KQ = **Kinesthetic Quotient** = **Physical Intelligence**

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We are all familiar with IQ – the intelligence of our brains, and we're getting more familiar with EQ – being emotionally intelligent. But there is a third "body-wide" intelligence, KQ, which is not even mapped yet – the intelligence within our bodies.

This intelligence is not only poorly understood, it is being sapped further from our culture every day by the forces of somatic alienation. We have so little contact with the "natural" world these days – we walk in man-made shoes on artificial surfaces, we sit to work, we sit to learn, we sit to be entertained.

Physical education as we know it is built on principles suited to an industrial age: repetition and competition prepare you for the assembly line and the economic race, but the 21st century – the information age – is going to require a new physical education. Even the old one is slipping away from schools daily, without being replaced, or rather it is replaced in the kids' timetable with video games.

Meanwhile, "stress" (really "distress") is the most ubiquitous disease of the era. Stress is generated by a constant disparity between the "world as we believe it to be in our inner pictures" and the "world as reported by our senses". Given that our bodies are designed and prepared for (and haven't changed much since) the Neolithic Era of 70-15,000 years ago, those of us in an urbanized environment (and I count myself among those even though I live way out in the country) are in a constant state of stress.

Managing this disparity between our "animal" insides and our acculturated veneer is perhaps the greatest challenge of the 21st century because our responses to war and the environment rest on this Catch 22: we cannot escape our animal selves, on the one hand, and our attempt to robs us of that innate intelligence. Rather than using religion to try to transcend the animal self, I propose that we might instead re-immerse ourselves in it, embrace our genetic inheritance and interact with it more wisely.

Here's the beginning of a paper on the subject, for you to peruse while we construct more visual ways of presenting this:

Abstract: The medical role of bodywork and movement therapies is in the ascendancy; the educational role of practitioners is less discussed. Given the pandemic spread of "kinesthetic dystonia" in the developed world, an argument is made for the importance of using the principles inherent in contemporary bodywork therapies in wider educational settings. Part 1 examines aspects of the bodyworker's current role as a kinesthetic educator. Part 2 reviews the historical development of Physical Education, the traditional

home of kinesthetic training, and expands the scope of the educational challenge in light of the projected somatic needs of the coming century. Part 3 proposes meeting these needs through a revision of Physical Education, applying values from contemporary touch and movement therapies.

INTRODUCTION TO THE SERIES:

What a piece of work is a man how noble in reason, how infinite in faculties, in form and moving how express and admirable, in action how like an angel, in apprehension how like a god, the beauty of the world, the paragon of animals! And yet to me what is this quintessence of dust?

-Hamlet, II. 2

The over-educated Hamlet spends another three acts struggling between his body's dimly-felt instincts and his precariously-assembled reason. As the curtain falls on the 20th century, our entire culture embodies his struggle. For him, "time is out of joint"; for us, sailing through time at such speed, we ourselves are literally "out of joint". For both of us, "the readiness is all". In practical terms, however, what sort of resolution to the so-called "mind-body split" is our society ready for?

New times require new methods, and new methods require new assumptions. The assumptions that power this piece are:

- 1) As we pass from the Industrial Age into whatever the post-Industrial era comes to be called, we are not short of words or images, but we are desperately short on feeling. As a culture, we are literally "numb" in kinesthetic terms compared to most of our ancestors and even most of our less fortunate neighbors. For the purposes of this piece, let the term *kinesthetic dystonia* stand for this general kinesthetic ignorance and its many social and individual sequelae of reduced function: pain, alienation, and misunderstanding.
- This epidemic comes about because we persist in "industrial" methods of educating our children about how to live in a body, and we need to develop approaches more in keeping with the requirements of the new era. A person is taught how to live in his or her body from conception onward, and we are therefore required to rework our entire idea of somatic or physical education (PE) from the ground up.

