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The **OSTEOPATHYST**

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By Robert Johnston

CLOSE TO THE BONE

Principles of Treatment Dosage

Once an Osteopathic Structural Diagnosis is performed, the Operator must first consider safety in how they dose their treatment. The most effective method of ensuring safety is utilizing the barrier concept. The Operator must understand barrier in relation to tissue tension, tissue texture changes, and the responses of the tissues in relation to the intervention being applied. The Operator must rely on barrier to understand how strong the intervention is and, in this way, they will be able to increase or decrease the strength of the dose.

At such a point when Operators have performed an Osteopathic Structural Diagnosis and have a functional understanding of the barrier concept, they must consider two other variables in dosing treatment. The duration or length of the treatment will increase the dose as the treatment continues to increase in duration or length. The frequency of treatment will also alter the treatment dose, as more frequent treatment applies the dose more often regardless of strength (barrier) or duration.

To be clear, the three variables in dosing Osteopathic treatment are:

1. Barrier (direct, indirect, or balanced) as the strength of the dose (the deeper the barrier is engaged, either direct or indirect, the stronger the treatment becomes);
2. Duration or length of the treatment (the longer the treatment is applied the stronger the dose becomes);
3. Frequency of treatment application (the more frequently that treatment occurs, the more often the patient receives the dose and the less time they have to respond to it).

People will often ask how apportioning dosage for Osteopathic treatment facilitates stabilisation of the treatment and the patient. A major part of that process is to undertake a Global, Local, Focal treatment approach with the identification of Primary, Secondary, and Tertiary lesions in concert with barrier (strength), duration or length of treatment, and frequency of treatment. These principles should be utilized simultaneously as the Operator moves from general towards a very specific treatment. The Operator may perform a strict Primary, Secondary, Tertiary diagnosis prior to treating, or they may deploy a running diagnosis or integrative diagnosis. It is through the diagnostic procedure that the Operator identifies the locations of the lesions, the layer of tissue in which the lesion is situated (Superficial, Intermediate, Deep), the way that these lesions affect the neurovascular bundles and the related physiology, and thus the way to approach the lesions and apply the principles of treatment dosage.

In many ways, this principled methodology of dosage is a CAO (Canadian Academy of Osteopathy) generated approach that has developed over many years of assessing and understanding concepts and principles that other Osteopathic professionals have posited over time. In assessing and understanding the methods of other Osteopathic professionals, the CAO has gleaned key concepts that are clinically useful and applicable. In synthesizing and generating these methodologies the CAO has reinforced the underlying principles strung together along a common thread, which in turn provides students and graduates the skills to obtain efficiently the desired results for the patient. In building and reinforcing these concepts, it is hoped that the Operator is able to obtain the best possible results with the least possible confusion.

THE TRAPEZIUS and Involuntary relaxation



By Lee Jarvis

The image of a person relaxing is one that is universally recognized across countries and cultures; the hands are behind the head and the whole body is in a reclined or laying position. When a specific action associated with a physiological response occurs with such frequency across numerous boundaries, it is likely that there are inherent musculoskeletal mechanics and neuronal tracts that contribute to its working. In the following article the mechanisms that link the position of the upper girdle with relaxation, along with their osteopathic significance, will be explained.

What we will be calling the relaxed position in this article is represented by arms above the head with fingers interlaced behind the occiput (somewhat supine). It is worth noting that this position is considered a more relaxed/relaxing position regardless of laying, sitting, or standing. In this position we have two important positional changes to consider: elevation of the clavicles and elevation of the scapula. Clavicle and scapula elevation occurring simultaneously is naturally a paired motion because these two bones are attached through the acromioclavicular joint. The upward motions of these two bones produce specific mechanical and neurovascular effects that aid in creating relaxation on a physiological level.

The clavicle's relation to systemic circulation is a common and well-understood concept in osteopathy; therefore, it will only be briefly highlighted in the clavicle/subclavian relationship. The clavicle sits directly atop the subclavian artery and vein. When the clavicle is elevated from its neutral position, pressure is transferred off the subclavian arteries. The subclavian artery and vein are often incorrectly landmarked by the operator as a significant distance away from the heart; however, the aorta from ascending, to the arch, to the subclavian is all contained behind the manubrium sterni bone (Marieb, 2014). The proportionate size of the subclavian artery means that the pressures exerted on it is significant enough to produce more resistance for the heart to have to work against.

According to Hazzard (1898), "about an inch above the clavicle you will feel the pulsation of the subclavian artery. ... Pressure slightly downward and inward [in this region] will impinge upon the subclavian artery" (p. 77). When any artery is impinged it requires the artery and heart to work harder to continue to deliver blood to the supplied tissue. When the heart works harder, blood pressure increases systemically. When the relaxed position lifts the clavicle, it can therefore slightly alleviate the pressure on the subclavian and the heart, thereby reducing physical stress.

In the relaxation position the scapula is elevated; this puts the upper fibres of the trapezius on slack. The slack on the trapezius is considered by the author to have more neurological and osteopathic significance and will therefore be thoroughly covered in this next section.

The trapezius is innervated by the eleventh cranial nerve (CN11), also known as the accessory nerve. CN11 originates in the cervical spine from roots (approximately) C2-5. These C2-5 roots then pass upward inside the vertebral canal through the foramen magnum to the occiput. Once CN11 has entered the skull it then passes through the jugular foramen to return to the neck (Marieb, 2014). This unique course of CN11 demonstrates its importance; however, it is the system facilitated when active that makes it important to us.

As mentioned earlier, in the relaxed position the clavicles are raised. This raising of the clavicles will also slacken the sternocleidomastoid (SCM) muscles as they attach to the medial part of the clavicle. The SCM muscles are innervated by CN11 as well. When the hands are behind the head, the head is pushed forward/anterior slightly, which will further slacken the sternocleidomastoid muscle and the longus colli and longus capitis muscles. The longus colli further adds to the relaxation achieved by this position, as it receives innervation from the same spinal region as CN11. The longus colli and longus capitis has largely involuntary fibres in controlling its action and therefore acts with other muscles such as the trapezius and SCM.

When the trapezius and SCM muscles are muscles on contraction; they side bend (trapezius) and rotate (SCM) the cervical spine. These two muscles are voluntary muscles in part. That said, they also act out an involuntary head turn based on auditory and visual stimuli. The involuntary turning of the head to stimuli is a natural defense mechanism when an unexpected noise or change in light occurs. The auditory or visual stimuli will activate a set of neural pathways called the extra-pyramidal system, specifically the tectospinal tract. The tectospinal tract links the associated nuclei and cranial nerves of the eyes and ears to the anterior horn cells (AHCs) in the neck. These same AHCs are the nerve cells responsible for the eleventh cranial nerve.

This linking of eyes, ears, and neck muscles is a product of human evolution during times when humans could and would be attacked by animals and other humans. The tectospinal tract acting involuntarily makes it so that we are able to assess the potential attack as quickly as possible. Furthermore, because this system is for detection of threat, the sympathetic nervous system—also known as the fight or flight system—is activated, which in turn increases the heart and lung rate, stimulates blood flow to the skeletal muscles, and reduces blood flow to the digestive organs and higher centres of the brain. Because the tectospinal tract is related to short-term survival, it does make sense that there is a singular nerve that functions specifically to turn the head, that being the 11th cranial nerve.

At the time of impending physical attack, the activation of the sympathetic system, the tectospinal tract, and the neck-turning muscles is very important for survival. Yet in modern civilization, this physical reaction is very rare. In the country the author writes from, there is a very low threat of physical violence (outside of the hockey rink), but a surplus of perceived mental stress.

Mental stress is different in form than physical stress, as mental stress (our worries and frustrations) do not often have a somatic (tangible) form. This is not to say that mental stress is less important, even when self-amplified, as mental stress is equally damaging to the body. This form of stress has a different response, however, because there is no specific direction to turn the head when perceiving a “threat.” Without a specific, unilateral, visual or auditory stimuli, the tectospinal tracts will bilaterally activate the trapezius upper fibres and SCM muscles. Upon bilateral activation of the upper trapezius and SCM, the shoulders (scapula and clavicles) are raised up towards the ears, a position we universally associate with people who are under stress.

Because of the trapezius’ and SCM’s connection to the tectospinal region, by slacking the trapezius and sternocleidomastoid muscles (in the relaxed position) we can have an inhibitory effect on the sympathetic nervous system. As much as this application seems like an interesting tidbit to impress Osteopathic tourists, it also establishes a link between the physical body’s position and the mental perception of well-being—something the practicing Osteopathic manual therapist can consider and use in treatment.

To apply this to our Osteopathic patient assessment would mean that those held in the opposite of the relaxed position (shortened upper trapezius and SCM) would be less capable of rest and relaxation. To add to this lesioned position, the author feels it necessary to explain that when the SCM and trapezius are overactive, the neck is driven into extension. At this point, the longus colli no longer flexes the neck on contraction but will further extend the neck because the apex of the cervical extension (and the longus colli insertion) is now anterior to the longus colli’s origin. For our patients who have contracted trapezius and SCM muscles, we should consider the longus colli muscles, as they may be sustaining the position of the neck and therefore the contraction of the muscles.

