

My Bullet Points and Comments from Deane's Recent Lecture

Deane is a genius - and these notes are no substitute for listening to his entire lecture, which is rich in images, details and of course, his unique and pioneering perspective. My psychic grid listens for things that reinforce it's take on reality - it misses lots of other stuff so there are some limits to what i've detailed... Just allow this to add to your mix of understanding (or confusion :) ha! Some notes are partial and fragmented but I tried to reverse engineer my thought responses to his information...

Here we go....

- Stress and anxiety impacts our motor tone, motor skills and memory...
- "My intention is my one conscious control over my movement - and my unconscious - conscious intention vs. unconscious execution of movement."
- Deane quoting Milton " Don't make it more complex than that - it's the feeling state that we're giving off - establishing a memory so there can be lasting recall." response development and organization....
- Trager works through the Gamma Motor System- how i move is transferred to the client to succeed in lasting change of dysfunctional patterns by developing new memories...etc.
- The final arbiter of movement is the Gamma MS, brain stem and.... (missed this bit) have to listen
- we're conceptually handicapped - without knowing about unconscious patterning - 90% of NS involved unconscious level - responsible for our muscular control (see second bullet)

Pre-Frontal Cortex - conscious sensation awareness and intentions to move - motor and sensory cortex - conscious control add to Pre-Frontal Cortex - (memories, imagination...storage of sensory info)... which informs future movements through habituation... this take place in PFC...**

Brain Center - Limbic system - consciousness of our emotion impact on our sensory motor experience - and expression - how I feel (today's world)

Cerebellum - measure sensory info into brain as i execute and to initiate sensation and to measure those against the performance to monitor how are the sensations created by the movement mirroring my intentions so my movements moment by moment are accurate and continuously refined

* QUICK NOTE ON TRAUMA, STRESS AND ANXIETY - WHEN THE AMYGDALA IS ACTIVATED, ACCESS TO THE PFC AND THE HIPPOCAMPUS - ARE COMPROMISE AND YOU'RE FLYING CLOSER TO 100% ON AUTO-PILOT - MUCH OF SOCIETY IS OPERATING NOW WITH HIGHER DEGREE OF ANXIETY (IF NOT DIRECTLY BUT THE POOL IN WHICH WE'RE SWIMMING IS FULL OF THE FEAR VIBRATION, SO VICARIOUSLY WE'RE ALL IMPACTED TO ONE DEGREE OR ANOTHER) - my thinking/feeling anyway...

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Love this about Deane's thinking - an integrated whole...this next stuff is the bees knees...

- No single muscled does any single thing
- No muscle ever acts alone
- There is no simple agonist/antagonist relationship anywhere
- **The true model is one of body-wide synergy, everything is coordinated with everything else all the time**
- **Localized of origins and insertions do not exist. The mechanical transmission of the muscle movement to the bones involves the entire global connective tissue matrix.**
- Most people seldom fully contract or fully lengthen muscle fibers
- Established patterns are typically in the midranges of muscle fiber lengths. Moving out of these established limitations is the goal
- Complex and extensive synergies are involved in any movement development boy dysfunctional patterns and new patterns that achieve new ranges, coordinations ease and grace.
- **Functionally we have one muscle, one connective tissue matix, and one nervous system - This is the purpose of our work to to - (missed this bit but, I'll add my thoughts - listen to what Deane has to say though) -**
- **ML-Our work is to impart experiences that elicit the bodies inherent integrated coherence - disrupted by the "life in general". The body is a hologram - in particular the connective tissues matrix act like one, has the properties of a semi-conductor and liquid crystal - the learning is not local - it's systemic (check out Dawson Church's books - The Genie In Your Genes and Mind to Matter0**
- some patterns are hardwired - some super-imposed by experience - but there are some that are recruited (organization in our dna) ???
- All new movements need to be superimposed on our survival patterns - and our survival will always take precedence (my thoughts here - this is why our equanimity as practitioners plays such a huge roll in de-escalating a chronically stimulated nervous system) making it feel safe removes the survival patterning from the picture and we can get to work on the consciously habituated but forgotten and now unconscious layer of patterning that is dysfunctional in and of itself but can exacerbates any compromised survival patterning that may present.
- Survival patterns: heart beat, breathing, baseline tone, swallowing, exploration
- Our developmental movement - is a recapitulation of aeons of evolution... random, belly roll, crawl -(fish, snake) all fours - mammals homo lateral all fours crawl - camel, contra lateral crawl - cat horse, hopping, upright, balance... etc.

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- alpha motor neurons - - work horse muscles, conscious intention system - motor cortex and spinal chords...pyramidal tract cell bodies and axons
- **Gamma System - spindle cells and golgi tendon organs....**
 - sensory system
 - auto control system
 - sensorimotor cortex
 - gamma nerve cell bodies are in brain stem, spinal chord, muscles and tendons
- plasticity of brain can learn to bypass neurons that were deprived of oxygen as a result of birth trauma or later life - through repetition and other neurons and other motor cells can be taught to bridge that gap and take over - not a perfect recovery process but one that can compensate
- give them a sensory experience of what it feels like to move pain free - freely mobility informs whats possible...
- protection mechanisms become motor memory that perpetuate into dysfunctional compensations

I had to leave towards the end... but I added the following comment to the chat going on during the call...

One of the attendees asked for it... I've also attached a slide from my yoga anatomy class that includes the image from Dr. David Hubbard's research synopsis.

Dr. David Hubbard (Neurologist) at the Sharp Medical Center in San Diego (no longer there) who lectured at Trager Conference in 1992, found in his research into origins of fibromyalgia, that it was low level chronic contraction of the intrafusal muscle fibers/ muscle spindles that created the pain. When using wire EMG to evaluate pain patients, he found that the "painful" muscle belly was electrically silent but, the muscle spindle within the muscle belly was quite activated (chronic low level contraction). He also found sympathetic nervous system chemical marker 5-hydroxy dopamine within the muscles spindle indicating to him that the muscle spindle was innervated by the sympathetic nervous system, and thus greatly influenced by stress and tension thru chemical pathways. He felt the Sympathetic NS diagram in texts books needed to be updated to include the muscle spindle. He used the Trager Approach in his pain clinic to ween chronic pain patients off medications and to steer them away from surgery. He felt the compression/elongation, fluid nature of our work to be particularly effective. He had been/ was a fan of Travell's trigger point therapy where stretching was utilized. He found Trager to be more effective and that we knew this territory better than most... and that was 28 years ago. No longer was fibromyalgia all in someone's head but it was in the tissue exacerbated by stress responses impacting mechanisms in the gamma motor system...and Trager spoke directly to this mechanism. Thank you Deane for this exquisite unpacking of this system and it's implications in our work.

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Perhaps, this tape is still on someone's shelf and we could turn it into an MP3 for all.

Feel free to touch base anytime.

Metta,

Michael

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Dr. Hubbard referred to the muscle spindles as trigger points... (again coming from a Travell Trigger Point background).

Dr. David Hubbard's research:

- Trigger point produces spontaneous needle electromyographic (EMG) activity that is much more pronounced than that observed in adjacent, non tender muscle fibers.
- It appears that "trigger points" are essentially hyperactive muscle spindles that contain intrafusal muscle fibers that are in spasm because of sympathetic stimulation
- When sampled, 5Hydroxy Dopamine (a sympathetic nervous system indicator) was present in the muscle spindle.
- Stress, caffeine, alcohol cause contraction - low level
- It is believed that the low level contraction of the muscle spindle causes the fatigue/pain in fibromyalgia, CFS

