Determination of the Determining Power: Ode to an icon of 19th century medical reform and his contributions to the culture of Physiomedicalism.

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Introduction: the Battlefield of American Medicine

"Some are in the belief, and are free to express that belief, that the name of Samuel Thomson will live in all future ages, and continue to brighten in proportion to the circulation and development of the full extent of his medical discoveries...For, if the future age should receive his character from the present, loaded with slander, it will nevertheless, place a due estimate upon that practice of medicine which he originated amidst the persecution and calumny of the present generation; and they will do justice to his name, and to his medical discovery..." - David Tower, Four Lectures on the Thomsonian Practice of Medicine, 1828¹

Regulars, Allopaths, Homeopaths, Root Doctors, Thomsonians, Neo-Thomsonians, Eclectics, Physios. Diving into the subject of 19th century American Medicine requires a suit of armored protection for unbiased inquiry and historical fact-checking prowess (to neither of which I lay claim). It is a messy, brutal warscape, writhing with the confusion, complexity, and accusatory tone typical of conflict-driven sectarianism. Jacksonian era politics and social norms ensured that the laws that regulated the practice of medicine rapidly disappeared, and within this context, medical anarchy ensued.²⁻⁴ Different factions of therapeutic philosophy began to appear and publish literary arguments about the cause and more specifically the treatment of disease. They also argued internally about what to call themselves and their principles of practice and therapeutic strategy, about the nature and form of medical education, and about who should be qualified to receive the illustrious title of 'Physician' (or the acrimonious distinction of 'Quack'). This hot bed of reformation also targeted elitism and classism as symptoms of an anti-democratic plague thereby empowering a common 'do-it-yourself' population.^{3 (p443)} The concept of 'self-help' became the booming timpani within medical reform by challenging the perception that the role of physician was necessary for the healing of disease and more aggressively, that the 'Regular' practice of medicine was actually safe and efficacious.^{2(p15),5}

There are a few historians that have attempted to traverse this hostile territory, many focusing on the merited evolution of modern allopathic medical practice out of an otherwise barbaric history.⁶⁻¹⁰ Even more to the point, there have been some medical historians that have looked into the face of what has been termed America's Botanico-medical movement⁴ in an attempt to reiterate the foundations of therapeutic strategy for the evergrowing herbal medicine movement of modern times. Their attempts have been to reconnect practitioners of herbal medicine to a system of medical therapeutics that continues to be central to its present-day practice.¹¹⁻¹⁵ Their work succeeds in reconstructing the long-lost tangibility of Western herbal medicine theory and practicum that many of us modern herbal medicine practitioners may feel is missing within our clinical practice. I take my hat off to them, for they are warriors in their own right.

The following essay is an investigation into Samuel Thomson, a true icon of 19th century medical reform, and his system of therapeutics (Thomsonianism) that spread like wild-fire across a violent and sickly landscape, creating fertile ground for the development of botanical medicine in America and abroad. The nature of life and the human body and how to define disease and its causation, form the basis of the once widely utilized Thomsonian system of therapeutics.¹⁴ These foundational concepts, although metamorphic in nature, remain intact philosophies within the principles and practice of modern Physiomedicalism whose primary therapeutic objective is support of the 'vital force'.^{13(p11),14(p7)}

However, these fundamental Thomsonian concepts, as outlined below, were not novel ideas. Although Samuel Thomson himself readily admits to being 'uneducated', there is little doubt that he was privy to the legacies of Galen and Hippocrates, as well as larger philosophical debates taking place within medicine and the neighboring

fields of chemistry and physics during his time. What made Thomsonian medicine unique however, was that it was the first system whose materia medica was solely based on medicinal plants (refusing the use of mineral preparations), and that brought the following larger concepts together to form a concrete therapeutic system with reproducible results (and had enough fortitude to publicly upset the entire practice of allopathy and even perhaps inform its evolution.)^{2(p17-18),5}

