

CHANGE IN PERSPECTIVE OF HUMAN ANATOMY THROUGH RECENT SCIENTIFIC DISCOVERIES IN RELATIONSHIP TO THE PERCEPTION OF MOVEMENT

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ABSTRACT: This workshop was a presentation of an overview of the changing paradigm of human anatomy and a consequential change in attitude toward movement. Its objective was to broaden movement perception and awareness. The body and movement are appreciated in healing, in culture and in society in a multitude of ways. Through slide lecture, movement observation and exploration, the participant began to discover his personal relationship to anatomical perceptions of the body and that his understanding and preferences in movement learning and organization differ from others' needs in learning, and from other body and world perspectives. Through anatomical

approaches as impetus for movement experimentation and sharing, that individual may become aware that his own influence on his body, health and spirit, i.e., in his way of being in the world, is through active choice. By moving from images of current models of anatomy especially the fascial system, and then teaching this created movement, a participant learned about his own and others' biases and values concerning human movement and learning. An expanding perception of self and the human body is possible through exposure to, and active awareness of, one's own and other participants' approaches to movement.

Keywords: Movement. Perception. Body awareness. Fascia. Body movement in culture.

RESUMO: Este workshop apresentou uma visão global da evolução do paradigma de anatomia humana e uma consequente mudança de atitude em relação ao movimento. Seu objetivo foi o de alargar a percepção e a consciência do movimento. O corpo e o movimen-

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to são muito apreciados na cura, na cultura e na sociedade, em uma multiplicidade de formas. Mediante uma palestra com slides, observação e exploração de movimento, o participante começou a descobrir a sua relação pessoal com percepções anatômicas do corpo e que, no seu entender e preferências em aprendizagem e organização de movimento, diferem de necessidades dos outros na aprendizagem e de outras perspectivas de corpo e de mundo. Mediante abordagens anatômicas, como impulso para a experimentação do movimento e o compartilhamento, aquele indivíduo pode se tornar consciente de que a sua própria influência em seu corpo, saúde e espírito, ou seja, na sua forma de estar no mundo, é através de uma escolha ativa. Passando de imagens dos atuais modelos de anatomia, especialmente o sistema das *fascias*, e em seguida ensinando este movimento criado, um participante aprende sobre preconceitos e valores humanos de si mesmo e dos outros, sobre movimento e aprendizagem. Uma percepção em expansão de si mesmo e do corpo humano é possível através da exposição a – e a sensibilização ativa das – abordagens próprias e dos demais participantes com relação ao movimento.

Palavras-chave: Movimento. Percepção. Consciência do corpo. *Fascia*. Movimento do corpo na cultura

RÉSUMÉ: Cet atelier était une présentation d'un aperçu de l'évolution du paradigme anatomie humaine et d'une modification corrélative d'attitude à l'égard mouvement. Son objectif était d'élargir mouvement perception et la sensibilisation. L'organisme et de mouvement sont appréciés dans la guérison, de la culture et dans la société en une multitude de façons. Grâce au mouvement diapos, observation et à l'exploration, le participant a commencé à découvrir sa relation personnelle à anatomiques les perceptions de l'organisme et que sa compréhension et de préférences en mouvement différent de l'apprentissage et de l'organisation des besoins des autres dans l'apprentissage, et d'autres corps et monde perspectives. Grâce à un nouvel élan pour Anatomiques approches comme mouvement l'expérimentation et le partage, que personne peut devenir conscient de ce que sa propre influence sur son corps, de la santé et à l'esprit, c'est à dire, dans sa manière d'être dans le monde, est active par choix. En se déplaçant d'images des modèles actuels de l'anatomie en particulier le système fascial, puis l'enseignement ce mouvement créé, un participant appris son propre et d'autres des préjugés et des valeurs concernant la circulation et de l'apprentissage. L'expansion perception de soi et du corps humain est possible grâce à l'exposition aux, et la sensibilisation

active de, l'un des participants les propres et d'autres approches de circulation.

