

EXCHANGE

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How to Use Body Mapping in Your AT Teaching

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Ed.: The following lecture was given by Ms. Conable to the Swiss Society of Teachers of the Alexander Technique (SVLAT) in the summer of 2005.

You have all received a copy of a scientific article ["Improvement in Automatic Postural Coordination Following Alexander Technique Lessons in a Person With Low Back Pain," *Physical Therapy* (2005, 85:565-578)] documenting the effectiveness of the Alexander Technique in one case of back pain for which there was no clear medical cause. This research was done at Oregon Health Sciences University, in the Institute for Neuroscience, in the Center for the Study of Posture, in the balance disorders lab, one of the most respected in the world, where one of the scientists, Tim Cacciatore, had become deeply interested in the Alexander Technique. Tim set out to do a preliminary study to prove the Technique's effectiveness. He himself had experienced relief from his own back pain from Alexander Technique lessons. For the study he invited one of his colleagues, a woman who had suffered from back pain for many years, to be the student. I was the teacher in this series of lessons. I will call my student Leslie, though that was not her name. Anonymity seemed to be important to her as it is for many of our students.

For this research Leslie was tested three times, a month between tests, measuring contraction of selected muscles and analyzing her movement using the world's most expensive and sophisticated movement analysis program. Each testing session took several hours and involved, among other things, standing and sitting movement. Then, after her series of Alexander Technique lessons, Leslie was tested in an identical manner, again three times, a month apart each time. You will see when you read the paper that she was profoundly different at the end of the lessons:



ATI Vision and Mission

To establish an open means of global communication for people to discuss, apply, research, and experiment with the discoveries of F.M. Alexander.

To foster the use of the F.M. Alexander Technique in social and environmental interrelationships.

To create a vital organization whose structure and means of operation are consistent with the principles of the F.M. Alexander Technique.

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From the Chair

*Catherine Kettrick
ATI Chair*

“Like most people, I had believed...that my “mind” was the superior and more effective directing agent.”¹

Throughout the chapter “The Evolution of a Technique” we see Alexander change his thinking about how his mind and body work.

At the beginning of the chapter he states that he divided “mind” from “body” and thought that problems a person had would either be “mental” or “physical.” Treatment for problems, therefore, would require either a “mental” or “physical” approach. Because he believed his problem was “physical,” he began by trying to find a “physical” answer.

He also believed that “...I should be able to put into practice any idea that I thought desirable.”² But as he continued experimenting, he found, over and over again, that no matter how hard he tried, he couldn’t always do what he had decided to do.

Alexander (fortunately for us) continued experimenting, and as we all know, went on to develop the principles of inhibition, conscious control, and directing.

Each of these principles involves what might be called “self-control.” We must decide to inhibit our initial reaction to a stimulus, and continue that inhibition throughout any activity we choose to do. We must decide to direct ourselves in a new way, and continue that directing throughout any activity we choose to do.

As Alexander continued his work, he found many stumbling blocks, including faulty sensory appreciation and cultivated habits. However, there was one stumbling block he did not know about, that scientists are now studying—glucose depletion.

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EXCHANGE

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We use glucose for everything; it is the fuel that allows us to be alive and active. Low glucose levels mean we can't be as active as we might want to be; and, it turns out, low glucose levels also interfere with our ability to do what we "will to do."

Matthew T. Gailliot and his colleagues³ did several experiments where they gave volunteers a task that required some self-control (e.g., paying attention to part of a video), then gave them a second self-control task (e.g., a Stroop test⁴) to see how well they did on the second task. Before and after the first task, they measured each volunteer's blood glucose level. Another group of volunteers did a first task that did not require any self-control (e.g., just watching the video, without having to pay any particular attention to any of it).

The researchers predicted that if a first task required some self-control, that would use up some of the volunteer's available glucose, and that because they had less glucose available for the second task, they would perform less well on it. They predicted that volunteers who did not deplete their supply of glucose would perform at a normal level on the second task.

Their predictions proved true: volunteers who had lower than normal glucose levels after the first task performed less well on the second task; the lower their glucose levels, the worse they performed. This prediction was true for

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She was nearly free of the pain she had suffered for decades; she was far more symmetrical; her movement was much more fluid and efficient.

All the scientists in the lab were impressed, and there was a good deal of interest in the research when it was presented at a meeting of neuroscientists in Europe a few months after it was done. Now the research is available to the public in the paper that you have in your hands.

Certainly this research documents the effectiveness of the Alexander Technique, and it is my view that the research also documents the effectiveness of teaching the Alexander Technique from a Body Mapping perspective as well as “in activity,” for I truly believe that lessons that did not directly correct this student’s faulty body map would have been less effective in the short time we had together. There is nothing in the account of this research that describes how the lessons were given, so I am hoping it will be useful to you for me to describe in some detail how I taught this particular student, for I believe how these lessons were conducted was important to their success. I can show you how Body Mapping was used in this one case, hoping it will help you understand how it may be used in other cases.

So, this lecture is in three parts: First, I want to tell you how I taught the lessons. Then I want to examine with you another paper you have in your hands, the article by neurophysiologist Richard Nichols about the body map [“The Scientific Basis of Body Mapping,” see www.bodymap.org]. Third, I want to tell you about the structure we will follow later in the afternoon during the time for exchange of lessons.

For the sake of the trainees present today, I want to encourage you to take excellent care of yourselves as you listen. Stay awake in your own body and remain as comfortable as you can. If you need to get up and walk around, just come to the edge of the room and take a stroll. If you want to do some lying down work while you listen, feel free to find a spot on the floor.

May I recommend that you use every change in projected image to just ask yourself how your use is as you listen and make any changes that need to be made in the manner of your sitting.

There was no clear medical cause for this woman’s back pain. This seems very strange to those of us with eyes for use, because in most of these cases we see the cause with utter clarity; certainly I did in this documented case. Leslie’s pain was caused by misuse, so we used

observation, inhibition, and direction

to solve her problem, just as Alexander had done to solve his vocal problem years before. Leslie’s misuse was caused by the errors in her body map. It is for that reason I used Body Mapping extensively in the course of her lessons.

To repeat: Her pain was caused by misuse. Her misuse was caused by the mistakes in her body map.

What is a body map? It is a person’s representation of the body in the brain, just as your road map is a representation of Switzerland on paper. Our body map quite literally dictates our movement, its range and its quality. If the map is good, movement is good. If the map is a little weird, movement is a little weird, and if the map is seriously in error, as Leslie’s was, then the movement will be inevitably painful and awkward. I have learned from my decades of teaching the Alexander Technique that correcting the mistakes in the body map is the most efficient way to help students learn the Technique.

What, then is Body Mapping? Body Mapping is the conscious identifying of errors in the body map and the conscious correcting of those errors so that one's body map becomes completely consistent with its territory, with regard to structure, but also with regard to function and size. In the case of learning the Alexander Technique, one learns the highly refined, coordinated movement the Technique cultivates much more easily and fully with a corrected body map than one does with an inaccurate body map, though presumably the Technique itself would, over time, change and correct the student's body map as the result of the teacher's guidance and example.

How may one know one's body map? By drawing the body, or a body part. A drawing will always reflect the body map. By looking in a mirror and asking how what one sees differs from what one expects to see. By answering questions. All students will answer the question, "What's a neck, do you think? What's it like, really?" The answer to the questions will give you as the teacher a lot of information about the student's body map of the neck.