Planting the Seed of Vitalism

Thomsonian medicine was born within an era of opposing views regarding the nature of 'life phenomena'^{17(p18)}, an academic, philosophical, and religious debate which was deeply influencing late 18th century and 19th century scientific research into the laws of organic and inorganic chemistry and physics, and hence the fields of physiology and medicine.¹⁷⁻¹⁹ One side of this vitalism vs. mechanism debate found its ancestry in Georg Ernst Stahl's (1660-1734) principles of *anima*,^{2(p91)} which declared that even though the living and the nonliving are both composed of matter, the difference between them is the presence of an immaterial vital principle (*anima*). This *anima* could only be described or studied within the context and understanding that living matter is endeavoring towards a particular goal or purpose and this endeavor, or goal-seeking effort, is driven by the directive agency of *anima* over the mechanical manifestations within living matter.²⁰ *Anima* was endowed with intelligence and represented a 'finite portion of the universal spirit that actuates all creation'.^{21(p531)}

Samuel Thomson was revered by medical reformers for rekindling the concept of *anima*, or vitalism, in governance of physiology and hence medical therapeutics.^{2(p91)} This concept was later termed 'vital force' by the Physiomedicalists,²² but Thomson himself never specifically referred to it as such. Instead, the presence of this concept within Thomson's theory and practice is inferred from his explanations of the constitution of life and the body, the cause and treatment of disease, and his objections to the employment of blood-letting and the use of 'depletive remedies', such as mercury, arsenic and opium, by allopathic or 'regular' physicians.^{5(p191)} Thomson states:

"For there are but two great principles in the constitution of things, the principle of life and the principle of death. That which contains the principle of life, can never be tortured into an administration of death. If, then, a medicine is good in any case, it is because it is agreeable to nature, or this principle of life, the very opposite of disease."^{5(p188)}

This concept of animism or vitalsim *is* often directly stated by Thomson's contemporaries under various and sundry titles and explanations.²³⁻²⁶ A clear example of this can be found in *Four Lectures on the Thomsonian Practice of Medicine*,¹ whereby Tower embarks upon the clarification of what he calls 'the active power' with the premise that the organization of the human body and all its elements was proof in and of itself that it was designed for such animation. He states:

"The great point with us, as physicians, is, to know what principles are active, and what passive, in animal motion. The nature of the active power, and the nature of that on which it is exerted. For there must be such an agent as active power, and this active power acts on material substances. It is necessary for the physician to have correct views of the active power, for in diseases the active power is weakened and diminished by inanimate matter, and it must be assisted..."

Heat, or the Determining Power and the Vital Flame

Samuel Thomson actively called upon and quoted aspects of Galenic and Hippocratic medical philosophy in the formation of his system of medicine. For example, he believed that the human body was comprised of the four elements (earth, air, fire and water), whereby earth and water constituted the 'solids', and air and fire (or heat) were the cause of life and motion.^{5(p185)} In addition, Thomson quotes the Hippocratic sentiment of 'nature is heat', ^{5(p190)} forming his entire system of therapeutics around the axiom 'heat is life, and cold is death', whereby adding or diminishing heat could promote either health or disease.^{5(p43)} Thomson described his theory of this vital

heat as 'the determining power'⁵⁽¹⁸⁶⁾ which flowed outward from a 'fountain'^{5(p188)}, the stomach, having been fueled by the digestion of food and nourishing substances. This is not dissimilar to the concept of *Agni* (its various types and functions) of Ayurvedic (Indian) medicine.²⁷ Thomson writes:

"Our life depends on heat; food is the fuel that kindles and continues that heat...The stomach is the deposit from which the whole body is supported. The heat is maintained in the stomach by consuming the food; and all the body and limbs receive their proportion of nourishment and heat from that source; as a whole room is warmed by the fire which is consumed in the fire-place."^{5(p186)}