Les mots-clés: Mouvement. Perception. Conscience de corps. *Fasce*. Mouvement de corps dans la culture.

This was the first presentation at the Criatividade, Ser Cura, II Encontro de Estudos em Movimento, IV Across the Threshold: Creativity, Being and Healing and IV Seminários Transculturais Sobre Teatro e Dança, with awareness that this initial workshop could set the tone for the entire conference, the presentation was framed as a congenial and informative lecture with investigation and exploration movement experiences. The accepted premise is that individual movement style influences perceptual understanding of the world around us. The overriding cognizance is that humans learn through kinesthesia, that is, through experience, through movement, and that learning through movement is a fully embodied experience. Objectives were to promote awareness, understanding and appreciation of the various movement and learning styles of the participants, and in so doing, the participants would begin to appreciate their own unique styles. A relevant intent was that participants begin to interact early in the workshop. Moving together and sharing movement discoveries immediately establishes a relationship of nonverbal and verbal communication among workshop participants. This allows for a release of body and social tension and an understanding for the participants that they are permitted to relax, move and express themselves. Having a movement “icebreaker” early in the workshop allows for effective learning throughout the workshop.

There has been much written about the value of alternative learning styles to the traditional sitting in one place in a classroom and attending lectures. Movement as an avenue of learning is appreciated by this presenter: If I can move it, I can relate to it and begin to understand it. The awareness of the value of movement and perception is interwoven into the context of this presentation.

The expectation was that through this workshop experience of learning about the changing



perception of anatomy, the participant would begin to learn about and articulate what he personally values in human movement and then use this awareness and integrate this experience through the week's workshops and presentations. In doing so, he prepares himself for expanding perceptions of the human body through the representative perspectives offered at this conference on body, health, and spirit, and to make active choices in his way of being in this world. Through the workshop's shared movement exploration and observation, various means of perceiving "physical presence," our own and that of others, become apparent as a means to this end. This construct was continued and developed in the follow morning's workshop on the perception of energy.

Slide Lecture #1 Historical Context

The workshop began with a slide lecture on past models of anatomy, illness and medicine. Throughout history, healing of illness and disease was directly influenced by the then-in-fashion-perspective of the human body: According to Gohde (A history of western natural healing practices in Europe, 1999-2012), "The ancient era prior to Hippocratic Greece was a period dominated by superstitions where sickness was caused by supernatural forces." The healings involved were not considered "natural."

As time went on, there was a separation where folk healers treated the lower classes and professional healers treated the upper classes. The Greeks believed organization brought health, the Romans believed sanitation brought health. Gladiators and warfare brought about the need for surgery. A guide to medicinal plants (herbal medicine) was published in 78 AD and was a standard for 1500 years. The Church's influence was huge in reducing folk healing in favor of professionals. The Church said that suffering was of God and healing outside of the Church was evil, therefore science (because it was "not Church") was against God. Later, with the emergence of hygiene and a personal health perspective, the Church accepted science as the better alternative to folk medicine. "Modern medicine started with the advent of preventive medicine in 1876." This was the beginning of the

reliance on science as biomedicine (Gohde, 1999-2012).

More recent models of anatomy and medicine were introduced. For years western medicine has accepted anatomical dissection as the model of anatomy correctness, the foundational perspective based in the Descartes body-mind dichotomy. With the hierarchy of the mind over the rest of the body, and the understanding that parts make the whole (represented by daVinci's Vitruvian man), the body was divided and segmented into bones, muscles, organs, etc., governed and controlled by the mind and the brain, also segmented. We attempted to understand the body as a whole by segmenting it. Presentation of slides of the human body dissected into various parts, body systems and organs, including the brain, illustrated this model.

Segmentation has not worked as a successful model. There is much that segmentation does not reveal, in fact destroys. A quotation from Albert Szent-Györgyi (1963) that aptly summarizes this perspective: "Whenever we separate two things, we lose something, something which may have been the most essential feature." The intracranial membrane system in the brain was addressed briefly in the slide lecture as an example of how the Calvarian cut in dissection destroys this membrane. The intact intracranial membrane system as observed through a window cut dissection, is now realized to take an active role in health. An example (Ashfield Physiotherapy Centre, 2006) is that a tight intracranial system affects the functioning of the sphenoid and can affect the pituitary gland in the sellaturcica, consequently causing hormonal imbalances.