In the case of Leslie, I first conducted a pretty extensive intake interview so that I could fully understand the history of this student's pain. I learned from the interview that Leslie's pain was of long standing and quite debilitating, sometimes requiring bed rest and significant use of pain medication, always threatening her work life, which included a lot of travel by air, and usually reducing her joy in life. Leslie, I learned, had had extensive physical therapy with little positive effect, for the usual reason: she brought the same use to the prescribed exercises that she brought to everything else, with the same result. The fact that extensive treatment had not helped her had discouraged her, and it is accurate to say, I believe, that she was skeptical that I could help her and afraid these lessons would be a waste of her valuable time, though certainly she hoped for relief. She had had regular massage, and I believe Leslie's back pain would have been much worse without the massage, which relieved some of her muscular tension and kept her connective tissue from conforming completely to her tightened muscles and to her asymmetry.

I also learned in our initial interview that Leslie's pain came and went in some predictable ways: always worse when she walked her dog; usually very bad when she lectured and when she worked in the garden; often worse on waking up from sleep; sometimes very bad at the computer. I regarded this information as significant, and I based a lot of my teaching on the revelations that came from the intake interview.

The first thing I did after the intake interview was to go to a fundraising event and watch Leslie give a speech to potential donors. (I recommend this, by the way. Go watch your students in action whenever you possibly can.) I observed Leslie fix her body into a severe back and down position as she spoke, a position that would be quite familiar to all of you. Leslie remained

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unmoving in her back and down position except when she absolutely had to move to deal with her equipment. Her vocal quality was not good, but her manner was nonetheless engaging because she is so passionate about the value of her work, and so articulate. Leslie's enthusiasm for the content of her speech was in fact her excuse for her total lack of body awareness as she spoke. She was subject to the common illusion that increased awareness of herself would result in decreased awareness of the content of her speech and of her audience. I teased Leslie a good deal about this, getting as much humor out of it as I possibly could. This woman has extensive knowledge of the brain and she had to admit that nothing she knows about the brain would justify such a fear, the sensory and the cognitive being capable of simultaneous full function. In fact, I was able to prove to her over time that the sensory actually aids the cognitive, if it gets a chance.

Leslie's fixture down and back in speaking carried its usual consequence. She discovered at the end of her speech that returning to her seat was not easy and she became aware of the pain she had completely ignored during her speech, which gradually eased a little as she sat.

1. (*Projected in English and German*): Ask students how they are conceiving themselves with regard to structure, function, and size. If the conceiving is faulty, give correcting information. Use anatomical models.

Our first lesson, therefore, was all about how to stand while speaking in public. I used the full length mirror in my teaching room to show her how she had been standing. We made a thorough examination of what she had done, based mostly on her own observation. "Tell me what you see," I would say, "and tell me what else you notice," and "If you were in your audience, what would you remark about how you are standing?"

Leslie was able to see that she was severely back and down as she spoke, though she had been unaware of it at the time, and we were able thereby to create a clean distinction in Leslie's mind between the habitual and the normal. She could see this wasn't a normal way to stand. By the end of the hour, we had also determined that, in her body map, weight delivery was mapped along her back instead of at her center. The way she was standing was completely consistent with her body map, but it was completely inconsistent with her actual body, therefore the pain. I invited Leslie to change her body map by continually referring to the skeletal picture.

Projected picture: the skeleton.

I used this picture of the lateral view of the spine to show Leslie a better way of standing. Together we examined all the ways in which her habitual stance

in speaking violated the architecture of the bony structure. I guided her with my hands to a better balance, and she was able to say that she felt better there, though she felt oddly forward. We were able to establish that her feeling forward was an instance of sensory unreliability. We agreed that she was forward of what she was used to but not forward of balance. I encouraged her to say to herself every time she corrected her balance and felt forward, “I am forward of habit, but I am not forward of balance.” I assured her that her senses would become reliable and she would no longer feel forward when she is balanced. In fact, I told her, as her senses become reliable she will experience her dropping down and back as exactly what it is, down and back, so she will know when she is doing it. She will no longer live under the illusion that she is vertical or upright or balanced when she is in fact down and back.

2. (Projected in English and German): Give homework based on the need for correction.

I gave Leslie multiple copies of the skeletal picture so that she could put / one on the refrigerator door / and one in the car / and one at the computer / and one in the bathroom / and one on the bedroom mirror / and wherever else she thought she would attend to it. I said, “Just paper your world with the truth.” I told Leslie her homework was to absorb into her body map the truth of the picture she was looking at. Her brain, I said, had simply made a mistake in mapping her arm-leg-torso moving muscles of her back as her support in uprightness. Now she was going to correct this error and allow her back to release forward and up so that it could enjoy support from her spine and her postural muscles. I showed her how her back can lengthen and widen as it no longer has to do work it was not designed to do. Leslie grinned at the thought of having homework after all these years, and she really did do her homework very well.

The biggest challenge in Leslie’s learning to maintain a lovely balance as she gives her lectures was returning awareness to her standing frequently enough to inhibit her pulling down and stiffening. Leslie invented a symbol for herself—a star, I think—to put in her lecture notes to remind her to return awareness to how she was standing. This worked very well. Many of the musicians I have taught do the same thing in their music notation.

At the end of the first lesson, I told Leslie that I needed to come and see her walk her dog, which I did a few mornings later. The dog turned out to be very poorly trained so it frequently pulled hard on the leash, to which Leslie responded by digging in her heels and pulling against the dog in an asymmetrical way consistent with the chronic twisting in her body. We established that the dog’s pull was either causing the twisting or it was reinforcing it. In either case, it was damaging, causing her worst pain. I told Leslie she needed to either get the dog trained so that it would walk beside her with no pulling, or she needed to get someone else in the family to take over the task of dog walking for the time being. She was too vulnerable to injury to continue with this activity in its current form. She agreed to stop walking the dog and one of her daughters began to do it instead.

3. (Projected in English and German): Give introductory lessons that help the students map their heads, necks, spines, backs, and limbs accurately right from the very beginning.

Projected picture: the neck.

I gave Leslie for her second lesson one that was a very ordinary first lesson, in front of the mirror so that she could see all the change that was happening. I had, as I always do, large pictures of the neck and the entire muscular system clearly visible to Leslie, as well as the skeletal picture we had used the week before. I explained carefully to her about the tension she was carrying in her neck, the effect the tension was having on the balance of her head, and the consequences of the neck tension for the rest of her body. I used pictures of the neck and head and spine to make these

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points, and we identified the mapping errors that were responsible for her neck tension. She had mapped the top of her neck as starting much lower than it really does, near the back of the bottom of her jaw rather than near the top of the jaw, as it actually is. In addition, she thought of her neck as being in back, rather than all around, and she also had the bottom of the neck mapped much higher than it actually is. No wonder her neck was so shortened; it had to fit a short map!

Projected picture: the spine.

One more mapping error contributed to her particular pattern, and that was an attempt to create a straight spine in her neck and elsewhere, and we had to continually refer to pictures of the curves of the spine, particularly the cervical curve, in order to correct her incorrect map and thereby relieve her tension.

Leslie was able to follow my guidance very nicely in that first lesson so that she could feel and see herself lengthen toward her actual stature. This was impressive to her, and like many students, she liked the way she looked as downward pull was reduced. I encouraged Leslie to use the mirror a lot in the coming weeks and I also encouraged her to read my book, *How to Learn the Alexander Technique*, which she did. Another bit of homework!!

