

Thesis from Luke Thomas

## The Release of Electromagnetic Energy from Horses During Osteopathic Treatment and Training

From 1990 until the 2004 I worked on outback Australian Cattle Stations, Starting horses under saddle also known as breaking in. I would usually start on a mob of 10-15 unhandled horses and in around 10 – 15 days (about 2 weeks) these horses would be handed over to the stockmen and women who used the horses to muster cattle on the million acre sometimes 2 million acre stations.

These cattle stations would stock often 40 to 50 thousand head of cattle and the preferred method to move the cattle from point A to point B would be via stockmen on horseback as the use of motor bike and helicopter would cause the cattle to jog which given high temperatures of that region plus the size of the paddocks, often fifty to one hundred thousand acres ,this could entail moving the cattle often several days travel from the back of the paddock to the yards where they would be processed . If the cattle jogged this distance they would loose a considerable amount of weight and these cattle were usually sold by the kilo and so the age old method of walking cattle with stockmen on horses was employed then as it is today .

The horses that I was dealing with had had minimal handling , sometimes their only ever contact with humans had been when they were bought into the yards as weanlings. Yearlings or two year olds , lassoed around the neck and feet ,dragged to the ground then hot branded and the colts would be gelded, without anesthetic, then given a shot of penicillin .

The horses would then be turned out in to these large Paddocks to grow and would then be bought back in as four sometimes five-year-old even six- and seven-year-old horses that would be broken in and then put straight into work in the mustering camps .

As I'm sure the reader can imagine , the horses that I was handling were incredibly fearful of man and therefore were existing primarily in their sympathetic nervous system aka fright Flight .

The process to handle theses horse would be that they would be coached into the horse yards with quiet older horses that would be released into the horse paddock , the young ones would then be drafted off until they were bought into the round yard ,usually around 15 meters across .

The horse would be lassoed ,and then and the dance would begin . The first objective would be to catch the horses eyes , this would be archived through creating a small noise ,such as a click or a clap .when the horse would turn to face its suitor that was the time to drop the eyes beneath the brim of the hat and retreat several steps ,rewarding the horse for its behavior by the removal of the stimuli ( the human presence ) , also commonly known as negative reinforcement .

Over the next several short lessons this advance and retreat would be repeated time and again until the handler could get close enough to the horse to have it reach out to sniff my hand . And yes I was attacked several times over the years by usually big wild mares who were so defensive due to their fear of humans that knocking a human to the ground and attacking them with feet and teeth was a very clear option .

Back to the process . Once the advance and retreat process had allowed me to get up to the horse and the horse was reaching out to sniff my hand I could then turn that fear into curiosity which with some more reptation could then be turned into confidence and then with many tiny approaches and then

larger retreats I could eventually get to a point where I could touch the corner of the nostril with the edge of my hand .

Once physical contact was made with the horse I would work my way up to the eye using the same advance and retreat method until after many repetitions the horse could be approached and rubbed down all over its body .eventually patted and finally rubbed down with the saddle cloth .

When the horse was comfortable with approach and touch the next step is to gain control of the horses direction and speed . This was done using a halter and lead rope and gaining control of the direction that the horses feet were moving . Primarily the hind feet . So by stepping to the side of the horse into its monocular vision and driving /directing the feet of the horse forward following the circle of the round yard the nose of the horse would be drawn towards the handler causing the inside hind foot to step Infront of the outside hindfoot thus disengaging the horses hind end aka its motor and also causing the horse to change from viewing the handler with its monocular vision to its binocular vision ...

This is the moment the magic happens .

The block drive line . If we were to stand Infront of any prey animal .. sheep ,cattle ,goats ,horses , deer even and we create energy .. noise movement .. depending on our position of course but we can block the animal's forward movement . If we were to stand behind the animal and create energy ,noise and or movement we can drive the animal forward .. the exact position of the line between the two as any experienced stockman or woman knows even if they have never actually thought about it is 45 degrees out from the animals eye . This is also the line between monocular and binocular vision . I have named this line the Block Drive Line . In front of this line you're blocking the animal . Behind the line you're driving .