At this point in the workshop, the movers in the audience, in auditorium seating looking up at the stage, were very ready to move. The structure of the rest of the workshop was explained: there would be pauses for writing and reflection, a movement warm-up, presentations on individuals whose work influences and supports the change in anatomical perspective, information on cells and fascia, a time of movement exploration and integration, and also a time for sharing, summary and questions.

Movement Warm-up

The warm-up was prefaced with, “How does our acceptance of the western medical model reflect itself in our own perspective of self and thus in our individual inherent rhythms, phrasings and dynamics? Let’s play.”

All participants were invited onto the stage for the warm-up. The following instructions were given, with time in between each for the participants to fulfill the tasks:

What do you need to do right now to warm-up, to recuperate from sitting during my talk? You are welcome to move and vocalize. Do several movements or exercises to warm-up and remember them to repeat. Blend them together as a warm-up phrase. Teach one other person one part (only a part, not the whole) of your warm-up phrase so you both can perform a part of each others’ warm-up.

They were given time to write, reflect upon and then discuss with their partner, the following: “How did you approach your own warm-up? What were your goals? What was your approach? How did you organize to teach your movement? Was your way of organizing into teaching helpful or confusing for your partner?”

To the person who was taught:

“What was valued by the person who taught you, by you? What, if anything did you need to take care of within your own body, within your thinking, your organizing? Did your teacher touch you? Did this help or not? (The power of touch is huge and will be focused upon in our next workshop together.) Remember what questions, if any, you needed to ask the person teaching the movement in order for their movement to make sense to you. How did you need to learn their movement? In other words, how do you need to organize movement in order to learn movement?”

The participants thought, wrote and suddenly the stage erupted into paired discussions. It is important that participants have time for this sharing. Insights often occur as they reflect upon

and share with awareness their interactions in teaching and learning the movement phrases. It is important that they are heard and their revelations expounded. The partners honor and respect each other in listening. These conversations are usually quite dynamic, with the participants often pulling the presenter aside to communicate or clarify their discoveries.

They were asked to then share with another group. Now more people are present to listen to a participant’s perspective. Being heard and seen is vital to feeling appreciated and in feeling that one’s thoughts and discoveries have value. Self-worth and respect are a part of this way of being, this way of learning. As this section of the workshop ended, the participants were asked to retain their choreographed warm-up phrase because they would be returning to it.

A place of awareness for you as observer: What the professor gives and what you ask shows what is valued by you both. The variables could be the same or different, but they demonstrate your perspective from the context of what you bring into the class (or to this workshop), my perspective as the professor today, from what I bring and ask of you, and their combined influence on how you fulfill what is asked. This information is invaluable to you as a student, and as a student of life. With Laban Movement Analysis you are able to uncover even more about what your strengths and weaknesses are in perceiving and communicating movement.”

The participants left the stage as a community. The ice was broken.

Slide Lecture # 2 Contributors to the New Perspective

The consideration of the body and movement as a gestalt was understood and taught by Fritz Perls, Irmgard Bartenieff and many other somatic explorers in the mid and late 20th C. Their students experienced a sense of body integrity and intelligence, but only recently with discoveries in neuroscience, bioenergetics, biomagnetism, etc. is this sense of wholeness supported by western science. The focus has shifted in our direction, to



those of us “on the threshold,” i.e., those working somewhere between traditional and alternative understandings of the body, health, healing, movement, and science. With the advent of this acceptance by traditional medical communities, now willing to work with us, our perception of oneness of the body and the oneness with our environment is being considered and, most importantly, questioned with respect. Some of the men and women who contributed to this new perspective on anatomy, movement, science, and healing were introduced through slides.