At the end of that lesson I showed Leslie how to use the gymnastic ball to release her back by draping her body over the ball. She was looking in the mirror as she worked with the ball, and she was very impressed with the way the ball released the lower back tension that had been imposed by her down and back habit. Her back looked very long to her. This encouraged her to accurately map her actual length, for not only had her neck been mapped as shorter than it is, she herself was mapped as shorter than she is.

The next lesson continued in this manner, and the main event in that lesson was Leslie's insight into how much she had always tried to pull herself up out of her downward pull habit by trying to achieve what she thought of as "good posture." This pulling up only added to her tension. I praised and reinforced this insight in every way I could think of, including asking her to go back into her slump, then ease out of it to balance, then pull herself into her habitual pulling up into her idea of posture, so that she could see there were actually three conditions from which she could choose, not just the two choices of pulling down and pulling up that for her had been "a rock and a hard place," as we say in America, or a Scylla and Charybdis, to use the classical terms.

I knew from the intake interview that Leslie often woke up tense and hurting in her back. I had told her at the time that some students wake up more relaxed and comfortable and some wake up tenser and hurting. I told her I considered it significant that she woke hurting and that we would certainly inquire into her sleep habits as we proceeded with her lessons so that they could be removed as a factor in her pain. I asked Leslie to just be observant about her sleeping. Now the time had come to discuss what she had observed.

We learned: Leslie often went to sleep tense. She didn't usually take time to relax before falling asleep. She had also, over time, gradually reduced her moving in her sleep so that it was well below what sleep labs have determined to be normal movement during sleep. She had done this in part—as have many students—as a result of advice she had received about acute episodes of back pain, things like putting a pillow between her knees, a practice which might have some small virtue during an acute episode but is very bad advice for the long run. There are two reasons for this being bad advice: the first is that it restricts movement, and the second is that it is hard work for the lower back to balance one leg on top of another hour after hour.

No little child ever does this in sleep. Instead, children bring one leg forward of the other, or back of it, in order to deliver weight directly into the bed through the thigh bone.

4. (*Projected in English and German*): Teach your students to incorporate Body Mapping into their lying-down work.

I taught Leslie constructive rest and asked her to do it before she fell asleep and to always remind herself on falling asleep that movement during sleep is natural and very important for muscular freedom, for the integrity of the connective tissue, and for circulation. I further asked Leslie to always remind herself in her lying down work about the centrality of her spine, and about the depth of her neck, top to bottom. I taught her how to palpate her neck in constructive rest, exploring the base of the skull, the extent of neck muscles in front, the attachment of neck muscles at the collarbones, and especially her cervical curve. I asked her to cup her hands under her cervical curve and just let her hands gather information about the curve and to communicate that information to her brain so that her brain could remap her neck successfully. Soon Leslie was waking up much more comfortably due to her constructive rest before falling asleep and due to allowing more natural movement throughout the night.

I suggested we do Leslie's next lesson in her office because I suspected that she had underreported her pain at the computer. I turned out to be right. She ignored her pain in the office in the same way she had ignored it in public speaking.

Leslie's work environment turned out to be one designed to create back pain, so we were forced to spend a lot of the first hour in her office getting her set up in a more mechanically advantageous way. Among other things, I expressed my distress with her chair, a task chair meant for a much smaller person which was adjustable but not in any of the ways Leslie needed it to be. In fact, we actually made three shopping trips together to find the right chair for her, a chair that allowed her to very quickly change the chair to a shape perfect for her work at the computer and then to a shape perfect for her making phone calls and then to a shape perfect for desk work.

I gave Leslie several lessons in her office. I don't remember the exact number. This was important, in my view, in the success of the lessons, because I could see just exactly what the stimuli were in her workplace and the response she was making to them. Again, we had to address her illusion that attention to herself reduced attention to her work. This, too, is a mapping error, and again she was able to learn that self-awareness actually enhances world awareness, the exact opposite of what she had mapped.

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I taught Leslie to keep careful track of the relationship between use and pain. Whenever she experienced pain or an increase in pain, she was instructed to carefully note her use. Did the pain increase as her use deteriorated? If severe pain returned, had she severely lost herself and severely pulled down? If she stayed free, did she escape the pain? Leslie was able, over time, to establish in her own mind an absolute correlation between deteriorating use and pain and improved use and comfort. That correlation gave her the information she needed to inspire further observation, inhibition, and redirection.

Projected image: skeleton.

We did two lessons in Leslie's garden, and I believe these were among the most beneficial to her. For one thing, the pain-use correlation became painfully obvious there. Her use was terrible in the garden, where she was the world model for end gaining. Her garden tools were in bad shape, so I spent about five minutes extracting a promise that she would get some of her tools sharpened and replace some others. I often extract promises from my students. This is done in a humorous, lighthearted way, but I think it helps them a lot. They have to make a commitment, and I can ask at the next lesson, "Are you keeping your promises?"

5. (Projected in English and German): Teach traditional procedures, like whispered ahhs, by addressing the body map.

The first lesson in the garden required me to teach Leslie monkey and lunges, two "traditional procedures," so that she could do her work in a more mechanically advantageous way, coming forward from her hip joints in coordination with the bending of her knees and ankles, when her habit would have taken her backward and stiffened her legs to do the same tasks, particularly using the lawn mower. Fortunately, I had a little flexible skeleton with me, so I could show Leslie the use of the joints in monkey on the skeleton as well as in my own body, and she was able to catch on pretty quickly by finding the same joints in her own body. Without the help of the little skeleton to clarify the joints being used, teaching monkey and lunges to a student like Leslie can take a long time.

The first lesson in the garden was not very successful, from a certain point of view. Leslie's end gaining was so bad that even with help from me she was in pain at the end of the hour. I said, "Okay, what can you learn from this?" Leslie was able to draw all the relevant conclusions: her self-forgetting, her end gaining, her ignoring pain and tension, her refusal to stop. The point is this: a lesson that is unsuccessful from the point of view of improving use or reducing pain can be nevertheless be very successful if it shines a bright light on habitual behavior. I told Leslie at the end of the first garden lesson that we would have to have a second lesson in the garden and that I wanted her

in the meantime to really think about what she had done there and what she would need to change. I brought as much humor to it as I could. “Did you ever hear of anyone enjoying gardening?” I asked.

In answer, she smiled a wry smile.

“What’s that about, do you suppose, enjoying gardening?”

“Well, I think they must do it in a different way than I do.”

“Oh, like what?”

“Well, maybe they slow down a little.”

“Yes, I think so,” I said, “and maybe they actually see the flowers as well as the weeds.”

The second lesson in the garden was much more successful. Leslie was ready to change her ways. She finished that lesson free of pain and pretty pleased with herself. I laid down a lot of rules about gardening in the future and extracted promises. “I need to know,” I said, “that I can count on your carrying on in this easier manner in the garden. Promise?” “Promise,” she said.

My students very quickly learn that they will be asked for a full accounting of themselves at the beginning of each lesson:

I say, “Please tell me how you got along between last lesson and now,” or “What do you have to report?”

I expect a detailed report, nothing abstract. If a student says, “Oh, I did really well,” I say, “Please tell me about really well. What was your experience exactly?”

