



Chiropractic and Energy Medicine: A Shared History

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ABSTRACT

Background: The history and philosophy of chiropractic shares similarities with contemporary research into subtle energies and the theoretical models of energy medicine.

Objective: To illustrate the similarities and provide examples in order to advance the understanding of the philosophy of chiropractic and contribute in a meaningful way toward a new approach to chiropractic research.

Discussion: Three bodies of evidence are discussed in order to plainly show the similarities. The examples are: the body of research into subtle energies and energy medicine, the original studies and writings of DD Palmer, and the research conducted in the BJ Palmer Research Clinic in the 1930s and 1940s. It is argued that these three examples are compelling in their interconnections and point the way toward a new vision of research and philosophy in chiropractic.

Conclusion: The philosophy of chiropractic and chiropractic scientific research can best be understood by first understanding the latest research within energy medicine and how this relates to chiropractic's history. (*J Chiropr Humanit* 2008;15:27-54)

Key Indexing Terms: Philosophy; Chiropractic; History; Vital Energy (Philosophy); Electromagnetic Fields; Complementary Therapies

INTRODUCTION

Chiropractic and energy medicine have a great deal in common, especially philosophy, theory, and research. These similarities can best be understood by exploring the influence that energy medicine

and subtle energy research have had on chiropractic in the past. This relationship is even more pronounced when first examining the extensive research available on subtle energies. A growing body of evidence in the literature verifies some of the claims made by energy medicine.¹⁻³ Technological innovations make it possible to study subtle energies, or those energies within and around the body. Subtle energies remain central to many energy medicine practices such as ayurveda, reiki, acupuncture, and homeopathy. Several authors note similarities between the philosophy of chiropractic and such practices.⁴⁻⁶ This growing body of research, when examined

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alongside the early history of chiropractic, provides empirical evidence for chiropractic's original claims that the body has its own intelligence utilizing energy for organization and healing. This article is even more pressing because some chiropractic researchers are now examining the body's energy systems in relation to the chiropractic adjustment and some chiropractic techniques explicitly use subtle energies in their approaches.⁷⁻¹¹ The present paper argues there is a long history of subtle energy theory and research within chiropractic, enough to consider it a form of energy medicine and a subtle energy practice.

The best place to explore the shared history of energy medicine and chiropractic is the early history of chiropractic and the writings of DD and BJ Palmer. DD Palmer developed chiropractic after practicing as a magnetic healer for nine years.^{12 (p. 17)} In addition to his expertise in anatomy and physiology, Palmer was an expert in magnetic healing; a form of energy medicine.¹³⁻¹⁵ A careful study of BJ Palmer's writings about his own research on human energies in the 1930s and 1940s shows that he incorporated some of the subtle energy research of his own day, research providing the groundwork for current models.¹⁶⁻¹⁸ Thus, both Palmers developed theories and practices that have common roots in contemporary research.

Drawing comparisons between energy medicine and chiropractic furthers philosophical understanding and future research. First, this comparison grounds the philosophy of chiropractic in compelling theoretical models and scientific evidence. Second, modern chiropractic research can be realigned with DD Palmer's original models, and BJ Palmer's empirical studies. This approach to research places chiropractic in a wider context, relating it to the broader tradition of subtle energy research.

Large segments of the chiropractic profession have moved away from its original principles, in part because of monetary emphasis on quantifying biomechanical symptom correction, rather than a holistic, system-wide understanding of the body's capacity to self-heal.^{19, 20} This claim is especially relevant to the current paper due to the branches of funding available from the National Institutes of Health (NIH) for complementary and alternative medicine (CAM) research. The arm of the NIH dedicated to this research stream is the National Center for Complementary and Alternative Medicine (NCCAM).²¹ Under these auspices, chiropractic is identified as a manipulative method, not as energy medicine.^{22,23} Recently, large sums have been allocated for research based on this dichotomy, furthering the entrenched perspectives. The historical record of the origin of chiropractic suggests a clear argument can be made to identify chiropractic within both categories. This wider perspective, would add credence to a reinterpretation of chiropractic's original principles, especially since the current evidence is congruent with such a stance. A new flexibility regarding theoretical models and research foci will reinvigorate the chiropractic profession and link it explicitly with many other approaches to health and wellness.

METHODS

This paper explores three bodies of evidence to support the thesis that chiropractic and energy medicine share a common history, similar philosophies, theoretical models, and possible research agendas. The first body of evidence on which this paper focuses is subtle energy and energy medicine research. This section will focus on models and theories congruent with the models developed by the Palmers. The second

section discusses DD Palmer's philosophical models of life, his influences, and writings. The third section examines BJ Palmer's writings based on his extensive research. The historical aspects of the paper adhere to the norms of qualitative research in the use of quotations and artifacts, such as texts, to support the main objective of this paper. The paper will not be historical in a linear sense, as it will first examine recent theories and research and then consider history. Finally, the paper will synthesize the three bodies of evidence, to see if a new conceptual model for chiropractic theory and research is appropriate.