Fritz Perls, 1893-1970, was the founder of Gestalt Therapy. Perls focused on personal responsibility and experience in the present moment and on living in the moment. He felt that every action has a consequence. “The goal is for clients to become aware of what they are doing, how they are doing it, and how they can change themselves, and at the same time, to learn to accept and value themselves” (Yontef, 1981; Gomez-Jauregui, 2010).

Milton Erickson, 1901-1980, was a psychiatrist who believed that we can change our beliefs and feelings and this will change our patterns of behavior. He promoted the power of the unconscious mind as a problem solver (Berger, 2005).

Buckminster Fuller, 1917-1983, with his unique way of looking at the world, was only briefly discussed. He has had an incredible influence on the changing perspective of the human body:

Synergy is the only word in our language that means behavior of whole systems unpredicted by the separately observed behaviors of any of the system's separate parts or any subassembly of the system's parts. There is nothing in the chemistry of a toenail that predicts the existence of a human being (Dice, 2009).

There are those who think outside of the box. Buckminster Fuller never saw the constraint of the box. One of his concepts was that of tensile integrity, tensegrity. This is a type of structure with an integrity based on a balance between tension and compression components. In a tensegrity structure, the compressive members are connected to each other by these tensile members, according to Gomez-Jauregui, in *Tensegrity*, (2010).

Fuller's work was embraced by Rolfers and other early somatic practitioners in the 1970's who began to speak of the body as a tensegrity system (Myers T. W., 2009, p. 44), a perspective on the body that differs from the earlier idea of muscles, bones and joints as systems of mechanistic levers and pulleys. Donald Ingber, born 1956, applied Buckminster Fuller's idea of tensegrity to theory concerning cells (Oschman, 2000, p. 62).

Irmgard Bartenieff, 1900-1981, was aware that the whole body is connected in moving and that one part of the body could never be considered in isolation from the rest. She worked with exploring the initiations of movement from bones and experienced connectivity throughout the body as moving from the fascia. She also worked with those with polio, studying to understand emotional, neuromuscular, skeletal and movement connections. She started the Laban/Bartenieff Institute of Movement Studies where students learn Laban Movement Analysis (LMA), a description and analysis applicable to all movement. LMA focuses on the relationship of the body and its dynamics and changing shape through space, and Bartenieff Fundamentals (BF), the organization and understanding of movement patterning and dynamics of the body in space. LMA and BF are not independent from one another. An LMA/BF perspective of movement allows for change. LMA/BF as a form of body and movement awareness and re-education provides an opportunity to enhance the quality of movement function and expressivity in all areas of a person's movement life.

Bonnie Bainbridge Cohen, is an innovator and leader in developing the Body Mind Centering embodied and integrated approach to movement, touch and repatterning through experiential anatomy, developmental principles, perceptions and psychophysical processes. She is the author of the book, *Sensing, Feeling and Action* (The School for Body Mind Centering, 2001-2004).

There are many other people important to the development of body awareness and movement: Eric Franklin, Mabel Todd, Lulu Sweigart, Irene Dowd, the list goes on and on. All are important, and as movers, the participants may be familiar with those names already. A few more people of significance to our changing perspective on human



anatomy and movement were introduced through slides.

Albert Szent-Györgyi, 1893-1986, was a physiologist known for his innovative thinking. He was a Nobel Prize winner for his work on the Krebs cycle (a flow chart of biochemical workings of the body), and he discovered Vitamin C (Science, 1993-2008). There is a story about him riding his motorbike when a fly flew into his eye and he shut it to avoid the fly. By mathematical calculation, taking into the account the speed he was riding, the speed he decided the fly was approaching, the air currents at that time of day and his knowledge of the length of time it takes the nervous system to get information from the input to the brain to the muscles of his eyelid, he realized that there had to be a more instantaneous way of communication within his body than through the nervous system (Oschman, 2003, pp. 37-39). But how? His discovery is discussed later.