In our expanded vision of PE, we may include, as examples, parenting skills, how children learn to perceive, how much credit we give to bodily sensations like "hunches", how wide a vocabulary of touch we have at our command, or how we learn to handle the physical aspect of our emotions. Even aging and dying gracefully, as part of our physical life, must be included in our new concept of PE.

Many of the concepts and practices necessary to formulate such a new system are to be found in the collective wisdom contained in the developing arts that go (a bit reluctantly, for some of them) under the name "bodywork" (Claire,1995, Juhan 1987). This wisdom needs to be applied preventively on a mass scale – in other words, educationally – to combat "kinesthetic dystonia". Efforts in this direction will be the most effective and efficient in building a society which is more "kinesthetically literate", and therefore, less injury-prone, more durably autonomous, less distressed, and more adaptable, as well as moving toward being more sensitive, humane, clear, "in touch", and grounded.

In Part 1, we define kinesthetic learning and outline the consequences of the ignorance into which we have let ourselves fall. We then list some the various educational modes and roles currently employed by bodyworkers and movement therapists to promote the learning possibilities inherent to the kinesthetic sense. Finally, we propose an expansion of those roles from one-to-one healing into educational settings as a way to strike most effectively at the source of the problem.

In Part 2, we take a brief tour through the known history of physical education and kinesthetic healing, from the particular slant of the "fit" between expressions of physicality and the culture in which they occur. This part explores the origin of "kinesthetic dystonia" and includes some informed speculation about the educational needs of the soma in the next century.

In Part 3, we propose an expanded definition of Physical Education geared toward meeting those needs, drawing on the existing values, ideas, and techniques within the developing culture of hands-on therapies.

The series is designed to begin a dialogue in the profession around this question: Given the failure of our cultural systems in meeting current and future somatic needs, what can touch and movement therapies offer socially to stem the "kinesthetic dystonia" epidemic?

PART 1 – THE EDUCATIONAL ROLE OF BODYWORK

Kinesthetic Learning:

In terms of education, we gain our impressions primarily through three channels: visual, auditory, and kinesthetic (Bandler and Grinder, 1975). What you see, what you hear, and what you feel in the "brain below the ears"—such a separation is useful analytically even though these sense streams are never strictly separated in our bodies: kettledrums boom in our chests, the violins create fantasia pictures in our mind's eye, a lover's touch is like music, and so on.

Frequently, of course, learning takes place in two or all three channels at once, but we live in a culture where the kinesthetic mode of learning – the predominant channel in many primitive cultures – has been nearly completely supplanted in our educational system by the visual and auditory modes. In keeping with the "objectification" which runs through our mode of thought, our cultural system has predictably chosen to accentuate the two sense streams that are "teleceptors" – telling as what is going on at some distance from our bodies – over the primarily "interoceptive" kinesthetic sense, which tells us what is going on within ourselves (Berman, 1989). As the one sense which mediates and inter-informs between our "modern" neuro-motor chassis and our ancient gut tube, we ignore kinesthesia at our peril.

For most of us educated in the Western world between 1700 and the present, however, education beyond the age of six consists of holding the kinesthetic sense as still as possible at wooden desks while the eyes and ears are over-stimulated with data. This enforced rigidity is punctuated by short periods of kinesthetic mayhem called "recess". If one is "lucky", one is released from the kinesthetic imprisonment in the afternoon for a period called "gym class", where heavy emphasis is laid on repetitive tasks and competitive sports, and rarely on art or self-discovery.

For the majority of students, training in movement, in the intricacies of the felt sense of the body, or even the ability touch sensitively, is near nil, except in certain experimental or forward-looking programs (Montessori, 1967; Steiner, 1984). Even the familiar "five senses" list seeing, hearing, smelling, tasting, and "touch". But does that last word even purport to include our sense of movement, of balance, our perception of the "kinesphere" around us, and our felt sense of the multiple shifting physiologic processes within us? This is a poor word for a rich and complex sense.

