. This technique uses a sound source and four microphones coupled to a computer, enabling a visual mapping of room shapes in a manner reminiscent of the echolocation strategy used by bats. This technology offers the fascinating potential for camera-free imaging – not only of rooms but also of everything in the room, including people. Feedback from the SI community to the developers of this technology could possibly help shape the direction of development. A short article on the state of this technology is found at <http://phys.org/news/2013-06-microphones-algorithm-d-simple-convex.html>.

Imaging tools are already routinely used by plastic surgeons to measure precisely and to fit prosthetic parts. For this, they use images generated by stereo cameras and 3D CT or MRI scans that are coupled through computer-aided design and drafting (CADD) programs to 3D printers.

Advanced SI Practitioner Jeff Linn has used relatively low-tech computer-based video imaging to produce two-dimensional (2D) video imaging. A drawback of 2D images is that they are easily disbelieved, especially by those of us who are over-exposed to advertisements that are obviously manipulated through Photoshop®.

Getting Objective Feedback of SI Results Accepted and Published in Academic Journals

Academic journals want data, not merely anecdotes. Thus, hard data generated by the kind of mapping studies I'm proposing will make articles on SI more acceptable to academic journals, especially those, such as the *Journal of Morphology*, which focus on theoretical and applied functional morphology. Gaining greater academic acceptance and respect for the demonstrable results we achieve will be pivotal in advancing SI from being perceived as merely "a strange form of massage," both by the medical and academic communities, as well as by the lay public. I will go so far as to predict that if we document results effectively, there will one day be advanced degrees in SI at many universities around the world. Once SI receives the recognition it deserves, this will be a logical outcome.

In Search of Collaborators

Rolf identified a very large territory, the human body, in which positive changes in structure and function can be made. I believe the time has come to map this entire territory with the best tools we can get our hands on. Once we have mapped this territory, we can then use our maps to help us better understand the range of positive changes that we can create in our clients. This includes both clients who have "normally random bodies" as well as clients with significant clinical issues.

I propose, therefore, that we form a group – the "RolfMap" Team – composed of those of us with a genuinely strong interest in developing and implementing effective imaging and documenting strategies. The purpose of RolfMap will be as follows:

- To explore, refine, and extend the ideas presented in this article.
- To discover and track the presence, development, and evolution of imaging systems most appropriate for our work.
- To communicate with industry (imaging tool developers) about the use of their technology for documenting plasticity and structural change in human beings.
- To find sources of funding for workstations and office systems useful

for client and practitioner education and research projects.

- To educate the SI community about the development, relevance and use of imaging systems in SI work.
- To educate the research community and the public about SI's effectiveness, using data from RolfMap.

The RolfMap Team can start by communicating via email and social media. If you are interested in joining the RolfMap Team, please email Richard Wheeler at tarpitboss@mac.com. (Thank you in advance for any suggestions you might have for how to carry this forward.)

It is time to document Roling SI's extraordinary effectiveness in changing bodies and enhancing performance.

Dr. Rolf showed us the way. it's now our time, our responsibility, and our privilege to take this amazing body of work to the next level.

Richard Wheeler is a Certified Advanced Rolfer and Rolf Movement Practitioner in Ecuador. He is also an artist, musician, paleontologist, inventor, and entrepreneur. He is available to mentor Roling students.

The Mystery of the Ten-Series Symbols

By Anne F. Hoff, Certified Advanced Rolfer™

Author's note: I am most grateful to Emmett Hutchins, Carol Agneesens, Don Bruce, Jeff Linn, Michael Vilain, and (particularly) Allan Kaplan for all of their efforts and communications to help with this article.

When I was studying Roling® Structural Integration (SI) in the mid-1990s, students had class t-shirts made with the stick-figure images shown in Figure 1. We didn't know the provenance of the stick figures, but they clearly had some relationship to the Ten Series. Despite the lack of information, they looked cool on t-shirts emblazoned with the slogan "Roling—the Evolution Revolution—Get It Straight," proclaiming our passion for our work. Recently, I began to wonder again about those figures, and their origin. I dug deeper into the mystery with help from colleagues, came to some definitive conclusions, and added some speculation, all of which I'll present below.