Dr. Robert O. Becker, 1923-2008, a physiologist, showed that the cells surrounding the nerves, the perineural cells, generated interconnected direct fields of current within the extracellular matrix of the connective tissue and are important in regulating the nervous system and wound healing. He proved Szent-Györgyi's concepts about the semiconducting nature of molecules at the tissue level (Oschman, *Energy medicine, The scientific basis*, 2000, p. 61).

James Oschman's two books, *Energy Medicine: The Scientific Basis and Energy Medicine in Therapeutics and Human Performance* "give the most skeptical academic scientists a theoretical basis for exploring the physiology and biophysics of energy medicines" including an understanding of the influence of sounds upon the body's physiological processes and our consciousness (Oschman, *Faculty bios*, 2006-2011). Sound was mentioned because the presenter in the following workshop would be working with sound vibrations.

Caroline Myss, born 1952, developed the field of "Energy Anatomy," a science that correlates specific emotional/psychological/physical/spiritual stress patterns with diseases. Her accurate research is in *The Creation of Health: The Emotional, Psychological, and Spiritual Responses That Promote Health and Healing*, co-written by Caroline and C. Norman Shealy,

M.D., Ph.D. a Harvard-trained neurosurgeon. She explored the fields of human consciousness, spirituality and mysticism, health, energy medicine, and the science of medical intuition. Caroline has established her own educational institute in 2003, CMED, Caroline Myss Education (Myss, 2010).

Candace Pert, born 1946, is a neuroscientist and pharmacologist who explored the relationship between our emotions and science. She also discovered the opiate receptor, the cellular binding site for endorphins in the brain. (Pert, 2012).

Thomas Myers studied with Drs. Ida Rolf, Moshe Feldenkrais, and Buckminster Fuller. He also studied less extensively with movement teachers Judith Aston, Emilie Conrad, and in the martial arts. His work is influenced by cranial, visceral, and intrinsic movement studies he made with European schools of osteopathy. He focuses on anatomy, soft tissue manipulation, and "the social scourge of somatic alienation and loss of reliance on kinesthetic intelligence" (Myers T. , 2012).

John Upledger, born 1932, is an osteopathic physician who has been recognized as an innovator and leading proponent in the investigation of new therapies. He developed CranioSacral Therapy (Upledger Institute International, Inc., 2011).

The slide lecture ended with a quote from Physicist Richard Feynman, "A paradox is not a conflict with reality. It is a conflict between your feelings of what reality should be like" (Oschman, 2003, p. xxix).

Slide Lecture #3, A New Model of Anatomy

Recently a "modern" understanding of anatomy acknowledges new perceptions of, for example, the cell. Electric current is now seen as passing through fascia as a flow of energy traveling through the body. There is an awareness of the interconnectedness of the various systems of the body. It is not as easy as once thought to separate ligaments from muscle from fascia in either structure or function. The avenues of knowledge that previously seemed esoteric or "out-there" in possibility by western thought are now being accepted. Meridians, the validity of acupuncture, chakras, human energy fields (auras) and the intelligence of Eastern medicine are now more seriously considered



by Western medicine than in the past. From the presenter:

We are today, through our perceptions and the perspective of the body as a whole experiencing movement and observing and communicating about movement in relationship to this new understanding. The segmented parts of the body are now to be considered as landmarks of a continuous whole. We look at cells and fascia as models of this new perception of wholeness.

The purpose of this part of the workshop is not to explain in detail but to demonstrate that there has been much intelligent scientific investigation and thought contributing to this new understanding of human anatomy. Some of the accepted concepts of this new paradigm are:

1. All the “parts” of the body work together, there are no “parts.”
2. The body is intelligence.
3. There is no hierarchy in body “parts” intelligence (Class notes from Susan Cotta CranioSacral Therapy I classes, 2006).
4. The fascial network is more important than originally thought(Alvino, 1996).

Within the new model of anatomy we observe:

1. The electromagnetic properties of the body.
2. Proteins as semiconductors of electricity.
3. The fascia containing an electrical current.
4. Bell’s Theorem (Oschman, 2003).