What has happened to the teaching of movement in our culture? Kinesthetic learning has been primarily restricted to three narrow (and until recently, fairly separate) bands: the performing arts, athletics, and rehabilitation. Note the implicit presumption in restricting kinesthetic training to these areas: For the majority, one's ability to move is completely

"natural", and need not be trained unless one enters the sanctioned extra-normal arena of sport, dance, or disability. The working assumption that movement springs up in us fully-formed, like the ability to see and hear, is an unfortunate turn for all of us, because:

- 1) Learning to move in our "artificial" society is about as "natural" as learning to read, and even everyday movements are subject to many internal and environmental disturbances, e.g. everything from shoes to parental strictures, gender differences, or minor injury sequelae, which have significant physical and psychological effects, especially in the long term.
- 2) Kinesthetic education has both far wider and far subtler uses in daily life than we have yet realized. From injury prevention to improvement in satisfying sexual relations, to increased understanding of non-verbal communication to developing the largely kinesthetic skills of intuition, bodywork and movement therapies offer windows into both the mundane and the interestingly arcane possibilities inherent in the cultivation of kinesthetic awareness.
- Those who are highly talented in the kinesthetic sense (which includes, for instance, not only those who shine in ballet class, but also those kids shooting baskets on the local lot with consummate grace and skill, but who may not be as graceful in the dominant visual and auditory senses) are being left out and let down by the system. In extreme cases, kinesthetic learners are being labeled Learning Disabled, when in fact it is the education system that is learning disabled.

Can we make a mainstream curriculum out of kinesthetic skills? First and foremost, we must recognize that the sense of the body in movement is not only a sense but a form of intelligence, like musical, mathematic, or linguistic intelligence (Gardner, 1993). Even our language speaks of this connection: the phoneme '"in-", which conveys movement in such words as "kinetic", "kinesiology", and "kinesthetic", is fundamentally related, according to the Oxford English Dictionary, to "know", "knowledge", "ken", "king", "kinship", and even all the "gene-" words like "genesis" and "generation".

The link between "kin-", as movement, and "kin-", as connection, is the word "understanding", a human experience based firmly in kinesthesia, and is beautifully defined in *The Education of Little Tree* (Carter, 1976):

Granpa and Granma had an understanding, so they had a love. Granma said the understanding ran deeper as the years went by, and she reckined it would get beyond anything mortal folks could think upon or explain. And so they called it "kin".

Granmas's name was Bonnie Bee. I knew that when I heard him late at night say, "I kin ye, Bonnie Bee," he was saying, "I love ye," for the feeling was in the words. When Granma would say, "Do ye kin me, Wales?" and he would answer, "I kin ye," it meant, "I understand ye". To them, love and understanding was the same thing, you couldn't love something you didn't understand.

Granpa said back before his time "kinfolks" meant any folks that you understood and had an understanding with, so it meant "loved folks". But people got selfish and brought it down to mean just blood relatives; but actually it was never meant to mean that.

Granpa said that such was "kin", and most of people's mortal trouble come about by not practicing it; from that and politicians.

While visual and aural channels are excellent for linear data, behaviors are far better conveyed in the kinesthetic mode. Imagine that you are trying to learn a new skill, from hammering a nail to getting on your own shirt for the first time, or a dance, or nearly any physical behavior. Someone could tell you about it, show you how they do it while you watch, or actually move your body through the motions involved. How do you think you will pick up the skill the fastest? Kinesthetically, of course – as your body is moved through the action, your cerebellum, sensory cortex, et al. record the pattern of muscle spindle and Golgi tendon organ firings. This lays down a kinetic memory for easier replay on your own (Juhan, 1987).

Research shows that kinesthetic guidance can be translated into behaviour 30 times faster than visual guidance can and many thousands of times faster than audio guidance (Birdwhistell, 1971). With so many of our health problems these days being behaviour-based, can we afford to ignore an educational method that promises a 30-fold decrease in the time needed for feedback?