So why is this line important . In a natural environment say here in the Australian bush , if a mob of dingo's were chasing a brumby , the horse would be galloping away from it's pursuers with the dingos' off to one side ,so the horse would be looking back with one eye ,forward with the other eye ,one ear back one ear forward . Now if the predators were able to get to the front of the horse ,the horse would then realize that it's number one form of defense "Flight" would have been weighed and measured and found wanting .

Another example is when a domesticated horse sees say a plastic bag blow into its field . It runs several hundred metres away to a safe distance where it can then turn using its telescopic / binocular vision to observe the threat . This is the normal everyday behavior of the horse , however when the human gets involved and entraps the horse in a yard and encases its head in a harness . Things change dramatically for the horse .

This situation occurs during the handling of the horse when the horse is asked ,caused or allowed to move forward on the lunge . It's in flight ,being pursued by a predator (the handler ) with a rope attached , when the handler draws the horses nose towards him or her causing the hindquarters to swing away , the horses the block drive line is crossed ,the horse goes from seeing the human out of its monocular view to its binocular view ,and its gripped by fear as the 50 million year old rule of "don't let the predator out run you " is broken.

This would rarely occur in a natural environment , In the round pen it's a regular occurrence .

So what happens to the energy that was causing the horse to run . The energy that could of propelled the horse several hundred meters in a matter of seconds. ? What happens when that energy is no longer required .

Well firstly the horse goes into a freeze state , the horse has been caught and the purpose of the freeze state is for the horse to evaluate the situation. Does it run again ,defend itself or return to grazing ? A moment of clarity where operating from the amygdule is not going to help , so its back down into the cerebellum for the horse . The adrenalin is switched off and the potential energy that was being used to propel the horse is switched off also .

The horse changes from the sympathetic to the parasympathetic in a hurry ,and the electro magnetic energy that moments earlier was being used to propel 500kg across the plains at 65 kilometers per hour is, I believe expelled . Released and shaken off .

I will never forget The first time I felt this. It was in the early 90's on Lake Nash Station in the Northern Territory .

I was working with a big Brumby X Percheron mare . The heavy horse blood was introduced to the brumby population to get more size and bone and in this case it worked ..

I was working on sending this mare forward ,ideally asking her to not change direction and not to change speed .

As I backed away to allow the horse to turn into the middle of the circle ,the mare changed from monocular to binocular vision and the energy hit me in the chest like a ton of bricks .

The sensation that is felt is a strong feeling of butterflies which I now know to be blood leaving the digestive system ,moving to the heart and muscles . Sometimes there's a sensation in the TMJ , Back of the neck or the top of the head , the ears can ring and a feeling of nausea and later exhaustion can occur. All signs of our own body going into Fright flight . ,

So what type of energy is being transmitted here ?? I believe it to be Electro magnetic energy that is positive during times when the horse is operating from its sympathetic nervous system ,

This being the result of billions of action potentials initially switching on from the resting state when the neuron is exhibiting a negative electrical charge inside the cell compared to the outside of the cell .

The neuron then switches from the resting state to the rising state due to sensory stimuli ,when the sodium ions within the cell create a channel in the cell membrane allowing those ions to interact with the potassium ions which have also made their way to the cell membrane from the neuron and thus creating a positive charge .

. Once this positive charge is achieved the electromagnetic energy that was active in say the ganglia of the thoracic and lumbar regions of the spinal chord powering the sympathetic nervous system ,reach the falling phase where the sodium channels in the cell membrane close and the potassium channels remain open allowing the neuron to regain a negative charge and return to a resting state and then

allowing the nervous system to return to the parasympathetic state. . Heart rate drops ,the neurotransmitters switch from releasing noradrenaline to acetylcholine ,the pupils constrict ,the blood flow that was redirected to the heart and muscles is returned to the extremities including the parotid saliva glands ,causing an increase in saliva production and triggering the lick and chew .