References

Marieb, Elaine N., and Katja Hoehn. *Human Anatomy & Physiology*. 10th ed. Toronto: Pearson, 2014.

Hazzard, Charles. *Lectures on Principles of Osteopathy*. Kirksville: Still National Osteopathic Museum, 1898.

Sacral Myopia: An Interrogative Anatomical Oversight



By Sam Jarman

Does the sacrum move? Yes, it does.

Where does it move the most? At the interface between L5 and S1.

What is the constant and unending impetus for movement of the sacrum at L5-S1? Respiration as transmitted through the ribs and vertebral column as well as the collective soft tissues that run vertically along the back of the patient and have a common attachment at the sacrum.

What moves more, the sacrum or the vertebral column and ribs? The vertebral column and ribs.

Considering the above extemporaneous preamble, is it not reasonable to begin considering that the sacrum is not responsible for its own movement? Realistically, no bone is directly responsible for its own movement. If the most constant movement imparted to the sacrum comes through respiration and is transmitted through the vertebral column and its muscles (i.e., iliocostalis thoracis), is it not reasonable to perform a differential diagnosis between all ribs, all thoracic and lumbar vertebrae, the pelvis, the hips, and the sacrum to determine where the actual dysfunction that presents on the sacrum originates? It is wonderful to have a bag full of sacral tricks but they are useless if there is a rib lesion affecting iliocostalis thoracis (or any other muscle in the erector spinae group)

because the cause of the sacral dysfunction hasn't even been identified. As Robert Johnston told students at the CAO via one of his mentors: you will never find what you do not look for.

Many Osteopathic Operators will have preferences; we are only human, after all. That being said, a preference for a region or treatment style does not excuse ignoring the rest of the body. Believing that one joint will determine the health and function of all others is an act of ignorance. Believing one joint may have a strong impact on many others is logical, especially when coupled with the willingness to investigate all other parts to

ensure where the actual issue (Osteopathic Lesion) lives. When considering the sacrum, it is implausible to believe that a sacral dysfunction supersedes a dysfunction of the coxofemoral joint without performing a differential diagnosis. The same may be said of automatically believing that a dysfunction of the coxofemoral joint supersedes a sacral dysfunction. Regardless of which part of the body one is examining, it is necessary to perform a differential diagnosis.

As is a theme here in the *Osteopathyst*, it will be noted that the Rule of 9 is a guideline for how to perform such a differential diagnosis. In order to be successful with anything in Osteopathy one must not ignore any structure, but also not dwell on any structure that is irrelevant to treatment. The Rule of 9 allows for efficiency and accuracy in searching for Osteopathic Lesions, such that all structures are included, the pertinent structures are found, and the necessary structures are triaged for correction. Through this process, a structure such as the sacrum is no more or less important than any structure it might influence negatively (or vice versa). The point here has nothing to do with the sacrum specifically; it just happens to be a point of fetishism in Osteopathy that allows for common ground and a point to be made. The point here has everything to do with being fully comprehensive in diagnostic procedure to ensure that the structures displaying Osteopathic Lesions are found and treated appropriately as required by the patient and not dictated by the preference of the Operator. If Osteopathic Operators only test joints while ignoring soft tissues, they are not only ignorant, they are unsafe. If Osteopathic Operators only test the area of complaint while ignoring all other areas, they are not only ignorant, they are unsafe. Be inclusive and comprehensive in your diagnostic process to improve safety, efficiency, and results while reducing ignorance in the profession.



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The Osteopathic Trilogy Through Palpation



By Sheryl Crotta MOMSc.

Let's begin by defining a **trilogy** as a group or series of three related things—specifically in relation to osteopathic assessment, diagnosis and adjustment—and how palpation might fit in.

Earlier this spring, 2016, I had a chat with Mr. Johnston about returning to the CAO this fall. What emerged from that talk was Mr. Johnston's great idea to incorporate palpation instruction into the program. I wasn't certain about how this would translate into the program; however, having been at the CAO for many years, I have come to embrace the unknown. What I did know is that this was going to be a great experience.

Palpation has always been integral to osteopathy. In addition, we are all very familiar with the principles of assessment, diagnosis, adjustment (and re-adjustment). These principles are—and will always be—pillars of our profession. Yet when we consider these concepts through the lens of palpation, more depth and meaning emerge from these osteopathic principles.

Palpation in and of itself can be very dry if it is simply an exercise in finding anatomical landmarks. Palpation is about finding and locating bony structures, ligaments, joints, muscles, viscera and so on, but it can be so much more.

Take the example of a hip assessment and diagnosis where the coxofemoral joint is flexed and internally rotated: What does this diagnosis really mean in the big picture of your trilogy of

assessment, diagnosis and adjustment? What good will this finding be if you do not understand the environment that your target tissue exists within? The collection of anatomical structures and combination of moving parts will reveal a lesion pattern; however, we must search for it in order to make use of it. The ability to connect lines of force within the mechanical lesion pattern in the body and appreciate the structures involved in the individual patient is what matters.

Recall that a **trilogy** is a group or series of three related things (i.e., assessment, diagnosis and adjustment). In the following example, let's examine how the idea of the osteopathic trilogy might operate. Using the coxofemoral joint lesion pattern above (flexed and internally rotated), the operator's osteopathic wheels should begin to turn and present reasons why this pattern may exist. During this process, one must consider that this portion of the coxofemoral joint is an integral part of a mechanical line known as the pelvic base line in the Myogon model and how that connection might influence the other mechanical lines throughout the body.¹ Leaving no stone unturned, the shoulder girdles, cervical spine and cranium must be explored to acquire a dynamic impression of the pattern.

A final diagnosis or conclusion is not drawn at this stage of the assessment, as further information must be gathered to assess the global presentation. You are working with a dynamic, active diagnosis. Essentially, the assessment, diagnosis and adjustments occur simultaneous in the process described. As this process continues, the lesion pattern becomes clearer as superficial lesions are removed and the body allows the operator a deeper understanding of the lesion pattern.

In the local mechanics of this region, one should consider that pelvic base line (femoral head) is also an anatomic junction or pivotal connector to the innominate in the acetabulum, which is connected to the sacrum and the motor line moving cephalically through to the lumbar spine. The spine is referred to as the posterior vertical line or the motor line in the Myogon model. The motor control from the lumbar spine is important to consider in this example. The cause of the pattern in the lumbar spine must too be investigated. Even further, the assessment should continue to consider structures such as deep lateral rotators, gluteal tissues, the posterior and anterior portions of the leg, and the lower leg in order to gain a more complete lesion picture.

In addition, some structures such as the iliolumbar ligaments, sacrotuberous ligaments, and the pelvic floor (levator ani) may be used to monitor progress in the pelvic complex. This allows operators to check their work. In essence, any tissue connected to the greater trochanter via the femoral head is suspect in this example. As well, pay attention to tissue tension changes and mechanical patterns down the femur and feel the mechanics of the knee, as well as the ankle/foot and their mechanical components. This example by no means exhausts every opportunity for assessment. We must dig on—look, feel, and piece together the findings. The ability to palpate is a key skill in logically progressing through your assessment and coming to a orking diagnosis and understanding of the lesion pattern.

Regarding the appropriate adjustment specific to the patient, it is critical to have an appreciation of the tissue type under your hands. Global, local and focal awareness of the type of tissue will direct the selection of the most appropriate tool to be used in the adjustment (i.e., fibrotic, tonic, boggy, hot, cold, hypotonic, hypertonic).

¹Johnston, R. (2015). *General Osteopathic Treatment: An Introduction to the Principles of Classical Osteopathic Treatment*. Hamilton: CAO Press.

²Ibid.

The importance of palpation in the role of accurate assessment, diagnosis and adjustment is paramount. The reality is that if any of these components is absent, you are no longer talking about osteopathy. You have a manual technique of sorts, or a range-of-motion exercise. That is not osteopathy. As you feel the pattern and relationships through your assessment and diagnosis, you will know what needs to be done by trusting yourself and your abilities. So the process of learning palpation is a stepping stone to learning osteopathic skills and a bridge to learning the art of osteopathy.

With all that being said, we must start somewhere—at the beginning. We do need to learn the ABCs of palpation—locating anatomical bony landmarks, soft tissue landmarks, viscera, etc.—but learning palpation is a process that enables and ensures your confidence in your assessment, diagnosis and adjustment (the trilogy).

The anatomy has all the answers, but if you do not have the palpatory tools to access those answers then you will be left in the dark. This can be a lonely and frustrating place to find oneself; however, this is a place we all visit during our development. This lonely, dark place is uncomfortable and causes much struggle, but it is where true growth comes from. Embrace the struggle! As your skills develop and refine, what you gain is unstoppable confidence in yourself and in osteopathy.