For us in the West, however, even dance, our most kinesthetic art, is often taught before a mirror, where the student hears the teacher's words and tries to follow her visual form. In Bali, the old dance teacher molds her front against the back of the young student, laying her hands atop the student's hands, so that every subtle movement from the teacher is conveyed at once to the student, and every student mistake is perceived and corrected by the teacher far more quickly than any visual assessment could possibly provide (Meade & MacGregor, 1971).

Making a full curriculum out of our body's felt sense will require decades of experimentation and research. We will need to be able to test for and recognize different forms of kinesthetic talent and begin to develop a variety of standards and teachings in

this area. We need to be able to recognize and assess the output of the body's felt sense – movement and posture—in much the same way we assess the verbal and visual student output. This involves the recognition of the way the body's pattern develops in space and over time and skill in recognizing when part of that pattern might be missing or malfunctioning.

The pattern of organic movement is one of the most basic, enduring, and recognizable characteristics of living matter:

"We are not stuff that abides, but patterns that perpetuate themselves." (Norbert Weiner, as quoted in Rolf, 1977)

"Islands of order in an ocean of chaos, organisms are far superior to human-built machines. Unlike James Watt's steam engine, for example, the body concentrates order. It continuously self-repairs. Every five days you get a new stomach lining. You get a new liver every six months. Your skin replaces itself every six weeks. Every year, ninety-eight percent of the atoms of your body are replaced. This nonstop chemical replacement, metabolism, is a sure sign of life. This 'machine' demands continual input of chemical energy and materials (food)." (Sagan & Margulis, 1995)

The body in general is thus a very changeable set of materials that nevertheless maintains a recognizable, if ever-transforming, pattern. Movement and postural pattern-recognition skills are essential to the physical educator of the future. Recognizing the flows and blocks within the patterns of body movement is a skill that body therapists, empirical researchers all, have been developing, lo, these many years.

From these observations have come various body typologies employed by bodyworkers. As examples among many, we could cite Sheldon's endo-, meso-, and ecto-morphic types, and the internal-external typologies common to structural integration and cranio-sacral therapy, as well as Reich's body types and their more recent modifications (Sheldon 1940, Sultan, Reich, Lowen, Keleman 1985, Kurtz).

Although each of the main channels of learning has its own form of artistic expression—images for the eye, music and language for the ear, dancing for the felt sense of the body—only the visual and auditory forms have widely understood systems of notation. That which is seen can be rendered in a multitude of understandable ways through painting, photographs, diagrams, and cinema, to name a few. In terms of what is heard, the spoken word can be written down, and musical notation is so universal that it can be sent to Russia to be readily decoded by a chamber group there. Movement and the felt sense have no similar common language, no way of being conveyed economically or universally. Balanchine, it is true, developed a notation specifically for ballet, and Rudolph Laban and Noah Eshkol developed movement notation systems for wider

application, but they are both cumbersome and not in common use (Laban, 19--, Eshkol, 1978). The felt sense of the body and the complexities of movement simply have not been explored in a systematic way, as have the other two major learning modes.

Another indication of the lack of understanding of kinesthesia turns on a quirk in the English language. There is a word for not being able to see: blind, and there is a word for not able to be seen: invisible. There is a word for not being able to hear: deaf, and a word for not able to be heard: inaudible. There is a word for not being able to feel: numb, but what is the word for not being able to be felt? Undetectable, impalpable, "unkinable"? "Ineffective" probably comes closest, but none of them quite convey the concept. The inability to make oneself felt, to make a palpable impression on the world around oneself, is nevertheless a condition which we recognize in many clients, and a prime cause of depression in certain people, but for which there is no name, no recognition.

While an integrated revision of education would also integrate the three sensory channels into a seamless whole, as we see even now in some early, preschool education programs, this article concentrates solely on the social possibilities for improving the education of the kinesthetic sense.

It is this general lack of attention to the kinesthetic sense which has produced what we are calling "kinesthetic dystonia", an epidemic of unnecessary parasitic muscle tension and structural pain, early degeneration due to dis- or mis-use of body parts, alienation from purpose and free emotional expression, and a reliance on what can be seen and heard over what can be felt. The bodyworker is already pursuing this problem daily on a one-to-one basis. Let us look at some of the parameters of this work.