We see many similar metaphors regarding this subject in the writing of Thomson's contemporaries, all of which suggest that Thomson was not alone in his vitalistic argument of heat as the great animator of life. Often referred to as the 'caloric', it was evidenced from the observation of heat in the natural world, that it must play a role in the animism of the human body. This argument was based upon the seasons as observed within northern hemisphere, whereby the heated time of year brought forth the flourishing of movement and life just as the winter yielded stillness and death.^{1(p41-42)} This comparison was further indulged by the admiration of the sun as ultimate regulator of life which sits at the center of all known things, perpetually exerting an omnipotent energy outward into the universe.^{21(pvi)} Although this particular Romanesque argument venerated the heart as the seat of 'calor vitalis' and compared it as such to the Sun^{21(p530)} (unlike Thomson who recognized the stomach and digestion as the source of vital heat), nonetheless it expresses inherent support for Thomson's axiom and his concept of the 'vital flame'.^{5(p188)} These literary examples are furthermore fortified by discussions regarding the role of heat as a catalyst in chemical reactions,²¹ its effects on water in the creation of steam,^{1(p43)} and many others.

Defining Disease and its Causation: an inherent philosophy of Vitalism

Building upon the apothegmatic construct of heat as the source of life, Thomson's definition of disease and his views on its causation also speak to an inherent philosophy of Vitalism. Although his sentiments were described differently by various Thomsonian authors, according to their doctrine there was one singular cause of disease and in describing this cause one could define disease in simple terms. There was no need for the various and sundry names and titles denoted by the 'Regular faculty' in the differentiation of disease states.^{5(pg191), 24(p12)}

To Thomson, the human body being made up of the aforementioned elements of earth, air, fire, and water, was only able to achieve a perfect state of health when each of these elements were in balance with one another^{5(p185)}. When these elements were thrown off balance (for whatever reason), the imbalance created a diminution or absence of fire, or 'heat', and in this absence of heat the body would be proportionally affected by 'cold'.^{5(p186)} 'Cold' was henceforth the cause of 'obstructions to perspiration', and these 'obstructions' manifest themselves as symptoms of disease, often referred to by Thomson as 'canker' and 'putrification'. It was 'cold', therefore, that was at the seat of all disease, being opposite to all that supported life. This was the singular cause of all of human suffering.^{5(p185-189)} Thomson himself was adamant about this singular causation:

"And I found that all disorders which the human family are afflicted with, however various the symptoms, and different the names by which they are called, arise directly from obstructed perspiration, which is always caused by cold, or want of heat."^{5(p43)}

This approach to defining disease from a physiological perspective (albeit potentially limited), rather than defining disease based upon its symptomatic presentation, represents support for the larger concept of vitalism present in Thomsonian medicine, as well as in its evolved state of Physiomedicalism.^{13-14,28-29} In this regard, Thomson often describes what could be interpreted as an epic battle between inward heat, or the determining power, and the external forces applied by 'cold' in the causation of disease. He likened this determining power, which originated in the stomach, to a fountain whose outward flow could be easily overpowered by the influence of the stream (the cold). He writes:

"The inward heat is the fountain of life, and as much as that has the power above the outward heat, so much we have life and strength, and when we lose this power of heat, our strength and faculties decay in proportion; and it is immaterial whether we lose this power by losing the inward heat or raising the outward heat above it, as the effect is the same...When the outward heat becomes equal with the inward...cold assumes the power and death takes place."^{5(p193)}

We see different variations of these sentiments throughout Thomsonian literature.^{2(p25-43)} Although narrowed down to a singular causation, the explanation of pathology, or the effects of an overpowering 'cold', sometimes shifted between concepts such as canker and putrification,⁵ obstructions as caused by canker and putrification,^{5,25,30} or in some perspectives 'loss of tone to the organs'.^{24(p8)} By and large however, there was a general agreement within Thomsonian medicine that a singular cause and hence therapeutic strategy was clear. Countering cold, or supporting heat as the living power of the system (vital flame), was the primary therapeutic objective.