Bell’s Theorem states that “At a fundamental level the separate parts of the universe are connected in an intimate and immediate way” which mathematically supports the concept that subatomic particles are connected in some way that transcends time and space. Anything that happens to one particle instantly affects all other particles. (Alvino, 1996). This simultaneous communication and movement are the means of communication within the body. When Bell’s theorem is united with an understanding of the living matrix (Oschman, 2000, pp. 59-67), consisting of connective tissue, the concept of oneness within the human body is realized.

To further elaborate, connective tissues visualized as a network of proteinous substance throughout the human body, that is to say, the

body predominately consists of collagen and water (Oschman, 2003, p. 59). The quote “A human being is a container invented by water so that it can walk around” (Juhan, 2003, p. 59) was shared to illustrate this point. Proteins and water are semiconductors of electricity. (Oschman, 2000, pp. 59-60).

Remember Albert Szent-Györgyi? He discovered what is now known as the living matrix. He went back to his work on the cell to see what he may have missed, “to see what everyone has seen, to think what no one as thought”-Szent-Györgyi 1988 (Oschman, 2003, p. 36). He looked again at his work in using the centrifuge to destroy the cytoskeleton of the cell to study the contents of the cell. (Oschman, 2003, pp. 31-33). He thought about his knowledge of the transference of information in the body that occurs faster than the nervous system can deliver it. (Oschman, 2000, pp. 59-61). This is where his creative ability to rethink and not be content with his own discoveries came into play. “The significant problems we have cannot be solved at the same level of thinking with which we created them.”-Albert Einstein (Oschman, 2003, p. xxix). When the cells had been put in the centrifuge, their skeletal structure had been destroyed. In looking at the remnants, the cytoskeleton,” Szent-Györgyi realized that the hydrated structure of the cells in the connecting fabric of fascia was where communication occurred. The hydration of the cells cytoskeleton allowed for a piezoelectric effect. The extracellular material as matrix was the actual communication system (Oschman, 2000, pp. 59-61, 73.) occurring from one cell to the next, from one system in the body through another. “The properties of the whole network depend upon the integrated activities of all the components” (Oschman, 2000, p. 48). A new appreciation of cells/tissue and the matrix emerged from his findings.

Donald Ingber’s work with cells, based on Fuller’s theory of Tensegrity (Oschman, 2000, p. 62) substantiated Szent-Györgyi’s discovery that the electric current in the body meridians flowed through the living matrix, the fascia, giving additional support to the understanding of the cell and fascia contributing to a vast communication network, a semi conductor. (Oschman, 2003, p. 108). Robert Becker also validated this discovery of cellular communication: “the cells surrounding

the nerves. . . form an interconnected continuum that generates direct current fields”(Oschman, 2003, p. 75). “Molecules do not have to touch each other to interact. Energy can flow through the electromagnetic field. . .The electromagnetic field along with water forms the matrix of life.”- Albert Szent-Györgyi (Oschman, 2003, p. xxxii). This living matrix encompasses all the connective tissue systems (Oschman, 2000, p. 95), including the fascial system.

Discussion and slides as visual aids of Thomas Myer’s work with dissection of fascia and the illustration of his discovery of the sternalis, as a missing connective tissue when the body was dissected in the traditional manner was presented. Myers remarked that in turning his scalpel sideways, he was able to dissect the fascia as one entire network of material, illustrating the fascia as a continuous network of connective tissue throughout the body(Anatomy trains and fascia: New evidence from dissection, video lecture, 2010).

Movement Session #2, Expanding this knowledge to movement experience

To reiterate, within the body systems of unification there is a communication of energy. An explanation of the exact way this communication occurs was not within the scope of the workshop. The explanations given were to encourage a holistic approach to movement in this second movement experience.