I ask about each thing we have worked on. In Leslie’s case, for instance, I would always ask about any speech she had given. Was she able to keep track of what she was doing as she spoke? Did she experience any pain? Was she stiff at all when she finished? If she found herself tensing, could she redirect? Had she spent time in the garden? What was her experience there? Did she end gain? Did she stay with the means whereby? How did she feel each morning as she woke from sleep? Was her nighttime constructive rest continuing to benefit her?

I always ask even the most advanced students if they have questions. I have learned over the years that many students will not ask their questions if they are not invited to do so. This is especially true of very bright, knowledgeable students like Leslie. They often think they ought to know. Many students learn to bring lists of questions in their notebooks, and I often find these are some of the most fruitful times in lessons, the detailed report and the questions.

One lesson was entirely devoted to the use of the gymnastic balls. Leslie had purchased three, in different sizes, for different purposes, the smallest one to sit on in her garden while planting and weeding. I showed Leslie how to sit on the biggest of them to release her back and legs and how to work at her home computer on it, so that her body stayed fluid. We worked in front of the mirror, Leslie draping over one of the balls, rocking back and forth to release the entire length of her back. I often sat on another ball myself and used my hands to guide a release in her back. Leslie could clearly see herself lengthening and widening as she released, and then we worked on getting up, pushing away from the ball, coming to kneeling beside it, allowing the length and width to continue, coming to her feet still

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taking advantage of what she had learned while she was on the ball. She learned to use the gymnastic balls as a resource throughout the day, going to the balls for release whenever she noticed she was tightening. A few minutes on the ball could send her back to her home computer comfortable again.

6. (Projected in English and German): Name what's happening in table work in a way that supports changes in the student's body map.

Near the end of her series of lessons I gave Leslie several table lessons. I thought it was very, very important that she have a lot of experience of change before she have table work so that she in no way became dependent on the table work and so that she already had a lot of experience of noticing change to bring to the table work. I talked with her all the time I was working with her on the table about her body map, especially with regard to size, for, as I have mentioned earlier, Leslie had been mapped too small. I told Leslie about Alexander's term "full stature" to describe our goal with the Technique. Leslie was able to use those words full stature very much to her advantage.

7. (Projected in English and German): Tell students about their body maps and about the power their maps have for good or ill.

Fortunately, as a scientist, Leslie knew all about the existence of the body map in the brain, though it had never occurred to her that she could examine or correct her own. In fact, all the scientists in the lab were surprised to hear that practical use was being made of the body map among musicians and Alexander Technique teachers. They knew only its descriptive, anatomical value.

Leslie turned out to have significant body map errors in all three arenas: structure, function, and size. Another of her structure errors was her mismapping of her shoulder blades, which she pulled chronically together and way too far down her back. She had shoulder blades mapped as on her back, with no mapping at all of the way they come around to the sides to form the humero-scapular joint and no mapping at all of the way they curve up over the top of the ribs.

The irony of this was immediately apparent to Leslie because she knows the anatomy of the area very well intellectually. She could pass a test naming the muscles and indicating every insertion of every muscle, so she was able to see that the truth she knew intellectually bore very little resemblance to the structures in her body map that determined her movement in that area. Her knowledge of anatomy had done her no personal good at all in the past because it had never moved into the areas of her brain that control movement, but her knowledge of anatomy became a huge asset in her work once she learned how to move her knowledge of anatomy into her body map so that her map became congruent with its territory.

I have already mentioned a serious function error in her assuming her back must carry her weight. Correcting weight delivery to the center of her was crucial to her becoming free of pain.

Her size error involved her whole body. She used the mirror, her kinesthesia, and her contact with the table in our table work and with the floor in her constructive rest to gradually map herself correctly with regard to size.

8. (Projected in English and German): Identify for your students when their misuse is the result of a flaw in their body map rather than trauma, imitation of others, suppression of emotion, a dream body, loss of awareness, teachers' injunctions, or other causes.

I do not want to give the impression that I always use Body Mapping in teaching the Technique, beyond the first lesson. Some people come to lessons with quite accurate body maps, so that their misuse has nothing to do with inaccuracy in the body map. I taught a man, for instance, a guitar player, who had a fine body map but had responded to extreme emotional trauma with extreme tension. Working with Body Mapping would have been useless to him. Is it necessary to always know the cause of a student's downward pull? Of course not, but it is often useful, and when the cause is mismapping, as it was for Leslie, then it is invaluable.

9. (Projected in English and German): Encourage the students to observe how movement looks when it is based on an accurate map, so they have models to imitate. This is especially important for musicians, as a protection against imitating misuse, which they so often do.

There was no occasion for me to ask Leslie to watch models other than myself in our lessons, but I did often ask her to watch me, in the garden, at her computer, walking. Imitation is a powerful teaching tool, as is simply watching efficient movement. I often asked Leslie to put her hands on me as I came to balance out of an imitation of her habit in standing. This was very useful to her, for she could feel the tension disappearing from my back as I came to balance.

I suggested that Leslie look around her when she is traveling to see people who are sitting very comfortably on airplanes, in airports, at meetings, at dinner in restaurants, in the many labs she visits around the world, and then to just imitate what she sees to enhance her own comfort.

I always describe the Alexander Technique to students as a self-help method. F.M. Alexander helped himself to the recovery of his voice. I tell students that they will be doing exactly as Alexander did:

observing, inhibiting, and directing.

The difference will be that they will have someone to teach them how to do it so that they don't have to reinvent the wheel, as it were. I tell students their recovery depends not on what happens in the lessons but rather it depends on what happens between the lessons. It depends on their own continuing observation, inhibition, and direction.

Leslie became quite good at observation of herself, and she made many improvements based merely on observation, for the brain often responds to observation with correction, just automatically. Leslie learned what she needed to inhibit in her behavior in her world, and she learned to direct

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herself using all the means that are familiar to you all, including Alexander's orders. The success of these lessons should be attributed to Leslie, not to me. I taught her how to observe, inhibit, and direct, but she is the one who carried them out with the consistency and integrity that resulted in this much positive change in a fairly short time.

Now I would like to speak to you briefly about the paper by Richard Nichols that Doris [Dietschy] has given you and to say that I am very grateful to Doris for translating it into German. The author, Richard Nichols, is a world-renowned neurophysiologist, and he is a very fine flute player, too, so he has a deep and abiding interest in conveying to musicians everything that is being learned about the brain that might be of help to them in their demanding work.

The presence of the body map in the brain is something neuroscientists now take for granted, though they are still learning about the brain's plasticity, which includes the possibility of enhancing or changing one's body map. It has been very useful to my students to have this very brief review of what is known.

I just want to direct your attention to certain sections of the paper so that you may have some perspective on them as you read, for instance, the first line: "Anatomical representations of the body are regular features of many parts of the brain." It may be confusing that we sometimes refer to a body map and other times we say body maps. I want to clarify this so that there is no confusion. We say body map when we are referring to all the self-representation in the brain responsible for movement. The body map's unity, or continuity, is clear from its resulting in just one thing: movement, in all its range and quality. Remember, if the body map is accurate, movement is good. If the body map is a little weird, movement is a little weird. If the body map is grossly wrong, movement is awkward and injury producing.