Ultimately, you are taught to palpate but you teach yourself to feel through palpation with a strong foundation in anatomy, physiology, osteopathic manual manipulation and osteopathic theory. Sensory stimulus and motor response must permeate your being. Once you have a taste of what effective palpation feels like and you can sense connectivity, you are in. The osteopathic detective in you will no longer be able to leave any stone unturned. When you

can palpate and assess correctly, your working diagnosis will lead you to adjust the adjustment to best suit the patient on the table.

Working with the principles will never leave you empty. On the contrary, they never stop filling you up. They will continue to refuel and reenergize your enthusiasm for your profession. Without a doubt, the process of becoming an Osteopathic Manual Practitioner is a tough mountain to conquer. KNOW that it is worth every moment of the struggle! Learning the art of osteopathy is an opportunity to show what you are made of and realize that you are much more than you could have ever imagined.

References

Johnston, R. (2015). General Osteopathic Treatment: An Introduction to the Principles of Classical Osteopathic Treatment. Hamilton: CAO Press.



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Flying under the Radar

(or Avoiding Reflex Contractions)



By Sam Jarman

Osteopathic treatment relies on an understanding of the human body. Anatomy is the key guide as it is palpable. Understanding the functions of anatomical structures is essential as that will allow the Operator to know how to approach and move that structure to achieve a desired result. Muscles, fascia, tendons, and ligaments are all relatively straightforward to understand as stand-alone structures; however, when viewed in context, there are confounding variables in the forms of other structures – nerves, arteries, veins, and lymphatics (at the Canadian Academy of Osteopathy they are collectively referred to as the “rivers of life”). Each one of these nerves, arteries, veins, and lymphatics are structures and have functions that will alter the muscles, fascia, tendons, and ligaments. For the moment we will focus on the nerves and what they do in order to reflexively control muscles.

The muscle spindle and golgi tendon organs (GTO) both take responsibility for modulating the force that a muscle

is producing at all times. They work in concert with one another insofar as one is in the tendon (GTO) and inhibits muscular force based on how much tension is placed on the tendon while the muscle spindle modulates muscular contraction based on velocity and stretch. Acceleration of a muscle will invoke the modulation of the muscle spindle while tension on the tendon will modulate muscular contraction through the GTO. Both the muscle spindle and GTO have stretch-activated cation channels, which means they have mechanically gated ion channels that will create action potentials when activated through mechanical stimuli. All of this mingles together so that the velocity and force of therapeutic movements will, without question, interact with normal and clearly understood reflex loops. This means that the velocity and force of therapeutic movements matter immensely with respect to producing an outcome.

In order to avoid inducing these reflexes, it is important that the

Operator not excessively accelerate or decelerate the patient during treatment applications. The excessive acceleration or deceleration are both mechanical stimuli that will activate the muscle spindle and GTO reflexes. All of this points towards the actual “how” of force transfer from the Operator to the patient in order to diagnose or treat. If the Operator moves abruptly then the patient will respond reflexively on some level. If the Operator increases force application rapidly then the patient will respond reflexively on some level. If an Operator becomes overly concerned with this information, he or she may become overly gentle and not engage barriers effectively. The aim is to understand that barriers should be approached smoothly in order to avoid inducing the reflexes that will impede the Operator from getting to barriers as opposed to falling short of them. The key take-home is to move smoothly, not accelerate or decelerate rapidly, and avoid rapid changes in force delivery to mitigate a heavy response from both the GTO and muscle spindle reflexes.

MOVE YOUR BODY

Keys to Applying Compression or Traction



By Sam Jarman

What follows is key information about applying traction or compression as an Osteopathic Operator. The information presented was learned from Robert Johnston while I was a student at the Canadian Academy of Osteopathy, and has been understood through the diligent practice by which he guides students. The impetus for putting this information on paper is to offer consistent observation of students and professionals, particularly those with table habits where practitioners may not be doing what they think they are doing. Keep in mind that most of the key principles outlined here are not simply about traction or compression; they are about patient control and application of treatment generally. Also, please note

that the author is not immune from these ineffective habits, and that they are in the long and tedious process of being corrected.

The main goal of traction or compression is to alter the distance of bony surfaces with respect to one another (either bring them closer together or move them further apart). Along with altering the distance of bony surfaces with respect to one another there will also be alterations of length and tension on related soft tissues. The primary goal is establishing a safe hold of the patient's anatomy with as much contact as reasonably possible, and then generating the movement from the Operators' bodies, not their arms. The

safe hold of the patient's anatomy with as much contact as reasonably possible is straight forward; it means the patient is under control through the hold as well as the contact. Stated directly: more contact equals more control, safety, and movement options. Creating movement from the Operator's body and not the arms provides two very clear benefits:

1. **More force is produced with less specific effort applied to any one body part on the (meaning Operators are far less likely to injure themselves over time as the force and movements are diffused over their body, generally speaking);**
2. **The lack of accentuated muscular force in any particular part of the arm through establishing a hold and moving with the body reduces general sensory stimuli that would be created by muscular contraction, allowing for more sensory stimuli from the hands to register.**

The way to ensure the movement is generated from the Operator's body is to ensure that the position of the Operator's hands, in relation to the Operator's body, does not change at any point. When Operators' hands remain the same distance from their body while holding the patient's anatomy, whatever is in the Operators' hands comes along for the ride when the Operator moves. In other words, when Operators alter the position of their hands with respect to their body, as they shift their body, the Operator moves and the patient's anatomy doesn't.

When using the keys that are described above, the Operator increases effectiveness and the patient achieves a more accurate and useful result. As Osteopathic Operators, our technical proficiency is not about us as practitioners; it is about benefitting our patients. Minimizing Operator effort while increasing accuracy protects the Operator, allowing them to incur less wear and tear. The more efficient and effective the Operator is in treatment, the more they will be able to help

patients while increasing their career longevity. Acrobatic “techniques” with elaborate setups are counterproductive for the patient because the Operator will wear out faster by performing them. Acrobatic “techniques” with elaborate setups are not advanced; they are merely ego boosters in most cases. Simple, efficient, and accurate approaches to treatment that are created from principles (as guided by the anatomy of the patient and Operator) are truly advanced, as they recognize the result the patient requires and the longevity of the Operator.

Please remember that the point of this article is not specifically about traction and compression. It is about:

1. **Patient control**
2. **Patient safety**
3. **Improving patient results**
4. **Operator efficiency**
5. **Increasing Operator longevity**

It would be wise to consider the following: if the method by which one chooses to treat aligns with the basic principles of force, application of treatment becomes more efficient for the Operator. Keeping this in mind will improve results in real clinical situations, as the best proof of the efficacy of Osteopathy is a clinically relevant outcome on the table. As Dr. Still stated in *Osteopathy: Research and Practice* (p. 283):
“The time has come for the practical man to lay down all unverifiable theories and prove what he says by what he does.”

Dr. Still, in *Osteopathy: Research and Practice* also states (p. 6):

“An osteopath must be a man of reason and prove his talk by his work. He has no use for theories unless they are demonstrated.”

Let us, as a profession, consider Still’s advice to spur improvement in technical skill to enhance patient results.

Advice to Osteopathic Students

By Sarah Hindmarsh



In the beginning, you were determined to obtain answers to assist those you care for: friends, family, patients, the community and, quite possibly, yourself. That intention came from a very pure place and is one to always remember on your path. It will keep you on track as you grow and develop a sense of confidence in your work and in your role as a practitioner. Never forget what drew you to seek out greater knowledge of the body. You were once simply curious.

You made the choice to embark upon painstaking hours of studying and analyzing structure and function, human form, lesionology and mechanics. Preparing for exams, clinics, auditing and ever-changing requirements seemed like it will never end!

(If you are pondering the purchase of a new computer around the time that Clinical Case Reports become a part of your life, DO IT! I am not speaking from experience or anything. I’m just saying. But I lied. Of course, I am speaking 100% from personal experience. Having access to a reliable computer will—well, let’s just say that your laptop becomes your second brain, almost like an external organ.)

Academics aside, your fundamental understanding is based on principles and nature’s laws. These fundamentals allow for freedom and possibility, something that as health professionals we are incredibly lucky to have and utilize.

Be open to your classmates, mentors and colleagues. Remember that Dr. Still spoke of the capacity for all intelligent and educated individuals to practice by principle, and that each one will approach the body in a different way. This is what makes your work an art, full of your individual perceptions and applications.

While considering this, become comfortable with disagreeing with others; ask questions and challenge your own boundaries. When you open yourself up to the possibility of being incorrect, you also reduce the boundaries of your ability to learn.

Find a way to laugh—from the pit of your stomach—as much and as loudly as you can. Remind yourself that you are human; you will make mistakes and you will also learn from them. It is possible to take on all challenges with grace. Share that same understanding with your patients long after the academic process is complete.