The History

I first went on the Rolf Forum LISTSERV to consult colleagues. Roling Instructor Carol Agneesens also remembers the figures from class t-shirts circa the mid-1990s, and she directed me to Don Bruce, who had made class t-shirts around that time but did not know who found the images. Further digging by Agneesens and Allan Kaplan clearly suggested that the "set" for the Ten Series is actually a combination of figures from two periods (and two different sources), as they could trace only the figures for sessions seven to ten back to the early 1980s. Kaplan found versions of the figures for sessions seven through ten in his own and other students' notes from classes with both Emmett Hutchins and Peter Melchior (both were instructors at the Rolf Institute® who later were part of

the formation of the Guild for Structural Integration (GSI)]. Kaplan also located figures for sessions seven through nine in "A Searcher's Handbook"—a manuscript that Clinton Kramer compiled based on his notes from a class with Emmett Hutchins. (The class was presumably held in 1985, the date listed next to the manuscript's opening quote.) In the "Handbook," Hutchins refers to the figures as "symbols" and uses them to distill the meaning of the sessions. Figure 2 shows these early "symbols" for sessions seven, eight, and nine as they

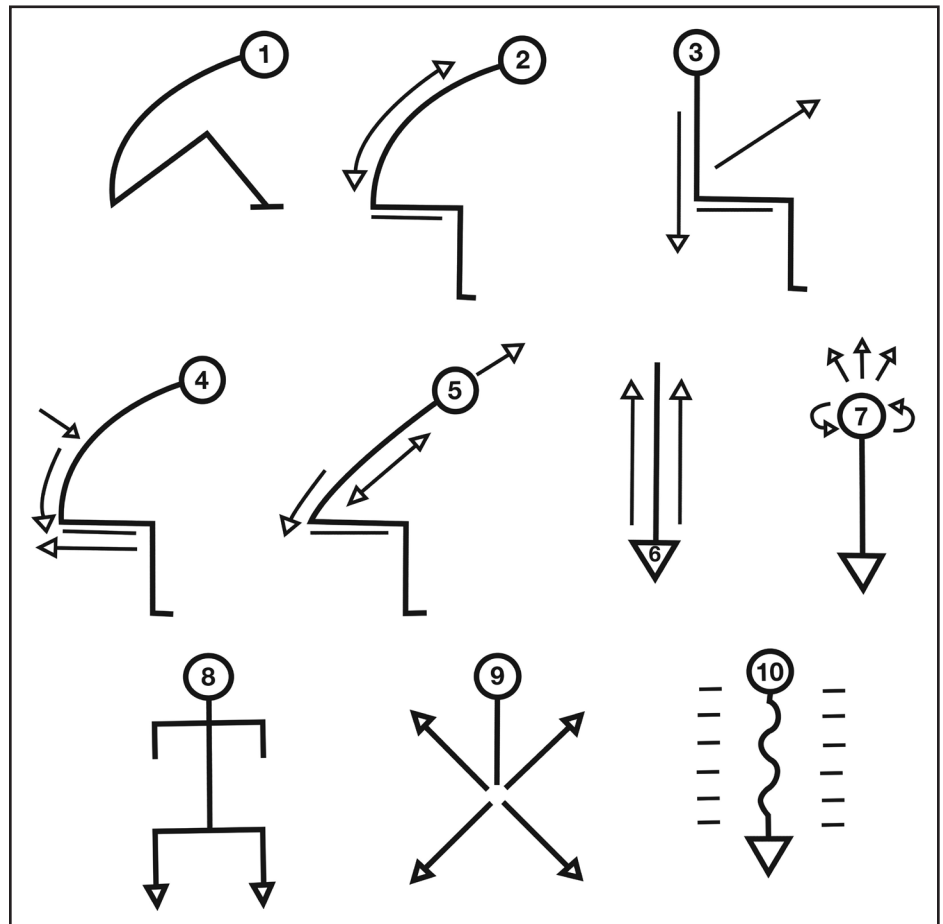


Figure 1: Stick figure images circa mid-1990s (recreated by Michael Vilain, from a t-shirt image provided by Don Bruce).