I repeat Richard's first sentence: "Anatomical representations of the body are regular features of many parts of the brain." The body map consists of many independent but coordinated maps that govern different aspects of movement. We were not born with these maps, but we are born with the resource and inclination to build them. In the case of the body map, the building is reciprocal. The rudimentary map that a baby is born with is sufficient for the movements made in the womb and in the crib. The movements in the crib build the map that makes it possible for the baby to roll over; the baby's rolling over builds the neuronal connections that make coming onto hands and knees possible; the activity of the baby on hands and knees further builds the brain, until the baby just two to three years later is walking and running and jumping and dancing and throwing a ball, and, wonder of

wonders, speaking and singing. The body map will continue to change, especially with regard to size, and in response to “novel experience,” throughout life. It can truthfully be said that your first Alexander Technique lesson is novel experience!! When a teacher guides a change in head balance, for instance, the teacher will indirectly change the student’s body map, over time, based on that “novel experience.”

The teacher’s hands-on guidance can be enhanced in this regard by visual aids such as the drawings we have used today, by use of mirrors, by reading, by palpating, by anatomical description, and by modeling, so that change in the body map is conscious, consistent, and lasting.

So, I use an analogy to sort out this matter of map and maps, not a perfect analogy, but a good enough analogy to make the point. Suppose you are going on a camping trip during which you hope to go hiking in the mountains. You will need at least a road map to get you to the mountain, a map of hiking trails, an elevation map, a map of water sites, and a map of sites where you are allowed to camp. If these are all bound together in one volume, as they often are for hikers, then you might say as you leave your house, “Do we have the map?” Everyone would know what you mean, even though in that one volume there are several maps, and no one of the maps alone would suffice for your purposes. You need them all. In similar fashion, we need all our body maps, those that govern movement at the extremes of range, those that govern ordinary range in joints, those that represent size, those that command muscle, etc.

Let’s look to a bit further on in Richard Nichol’s article. We come to the following statement, “In the case of amputation, the cortex representing the lost limb or limb segment will eventually come to represent neighboring portions of the body.” I want you to understand that each statement in this article summarizes information that would require many volumes to spell out in detail. For instance, scientists have discovered that the experience of phantom limbs is due to the persistence in the brain of the body map for the missing limb. They have therefore devised ingenious ways to prompt the brain to remap the neurons to adjacent areas of the body so that the unpleasant, continuing sense of a limb that no longer exists disappears because the body map has changed its mind.

Quoting again, “If movement is based on an inaccurate knowledge or perception about the anatomy of the body, then pathologic changes can result. These practices can lead to alterations in cortical representation, which can then become reinforcing of the faulty motor practice.” This was exactly the case with Leslie. Her “inaccurate knowledge” that she must throw weight onto her lower back, that her shoulder blades should be pulled together, that her neck was short, all this “inaccurate knowledge” led to the “faulty motor practices” of standing back and down to speak, of pulling her pelvis way in under the handles of a lawn mower, of dragging her head forward to meet her telephone. Whenever we change the “inaccurate knowledge” to accurate knowledge, we readily change the “faulty motor practice” to elegant and efficient motor practice. That is the whole, practical point of Body Mapping, and I hope that Richard Nichol’s article will help you form a sense of the science behind it.

Projected pictures: neck and spine.

Now, about the exchange of work, after the mid-afternoon break.

In my work with musicians, I must concern myself with every aspect of the musician’s body map, and I often find the errors that are injuring or limiting the student in small structures, like the lips, tongue, soft palate, pharynx, thumb, wrist, or ankle joint, for instance. It may seem overwhelming to learn to identify mismappings in all these

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structures. You will learn all that in due time, if you choose to, but in the meantime the best thing is to begin to inquire into your student's mapping of the structures that are involved in Alexander's orders.

You are teaching a student to think, "I wish my neck to be free." There is a progression in the use of orders, from infancy, as it were, to maturity. In the beginning the student may think, "I wish my neck to be free," and nothing whatsoever happens. I tell the musicians that it is like saying, "I wish to sing a C sharp." In the beginning, one may not know how to sing C sharp. A little later one may wish to sing a C sharp, but when the note is checked with a tuning fork, it turns out to be some other pitch. In the case of "I wish my neck to be free," the thought gradually arises to the status of an intention that can be actually carried out so that when I think, "I wish my neck to be free," surprise! surprise! my neck frees. Later on, the thought ceases to be a verbal thought and it becomes integrated so we are able to free our necks even in intense activity or emotion, just like the musician can reliably sing C sharp. We can then be said to have reached maturity in our use of the orders.

Now, this progress toward maturity, or skill, in the use of "I wish my neck to be free" will be slowed and compromised by a neck mismapped as Leslie's was. Leslie, without our addressing her body map directly in the beginning, would have directed only a very small portion of her actual neck and she would have experienced frustration. Leslie learned to continually recall the actual dimensions of her neck so that she could successfully direct it to become free. Over time, her map of her neck became accurate and she no longer has to think about it. She knew its structure, its function, and its size right where knowing counts most, in her body map, so she could successfully direct it to free.

So, in the beginning, after the break, just concern yourself with your student's mapping of the crucial structures of the orders: neck, head, spine, back. This is what I hope you will be interested to do in your exchanges in the role of the teacher. Consider your student's mapping of the structures that are represented in the anatomical drawings Doris has projected. Be sure you use those pictures to help your student, if they are relevant.

I have heard it estimated that about one-fourth of the Alexander Technique teachers in the world are using Body Mapping to some degree in their teaching. I know from experience that some people will not choose to use it. That may include some of you, so I do not want to put you in an uncomfortable position here this afternoon, asking you to do something you do not want to do. If, in the exchange period after the break, you do not want to experiment with Body Mapping, then just go ahead and work with your colleague in your usual way, and that will be fine. I would ask you, however, for this one addition to your thinking as you teach: that you just bear in mind as you teach in the manner that you usually do, that your student has a body map. You may choose not to use Body Mapping as I have described it, but you are confronted with a body map in each student willy nilly, so merely being mindful of the existence of the student's body map will be helpful, I think you will find.

To repeat: experiment with Body Mapping in the exchange period that follows the break only if you want to. Otherwise, just proceed as you ordinarily would.

During the break, please find two other people to work with during the exchange session. I will ask you three to alternately assume three different roles in your little group throughout the rest of the afternoon: student, teacher, and observer.

Ordinarily, when teachers work in threes like this, the observer is primarily watching the teacher, but I am going to ask you to change that today. I want both the teacher and the observer to be chiefly concerned with the student, for

we will want to see if we can help the student by identifying any mapping error that may be getting in the way of improved use.

If you choose to experiment this afternoon with Body Mapping as you teach, then as both teacher and observer you will be asking yourselves: Does this student have any mismatching of the neck? Does this student have any mismatching of the spine? Does this student have any mismatching of the back?

Or you might ask: how can I help this student improve or refine his or her map of the neck, spine, and back? For instance, we need to help students get a very clean, clear distinction in their body maps between spine and back. When they get a clear impression of their big, reliable, bony spines there at the center of them, and their deep, wide, muscular backs behind their spines, then they are much better able to follow their own orders to allow the spine to lengthen to full stature and to allow the back to lengthen and widen, especially widen.

This afternoon, as you put your hands on your student's neck, then, you can inquire with your hands about the student's map of the neck and you can use your hands to inform the student about the dimensions of the neck, its top, its base, its cylindrical nature, its lying along a cervical curve.

Some students are directing a straight neck, not a curved one, and they end up with rigidity rather than the freedom they seek. You can help them with your hands and with your words to come to appreciate and then to accurately map the curvy nature of the neck.