Live your life, love your family, friends and support systems. Trust nature and serve your community. Osteopathy is in everything, if you are paying attention.

As the man said, Dig On!

Dr. Homer Tweed:

A Case Study of the Biographical Files at the Museum of Osteopathic Medicine



By Anna Mullen Villareal, MA

The collection at the Museum of Osteopathic Medicine is comprised of more than 80,000 artifacts that preserve the history of the profession, its practitioners, and its patients. Yet can one cultural institution amass the history of all individuals within the scope of osteopathy? With the mission of preserving and promoting the history and tenets of osteopathy through collections and research, the Museum of Osteopathic Medicine is striving to do just that. In addition to the permanent collection of artifacts, the Museum maintains an active research collection of osteopathic biographical files. These files were established over a decade ago to house the biographic, education, and career information of osteopaths, educators, and other influential people in the profession. This collection contains more than 12,000 individual files, with new records added weekly.

The biographical files at the Museum of Osteopathic Medicine improve the efficiency of research while ensuring the preservation of the individual stories and experiences of osteopathy. When a research request is submitted to the Museum the first resource utilized is the biographical file collection. Currently a mix of digital and paper files, the collection provides a base of records for understanding a specific practitioner's background and work. Exploring the process of a recent request for information on Dr. Homer Tweed depicts how important the biographical files are for researchers at the Museum of Osteopathic Medicine.

Homer Tweed, of Quakertown, Pennsylvania, worked as a city mail carrier before entering the American School of Osteopathy in Kirksville, Missouri. He began classes at the age of thirty-one on September 14th, 1914. A copy of his student record provides this information as well as his primary school history, marital status as a widower, and a list of the coursework completed each semester at the American School of Osteopathy. A scan of his senior yearbook, *The Osteoblast* 1917, includes a portrait of Tweed and his classmate's chosen quotation to accompany the image: "It is not good for a man to be alone." This quote, the presence of another graduate with the surname Tweed in the yearbook scan, and cross-reference paperwork in Dr. Homer Tweed's biographical file, leads the researcher to a second file—that of Dr. Laura Parsons-Tweed.

Laura Parsons of Saginaw, Michigan, worked as a nurse at Saginaw General Hospital for four years before enrolling at the American School of Osteopathy. She was twenty-seven during her first semester of school, September of 1914. Both biographical files in question include copies of the Tweed-Parsons marriage announcement from July 19th, 1915, in the *Journal of Osteopathy*. The editorial comment accompanying Dr. Parsons-Tweed's senior portrait in *The Osteoblast* 1917 yearbook reads, "Most any of us would be glad to be proficient in one thing only, but Laura knows Anatomy from A to Z, [and] never [has] she been known to fail to answer quiz questions correctly in any of her classes."

After graduating from the American School of Osteopathy in June of 1917, Dr. Homer Tweed practiced with his wife in



Postcard depicting the American School of Osteopathy and the American School of Osteopathy Hospital, 1914, Museum of Osteopathic Medicine, Kirksville, MO [1979.341.01]

Oklahoma and Michigan before settling in South Pasadena near Los Angeles, California. The American Osteopathic Association produced a yearly Membership Directory, beginning in 1914, which allows researchers to track the location of osteopaths both in the United States and internationally who are members of the association. A reproduction of the Journal of the American Osteopathic Association index in Dr. Tweed's file highlights his area of research during this time period: vertebral lesions. Between June 1926 and October 1927 alone, Dr. Tweed published four articles on the subject in the Journal of the American Osteopathic Association. Dr. Tweed and Dr. Parsons-Tweed even developed a method for preparing spine specimens for research that would be both permanent and flexible. In an April 1926 article Dr. Homer Tweed writes,

Permanent preparations of spinal columns showing normal movements of the articulations, and retaining such changes are due to vertebral osteopathic lesions, are necessary to the accurate study of the mechanics of vertebral movements and especially to the mechanical effects of vertebral lesions. ... This method is tedious but the time used in preparation is

well repaid in the beauty of the final result. ... By this method we have prepared spines which are odorless and freely flexible in the dry state.

Dr. Tweed's article includes ratios for preservation solution preparation, figures of spines in various stages of preservation, and alternative steps for osteopaths creating educational specimens in diverse climates.

One of Dr. Homer Tweed's articles from this time period in the Journal of the American Osteopathic Association is reproduced in full in his biographical file, "Modification of the Tweed Method of Preparing Spines," published in July, 1926. The article notes Dr. Tweed's work at Sunny Slope Laboratory, a branch of the A. T. Still Research Institute. This yields a third line of inquiry and third biographical file for researchers interested in Dr. Tweed: his work with osteopathic pioneer Dr. Louisa Burns.

The Museum of Osteopathic Medicine's biographical file for Dr. Louisa Burns is visibly larger than many in the grouping. Dr. Burns was born in Indiana in 1870. She graduated from the Pacific College of Osteopathy in 1903 and remained on campus for additional study and to serve on the faculty as Professor of Physiology. In 1917,

she became the Director of the Sunny Slope Laboratory, a branch of the A. T. Still Research Institute in California. The A. T. Still Research Institute had been established in Chicago, Illinois, in 1913. From her office on South Hill Street in Los Angeles, Dr. Burns frequently published research and updates regarding the ongoing work at the Institute. In October 1928 she wrote:

This year we need a more abundant supply of such materials and are able to do more work than before. Dr. Laura P. Tweed is now doing blood chemistry and uranalysis in the Institute Clinical Laboratory as well as at her own laboratory at 621 Fremont Street, in South Pasadena. ... Dr. Homer Tweed, and all of us, indeed, perform autopsies whenever occasion offers.

Both Dr. Tweed and his wife Dr. Parsons-Tweed published frequently during their time at Sunny Slope Laboratory, both individually and with Dr. Burns, leaving a clear record of career interests and accomplishments in osteopathic research.

All of the biographical file information of Dr. Homer Tweed outlined above is accessible in three clicks of the computer mouse at the Museum of Osteopathic Medicine. Through cross-referencing, one can also peruse additional files of interest, those of Dr. Laura Parsons-Tweed and Dr. Louisa Burns. While there are many research questions still to be answered regarding Dr. Homer Tweed, the information in the biographical files creates a foundation of knowledge. The researcher learns about his life experience before osteopathy, his education in Kirksville, and his career after graduation. This understanding helps shape the researcher's future questions, which could include follow-up work in the Museum's permanent collection and extensive holdings of osteopathic publications.

Those three files used in the initial search for information on Dr. Homer Tweed represent a miniscule percentage of the ever-growing resource of osteopathic biographical files. With this research collection, the Museum of Osteopathic Medicine is striving to preserve the unique individual histories of persons in the osteopathic profession.

¹ Tweed, Homer N. "Method of Preparing a Flexible, Permanent Spinal Column" *Journal of the American Osteopathic Association* (Volume 25 Number 8, April 1926) 606-607.

² Burns, Louisa. "Clinical Laboratory of the A. T. Still Research Institute" *Journal of the American Osteopathic Association* (Volume 28 Number 2, October 1928) 116-117.



Biographical File research storage before digitization project, 2013, Museum of Osteopathic Medicine, Kirksville, MO



Dr. Laura Parsons-Tweed and Dr. Homer N. Tweed, The Osteoblast yearbook, 1917, Museum of Osteopathic Medicine, Kirksville, MO [X2016.1153]

MATTER MOTION MIND

The Importance of Operator Posture and Self Care

By: Paul McQuade
B.Sc., Ost., Med.



Fall 2016 will be an astonishing semester as we welcome three year-one groups to the CAO family. It would be remiss of

us as teaching staff not to provide you with all the skills necessary to become successful, principles-driven osteopaths.

Picture the scene as year-one students carefully reconstruct the demos shown by Mr. Johnston in OMM. Full thought is on patient positioning, the careful and deliberate placement of the operator's hands with the intent of lifting the limb in a very concise, methodical, and considered manner. Full concentration is on the smooth, rhythmical handling—a genuine attempt to “walk the walk.”

"LETS TWIST AGAIN..."



As staff, we see a somewhat different picture that could be described lightheartedly—something between Jose Bautista swinging a baseball bat and Chubby Checker's “The Twist” (younger students may want to YouTube that!). The aforementioned image of professionalism combined with bums swinging almost out of control, backs hunched over patients, use of muscle strength to do the work and body weight rocking back and forth with bent knees, needs to be corrected promptly. This sort of operator movement is wildly inefficient and will lead to injury and degeneration of the low back, hips and knees. According to the Canadian Joint Replacement Registry 2013 Annual Report, a total of 134,334 hip and knee replacements

were performed for the period of 2010-2011 (this figure excludes those surgeries performed in private and overseas medical facilities).