DISCUSSION

The Three Bodies of Evidence

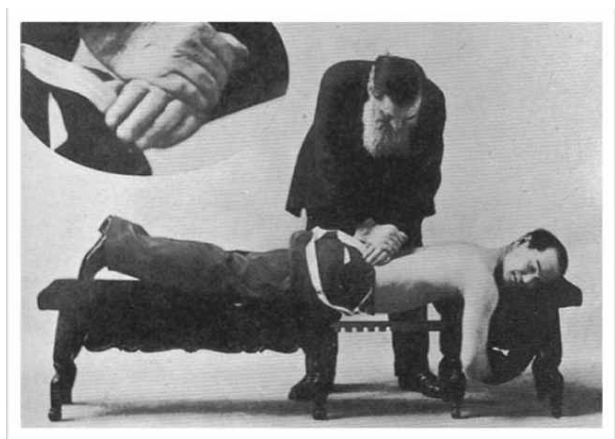
A brief overview of the three bodies of evidence by way of definitions will help to orient the reader to the material. It is important to define the key terms and show exactly why chiropractic theory should be linked to energy medicine and subtle energies. This means defining what we mean by energy, how DD Palmer defined his theory, and how BJ Palmer's research shaped his understanding of human energies and chiropractic. Energy, in general, is defined as the ability to do work and overcome resistance. Schwartz has argued that all healing involves energy.¹ Thus, energy medicine includes all healing. More specifically, energy medicine traditionally includes energies that are applied to the body or triggered within the body to induce healing.

Energy medicine is defined by NCCAM²³ in two categories, veritable, or measurable, and putative, defying measurement (in a reproducible way). Veritable energies include sound vibrations, electromagnetic forces, light, magnetic fields, and lasers.

These energies,²³ "...involve the use of specific, measurable wavelengths and frequencies to treat patients." On the other hand, according to NCCAM, putative energies such as auras, biofields, chi, life force, and prana, defy measurement.²³ "Vital energy is believed to flow throughout the material human body, but it has not been unequivocally measured by means of conventional instrumentation. Nonetheless, therapists claim that they can work with this subtle energy, see it with their own eyes, and use it to effect changes in the physical body and influence health." Since chiropractic theory, which emphasizes an innate intelligence that utilizes vital energy is closer to putative approaches, the first section will focus on putative approaches that may indeed be veritable.

Many authors note that DD Palmer's (Fig 1) philosophical approach was informed by his studies of magnetic healing and spiritualism.^{14,15,24,25} After examining the

Figure 1. DD Palmer demonstrating an adjustment on Shegato Morikubo, 1906 (The Science of Chiropractic its Principles and Adjustments; Photograph used by permission of Palmer College of Chiropractic).



current research into subtle energies alongside Palmer's influences, it becomes evident that his models of neurophysiology were also thus informed. In an attempt to unite spirit and matter and overcome Cartesian dualism by redefining life, Palmer wrote,^{12 (p. 19)} "The dualistic system—spirit and body—united by intellectual life—the soul—is the basis of this science of biology, and nerve tension is the basis of functional activity in health and disease." Central to this philosophical outlook was his belief he had found a new definition of life;^{12 (p. 106)} "the result of vital force, spiritual energy, expressed in organic creation." Palmer even went so far as to suggest that he,^{26 (p.11)} "located the spirit in man," and, "found its abiding place to be throughout the entire body, a position from which each and every nerve may be used for receiving and forwarding impulses."

Taken together, it becomes evident that Palmer's conception of neurophysiology, life, matter, and spirit were contemporary for his time and also ahead of his time. His ideas were contemporary because they reflected many of the common assumptions that spiritualists and magnetic healers held about the world. The ideas were ahead of his time because he incorporated this worldview into his vast knowledge of anatomy and physiology along with his extensive experience of working directly with subtle energies. This approach places him more squarely alongside contemporary research than the other healers of his day.

The most intriguing concepts linking Palmer's theories to modern theory are his notions of tone and vibration. Palmer wrote,^{26 (p.26-28)} "Nerves, like all material substances, are composed of particles, atoms or molecules, which vibrate, oscillate... When nerves are in a normal condition, known as tone—normal tension, normal

elasticity and normal renitency—impulses are transmitted by *vibration* in a normal manner with the usual force." In the section dedicated to Palmer's writings and influences, we will explore this notion in more detail. He was writing about life and healing based on his own studies of subtle energy practices, philosophies, and energy medicine. This perspective would be taken up by his son years later, using the latest technology available.