Thomsonian Therapeutics: In support of the Determining Power

As all disease within the human body was believed to be caused by cold and its obstructions, it was very evident to Thomson and his followers that this general causation need only be countered by a general remedy. The Thomsonians were clear, however, that one general remedy did not mean a single therapeutic agent, but rather a single therapeutic approach.^{5,23-24,26} Thomson's patented system, or the general cure, sought first and foremost to rekindle the vital flame, or determining power, by raising internal heat to clear obstructions, followed by a cleansing of the stomach and bowels so digestion, or 'the fountain', could once again maintain the determining power on its own:

"There is no mystery in it, the whole plan consists of keeping the determining power to the surface from the fountain of the body, which is the stomach; from which all the limbs receive their support and warmth, and when you cannot raise their support and warmth, and when you cannot raise the fountain sufficient to give nature its proper course, you must lower the stream, or outward heat, by keeping the heat down on the limbs and raising the inward heat, when there can no mortification ever return from the limbs to the body, any more than a log can float against the stream."^{5(p138-139}

Surprisingly, this sentiment of 'general cause, general remedy' was shared by different therapeutic philosophies even within the practice of allopathic or Regular medicine.^{2(p16-17),4,31} In this regard, there was also at times agreement between Thomsonians and Regulars about their respective therapeutic mechanisms as outlined in the following statement:

"Dr. Thomson by considering disease as the general effect of a general cause, *obstruction*, fixed his remedy, like the others. Remove the *obstruction* is his cure. Remove the *debility* is Dr. Brown's cure [referring to Dr. John Brown and his Brunonian system]. Remove the *morbid excitement* is Dr. Rush's cure [Dr. Benjamin Rush of Philadelphia who heavily employed the practice of blood-letting]. And all done by diffusive stimulants. The *debility* is to be removed by *diffusive stimulants*. The *morbid excitement* by *diffusive stimulants*. The *obstruction* by *diffusive stimulants*.

Therefore, the mechanics of Thomsonian therapeutics did not differ much from the popularized heroic³² practices of Regular medicine, both of which sought to effect a cure through stimulating secretions from the body.^{2,4} However, even with the employment of strong emetics, purgatives, and diaphoretics, Thomson believed his practice was superior, safer, and more efficacious than that of allopathic practice because his system worked with the body rather than against it. He used steam baths and botanicals as the therapeutic agents, rather then what he called 'depletive remedies' or 'instruments of death', ^{5(p187)} such as mercury and arsenic, and the practice of blood-letting. These en vogue agents of the Regulars, Thomson argued, worked against nature and the determining

power, by promoting cold and therefore death.^{5(p188)} A good example of this is present in Thomson's opinions about the role of fevers:

"I have found by experience, that the learned doctors are wrong in considering fever a disease or enemy; the fever is a friend, and cold the enemy...it is the struggle of nature to throw off disease...If cold, which is the commonly received opinion, (and which is true) is the cause of fever, to repeatedly bleed that patient, and administer mercury, opium, nitre, and other refrigerents to restore him to health, is as though a man should, to increase a fire in his room, throw a part of it out of the house, and to increase the remainder, put on water, snow, and ice!"^{5(p191)}

In reading Thomson's *New Guide to Health*⁵ it becomes apparently clear that the primary objective in the treatment of disease was to support the body's own recuperative agenda. This approach of supporting physiology, honoring the vital force by working with the body rather than against it, has become an essential feature in the practice of present-day Western herbal medicine.^{12,33} There is an emphasis placed upon the importance of investigating the physiology, rather than the symptoms of disease, prior to the application of a therapeutic strategy.^{14(p8),33} There is still present a belief or faith in the self-affirming and self-regulating power of nature, and the unprecedented importance of supporting this power in the negotiation for wellness.