Upon preparing this article, research into the prevalence of injuries within manual therapy disciplines was discovered. One such abstract, published in the Journal of the American Physical Therapy Association in July 1999, is entitled “Cause, Prevalence, and Response to Occupational Musculoskeletal Injuries Reported by Physical Therapists and Physical Therapist Assistants” by Holder N, Clark H, et al. It reported that “nearly a third of respondents reported occupational related injuries. The most significant figures reported were 62% of respondents reporting low back pain, 50% of respondents modifying their body mechanics to reduce the risk of further injury and 43% using increased personnel.”

(<http://ptjournal.apta.org/content/79/7/642.full>)

Our osteopathic “go-to” postures are commonly referred to as the A frame and the fencer stance, and they take a lot of practice to get right and to feel normal. These postures and their associated movements need to be practiced at the treatment table constantly. Mr. Johnston will say repeatedly, “I'm still learning how to pick up the leg, the arm, the head,” and even though he has more than fifteen years experience as an osteopath, the A frame and fencer stance are generally the point from which those movements commence.

When performed correctly, these postures allow you to protect your lower back, hips and knees. You recruit the strong muscles of the legs and support comes from your feet and ankles. Eventually, the movement becomes effortless and, with practice, rhythmical. The other benefit is that these postures will help to reduce significantly your risk of major MSK injuries—and the CAO's exemplary safety record to date proves this. That said, new students will likely experience a period of adaptation, and you will probably experience some minor MSK aches in places you never knew you had muscles. But it doesn't last long.

BRINGING IT ALL TOGETHER...

I'm unapologetically biased and will say that student clinic is the most important element of your undergraduate education. The student clinic is where you put your training, studying and skills into practice, and is every bit a structured learning environment with detailed case history reports for each patient treated. This practice maintains a reflective daily portfolio. Moreover, every morning we begin with thirty-minute tutorials for year-one students with the main topic being Operator Posture.

The clinic environment is very different from the classroom insofar as you will be introduced to real-life patients who come to our clinic for help. Ranging in age from 18 to 80+—and with a variety of presentations—every patient is unique and needs to be handled differently. Part of my role with the CAO is to ensure that all students display correct and sustainable posture. To instill good posture as a habit means having to break the bad habits—and that means recognizing your bad posture.

When this author was a student in England, my training included “cracking” everything from the nose to the toes, and as much as I practiced, I was practiced on. I was told it takes four years to study osteopathy and ten years to recover. This is a rather conservative estimate, but you can be assured how fortunate you are not to be spending your training as I did. Remember: your health is your wealth.

N.A.V.L.

Nerve - Artery - Vein - Lymphatic

WHY PHILO

Is Important to the

History of

Osteopathy

Objectivity in the telling of any tale is difficult, if not impossible. This is very evident when we attempt to go beyond the historical chronology of



By: Darren M. David

something like the history of osteopathy. Context for understanding the historical events is so important, but when we do so, we enter a landscape that is being painted by an author whose colour palette and materials have a profound influence on our perception of the events being described, even if that author is unaware of that palette. Sometimes, the author is influenced by personal accounts; other times, by a philosophy; other times, a belief. Whatever the case may be, it is very important that we remain critical of any and all interpretations of events concerning the history of osteopathy because many of the recounted tales fail to include Still's philosophical outlook. To put it another way, those who tell the tale of osteopathy often do so from a perspective outside of Still's actual philosophical writings, and while it is necessary to have some sense of objectivity, one should be aware of the foundations from which they write. It is inevitable that those close to osteopathy want it to thrive, to succeed, and the authors inevitably offer their own perspectives on solutions to the struggles osteopathy might face. Yet memory can be variable, and because these perspectives are offered from a singular position, they are potentially introducing inconsistencies into the profession. Should we tell the tale of osteopathy, should we take that responsibility, we should do so in a way that allows us to stand on the shoulders of the forefather of the profession, if only to find our own footing, firm to the ground, unyielding to those who try and sway the course of our evolution.

This has been made clear to me thanks to the CICO guest lectures that have attempted the near-impossible task of identifying the origins of thought that led Still to say,

SOPHY



“This is the philosophy of osteopathy.” To show how this is dangerous, rather than painting a landscape or a portrait, historians collect different pieces from different puzzles, all without borders, and all with missing pieces. These fragments are given continuity by their own bias where, in order to perceive this thing called osteopathy, the “I” of the observer manufactures what is missing, and arranges those fragments into a narrative that makes sense to the “I” of the audience.

And here we have a paradox, for how can we have a story of osteopathy that is shaped by personal perceptions? The answer is that we cannot. Our desire for such a display of brilliance, however, leads to a suspension of disbelief where we ignore the deistic hand setting the stage of thought—the frame to the puzzle pieces—that define the borders of the intellectual and cultural landscape in which we hope to learn and practice our science.

It is clear that there is a benefit to the existence of osteopathy; but it has been difficult to quantify its findings in a way that stays true to both the principles set out by Still, and the edifice of the culture from which his science struggled to take hold. As long as those telling the story of osteopathy remain within a materialist and empirical perspective, our work will forever seem to miss its mark, and never be able to articulate its true contribution on the world stage.

Osteopathy has not gained success in its practice through conventional thought. Yes, it uses deductive methods, but not as part of a reductionist model, not at the expense of its successes. In this way, it is not able to reduce the variables that are included in its successes and failures because those differences in results epitomize the multiplicities and idiosyncrasies of individuals.

This means that we are at a crossroad for how to continue. Sometimes these divergent paths are influenced by a montage of historical lenses, particularly if they are associated with reductionist ways of thinking.

Reductionism is commonplace, as the culture we live in is very much seduced by monotheism, where there has been one god, one crown, one head of state—and in osteopathy, one way to test for the success of the science. This reductionist thinking is comforting in a world of variability, incongruity, and chance. At best, however, this form of reasoning is

a convenient tale we tell ourselves, so as to deal with the immensity of the uncommon. But is this the thinking that Still employed when he discovered osteopathy? It seems unlikely, for he held principles that were particular to the individual in every way—an individual that was as varied in physiology, as s/he was in fingerprints.

Therefore, the ontological nature of our science is influenced by the epistemological model we use, for that model directly correlates to the way we practice. If we do not recognize this difference within our thought process—between a reductionist and an individuated perspective—there will always be a longing to either gain acceptance from within the medical community at large and become part of this monotheistic culture, or be forced to accept being second best in a race we cannot—and should not—run.

So how do we shift the model? How do we set the stage for those coming into the practice of osteopathy? How do we influence their internal narrative with the one the original osteopaths practiced and wanted for the world? It begins with those who wish to tell our tale, and the tale of our brothers and sisters that came before us.

This essay does not attempt to explain exactly how this is done; rather, it takes a rather osteopathic approach, and asks the reader, and those who wish to connect the trajectory of our narrative with our past, to question their own position within the House of Osteopathy. Still talked about the House of Osteopathy as only being big enough for osteopathy. Any attempt to bring something else in meant that much osteopathy must go out. What happens, though, if the philosophical foundation upon which that house is built is being threatened? What happens if the brush that is painting our history is unwittingly tainted with an ideology that does not serve our understanding as we move forward?

In the end, Still did not play intellectual games by including the lineage of his thoughts for us. Instead, he set forth a philosophy first, establishing a rock of reason through which to communicate and interact with the anatomy in very powerful ways, ways that are manifested in the mechanics. If we do this, the validation so many have sought over the years will be found within the self-realization that we have our own vantage point on how to see the world. If we just pay attention, we will know how to tell our tale.

INTERVIEW

Dr. Bob Schneider



By Adam Houston

1 *To begin, can you tell us a little bit about yourself, and your professional history?*

I was raised in St. Louis, Missouri in the suburbs. I was really into sports growing up. I went to college and received a Bachelor's degree in psychology. From there I went to graduate school, but realized, I loved the body-mind connection. But at that time, I had not yet taken the hard science courses, like organic chemistry and physics. Plus, I was the first college graduate to be in my family, ever. So I thought maybe I'd go the mid-level route and become a Physician's Assistant (P.A.). I practiced as a Physician's Assistant for about five years. During that time, I was involved in teaching allopathic medical students, and I thought to myself, hmm, this just doesn't seem right. I saw the caliber of students I was teaching, thinking I can do this. With my wife's encouragement I returned to school at an older age, with children of our own, to complete the prerequisites for medical school. At the same time, as a P.A. in rural South Dakota I got to meet an Osteopathic Physician (D.O.). I had never even heard of D.O.'s. I saw people walk into the office limping, and walk out pain free, and I didn't know what the D.O. was doing. So I asked the D.O. and she told me all about Osteopathy and she showed me a few techniques. Now, I thought to myself, I've already learned allopathic medicine as a physician's assistant; I want to learn Osteopathic Medicine. So I asked her, where should I go to school? Well she said, "The best school is in Kirksville, MO". So I did the hard science courses, applied to medical school and got in. My first two years of school in Kirksville were amazing; the things I was being taught to palpate, I had never even felt before, like a transverse process. [It's interesting now as I teach it, my students have the same problem, they can't feel it at first, and I encourage

them, and say, "be patient, in time you'll feel these things".] So the first two years were basic sciences plus training in Osteopathy, which I just loved. But it was difficult because we were learning so much medicine at the same time.