The Bodyworker's Role in Kinesthetic Learning:

Bodywork and movement therapists of all flavours will usually cheerfully admit that at least part of their function is educational as well as strictly therapeutic. This kinesthetic education takes place on at least three levels:

1) The unconscious physical, where new data floods the brain stem, cerebellum, and limbic system of the client, the so-called "subconscious", because the practitioner has stimulated proprioceptive nerve endings in some "forgotten" portion of the soma. In this role, bodywork operates as a wake-up call from what Thomas Hanna has termed "sensori-motor amnesia" (Hanna, 1988).

Our total sensori-motor experience, popularly called the "body image", is our integrated experience of what Rolfer Robert Schleip has termed "the neuro-myo-fascial web" (Schleip, 1994). At this level of learning, no cognitive recognition is necessary on the

client's part; in fact the new perceptions may resist verbal description, but there is a resultant perceptual or behavioural change nonetheless. This data can range from the fairly simple – "Wow, I didn't even realize I was holding on to that muscle!" – to the profound, as with the woman who belts herself so tightly with a band of tissue around the waist that very little of her "energy" makes it through the bottleneck. Although a pattern like hers can be emotionally based, it can also be merely a "received habit", something imitated and adopted by her without particular emotional content, in which case it can be released and resolved without ever bringing it to her conscious attention.

This kind of education can only go from hand to body in a non-verbal fashion. Important as it is, it does not easily lend itself to any kind of social education, although a well-run session of meditative movement such as Continuum can create the conditions for individual discovery. It also points to the need to give all of our young people a wider vocabulary of touch so that more of this kind of communication can be promoted in a non-professional, day-to-day context.

2) Other subconscious patterns need to arise to the fully conscious level to be resolved. Bringing them to the client's attention is part of the bodyworker's educational function. This is the category of the interconscious, where unconscious patterns of holding are brought into the conscious for examination.

The interconscious mode includes the perception or re-perception of old habits, often with emotional underpinnings or temporal distortion, e.g. "My God, I never realized how much I stopped my breath in my upper chest. When you were working there it was as if I could see my father with one of his headaches and felt how we kids would sneak around the house holding our breath in case we made too much noise and he got angry." It can also include more mundane efficiency or pain-relieving concerns, when we say something like, "What does it feel like if you breathe through your nose now instead of your mouth?", or "Can you feel how your left knee travels a straight line when you walk while your right knee turns out just before you land on that foot?"

This kind of learning has its roots, in modern times at least, in the seminal work earlier this century of F. M. Alexander (for the head, neck, and upper back "primary control" mechanism) and Else Gindler (for breathing) (Barlow, 1976; Gindler, 1978). This mode of education also often requires hands-on, one-to-one contact, but certain perceptions can be reliably evoked in a group situation, as in a Feldenkrais "Awareness Through Movement" lesson (Feldenkrais, 1972; Lyttle, 1997).

3) At other times, bodyworkers function educationally on the purely cognitive level: "Take that thick wallet out of your back pocket while you're driving," or "Avoid lifting anything heavy for the next few days". We may try to educate our clients on efficient sitting, issues of alignment and carriage, daily activities and exercise, relaxation

techniques, habit control, stress reduction, or injury avoidance, as examples. This category includes all the times in which the client's conscious compliance must be relied upon. This type of learning is easily adaptable to large group learning, in classes, or through books or other media.

Many of us, most of us, work with all three levels of learning with our clients. Can we take what we have learned about client education and the somatic values implied by our diverse approaches and apply them to a social challenge: the somatic education of a new generation? In the rush to get more and more techniques under our belt and to gain medical mainstream acceptance, our educational functions are currently being underplayed.