Conclusions: Vix Medicatrix Naturae

The irony of modern day historical investigation into the heart of turbulent 19th century medicine lies in an apparently biased interpretation of historical literature. The side you are investigating from (because yes, there are still sides), modern orthodoxy or the holistic paradigm, continues to dictate the outcomes of our perceptions of history. However, in my days of studying linguistic anthropology I learned that one must speak the language if they are hopeful of ever even attempting to understand a culture. Therefore, it is in the language of the Thomsonian approach to the treatment of disease where the present day practitioner of Western herbal medicine can begin to appreciate the culture of Physiomedicalism.

Thomsonianism promoted the principle of supporting the vital force that became the cornerstone of the practice of past and present-day Physiomedicalism.^{13-14,22,28-29} Physiomedicalism is therefore an evolution of a system of medicine that seeks to work with the physiology of the body (vital force) rather that against it. There is an underlying respect for the intelligence of the *anima*, the immaterial essence of nature that was designed to moderate itself, the *vix medicatrix naturae*, or healing power of nature.^{2(p94)} Physiomedicalism is then a culture that lives within the foundations of the present-day theory and practicum of Western herbal medicine and its holistic paradigm, which also seeks to celebrate this intelligence and support of the vitality of the human body, rather than medicate against it.^{12.33}

In addition, Thomson believed that every person should have access to the knowledge of how to heal themselves and be their own doctor.^{2,5,16} This, as an inalienable human right, is very much upheld in the present-day practice of Western herbal medicine. As Western herbalists we are trained to empower those individuals plagued by illness and disease to reclaim their responsibility for their health and educate themselves about the promotion thereof. It is an echo of a larger democratic appeal not dissimilar to that of Samuel Thomson's time, a concept know deeply engendered in the struggle for health sovereignty taking place on the battlefields of the present-day American healthcare system.

In closing, Samuel Thomson is indeed an icon of 19th century medical reform and who has rightfully been knighted as the father of present-day Western herbal medicine. It was out of his determination that the philosophies of Physiomedicalism were born, giving rise to a culture and system of medicine that was, and continues to be, "of the people, by the people, and for the people".