From there I went on to two years of clinical training, but I didn't do much manual manipulation because I was learning so much medicine. So, I did a rotating internship, which means you spend time in all the areas of medicine, not much osteopathy, and then I thought, I want to be a general surgeon. I spent six months doing surgery, but I realized I missed the rest of medicine, like obstetrics. So, then I went into a family medicine residency program, which was actually an allopathic program. But I thought to myself, I need to be learning some Osteopathy, so I brought my table that I had purchased while I was in Kirksville and set it up in an exam room, which they let me do. I began teaching my mentors and my fellow residents and we started offering Osteopathic Medicine. Fast forward, now they have a D.O. at that clinic that treats manually, which is wonderful. So I then left there and went to a small town practice as a family physician where I did absolutely everything. We call it cradle to grave care. From obstetrics, surgeries, emergency medicine, house calls, you name it, I did it. So it was my goal to be a small town family doctor and raise my family, so I did that. It was 15 years later, with only one child left to finish high school and I got an itch to travel. Also, I was kind of burnt out of small town medicine because you're on call 24/7, and you don't get much of a break. So we went to New Zealand for a year and practiced. It was a wonderful, nice change of pace, and while I was there I got to meet some Osteopaths who, when they found out I was from Kirksville, just couldn't believe it. We had more fun, and their treatments were just like what I was taught in Kirksville.

But interestingly enough, as a D.O. in New Zealand, unless I sat through their practical and board exams I could not do Osteopathic Medicine. I thought, wait a minute; I've got D.O.'s in the states that when they finish medical school never work manually. Now I'm in a place where I want to work manually, and I can't! So while I'm there, I'm thinking, what's the next phase of my life? At that time, I got a call from the Kirksville campus and they asked, "Will you come back and teach?" So I've been teaching there for the last seven years. I get to teach Osteopathy, I get to practice it, I love it, I do research, I do lecturing, I am so happy. And I am also happy to be here today at the CAO's Spring symposium.

2 *Thank you for that. What an amazing story and career path you have. How was it learning Manual Osteopathic Medicine, as well as allopathic medicine at the same time concurrently?*

It was very difficult. The problem we have in the United States with colleges of Osteopathic Medicine is that our students have so much to learn, honestly. And many of them want to be the cardiologist, the neurosurgeon, the internist, and they forget their roots. For example, say at the Kirksville campus, out of 150 students maybe ten or less will actually do Manual Medicine routinely. The majority will fall into an allopathic medicine model and forget their Manual Osteopathy, and it's really unfortunate because of things like technology, big pharmaceutical companies, shortened visit times. Patients are not getting complete care; there's no question about it. We need to emphasize the value of Manual Osteopathic Medicine more.

3 *Can you speak about and explain Family Medicine to our readers.*

For me, as a Family Physician, it means truly cradle to grave care. That's why I still do obstetrics, and I do neonatal care; but I also make house calls, and I go to nursing homes with end of life care. I am the ultimate generalist, and I like being that. Plus, I do hands on manual work with every patient because that's important to me. As I thought about this while I was traveling here, I thought, you know, who knows what kind of health a person would have if they were to get consistent osteopathic health care from cradle to grave. Maybe they wouldn't be in the hospital, maybe they wouldn't have the disease processes that they have if they had hands on care throughout their life. Also, along with the education, prevention, and someone who asks questions and takes time to really get to know the patient.

4 *Your patients are so fortunate, my goodness. Even though you just touched on this, what is the benefit of seeing a patient from cradle to grave?*

Oh my, so many benefits come to mind. Like understanding a family's dynamics, and genetics, that does not often happen.

Understanding environmental effects, like air, water quality, and the food the patient eats, and where they live. These are crucial components of a person's health.

5 *For you also, having that foundation of a psychology degree would really help with understanding the whole family dynamics. That must be incredible as well.*

Yes, you are right, because I always wanted to understand the organic causes of mental illness. One of them that comes to mind is, untreated chronic pain. How that constant pain changes their mood, and that mood affects their relationships with family members. You know, I could go on and on about this kind of thing. But yes, definitely it is a benefit having the psychology background.

6 *So focusing more on the obstetric aspect of your practice, which you are lecturing on today, at what point should a practitioner start treating an obstetrics patient?*

Well, I've been thinking about this answer, before you even asked the question. If you consider that in my career, my first delivery was in 1980, and I've been doing OB since that time. I now teach it full time as well as still practice it. My youngest delivery was a 12-year-old patient, and my oldest delivery was a 50-year-old patient. That's a 38-year span. I think of women in that age group to be of childbearing age. We know that pre-existing back pain is a precursor for back pain in pregnancy, so if we begin treating a female patient with the idea in mind that they may someday become pregnant, you prepare their body much better for pregnancy. So yes indeed, I'm thinking anybody treating female patients age twelve and over, treat them as future child bearers. Treat them before they become pregnant, treat them during pregnancy and then afterwards.

7 *So it should be changed from "treatment from cradle to grave", to "treatment from prenatal to grave". You are so right; having the ability to be able to affect the mother before pregnancy, and then throughout the course of the pregnancy, that's got to be beneficial.*

And wouldn't that be amazing if we could have an international study where we could follow a cohort of women for that 40 year time span. I know for a fact we'd see changes. But it's a matter of finding the funding and finding interested practitioners. It hasn't been done yet, but it needs to be done because I think this time in history is right for it. If you look at the millennial's, and generation Z, they're ready for a change. They are tired of the status quo and they are asking the questions. I know with my Family Medicine Residents, I encourage them to ask the tough questions that matter.

9 *At what point do you think a new graduate can begin to treat a pregnant patient. If I'm fresh out of an Osteopathic program can I treat a third trimester patient right away?*

Yes, absolutely, of course you can. You can treat easily and I will try to demonstrate that in my lecture today. We do very safe treatments. Many patients, once they have treatments by you will realize, wow, what a difference, and they will tell their OB's. And it's not seeing the Chiropractor; it's seeing the Osteopath. You see, Osteopaths understand the anatomy and the physiology on a deeper level, to understand what's happening during pregnancy.

10 *That's great to hear, and I am thrilled to have had the chance to watch you lecture. Can you speak more about the potential of an evidence based research study done, because Manual Osteopathy would benefit in establishing itself more credibly in the eyes of the medical community.*

Unfortunately, in our profession, historically and internationally, there is not enough research being done. We need more. So that means that each one of us needs to be not only a practitioner, but a teacher, and a researcher. I don't know about the CAO but I would encourage research. Maybe try and couple it with one of the universities nearby with scientists who want to look into this. I know down in Kirksville they are encouraging us as faculty, as well as all the other Osteopathic Colleges in the states to do more and more research. We've got to get out there what it is we do, and show the people the differences we make. We've got some great studies, for example, pneumonia. But I think again, we are just not known for what we are capable of doing. We know it amongst our community, but that is not good enough. We live in an age of information. Evidence based research for a new OMM apprentice should have article after article to refer to, so it is up to us, myself included, and fellow students within the profession, to begin doing just that.

11 *How do you think a first year student in Manual Osteopathy should be taught?*

No doubt about it, day one- hands on. You need hands on right away. And then you need to be thinking Osteopathically as you are learning the anatomy, physiology, and other courses. Think Osteopathically with everything you learn and everything you do in your life. When you enter the door of that school, you are an Osteopath in training. You are not just a student. So you view life differently, you look at how people walk, you look at how sports are done, you look at everything in a different manner, and you begin asking questions, asking why. Why am I being taught this, why did A.T. Still do that? Ask the questions, put the hands on, and begin to understand what you are doing,



and always relate it to the basic sciences. As A.T. Still was a great anatomist, we should all be great anatomists. I think that as an Osteopath you are a better anatomist than most general physicians, because they don't think anatomically, they are too busy. It's the disease model; it's the singular approach.

12 *So what do you think we can do to get more people in the U.S. interested in Manual Osteopathy, if as you say less than ten students in a class of 150 choose Manual Osteopathy?*

That is a great question. We have what's called an OMM fellowship where after their second year of medical school they can apply to spend a year just learning OMM and assisting the faculty with the teaching of the first and second year students. That's only four students, and they love it and they do a great job. Also we just started last year with an online program that all students have to complete during their third and fourth year. For example, chest pain, learn it allopathically, and then learn it Osteopathically, and then ask, how can you incorporate your



techniques. And then they are tested, so that way we are trying to ensure that these students don't lose what they worked so hard to learn. Because so often, they are out with physicians who don't do any kind of manual medicine at all.

13 *As a family physician in your practice, do you do rounds at the hospital? And are you able to treat manually when at the hospital?*

Yes.