The Three Paradigms in Bodywork:

Bodywork and movement approaches can be usefully divided (although many approaches and practitioners will straddle these boundaries, sometimes from one moment to the next) into three patterns of premise and intent, or, to use the grandiose word-of-the-moment, paradigms (Maitland, 1995). Understanding the parameters and educational roles within the three paradigms will help us to grasp the scope of our part in changing Physical Education.

The first paradigm is relaxational. The premise here is that modern life is stressful and that bodywork can provide a break – a more healthful break than drink or drugs, but conceived on the same level: a chance to relax muscle tension, deepen the breathing, expand the narrowed mind, and return to the fray with a lower stress level. The intent of this type of massage is to provide a soothing atmosphere, to find and relax tight muscles, to flush metabolites and improve circulation, to renew the senses, especially the inner sense of space, and to generally provide a "time out" (Beck, 1988).

An underlying assumption of relaxation massage is that the effect is primarily temporary, and the client consequently renews his appointment for the following week, secure in the knowledge (or resigned to the fact) that he will arrive for that appointment in the same stressed-out, tensed-up, slightly frantic state in which he groaned his way onto the table this week. Although practitioners of every art will resist categorization, much of basic Swedish or Esalen massage falls into this category, as do many of the techniques practiced at spas – hot and cold packs, saunas and hydrotherapy, et al. Biofeedback and the "relaxation response" employed with Transcendental Meditation are sophisticated methods which nonetheless fall in this category.

Massage for simple relaxation is still very popular and rightly so. The increase of short-term chair work in office settings is a prime example. It is also being increasingly

practiced by non-professionals on each other, as a friendly gesture (squeezing the shoulders of a co-worker as you look over his shoulder at his computer screen), as a prelude to intimacy ("Let me get you in the mood..."), a parenting tool, as well as a generally good idea in our touch-starved culture. While a skilled relaxation massage practitioner is a pearl beyond price, the basic techniques involved can be taught in a few hours, even through indirect methods such as books and videos, to anyone with moderately competent hands and a basic empathetic sensitivity (Lidell, 1984; LaCroix, 1997; Downing, 1972).

The second paradigm is remedial or corrective. The premises here are largely consistent with the dominant medical system (although strategy differences have been known to occur between allopathic doctors and bodyworkers): "Something has gone wrong here and it is our job to fix it, to return it to normal." This corrective or remedial paradigm is the most popular point-of-view today within the massage and bodywork profession, especially for Continuing Education and other short courses (Chaitow, 1996). Ubiquitous advertisements trumpeting "cause and effect" or "correction and restoration" reveal adherence to the second paradigm (Massage Magazine, 1997). Most techniques of osseous and ligamentous release, positional release, myofascial release, somatoemotional release, trigger point therapies, and corrective exercises and manipulations such as those applied by physiotherapists are all based on the idea that there is a problem (negative) that needs to be repaired for normal function (neutral) to reassert itself.

The remedial paradigm is based on a Newtonian, cause-effect model which has gained ground steadily and increasingly for a number of reasons over the last two centuries in the world, and the last two decades in our profession. As medicine has moved into increasingly sophisticated use of drugs and surgery in an heroic manner, the lesser aches, pains and movement dysfunctions have been left in its wake with little or no effective treatment – witness the ubiquity of "Take two aspirin and call me in the morning". Massage therapists, sports rehabilitation experts, and other bodyworkers have consequently been increasing the specificity of their skills to step into the gap left by the departure of the medical world from this field. Insurance companies, recognizing the cost-effectiveness of this form of therapy, are increasingly willing to pay for these services, as long as the practitioner is willing to play the second paradigm game of SOAP notes and "if-then" statements in treatment protocols.