Footnotes

- 1. Tower, D. *Four Lectures on the Practice of Thomsonian Medicine*. By David Tower Physician at Avon Mineral Springs. Canandaigua: Bemis, Morse and Ward; 1828.
- 2. Haller Jr., JS. *Kindly Medicine*. Physio-medicalism in America, 1836-1911. Kent, OH: The Kent State University Press; 1997.
- 3. Flannery, MA. The early botanical medical movement as a reflection of life, liberty, and literacy in Jacksonian America. *J Med Libr Assoc.* 2002; (90)4: 442-454.
- 4. Berman, A, Flannery, MA. *America's Botanico-Medical Movements Vox Populi.* New York, NY: Pharmaceutical Products Press; 2001.
- 5. Thomson, S. New Guide to Health; or, Botanic Family Physician, containing a Complete System of Practice, upon a plan entirely new; with a description of the vegetables made use of, and directions for preparing and administering them to cure disease, to which is Prefixed a Narrative of the Life and Medical Discoveries of the Author. Boston: E.G. House; 1822.
- 6. Starr, P. The Social Transformation of American Medicine: The rise of a sovereign profession and the making of a vast industry. New York: Basic Books; 1984.
- 7. Starr, P. *Remedy and the Reaction: The Peculiar American Struggle over Health Care Reform.* Revised Edition. New Haven, CT: Yale University Press; 2013.
- 8. Warner, JH. *The Therapeutic Perspective: Medical Practice, Knowledge, and Identity in America, 1820-1885.* Reprint edition. Princeton, NJ: Princeton University Press; 1997.
- 9. Shortt, SED. Physicians, science, and status: issues in the professionalization of Anglo-American medicine in the nineteenth century. *Medical History*. 1983; 27:51-68.
- 10. Numbers, RL. The history of American medicine: a field in ferment. *Reviews in American History.* 1982; December: 245-263.
- 11. Griggs, B. *Green Pharmacy: The History and Evolution of Western Herbal Medicine.* Second edition. Rochester, VT: Healing Arts Press; 1997.
- 12. Wood, M. *The Practice of Traditional Western Herbalism*. Berkeley, CA: North Atlantic Books; 2004.
- 13. Menzies-Trull, C. *Herbal Medicine: Keys to Physiomedicalism including Pharmacopoeia.* Second edition. New Castle: Faculty of Physiomedical Herbal Medicine Publications; 2013.
- 14. Priest, AW, Priest, LR. *Herbal Medication: A Clinical and Dispensary Handbook*. London: LN Fowler & Co; 1983.
- Winston, D. American botanic medicine from Thomson to the Eclectics. 1999. Available at: https://www.herbaltherapeutics.net/_media/american_botanic_medicine.pdf. Accessed January 28, 2015.
- 16. Haller Jr., JS. *The People's Doctor: Samuel Thomson and the American Botanical Movement, 1790-1860.* Carbondale, IL: Southern Illinois University Press; 2001.
- 17. Melzer, SJ. Vitalism and Mechanism in Biology and Medicine. Science, New Series. 1904; 19(470): 18-22.
- 18. Sawyer, ME. An Inaugural Dissertation: Contain an enquiry into the Existence of the Living Principle and Causes of Animal Life. Philadelphia: T Dobson; 1793.
- 19. Payne, MD., M. Essays on the Philosophy of Vitality as Contradistinguished from Chemical and Mechanical Philosophy and on the Modus Operandi of Remedial Agents. New York: Hopkins & Jennings; 1842.
- 20. King, LS. Stahl, Georg Ernst. In *Complete Dictionary of Scientific Biography*. 2008. Encyclopedia.com. Available at: http://www.encyclopedia.com/topic/Georg_Ernst_Stahl.aspx. Accessed February 5, 2015.
- 21. Metcalfe, SL. *Caloric: its mechanical, chemical, and vital agencies in the phenomena of nature.* Vol. 1. Philadelphia: Lippincott; 1859.
- 22. Thurston, MD., JM. The Philosophy of Physiomedicalism, its theorem, corollary, and laws of application for the cure of disease. Richmond, IN: Nicholson Printing & Mfg Co; 1900.
- 23. Thomson, J. A vindication of the Thomsonian System of the practice of medicine on botanical principles, as originated by Samuel Thomson, and continued by his coadjutors. Albany, NY: Webster & Wood; 1825.
- 24. Howard, H. An improved system of botanic medicine, founded upon correct physiological principles; Comprising of a complete treatise on the practice of medicine. New edition. Cincinnati: OH: Kost, Bigger & Hart; 1854.

- 25. Mattson, M. *The American vegetable practice, or, a new and improved guide to health, designed for the use of families.* 2 vols. Boston: Daniel L Hale; 1841.
- 26. Stevens, J. *Medical reform; or physiology and botanic practice for the people.* London: Whittaker; 1848.
- 27. Agrawal AK, Yadav CR, Meena MS. Physiological aspects of Agni. AYU. 2010; 31(3): 395–398.
- 28. Curtis, A. *A fair examination and criticism of all the medical systems in vogue.* Second ed. Cincinnati: Printer for the proprietor; 1865.
- 29. Cook, W. The Physio-medical dispensary: a treatise on therapeutics, materia medica, and pharmacy, in accordance with the principles of physiological medicine. Cincinnati: By Author; 1869.
- 30. Smith, E. *The botanic physician; being a compendium of the practice of physic, upon botanical principles.* New York: Murphy and Bingham; 1830.
- Wood, M. Study guide to the six tissue states. 2010. Available at: http://www.portlandherbalschool.com/wp-content/uploads/2010/03/Study-Guide-to-the-Six-Tissue-States.pdf. Accessed January 5, 2015.
- 32. Berman, A. Heroic approach in 19th century medical practice. *Bulletin of the American Society of Hospital Pharmacists.* 1954; 11: 321-327.
- 33. Mills, S. *The Essential Book of Herbal Medicine*. London: Penguin; 1991.