In 1951, after 16 years of empirically studying the energies in the body in relation to the chiropractic adjustment, BJ Palmer re-conceptualized the chiropractic encounter to embody an energetic phenomenon. He wrote,^{17 (p. 209)}

Discovery Is Not Proof

A principle-constant was conceived by DD Palmer, in 1895, on a quantity flowing energy proposition. Would that conception prove true or untrue?

- life is motion- there is no motion without energy to move matter
- health is a rate of activity
- if rate of speed of motion is normal – health
- if slowed down – sickness and dis-ease
- to reduce quantity flow of energy is to produce dis-ease
- vertebral subluxation shorts energy flow
- vertebral adjustment restores it and restores health.

This approach to the chiropractic adjustment and the vertebral subluxation is different from the biomechanical symptomatic approach so often studied in the literature. It is also different than the classical definition of vertebral subluxation; misalignment of a vertebra, occlusion of an opening, pressure

on a nerve, and interference to the flow of mental impulse. Hopefully by more fully understanding chiropractic's roots in energy medicine and the compelling research in the literature pointing to the reality of subtle energies, this definition of BJ's could be more fully understood, and a new way of understanding chiropractic can emerge.

Subtle Energy Research

Current research into subtle energies suggests many of the putative energies (defying measurement in a reproducible way) described by NCCAM may in fact be veritable energies (consistently measurable). This reflection of the most current research is not evident on the NIH website, but it is clearly implied and discussed in the literature. Gary Schwartz,¹ (p. 167) offers a hierarchy of approaches considering the types of explanation the researcher may be willing to investigate. The scale goes from 1) the possibility that nothing may be happening; to 2) placebo effects; 3) electromagnetic (EM) fields; 4) quantum fields; 5) advanced physical phenomenon; 6) perhaps a new physics; to what Schwartz calls, 7) "spiritual mechanisms." Ken Wilber²⁷ suggests a more comprehensive approach that includes a way to discuss the spiritual and physical aspects of subtle energies as two sides of a coin. Wilber's explanation also includes the many levels of perspective that are involved in such a discussion. For each physical energetic experience, there is an internal experience associated with it, and many of these experiences may be spiritual. This approach to understanding the relationship between internal experience and objective experience may help to explain the origins of chiropractic's philosophy. The philosophy of chiropractic was born of contemplating and experiencing subtle energies.²⁸

Fields

Much of the research on subtle energies describes electromagnetic (EM) fields and quantum fields as possible mechanisms influencing the body's organization. For example, Beverly Rubik,²⁹ describes the biofield, (listed in the putative category at NCCAM), as a "complex dynamic standing wave" produced by interactions of the particles, ions, molecules, cells, and tissues of the body. Similarly, Jim Oschman³⁰ describes an electromagnetic field that is mainly generated by the heart, which flows through the muscles of the spine and the backs of the legs. Liboff³¹ has even suggested that each unique organism has an electromagnetic signature similar to DNA, an electrogenomic field. Rubik, Oschman, and Liboff all describe ways in which these fields are used to organize the body's systems. Curtis and Hurtak³² hypothesize levels of fields exist which influence one another.

Connective Tissue Matrix

The connective tissue matrix was first defined by Oschman.^{3,30} It communicates faster than the nervous system and is made up of the conductive nature of the tissues themselves. Biopolymers are the central focus of this crystalline lattice as they comprise every part of the body. His model is based on the earlier works of many researchers, some of whom will be discussed below, but most notably; Burr,³³ Szent-Gyorgyi,³⁴ Becker,³⁵ Hunt,³⁶ Frohlich,³⁷ and Davydov.³⁸

Body Electric

One of the best-known researchers in the field of energy medicine is orthopedic surgeon, Robert Becker. Becker found that there was a DC current traveling over the

perineural structures of the nerves as chronicled in his book, *The Body Electric*.³⁵ This current flowed from the more positive brain to the periphery of the body and was responsible for the healing and growing of the tissues. This polarity in the tissues also set up a current of injury when tissue healing ensued. The electric signal initiates the healing process. Similar currents were found early in the century by Loeb.³⁹ In a previous paper,⁴⁰ this author has related Becker's theories to the development of the chiropractic concept of mental impulse and noted some similarities to BJ Palmer's research published in 1936.¹⁶ The current paper expands on that original premise. One of Becker's earliest papers on the subject,⁴¹ published in 1961, the year of BJ Palmer's death, cited Harold Saxon Burr's landmark research at Yale. Burr was a contemporary of BJ's, although there is no evidence that Palmer was aware of Burr's work.