Third paradigm bodywork is integrative and holistic, and, as signaled earlier this century by Einstein and Jung, relativistic. In integrative bodywork, relaxation may happen, and problems may also be remedied, but the primary intent is to create an harmonic unity within the entire spectrum of the person. Integrative bodywork implies a more equal partnership between client and practitioner, and deals with complex interactions among many factors, internal and environmental, in the client's life pattern. The integrative paradigm generally finds less value in a separating, classifying diagnosis,

and more value in a comprehensive untypified picture of what is going on with the client. The values in the integrative paradigm are given in relational words like "balance", "attunement", "connection", "autonomy", etc. The healing model is not corrective but developmental: "Here is where you are now; let us see if we can get you to a place that works even better". Holistic practitioners are working toward a (widely varying and often ultimately unreachable) ideal, trying to bring about, as presumptuous as it sounds, a better-functioning person.

A second paradigm response to an injury could sound something like, "If you have a medial collateral ligament tear, then do 20 reps on the quad machine $3 \times / day$." A third paradigm response would be an extended series of questions — What is going on in that ankle? The hip? The opposite lower back? The kidneys? What is the client's anxiety level? etc. — to determine the possible relationships between the actual injury and other spatial and temporal factors. Treatment would then proceed on the basis of perceived strengths and weaknesses throughout the entire organism, rather than focusing on the area or system with the presenting problem.

Yoga, Homoeopathy, Oriental medicine, Polarity Therapy, the various approaches to Osteopathy and its derivatives, such as Rolfing, in their original form, and many others all partake of third paradigm principles and intents. Nearly any method, in fact, can be applied in this fashion. Although problems are frequently the motivation for the client to see the holistic practitioner, the practitioner's focus will not be on symptoms, nor even on a second paradigm "return to normal", but simply on achieving better function for the person as a whole. "If your symptoms get better," as Dr. Ida Rolf wryly put it, "that's your tough luck."

Third paradigm language is in its infancy, making its appearance in systems theory, the theory of relativity, and chaos/complexity mathematics. In our profession, the language of integration and relationship can sound frustratingly "New Age". The woman in Figure 10 might be described in such terms as, "Her top half and bottom half are not matching" – a kind of waffle-y language which sends some in our profession wincing with embarrassment and running for second paradigm cover. Nevertheless, the global and environment-inclusive view implied by third paradigm premises is a powerful and physically accurate one, and will ultimately prevail even as it gains a more precise formulation which includes, rather than rejects, second-paradigm practical wisdom .

Although each paradigm has something to offer educationally, third paradigm inquiries, with its "we-are-all-in-this-together" attitudes and "what-will-improve-human-function-generally" assumptions, are most readily applied to the problem we have set ourselves: using bodywork principles to generate a useful Physical Education system for the 21st century.

The Arithmetic of Social Change:

Although many practitioners enter careers in bodywork and movement therapies with a world-saving motivation, the math of employing one-to-one education to elicit massive social change simply does not work. Imagine that each practitioner can do a good job of returning 200 people per year to their kinesthetically integrated selves. This figure is perhaps naively optimistic: consider that at 40 sessions per week, 50 weeks per year – a punishing schedule for most of us – this yields Ida Rolf's 10 sessions per customer. Most Rolfers, as well as practitioners of other methods, will tell you that they are just getting started with most people after a ten-session series. Nevertheless, suppose our skills continue to improve until each of us can reliably restore 200 people per year. If we multiply that times an estimated 150,000 practitioners, the product yields 3 million people per year under optimal conditions – so about 150 years would be necessary to reach just the populations of the USA and Europe.

For reasons detailed in Part 2, we do not have the leisure of 150 years to affect this change. Even if we do have the time, one-to-one education is massively both labour and capital intensive, giving it a high social cost. Consequently, we must take off our blinders: all our work in developing healing processes, while valuable in itself, must be seen as merely a prelude to applying the same principles preventively. We must educate the populace to keep them from falling into the traps we are able to spring them from manually. An image supplied by a client illustrates this beautifully:

A doctor who came to the author's practice in London praised the efficacy of bodywork, saying ruefully, "Every day I come to work in hospital, and it is as if I am beside a river. Someone is floating down the river, drowning. I pull them out, dump the water out of them, and give them the kiss of life (artificial respiration). About the time I've got them sat up and ok, whoops, there's another person floating by drowning, and the whole process begins again – and again and again, all day long: I simply don't have time to go upstream and find out why they are all falling in!"