This sudden change from positive charge to negative is what I believe is able to be felt by another horse ,or human when in close proximity to the horse undergoing this physiological change.

The name given to this energy that can be felt and measured and photographed is the Biofield .

Although still somewhat a grey area amongst the scientific community The Biofield is able to be seen via a Kirlian Camera or via Biofield Viewer Imaging and can be Measured using an Electro Magnetic Field Meter .

I believe The Biofield to be an integral part of the survival instinct of prey animals to whom a nano second of delay in flight can be the difference between life and death and I believe that the biofield is also used as a way for prey animals not to collide when they are inflight such as in a murmuration of starlings in flight or a school of fish or a herd of galloping horses . As you can imagine a high speed collision amongst a group of prey animals would provide easy pickings for the predator.

Lets fast-forward twenty years from my cattle station days. I now work on the best thoroughbred horse studs in the country handling ,teaching to lead and gentling up to 500 foals per year .I'm currently in my 10 th year of this work .

Early on in the piece I noticed an interesting occurrence when mares and foals would lick and chew at exactly the same time in a synchronized manner .

If the patten of lick and chew in the foal was, tongue out 1 inch the 2 then 3 then 4 then back to 3 then back to 1 inch the mare would lick and chew at exactly the same rate as the foal .

I would see this and think to myself , this cannot possibly be a visual cue and then once again the same as on the cattle stations I started to feel the sudden surge of energy hit me in the chest .

Now this sensation is felt usually 3-5 seconds before the horse licks and chews and has a shake out and is also felt moments before the horse yawns .

As were all aware the lick and chew for example is a sign of the horse transitioning from the sympathetic back into the para sympathetic nervous system .

When the horse goes up into fright-flight, blood from the extremities is redirected to the heart and muscles so that the animal can flee from the threat .. or perceived threat as is often the case with horses . The blood is also redirected from the parotid saliva gland causing the mouth to become dry the same as it does with us humans when we get a fright .

. Once the horse has perceived that it is safe from the threat it relaxes back into rest and digest , heart rate decreases , posture and expression soften and breathing slows and the saliva returns to the mouth . To redistribute the saliva in the mouth the horse licks and chews . This creates a wonderful visual cue for us to see that the horse has returned to the parasympathetic .

I have named this sudden surge of energy as The Boom . And it is now a part of my every day training .

I have been able to share this phenomenon of feeling the release of energy and also feeling the biofield with many people now including the 2 Australian trainers who's videos you have used in your own LCAO video lessons Warwick Schiller and Georgia Bruce . Both who have both been students of mine .

I have shared this with Veterinary surgeons , Heart Surgeons and Scientists .

With the foals I train and the older horses I use "The Boom" as a Barometer of how much nervous energy is currently within the horse .as the bigger "The Boom" the wilder the horse

Also until you feel "The Boom " you wont feel it and then once you feel it you can't not feel it .

Unless of course if you're not paying attention or If you're not in the present moment . Anyone who has spent a lot of time around horses knows how well they can read our body language even our intention and they can certainly become very troubled if they feel that were not living in the present moment as they always are . So not only does' it tell me how much nervous energy is released from the horse each time it switches nervous system dominance .If I'm not feeling the Boom these days I know that I need to focus more on the horse and feel where its at emotionally .

The Boom is also felt in exactly the same levels in handling /training horses as it is during Osteopathic treatment .

When treating somatic disfunction in the body of the horse I feel the exact moment that the tension in the body is released via the boom .

If the tension in the body is caused by pain , that pain is clearly enough to bring the horse up into the sympathetic . When the pain and tension are released via Osteopathic Articulation Balancing the horse exhibits the exact same physical behaviors as when the horse releases when its being handled/trained .