So, we will divide the time after the break into three sections, so that each of you has a chance to be student, teacher, and witness. If you are a trainee who has not yet learned to put hands on, of course you will need to be student twice within your group. We will leave five minutes between each session to find out if there are any reports or questions that came out of your exchange. I will be available, and Doris and Kathrin van Schroeder will, to help you out if you have questions during your exchanges, or if you need our help for any reason.

Does anyone have a question now about anything we have talked about so far? ☺

By All Means: A Process Perspective on Means-Whereby vs. End-Gaining

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Work in Process

This is second in a series of articles based on what I'm calling the "process paradigm"—a way of understanding ourselves and our world in terms of processes (what is happening) instead of entities (what is present). In the last issue (February 2007), I explained the distinctions between process and entity paradigms in great detail and talked in general terms about their implications for our views of health and well-being. Starting with this article, I'll go on to apply that understanding to specific concepts related to the Alexander Technique. The topic of this article is means-whereby vs. end-gaining.

"It is essential in the necessary reeducation of the subject that in every case the means rather than the end must be held in mind."¹

End (n). An intention or aim.² Means (n). How a result is obtained or an end is achieved.³

In applying the process/entity distinction to Alexander Technique concepts, the contrast between means-whereby and end-gaining is a logical place to start. When I first started working on this article, I expected that analysis to be very straightforward. It seemed obvious that *end-gaining* has to do with entities (goals or final states) and *means-whereby* has to do with processes (how those ends are achieved). I expected to conclude that simply by emphasizing the means, Alexander teachers are working from a process-based paradigm. However, I soon realized that the situation is not that simple. There are a wide variety of ways to understand the relationship between means and ends. In this article, I'll discuss three different interpretations,⁴ progressing from the most conventional to the most radical. Each is a departure from a simple focus on entity explanations, but as we'll see, only in the final one do processes truly come first.

I'll illustrate each explanation with the example of two imaginary students: a computer programmer and a triathlete.

Interpretation #1: Don't neglect the means.

This is the simplest explanation of the importance of the means-whereby: trying to achieve our end without proper attention to *how* we achieve it can get us into trouble. Outside the Alexander world, we most often hear of ends and means in terms of justification—whether or not “the ends justify the means.” This is applied to cases in which we can get what we want (e.g., gaining power or winning a war), but only at a significant cost (e.g., causing great human suffering):

Problematic MEANS → good END + bad SIDE EFFECT

Consider our imaginary students. The programmer who neglects the means of typing (i.e., how she uses herself to type) may manage to complete a great deal of work in one day, but develop carpal tunnel syndrome. The triathlete who neglects the means of running may manage to win races, but suffer many injuries along the way.

When F.M. Alexander talked about end-gaining, it was often at a more basic level, discussing people's attempts to do very specific things with their bodies. For instance, in *Man's Supreme Inheritance* he talks about a pupil being

instructed “to relax and straighten the neck.” “If they do succeed in removing the specific trouble” [good end], he says, “it is almost certain that new defects will have been cultivated during the process” [bad side effects]. Moreover, it is unlikely that the desired end will actually be attained: “The attempt may be attended with more or less success, chiefly less.”⁵

Problematic MEANS → failed END

The underlying problem here, as Alexander explains, is that “[t]he ‘end’ was considered primarily and not the ‘means-whereby.’”⁶ This happens all too often, as we frequently pay little attention to the way we do what we do. At another point in *Man’s Supreme Inheritance*, Alexander discusses a tall actor who set about making himself appear shorter during his professional interviews. “He was never really conscious of the actual means he ultimately employed,” Alexander says. “[H]e had never thought it necessary to improve his knowledge in these all-important processes.” Over time, the means he did employ left him with a wide variety of problems, including “loss of voice, general exhaustion, and nerve and digestive disorders.”⁷

We could expect our imaginary students to encounter similar difficulties if they tried to make specific changes in their running or typing, such as keeping certain muscles relaxed or maintaining a particular posture. Most likely they have not developed the necessary means-whereby for achieving those ends. In fact, they probably never even considered what means might be required. Therefore, even if they succeeded in doing what they intended, other aspects of body functioning would suffer. Whatever attempts they made would be hampered by the same habitual ways of using their bodies that got them into trouble in the first place.

The role of process. This first interpretation certainly brings more attention to processes, as opposed to entities. Instead of explaining a problem in terms of what things are wrong (e.g., a tense muscle or a bum knee), we can explain it in terms of processes happening in real time (e.g., the habitual ways in which a person runs or types or performs any other movement or activity). Some aspects of this approach may be very surprising to students—particularly the insight that our habitual means can cause problems even when we’re performing seemingly simple tasks, such as rising from a chair, lifting our arms over our head, or relaxing particular muscles. I think of all the instructions I hear in yoga classes (lengthen your spine, open your chest, ground your feet) and the wide variety of things people actually do in response.

At the same time, this analysis still seems to treat the means as secondary to the ends. How do we know that our means is problematic? Because we’re not getting the end we want, as we want it—we’re in pain, or our body isn’t

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doing what we'd like it to do. Likewise, we'll ultimately judge improvement in the means by its effect on the end. Only when we can successfully complete a given task without pain or injury will we say our process is working. In a sense, we're using the ends—finally getting the result we want—to *justify*, or validate, the means.

With Interpretation #1, our students may emerge with the insight, “If I pay more attention to the way I do things, I'll have an easier time getting the result I want without nasty side effects.” This is certainly true, but it is not the whole story.

Interpretation #2: Focusing on the end is a lousy means.

The second explanation takes an important step beyond the first one. We come to see that focusing on ends is problematic not just because it distracts us from the means-whereby, but also because it *comprises an integral part* of our means. It's easy to view our attention to ends as something that happens prior to the means. In this conception, we have an idea or intention first, and we do the important part, taking action, afterward:

INTENTIONS, THOUGHTS → MEANS → END

We might consider an intention or idea to be something fixed that resides in our head (i.e., a mental entity) and causes us to do what we do. Alexander shared the important realization that thinking and intending are actually processes in their own right, and cannot be separated from the means:

MEANS [intending, thinking, acting] → END

As long as those processes are focused on the end, they will bring up our habitual patterns of psychophysical use. In Alexander's words, “As long as the ‘end’ is held in mind instead of the ‘means,’ the muscular act, or series of acts, will always be performed in accordance with the mode established by old habits.”⁸

End-gaining = Problematic MEANS → Problematic or failed END

In starting Alexander lessons, students are often surprised to have their attention brought to what's happening before they're aware of doing anything at all. Merely thinking about performing an action is sufficient to cause a habitual bodily response, which in turn will affect everything that happens next. Frank Pierce Jones describes this response as a “postural set,” a “postural change that precedes and accompanies movement.”⁹ In *Freedom to Change*, he describes such a change in the context of standing up from a chair: “Once the thought of standing up registers, the person responds with an automatic set: neck muscles shorten and any response except the habitual (or a minor variation—a ‘different kind of badly’) is excluded.”¹⁰

Postural sets will differ depending on a person's past experience and on the activity being performed.¹¹ In our triathlete student, we could look at the postural sets that appear when he considers swimming or cycling or running. For the programmer, we could observe what happens when he considers typing. Whatever activity a person is engaged in, habitual responses are going to limit their ability to act in new ways.

From this perspective, it may be difficult to see an alternative to our old habits, since striving directly for *any* end will call them up. Imagine that each time the triathlete prepares to dive into water, an involuntary tightening occurs in his neck and upper back. If we instruct him to change this directly—to relax his neck and upper back—that in itself becomes an end, and will bring up old habitual responses. Perhaps he will be able to relax his upper back, but then

his lower back will become tight. If we ask him to relax his lower back, then *that* becomes an end... and so on.