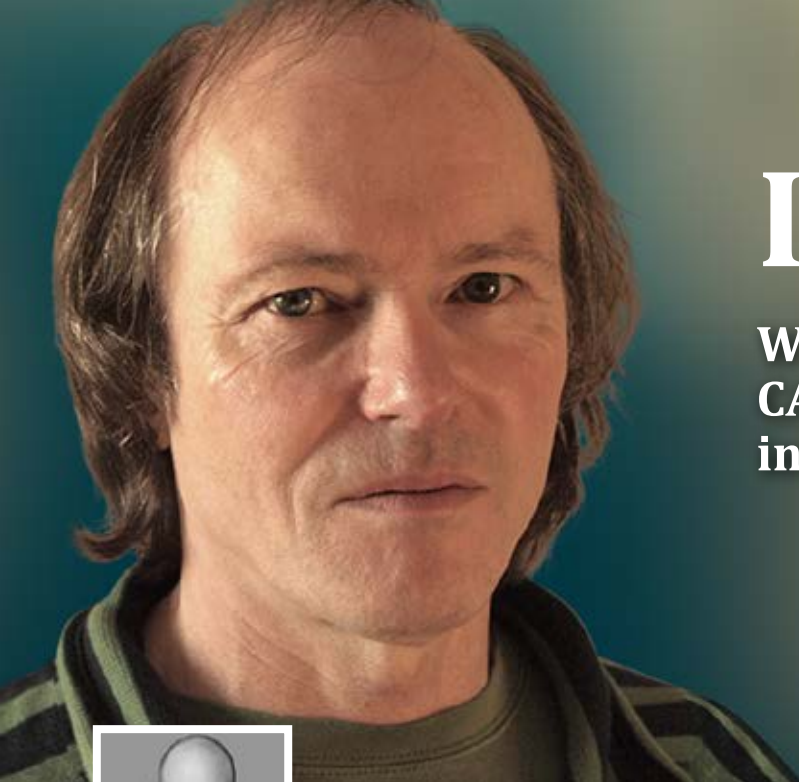
That is amazing. So if there is a complication during pregnancy, you can see the patient prior to, at the hospital, and after birth.

Oh yes.

14 *In my mind, the practice that you have is just the epitome of how a family practice*

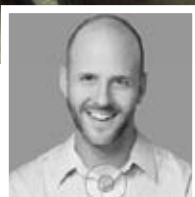
should be run; with seeing patients on a generational timeline using both Manual Osteopathy and allopathic tools when needed is great. In Canada, that is our biggest issue, that the two are so separate. It would be great if one day Canada could have these sorts of practices like you have where Osteopathy and allopathic medicine can coexist.

The need for manual medicine in our world is so tremendous, I would say, stay true to yourself and be the Osteopath you'd like to be. It would be wonderful to have a clinic with Osteopaths and Allopathic physicians working side by side. It is unfortunate that all of us don't work closer together for the welfare of our patients. But aren't we all working for the same goal? We are all just people taking care of people, don't we want better care for all people? Hopefully, I think your generation will break those walls down. They shouldn't be there. It is all about patient care, and quality care. What's important is the patient.



INTERVIEW

With John Lewis at the
CAO Spring Symposium
in June of 2016



By Adam Houston

1 To begin, tell me a little bit about what you were lecturing on today at the CAO's Spring Symposium?

I was lecturing on the body's endogenous bacteria and viruses. I was expanding upon A. T. Still's teachings that "osteopathy is nature" and that to find health we must act in harmony with nature – both within and outside the body. I was trying to bring those ideas into a sphere that maybe you wouldn't normally associate with osteopathy, but definitely within the scope of the founder's philosophy. The profession needs to stop promoting osteopathy as treatment for back pain and other musculoskeletal complaints, and grasp the whole vision of what Dr. Still was trying to teach. That includes what is going on in the external environment and how it affects the health of us all. While that was not such a big issue in Still's day as it is now, he was already thinking along the lines of how food and environment impact upon our health. He was a man ahead of his time.

We are all told Dr. Still's axiom, "To find health should be the object of the doctor. Anyone can find disease." But how many of us stop to think what it means? The two sentences reflect two vastly different philosophies with regard to nature. The first recognizes deep wisdom in nature; the second leads to fear and an attitude that nature needs to be subdued and controlled. To find health we must think more about what's going on all around us, and the materialist philosophy that drives the actions of the businesses and corporations whose

products and practices can disrupt the physiology of living organisms, including the use of antibiotics in medicine and farming. If the osteopathic profession as a whole would stand behind Dr. Still's philosophy it would be uniquely positioned to have a positive effect on public health and to change attitudes towards the natural world.

2 So because we ourselves are part of nature, when we go against nature we will have a worse result?

Inevitably. Nature is infinitely more intelligent than our minds or our science will ever be. That is why I chose to speak about antibiotics and their effects upon the body's endogenous bacteria – the microbiome – and by extension the body itself, not to mention the mind. In my lecture I related that when the European colonists settled in North America they regarded the indigenous American Indian population as primitive savages who needed to be civilized by conversion to the white man's religion and ways, and did not appreciate that the people they were trying to convert possessed a radically different worldview regarding the natural world and man's responsibility towards it. This was a true clash of cultures – the Europeans believing it was their destiny to control and tame the 'wilderness'; the Indians recognizing that we are part of nature and nature is possessed of an absolute wisdom to listen to and learn from. At the beginning, with small numbers of colonists, this wasn't such a problem. But when the white people took over the entire continent they had an immense impact on the pristine

natural environment that the Indian's worldview had led to. The same principle applies to the use of antibiotics. When you give antibiotics to a large proportion of the human population and to farm animals (not for killing bugs but for increasing the rate of growth and hence profit) it has an impact. When you administer antibiotics you are not taking into account the wisdom of nature acting within bacteria, its genetic make-up that allows them to adapt to the threat to their survival. The wisdom of nature within the microbes is the same as within every living cell of all organisms. When we start tinkering with nature, with ignorance and arrogance, there are unforeseen consequences that may not be good.

3 I noticed a common thread of how diversity plays an important role, the diversity of microorganisms within our body and how they create an environment that protects us. And you quoted Chief Seattle as saying that what we do to the Earth we ultimately do to ourselves. So when we administer antibiotics we give the whole world antibiotics.

Here are a couple of statistics. In 2010 American healthcare providers prescribed 258 million courses of antibiotics for their patients (833 per 1000 of the population). In 2011 American farmers purchased 30 million pounds of antibiotics, not to combat infection but because animals fatten 10% more when given subtherapeutic doses of antibiotics. This had generated a serious problem with antibiotic resistance. Under osteopathic philosophy – with its concepts of interconnectedness, interrelatedness, mutual dependence – you cannot ignore the concept of diversity in relation to health. If you cut down the rain forest and plant a monoculture of palm oil trees, virtually the only animals the system can support are rats and snakes; if you plant a monoculture of eucalyptus, a species requires fire to propagate, it can devastate an entire region. If a monoculture is attacked by a viral or bacterial disease it can be devastating, but a system with diverse fauna and flora can adapt and accommodate. The same principle applies to diversity within the body's microbiome.

4 You kept coming back to the term 'symbiotic relationship'.

We have a symbiotic relationship with our gut bacteria, which means that we both benefit. The bacteria serve useful physiological functions for us, while we provide a comfortable habitat for them. It is estimated that we have approximately 10,000 different microbial species in our gut. Some species are abundant while others are few in number but ready to proliferate when conditions are right. If you eat a new food that this particular bug can utilize, then you may get a bloom of a particular microorganism that is able to metabolize that

food and, in turn, it may provide us with additional nutrients from the food's breakdown. If you take antibiotics that wipe out that particular species of microbes you may be unable to tolerate that food, and maybe that's the origin of allergy, and why all allergies are on the rise. When we take antibiotics we neglect to recognize that nature operates as an interconnected web. Antibiotics inadvertently kill off various species of bug or selectively breed an antibiotic-resistant strain of the same bug, and that reduces our ability to adapt to changing conditions.

5 Is there any way you can relate this back to the osteopathic lesion?

Well, I can relate it back to Still's fundamental osteopathic principle of cause and effect. On that subject, remember what I was saying that the 'Four Principles' we all learn in osteopathic schools are not Still's principles, but were drawn up by a committee in Kirksville in 1953. Still's true osteopathic principles are the complementary – material and spiritual – principles of cause and effect, and nature's unceasing tendency towards health. The 'Four Principles' glaringly omit what Still described as the fundamental osteopathic principle: cause and effect – disease is the physiological effect of anatomical derangements. From this principle derives the principle of the osteopathic lesion, or rather primary and secondary osteopathic lesions. Primary lesions are structural derangements caused by strains or traumas, secondary lesions are other factors that cause or maintain abnormal function, originating elsewhere and registering reflexively in the spine through sensory nerve irritation. Still's list included mental shocks, grief, poor diet or overeating, poisons – including pathogenic microorganisms and their toxins, and medical drugs.