The participants were again invited to the stage and guided in exploring through improvisation. They were invited to move by experiencing body connections, by sensing the whole body moving and moving from various systems, i.e., skeletal, cellular, organs, muscular, and especially to explore moving from the presented information on fascia. Not addressed was the question as to how many may have constructed their earlier warm-up with the idea of moving separate body parts? They were reminded that a change in perception of the human body alters how one relates to it, so they were asked to experience and explore their original warm-up again, this time from the various perspectives just explored. With time again given in between each task, they were instructed:

Working with your own warm-up, choose the way you want to perform it, now with a different intent than in your original warm-up. This time, if you did not before, consciously choose your approach. Work with this approach and set the movement so you are able to repeat it. Teach a different part of your warm-up from this new perspective to the same person who was your partner in the original movement warm-up. Go back to your notes from warm-up #1 and share and talk with each other about what is different between your warm-up #1 and warm-up #2. Do you have a preference between them? If you do, do you know your own movement preferences enough to know why you prefer one way of performing your warm-up over the other? Go back to your original list and goals. Has anything changed? What did you emphasize before that you have now changed? What discoveries have you made?

Changes in rhythms, dynamics, and feeling tone of the movement phrase were mentioned as possibilities for observation and discussion.

The participants shared with their partners again and then again shared, showed and discussed their observations and discoveries with another group. They were invited to report some of their insights to the whole group. This brought the small group discussion back into a whole group experience and also reinforced the sense of community. At the end of this experience, they were reminded that the exercise was about the role of our individual movement preferences in learning and in the shaping of our interactions and relationships. They were asked to note for themselves what they had learned through this workshop experience.

The participants were enthusiastic about many aspects of the workshop. They particularly enjoyed having the opportunity to move their learning and having time to reflect, write and share. The workshop experience was purposely structured to prepare them for and lead into, the second workshop experience, occurring the following day, where they would be given more information and experience with fascia. The questions at the conclusion of this first workshop showed that the participants were eager for the information that would follow.



This lecture/workshop was presented as an integrative experience for the participants. Laban Movement Analysis, the perspective from which the workshop was created, emphasizes the importance of knowing one's own body (awareness) and its use of space and dynamics, in relationships, intent, and in communication. Expanded knowledge and understanding increases our own physical, spiritual and emotional presence in the world and increases our awareness of our own ability and responsibility to self and others in making choices. We have the ability to actively choose in any situation. We do not need to continue in destructive patterns. We as individuals, as cultures, as society influence our own and others' movement, health and environment.

The following day's workshop would build upon this foundational workshop in emphasizing the influence of perspective, particularly our perspectives on energy, science and touch on how body, touch and movement are appreciated in healing, in culture and society, i.e., in our environment. In conclusion, are cognition for all attending this workshop is that we could not have come to an understanding of the whole if an examination of the parts had not been initially undertaken. We must not devalue that initial perspective's importance as part of our process of discovery.

Western medicine is now regarding the body as greater than the sum of its parts, opening to the knowledge, models and perceptions that are present within the healing communities of the world. It must still do "scientific studies" but "medicine" from previous centuries or other cultures is no longer being discarded, but now examined and considered. In closing, Buckminster Fuller's definition of synergy encapsulates our growing understanding: "The "behavior of whole systems (are) unpredicted by the separately observed behaviors of any of the system's separate parts or any subassembly of the system's parts" (Dice, 2009).

REFERENCES

Class notes from Susan Cotta CranioSacral Therapy 1 classes. (2006).
Alvino, G. (1996, n.d. n.d.). *The human energy field*

in relation to science, consciousness, and health. Retrieved September N.D., 2011, from TWM: <http://twm.co.nz/energ.html>

Ashfield Physiotherapy Centre. (2006, n.d. n.d.). *The Anatomy of the Central Nervous System and CranioSacral System*. Retrieved September 2011, from Ashfield Physiotherapy Centre: <http://www.ashfieldphysio.com.au/cns-anatomy.html>

Berger, D. V. (2005, n.d. n.d.). *Famous Psychologist: Milton Erickson*. Retrieved January 25, 2012, from Psychologist Anywhere, Anytime: http://www.psychologistanywhereanytime.com/famous_psychologist_and_psychologists/psychologist_famous_milton_erickson.htm