Alexander proposed a way out of this vicious cycle: to work only *indirectly*. His “means-whereby” principle” requires using “an indirect instead of a direct procedure on the part of the person endeavouring to gain the desired end.”¹² The details of this “indirect” procedure are beyond the scope of this article, and in fact may differ somewhat from teacher to teacher. For our purposes, the most important point is that by interrupting the process of end-gaining (thinking about a specific end or intending to reach that end), we can open up the potential for new, non-habitual psychophysical responses to emerge. When we’re not doing what we usually do, there’s room for something completely different to happen.

The role of process. This second interpretation represents a major cognitive leap for many students, extending the idea of process into a whole new realm. It’s no big revelation that some sort of process is happening during gross motor movements such as typing or walking or playing sports. People can easily understand that if their arms or legs moved in a different way, this would affect their performance and their predisposition to injury. Any coach or ergonomics consultant could tell them that. Granted, it may be quite surprising to learn that they are performing even simple actions in a way that is harmful. But what’s really new here is the process-based approach to the “mental” or “psychological” aspects of performance. An Alexander lesson will

When we’re not doing what we usually do, there’s room for something completely different to happen.

address not just a student’s ways of moving, but their ways of thinking, intending, and attending to themselves and their environment. We’re looking at how these processes evolve moment by moment, over time, and how this affects everything else that happens in the body.

And yet, just as with Interpretation #1, the means still plays a subsidiary role. What is the benefit of the means-whereby principle? It helps us reach our ends. As Alexander explains, “by no other method can [the student] get the better of his old subconscious habits, and build up consciously the new and improved condition which he is anxious to bring about.”¹³ Focus on means-whereby is necessary “if an individual is to reach that satisfactory stage of progress where he can be reasonably certain of success in achieving his ‘ends.’”¹⁴ We could express this insight as, “If I don’t focus on getting the result I want, I’ll have an easier time getting the result I want.” At the end of the day, we’ll judge the success of our means by the ends we do or do not attain.

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Interpretation #3: Means matters most!

Is it ever possible to truly put means first? To evaluate progress and growth without using ends as the final measure of success? Indeed, it is. But to do that, we first need to question a basic assumption made in the previous two interpretations. In each case, when there was a problem with our end, we treated this as evidence that there was a problem with our means—that we must be doing something wrong. However, this is not the only explanation. When we don't successfully achieve what we're trying to achieve, all this shows is that our means and ends are mismatched:

MEANS → mismatch ← END

One possible conclusion is that there's a problem with the means, so we need to alter our means (as in the first two interpretations). But we might also conclude that there's a problem with the end.

For example, suppose the triathlete has been trying a new swim stroke and finds his back becoming sore after 30 minutes. We can assume that there's something happening during his swimming that is causing soreness. We could view this as a failure in means-whereby; if only the means were better, he'd be able to do the new stroke for a longer time without pain. In this case, we'd focus on the means because we know it's faulty.

However, we could just as easily view the student's difficulty as a problem with his goal. The fact is that if he were attempting something appropriate for his means-whereby at the moment, he would not be in pain. This is not to say that he will never perform this stroke with ease. Maybe he'll end up doing that after just one Alexander lesson. But we know that he cannot do it now. We focus on the means because that's the only way we can find out *why* he cannot do it. Only by seeing exactly what is happening when he makes the attempt—through “a reasoning consideration of the causes of the conditions present”¹⁵—can we figure out what would need to change to make the goal attainable. And it may turn out that due to the peculiarities of this stroke or of his body structure, he is better off not doing it, or doing some sort of variation.

This kind of focus on means, with no assumptions about what is the appropriate end, has the distinct advantage of being reality-based. Ends represent what we *want* to have happen, or what we think *should* happen. In contrast, looking at means-whereby tells us what *is happening* and what *can happen*—our potential. A core problem with end-gaining is its failure to take into account the factors affecting our potential at any given moment. Alexander describes this issue in the context of golf lessons, where instructions are given “without making certain that the pupil has the power to maintain a proper position of his spine and back and to use the limbs correctly during the performance of such physical acts.”¹⁶

At any given time, our ability to swing a golf club, perform a swimming stroke, or make any other movement is influenced by numerous interrelated factors, both internal and external. These include, among others:

- Universal structural and functional features of the human body (e.g., the movements permitted at certain joints)
- Features specific to an individual person's body (e.g., a particular swimmer's lung capacity or biceps muscle strength)
- Nonconscious neural processes, as shaped by past and present experience (e.g., survival responses of fight, flight, or freeze)

- Conscious cognitive and emotional processes, as shaped by past and present experience (e.g., patterns of awareness, sequences of thoughts or impulses)
- A wide range of ever-changing perceptions and sensations stimulated by contact with the external environment.

Some of these factors can be changed through experience or training, and others cannot. For example, we can gain more freedom of movement in our hip joint, but cannot change the size or structure of our hip bones. Some movements or postures (such as yoga poses) may need to be done differently by a person with particularly wide or narrow hips. We might encounter such a person who is frustrated by her failure to achieve the standard pose or movement. The only solution there is to work toward a different end.

Beyond the question of what factors *can* be changed is the question of which *should* be changed. This could easily bring us back to reliance on ends; we may conclude that whenever we can, we should change anything that interferes with achieving our end. But we also have the more appealing option of relying on reality. We can enable our means—nonconscious and conscious psychophysical processes—to be shaped more by present reality and less by our old misconceptions or misperceptions.

In working with students, we may do this any number of ways. Examples include correcting mistaken thinking about how the body functions; developing more reliable kinesthetic perception; and allowing access to a broader range of other sensory information (e.g., visual or tactile). We might also enable more conscious awareness of internal processes, including emotional experiences. A person may abandon an end not because it conflicts with physical reality, but because it conflicts with what they really feel and want at a deeper level. For instance, suppose the computer programmer has spent most of her time at work “checked out,” with all her awareness in her head. Once she starts feeling more embodied, she may become restless and realize she’d rather not spend 12 hours per day at a computer. (I speak from experience: During the course of Alexander training I was dismayed to discover that when I wasn’t checked out, my day job was actually rather boring.)

Interpretation #1: “If I pay more attention to the way I do things, I’ll have an easier time getting the result I want without nasty side effects.”

Interpretation #2: “If I don’t focus on getting the result I want, I’ll have an easier time getting the result I want.”

Interpretation #3: “What do you mean it’s not about getting the result I want?!”

The role of process. Finally, with this analysis, process comes front and center—so much so that it can be totally foreign and off-putting to students. In *Man's Supreme Inheritance* Alexander talks about people's tendency to "try to be right," pointing out that "The idea of 'right' is almost always associated with the *product* or result, not with the *method* of operation."¹⁷ Students usually come in wanting to achieve a specific result (improved performance, relief from pain) and expect to judge the learning process by how close they get to that end. Here we're asking them to do the exact opposite—to develop the "right" means (which will differ from person to person and moment to moment) and to judge the results they achieve by the way they achieve them. Coming full circle from Interpretation #1, we can use the means to justify the end.