Relating this back to gut bacteria, we can see that antibiotics can act as secondary lesions. If you remove from the microbiome a certain bacterium which provides a necessary service for the body, that can become a cause for adverse physiological consequences down the line and lead to a cascade of effects.

6 Do you think that as we learn more, we are going to find our way back to nature? Will all the advancements and knowledge lead us back to our true self?

It all depends on philosophy. Unless we as a society begin to recognize that to find health – both for ourselves and for the planet – we need to adopt a different philosophy to scientific materialism, nothing will change. That philosophy shapes our society, business and politics, our personal thoughts and actions, and our attitude towards the natural world. The money system, the power system, uses science as a tool to justify actions. Scientific experiments enable safe limits to be set for the dosage of medical drugs, amounts of agricultural chemicals, levels of electromagnetic radiation and atmospheric pollutants, and so on. But these experiments take little or no account of effects

upon the whole interconnected web of nature. In the case of antibiotics, this has led to gross over-prescription without considering the long-term consequences. A precautionary philosophy of acting in harmony with nature (much like that of the Native Americans) would lead to prescription only when absolutely necessary so as not to disturb the global web of life. I cannot stress strongly enough how much everything comes down to philosophy. When the Native Americans first encountered the white settlers, they noticed that their dominant emotion was fear – in a hierarchical society you are always looking up anxiously in case somebody stamps on you from above. But in a society where everyone is regarded as equal and we discard the notions of experts and authorities – and that is how Still saw things – then, like the Native Americans, nobody is above anybody else, not even the chief is above anybody. The only way to come back to our true self is by adopting the spiritual philosophy that nature knows all and defer to its greater wisdom. Use science for the knowledge it gains us, but put principles above science. That is A. T. Still's teaching.

7 It seems that British osteopaths do not focus much on Still. But you really have focused in on Still. Why do you think that Still isn't spoken of as much in British osteopathy?

I think he has been misunderstood. Osteopathy was brought to Britain by J. Martin Littlejohn, who founded the British School of Osteopathy in 1917. When I was a student at the BSO in the early 1990s it was evident that the school thought more of Littlejohn. Still was considered merely as a historical figure with no real importance to the present. We were taught that there was a 'debate' as to whether osteopathy was what Still taught or whether the science-informed medicalized version was superior. Actually there was no debate; it was hubristically assumed that the latter was true. As in all teaching establishments people generally trust what they are taught, and what has happened in osteopathy over the generations is that people have accepted as truth a watered-down and philosophically incorrect version of osteopathy, then graduates have become teachers and perpetuated this distorted version of osteopathy – and perhaps added other things to it – while being unaware of the true version. What got left behind, very early on – both in America and Britain – was the philosophy. To his credit Littlejohn was very true to Still's teachings.

Another factor which hasn't helped are Still's writings – his books and *Journal of Osteopathy* – which are a bit difficult, quaint and dated, and require a fair bit of interpretation. I spent a lot of time trying to understand the way Still saw the world, based on how it looked to an average American at that time in the Midwest. While trying to understand his message I had to take into account his background and influences, so really, I felt like an interpreter when I was studying him. Nowadays osteopathic schools seem to think that the scientific medicalized approach to osteopathy is the way forward, because

it is considered more modern and up-to-date. This is a grave error. It reflects a sad lack of understanding about what Still was trying to teach. I am confident that in years to come people will come to appreciate Still's true teachings, and him as a visionary. In many fields a counter movement is occurring towards biodiversity and thinking in terms of interconnectedness, the webs of life, and this sort of thing. Things will change, but not until a critical mass is reached where enough of the population demands that big corporations cease to implement practices that reduce biodiversity, manufacture environmental pollutants that poison the oceans and atmosphere, and create climate change, and so on. It all comes back to philosophy. We as a species have a choice: to control nature – to have dominion over the earth, as Genesis puts it – or to listen and learn from nature, because nature is invariably smarter than we will ever be.

8 When you lecture in the UK is the audience as receptive to Still's philosophy as in North America?

Strangely enough, I have spoken less often in the UK than many other places. Having said that, I think that osteopaths in all countries are generally receptive to Still's teachings once they hear them. It's just that they have never been properly exposed to them, and so don't know there is anything useful to be found in them. I have never encountered an audience that after learning what he was truly trying to teach, aren't enthused and inspired by it, and many who read my book write to me that it has changed their whole approach of osteopathy and their attitude in practice.

9 As technology continues to grow we are becoming less connected with nature and as a society we are getting further away from nature. What are your thoughts on that?

If you live in a big city and are constantly surrounded by buildings and concrete and technology you are less likely to value nature. You don't get to see where your food or milk comes from, and you don't see much wildness in your environment. Money has become the dominant force; you can't live without it because you've got to pay for things somehow. A lot of today's occupations are fairly meaningless and just serve to perpetuate this money-oriented system. The philosophy dictates the way the system operates, and the system has become a juggernaut that can't be turned around quickly.

10 How do you think a new osteopathic student should be trained? Are there any important lessons being missed in today's schooling?

First and foremost – and I can't state this strongly enough – people need to learn that osteopathy is primarily a philosophy. Students must learn the osteopathic philosophy before learning



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the manual medicine side. The philosophy is applied in terms of principles – cause and effect, and nature's tendency towards health – and must inform the teaching of the entire curriculum – every subject, every day – from matriculation to graduation.

Nature always tends towards health – that is the foundation of osteopathy. And since nature's tendency towards health cannot be explained by any known scientific law, we need a more appropriate philosophy to include that fundamental principle. Only when that happens can we say, as Still did, that the teaching "is upon the foundation of nature's rock." He is saying that osteopathy is not founded on the shifting sands of medical knowledge, where new "advances" constantly render obsolete what came before. Osteopathic principles are timeless, for nature's laws never change.

If you do not base your teaching and practice upon osteopathic philosophy and principles you have no right except a legal one to call it osteopathy. When Still's philosophy and principles are inculcated from day one, and constantly inform every lecture on every subject for the duration of the course and all your reasoning on the patients' presenting complaint and every treatment you give in the clinic, you will end up with a very different practitioner to the person who is simply taught how to apply techniques. If you apply the philosophy and principles to all your thinking on health

and disease, you are more likely to have confidence that the body will heal itself if only you have the knowledge and skill to remove obstructions to that process.

When every osteopathic curriculum is grounded in Dr. Still's philosophy and principles and, as Dr. Still counseled, every student goes out into the community to pass these teachings on to their patients, then osteopathy can one day achieve critical mass and effect a positive change in the world. But that won't happen if schools and governing bodies continue to perpetuate a medicalized, philosophically incorrect, version of 'osteopathy.' That does a disservice to students, to the profession as a whole, and to our patients.

11 So then what is the best way for students to learn about the philosophy? Is it through reading Still or works like your book?

I think Still thought about this question all his life, and the way he presented osteopathy was a distillation of years and years of thought. What I've tried to do in my book is bring out his true teachings in the way he wanted it. That took me fifteen years, and



I can't come to any other conclusion other than the one I've come to. You don't have to read a particular book, but you do have to know what Still was trying to teach us, and see if it resonates with you. Then make up your own mind on whether you want to follow his teachings or not.

12 You've done a great job of showing the spiritual side of Still's journey. Can a student be taught that philosophical training? Or in some way does it already have to be ingrained in them? Or is it already within us all, and school just has the job of coaxing it out?

That's a difficult question. We are so imbued with the dominant materialistic philosophy because we've been brought up with it since day one. It's so ingrained that we hardly notice it, and that's why it's very difficult to change this way of thinking. We accept things as they are. So when somebody come along and challenges this deeply ingrained belief system it takes a while to accept, let alone adopt, a different way of thinking. That is way Still said,

"We much show the people small stars, and but one at a time." The osteopathic philosophy is not something you grasp immediately. It needs constant reiteration and practice. Having said that, we do have an inbuilt faculty for recognizing truth – what the Bible calls "the moral law written in the heart, the conscience also bearing witness." The truth resonates in our hearts. That is why Dr. Still's teachings resonate, because they are founded upon truth. In the first three years of the ASO, when Still had intimate contact with the students every day and was teaching them by a kind of apprenticeship, they gradually absorbed his way of thinking. But if you don't keep that way of thinking in mind it will fade into the background, because the dominant philosophy is around us all the time. Still recognized that students must be constantly immersed in the philosophy and principles throughout their training.

Osteopathy's spiritually based philosophy is the reason why the practice has struggled to remain pure and, going back to your earlier question, this I think is also why Still has been largely ignored. He was trying to teach a philosophy much closer to that of the Native Americans than our own. Their way of knowing was not informed by the fragmentation that comes with a scientific worldview, but by a way of knowing with interconnectedness at its heart. "All is related" leads to a deep respect for nature and its inherent wisdom. And that mysterious wisdom is the foundation of osteopathy.



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