Dice, B. (2009, n.d. n.d.). *Buckminster Fuller, The Actions and Legacy of a Comprehensive Anticipatory Design Scientist*. Retrieved January 25, 2012, from Truman Library: <http://www.trumanlibrary.org/education/nhd/ingenuity.html>

Gohde, J. H. (1999-2012, n.d. n.d.). *A History of Western Natural Healing Practices in Europe*. Retrieved January 25, 2012, from The Natural Health Perspective: <http://naturalhealthperspective.com/tutorials/history.html>

Gomez-Jauregui. (2010, n.d. n.d.). *Tensegrity In Wikipedia, The Free Encyclopedia*. (T. S. Architecture, Producer, & Cantabria, Servicio de Publicaciones de la Universidad de) Retrieved January 22, 2012, from <http://en.wikipedia.org/w/index.php?title=Tensegrity&oldid=472527299>

Juhan, D. (2003). *Job's Body, A handbook for bodywork, 3rd ed*. Barrytown, NY: Barrytown/Station Hill Press, Inc.

Myers, T. (2012, n.d. n.d.). Tom Myers. (I. Kinesis, Producer) Retrieved January 25, 2012, from Anatomy Trains: http://www.anatomytrains.com/at/people/tom-myers_kinesis, Inc 2012

Myers, T. W. (2010, n.d. n.d.). Anatomy trains and fascia: New evidence from dissection, video lecture. *Fascia Research Pioneers, 14 Lectures by 12 International Experts*. Pittsburgh, PA.

Myers, T. W. (2009). *Anatomy trains, Myofascial meridians for manual and movement therapists, 2nd edition*. Philadelphia, PA: Churchill Livingstone, an imprint of Elsevier Science Limited Churchill Livingstone Elsevier.

Myss, C. (2010, n.d. n.d.). *Caroline Myss*. (C. Myss, Producer) Retrieved January 25, 2012, from



- Caroline Myss: <http://www.myss.com/features/bio/>
- Oschman, J. (2003). *Energy medicine in therapeutics and human performance*. London, England: Elsevier Limited.
- Oschman, J. (2000). *Energy medicine, The scientific basis*. London, England: Elsevier Limited.
- Oschman, J. (2006-2011, n.d. n.d.). *Faculty Bios*. (Energy Medicine University Intuitive Development, Inc.) Retrieved January 25, 2012, from Energy Medicine University Distance Learning: <http://energymedicineuniversity.org/faculty/oschman.html>
- Pert, C. (2012, n.d. n.d.). *Candace Pert*. Retrieved January 25, 2012, from Candace Pert: <http://candacepert.com/home/>
- Robertson, A. (February, 2009 4). *The Mind-Body Problem, PSY310 - History and Systems of Psychology WH09BSP02*. Retrieved January 27, 2012, from <http://www.silventarphotography.com/>: <http://www.silventarphotography.com/psych/articles/MindBodyProblem.pdf>
- Science, P. i. (1993-2008, n.d. n.d.). *The Albert Szent-Gyorgyi Papers Biographical Information*. (N. L. Medicine, Producer, & U.S. National Library of Medicine) Retrieved January 25, 2012, from Profiles in Science: <http://profiles.nlm.nih.gov/ps/retrieve/Narrative/WG/p-nid/147>
- Szent-Györgyi, A. (1963, n.d. n.d.). *pdf*. Retrieved January 25, 2012, from annualreviews.org: <http://www.annualreviews.org/doi/pdf/10.1146/annurev.bi.32.070163.000245>
- The School for Body Mind Centering. (2001-2004, n.d. n.d.). *Bonnie Bainbridge Cohen*. Retrieved January 25, 2012, from The School for Body Mind Centering: <http://www.bodymindcentering.com/Bonnie/>
- Upledger Institute International, Inc. (2011, n.d. n.d.). *Dr. John E. Upledger*. Retrieved January 25, 2012, from Upledger Institute International, Inc.: <http://upledger.com/content.asp?id=5>
- Yontef, G. P. (1981). *Gestalt Therapy, An Introduction*. Retrieved from <http://www.gestalt.org/yontef.htm>