Of course, our students usually do end up performing better, feeling less pain, and generally experiencing more success and satisfaction in their lives. This is no accident. Buddhism tells us that the root of all suffering is wanting things to be different from the way they are. We can broaden this to say that *any* process that is in conflict with the way things are—our thinking or intending, our kinesthetic perception, or any other psychophysical process—tends to cause suffering. It also tends to make it more difficult for us to achieve our specific goals in life. While we cannot predict exactly how Alexander lessons will affect any particular person, we can feel confident that by focusing on the means-whereby and encouraging more congruence with reality, we are moving in the right direction...whatever the end result might be.

ENDNOTES

¹ Alexander, F.M. (1918). *Man's Supreme Inheritance*. Reprinted in *The Books of F. Matthias Alexander* (1997). New York, NY: IRDEAT, p.111.

² Source: www.dictionary.com.

³ Source: Wordnet 3.0 (www.wordnet.princeton.edu). Throughout this article, I will use the phrase *means-whereby* interchangeably with the word *means*.

⁴ Note that I will be interpreting the means-whereby/end-gaining distinction, not F.M. Alexander's actual writing. In the course of the article, I will reference passages from Alexander's books. However, my primary goal is not to establish what he really meant, but to explore whatever is true, useful, and interesting with relation to this topic.

⁵ Alexander, F.M. (1918), p.122.

⁶ Ibid.

⁷ Ibid., p.151.

⁸ Ibid., p.111.

⁹ Jones, F.P. (1963). "The Influence of Postural Set on Pattern of Movement in Man." *International Journal of Neurology*, 4: 60–71.

¹⁰ Jones, F.P. (1997). *Freedom to Change*. London: Mouritz, p.150. (First published as *Body Awareness in Action* in 1976).

¹¹ Ibid., p.178.

¹² Alexander, F.M. (1923). *Constructive Conscious Control of the Individual*. Reprinted in *The Books of F. Matthias Alexander* (1997). New York, NY: IRDEAT, p. 231, footnote.

¹³ Ibid., p. 308.

¹⁴ Ibid., pp. 341–342.

¹⁵ Ibid., p. 231, footnote.

¹⁶ Alexander, F.M. (1918), p.129.

¹⁷ Ibid., p. 283, footnote. ☺

In Practice: A Teaching Handout

Be There and Be Aware: The Dynamic, Unified Field of Awareness

If you are standing, find an even balance on the “tripods” of your feet; if you are sitting, come into an easy balance on your “sit” bones.

Step 1: Notice your skin all over and yourself inside it. When this seems settled and clear, *add*:

Step 2:

- (a) Be aware of the space you can see around you.
- (b) Now include the rest of the room around, over, and behind you that you can't see.
- (c) Add the awareness that there is space beyond the walls of the room you are in.
- (d) Finally, add in the awareness that there is a whole planet beneath you, supporting you and the upward dynamic of your being. When this seems settled and clear, *add*:

Step 3: Notice how you are being drawn down onto the planet by gravity, and how your reflexes respond to that by reflecting the whole of you back up and out (like the bouncing of a rubber ball).

Take plenty of time to let that become all one thing that you just notice. There is no need to “work” at any of it—it is simply a unified awareness of yourself, where you are, right now, in context. Like a light, it is either on or off. You don't need to leave this background awareness to go into activity; let your activity come to you where you are, and go on about your life.

—*Andrea Matthews, with thanks to Frank Pierce Jones, David Gorman, and Bob Lada.*

From the Chair

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every experiment they did. Even small acts of self-control depleted a volunteer's available supply of glucose, so that control of thought and behavior on a second task was more difficult, until more glucose became available, either from storage in the body, or from eating.

In their discussion they write: "At its core, self-regulatory change involves overriding one response in order to enable a different response. The stronger the initial response or impulse, the more difficult the self-control task will be..."⁵

As Alexander Technique teachers we are familiar with this concept. It is interesting, however, to wonder if the difficulties our pupils may have inhibiting and directing might also be related to glucose levels. Perhaps we should be sure our pupils have eaten before they come for a lesson!

ENDNOTES

¹ Alexander F.M. *The Use of the Self*. 1984, Centerline Press, p. 26.

² Ibid, p. 16.

³ "Self-Control Relies on Glucose as a Limited Energy Source: Willpower Is More Than a Metaphor." *Journal of Personality and Social Psychology*, 92, #2, 325-336, 2007.

⁴ In a Stroop test the experimenter shows you color words, e.g. red, blue, green, but the words are printed in a different color from the color name. So the word "blue" might be printed in yellow, or the word "green" in red. Your task is to name the color, not the word. The test measures how much seeing the color word interferes with naming the actual color.

⁵ Op.cit. p. 334. ☺

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Please come and visit our website www.atcongress.com to find the latest Congress information including details about registration, workshops, lectures, and presenters.

The second call for papers, workshops, and lectures is now open. If you would like to give a presentation and share your knowledge with the International Alexander community, you can find the application form on the website. All applications will be received and processed through the website only and not by land mail. The deadline for completed application forms is 1 April 2008.

Our partner Amiconi Consulting (www.amiconiconsulting.ch) will be pleased to help you find your preferred Congress accommodation—be it hotel, pension, holiday home or camping site. Please note that August is holiday season in Lugano, so early booking is highly recommended.

Amiconi Consulting can also help you arrange your transportation to and from the Swiss airports of Lugano and Zürich and Italian airports of Milan (Malpensa, Linate) and Bergamo (Orio al Serio—low-cost airfares from Europe) and help you with touring possibilities before, during, and after the Congress.

With best wishes from your Congress Team: Michael D. Frederick, Jule Gartzke, Rosa Luisa Rossi, and Judy Stern

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Alexander Technique International (ATI) is a worldwide organization of teachers, students, and friends of the Alexander Technique created to promote and advance the work begun by F. Matthias Alexander.

ATI embraces the diversity of the international Alexander community and works to promote international dialogue.

About the Alexander Technique

Experience of the Technique has led to praise from George Bernard Shaw, Aldous Huxley, Prof. John Dewey, Sir Charles Sherrington, Julian Bream, John Cleese, Kevin Kline, Roald Dahl, Robertson Davies, and many others. It is taught at the Juilliard School of Performing Arts in New York, and the Royal College of Music and the Royal Academy of Dramatic Art in London, the Stratford Shakespeare Festival and the Shaw Festivals in Canada, Boston University, Brandeis University, and many other centers.

The common factor in all aspects of life is that how we are using ourselves—the way we do things—affects the result we get. The Alexander Technique is a means of improving that use. It has been called a “pre-technique” that people can apply to furthering their own special skills and activities. It is also essentially a preventive technique with which we can learn to improve and maintain our health.

The individual is the focus of the Alexander Technique. We are all unique, with different bodies, different experiences, and different problems. We go about the process of change in different ways and at different rates. For these reasons, what happens in an Alexander Technique lesson depends very much on the needs of the student at the time. In the basic sense, though, you will learn an attitude of not trying to gain your ends at any cost, and, at the same time, how to prevent your harmful habits that cause unnecessary stress and restrict your capabilities. Obviously, since what you are changing are patterns built up over many years, a permanent change will not be brought about overnight. However, the person who learns to stop and take time, to think constructively about how he or she uses him- or herself in everyday life, will find that this simple procedure can have far-reaching results.

Further information about the Alexander Technique can best be gained from a teacher near you (see the list at right for the nearest ATI office, or visit www.ati-net.com for teacher listings), as your changing experiences through lessons are the only real way to understand the nature of the work and what change is possible.



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