I have been measuring these levels of energy recently with an Electro magnetic field meter .and the levels of volts per metre sit at around 5-10 whilst the horse is stationary and can shoot up to levels in the hundreds when the horse is releasing .

So just as with many aspects of training horses ,there are similarities and colorations with Equine Osteopathy .

The body is a unit for example . During ridden work When a young horse is resisting turning to the left , that is because there is brace /tension in the near side hind leg . If the near side hind is braced in the same way that a boxer would be "on the back foot " so the hips ,the ribs, the shoulders the neck and the head will be in tension .No different to when the horse is exhibiting type 2 somatic disfunction .

From the zygomatic arch to the Trapezius to the Gluteus Medius the tension is evident .

To counter this during training the horses body directed via groundwork left right forward and backwards and sideways which could collectively be referred to as being "articulated ' and if we can borrow the term "circumducted" until the again, please excuse the plagiarism , the Range of Motion is increase ,thus removing the tension/Brace .

The boom occurs during training as soon as the tension/brace in the hind leg is released by the horse . exactly as it does during release of the tension in the same area during OAB ,

The body is a self healing mechanism . This is very similar to how a horse can accustom itself to a new environment . Initially there might be serious concerns from the horse regarding its safety , it may “live” in a state of fright flight for an extended period of time until it relieves itself from this self-imposed “dis-ease” and no longer perceives a threat and becomes habituated to its new surroundings .

Once the release of the tension occurs that was caused by the horse being in such a high state of fright flight a tremendous amount of yawning shaking out eye rolling and licking and chewing can be observed The same as can be observed when a horse who has been suffering from tension in its body for an extended period of time that is released during treatment with OAB .

Structure and function are interrelated . Just as in the Osteopathic Principals, Structure and function are paramount in training . A weight bearing posture for example in the horse is essential for the comfort and longevity of the horse in training . The horses working life will be greatly compromised if it cannot be allowed and encouraged to carry itself in “A weight bearing Frame” . Once the frame is established ,impulsion from “behind “ is further encouraged with the end game goal being “collection” .

Once the Structure, of Collection is achieved in the ridden horse, Function of any form of Movement such as the Piaffe Passage , Pirouettes and Tempe changes come easily.

. The rule of the Artery is supreme . In the same way that blood in an artery flows, Movement of the Trainer and the horse must also Flow and ideally as one . The movement of the riders body in all the gaits can speed up or slow down the horse , more flow through the riders hips can extend or shorten the length of stride .

Flow in movement of the trainer in ground work is of the utmost importance instilling confidence in the young horse while Bracy choppy movement can cause the opposite effect .

Articulation of a joint or series of joints during OAB to release tension and create mobility and range of movement can be compared to “transitions” in the ridden horse , walk to canter , canter to trot ,Shoulder in to renvers . The more transitions we can perform during training of the horse the greater the flexibility aka ROM we can find under saddle .

One final similarity which is almost identical with OAB and training horses both on the ground and in the saddle is what in OAB you call side bending of the head and neck and what in horsemanship terms is call Lateral flexion .

One of the first things that I do with the foals that I handle is once I have made physical contact with them I take hold of the bridge of their nose in the crook of my arm and bend their head and neck laterally . This is to create flexibility and to reduce brace .

Whilst performing this exercise on the foals around 10 years ago was where I really started to become familiar with “The Boom “and it was usually when the foals would momentarily resist the ask and the soften into it that “The Boom “ would occur . .

Exactly the same as when I use “ Side Bending “ to release tension in the neck of a horse while performing the OAB . The boom is felt and what a great tool it is .informing me that the release Has occurred .

So to conclude . Training and Treatment ,Articulation and Transitions ,Circumduction and Circle work

Same goals ,same Outcomes in both OAB and Taming Wild Horses Both result in the Wonderful Mysterious and Mind Blowing Phenomenon that I refer to as the Boom .