We can stop here for a moment and appreciate our place in medical history. Medicine has done extraordinarily well at reducing epidemics that scythed through populations in previous centuries, using second-paradigm biochemical manipulation and third-paradigm hygiene. We bodyworkers and other "alternative types" are thus freed to go upstream and find out why so many of the populace are falling into the illness river. Any alternative therapists who wish to sneer at the narrowness of allopathic medicine would do well to remember that the streets of Fifth Avenue were clogged with hearses in 1915 from people who died of influenza, that school halls of the 1930's and '40's clattered with the leg braces of polio victims, and that 19th century cemeteries overflow with the tiny headstones of infant mortality. Now very few people die of the flu or polio; more die instead from diseases that have their roots in longstanding health-robbing behaviors.

We can observe that the medical profession, as exemplified by the doctor in the story above, is struggling a bit with giving up the habit of drugs and surgical procedures in favor of effective prevention and behavior modification. We can pride ourselves on our developing abilities to affect behavior. We should not, however, deny what they have accomplished, or forget that our ability to go upstream from them at all is directly and entirely dependent on their success in making life less easily fatal.

Now that we have blazed a path upstream, what have we found? That many of the potential drownees are suffering from distress due to dietary, structural, and autonomic imbalances, which can be reduced or eliminated through our collective ministrations. Nonetheless, we cannot stop to bask in our good works for very long. We are beckoned still further upstream: The people who come to us – often the wealthier, more educated, and presumably choicest sections of the populace – why are they riddled with stress, tension, postural distortions, and their attendant aches and functional failures, in the very prime of their lives?

We need to pause in our daily dragging of people out of the stress / distress river to send a delegation even further upstream. If both the least and the most advantaged in our society are reaching adulthood with the levels of stress which we regularly see due to excessive muscle tension and postural distortion, we can say that "kinesthetic dystonia" is the most pervasive epidemic on the surface of the planet today. Instead of dramatically robbing a few people of their literal lives, this epidemic robs most people of a piece of their ability to live; it robs Life.

When a problem is this widespread, it is neither the medical system that we must fault, nor our own efforts, but the "physical education" system of our culture, taken in its entirety. We must, cooperatively with both medicos and educators, work our way out of the situation through "potential patient" education. We need to find out why people are responding to the challenges of life in this fashion, and devise an educational system which is more effective than the current one in keeping them from falling into that distressful river in the first place. This is ultimately the most economical and effective way to permeate the culture with the principles of our work, to reduce the load on the health care system, and to promote a healthier, more functional society.

Some bodyworkers, confronted with the argument given above, have responded, "It may be that we cannot reach the larger society by one-to-one methods—but if you get the right 200 people per year, the effect is multiplied by the influence they have on others." Surely this is true to an extent: to the degree that we can attract what the sociologists call "opinion leaders" (Barnett, 1953), our work will be spread and can influence the dominant culture in the same way that the language and sensibility of Gestalt Therapy—"being clear", "doing your own thing", "take responsibility", and "create your own

reality" – have gained acceptance, having traveled the entire gamut from heresies to superstitions in a single generation .

The suggestion here is not that we should all abandon our practices in favor of teaching certificates. The truth is, however, that sooner or later the perceptions, values, and skills we are trying to inculcate in our clients will need to blend into our cultural milieu – in other words, be absorbed by our children before they become the stressed-out adults on our tables and plinths. We have the opportunity and the duty to consider properly our role as educators as well as therapists, not just for the adults, but especially for the young.

(Modern manual therapists and movement teachers have not been alone in trying to educate the populace about kinesthesia. Traditional Physical Education has a long and interesting history. In Part 2, we explore that history in order to understand the origins of the "kinesthetic dystonia" problem, and to project into the near future to see what we, in our roles as educators, can offer to meet its challenge.)

Note: For Parts 2 and 3 of "KQ", visit Tom's website: www.anatomytrains.net