Electrodynamic Fields

Harold Saxon Burr was a physiologist who conducted over thirty years of research into "the electrodynamic fields of life."³³ In 1935,⁴² the year that BJ Palmer opened his research clinic, Burr published his groundbreaking hypothesis together with Yale philosopher, F.S.C. Northrop. Burr's theory is often cited as one of the established frameworks upon which current theory rests.^{3,27,30,41,43} Its similarities to the chiropractic theory of innate intelligence are apparent, thus an extended quote is in order. Burr and Northrop wrote,⁴² (p. 330)

It is reasonable to extend this hypothesis into the realm of biology. Potential gradients and polar differences exist in living systems. If this is so, then electrodynamic fields are also present. The following theory may therefore be

formulated. The pattern or organization of any biological system is established by a complex electro-dynamic field, which is in part determined by its atomic physico-chemical components and which in part determines the behavior and orientation of those components... It determines and is determined by the components. More than establishing pattern, it must maintain pattern in the midst of a physico-chemical flux. Therefore, it must regulate and control living things, it must be the mechanism and outcome of whose activity is "wholeness," organization and continuity.

Burr and Northrop proposed a physical/energetic explanation of the body's self-organizing capacity. In a summation of Burr's research, Ravitz⁴³ showed how the electrodynamic theory was also linked to historical approaches such as Mesmer's theory of animal magnetism, the electrical theories of Volta and Galvani, and field theories of Faraday and Maxwell. Interestingly, the history Ravitz provides is similar to at least two of the articles and books referenced by BJ Palmer in 1936.^{44,45} Even though Palmer was unaware of Burr, he was well aware of the long history of research into field theory. He even quoted a passage from Sullivan's *Science: A New Outline*,⁴⁴ describing the development of ideas from Galvani, to Oersted, to Faraday, to Einstein.

Self-Organizing Structures

Rubik²⁹ describes how the biofield is the result of the body's self-organizing capacities. That is, the body dissipates energy in a nonlinear far-from equilibrium nature as part of the process of self-

organization. The dissipated energy is used to form the biofield. The biofield helps to inform the body's organization. This bi-directional control, from below-up and from above-down, is typical of dynamic and complex systems.^{46,47} Several chiropractic researchers utilize such models as dynamical systems theory, complexity theory, and the new biology to explain the concepts of innate intelligence in a more mechanistic and dynamical manner.^{19,20,48-53} Now, these models can be used while sticking to the Palmers' original ideas about vital energy and vital force. The energies are being dissipated and also being used to organize the system.

Biophotons

Today, researchers are looking to the quantum nature of biological systems, especially regarding coherent light and biophotons. Frohlich³⁷ found the dipolar nature of the cells emit photons of light, which produce long-range coherent fields used by the biological system to communicate within itself and possibly with other organisms. Oschman,³ Rein,⁵⁴ Ho,⁵⁵ Creath and Schwartz,⁵⁶ and others look to these Frohlich fields and biophotons as an explanation of the organism's ability to be sensitive to electromagnetic fields, heal, and self-organize. Based on understanding the influence of biophotons on physical form, del Guidice and colleagues wrote, "what we see as structure is in fact, a consequence of coherent focusing of polarized waves of energy."^{57(p. 305)} The similarities to chiropractic theory are apparent; the form is a product of the self-organizing intelligence utilizing the energies.

Fritz-Albert Popp has studied biophoton emission in organisms for several decades and found the biophotons can be used as a measure of health.² Biophoton emission has

been used recently to determine the energetic changes in the body in response to a chiropractic adjustment. Hossu, Rupert, and Harrison⁸ have suggested that the chiropractic adjustment sends some energy to the connective tissue while the rest converts to electromagnetic energy like biophotons and moves through the body's cavities, which act as waveguides.

Energy and Chiropractic

There is also a good deal of research into the energetic mechanisms of energy medicine and energy healing. For example, Korotkov⁵⁸ and colleagues suggest free energy moving through biological systems may be described as free electrons in electron excited states mostly found just under the skin. This flow of electrons may be related to the energy meridians of acupuncture, which Curtis and Hurtak³² have referred to as a fifth circulatory system. They wrote,^{32(p.33)} "Research done in China has shown that acupuncture meridians are also good channels for both electromagnetic and acoustic waves." This general approach toward acupuncture and energy moving through the body is incorporated into Oschman's connective tissue matrix. This is important because Oschman also links the vertebral subluxation to this flow of energy through the system. This energy travels through different pathways than the nervous system. It is suggested that the fiber tracts from the vertebra transmit energy through the discs to the next vertebra; an energetic communication network.

Energy Healing and DD Palmer

Gary Schwartz¹ has focused much of his research on energy healing. Schwartz and colleagues have shown that the emanation of a magnetic energy from a healer's hand can be detected with a magnetometer. It is

possible to detect a person's presence and intention without looking.⁵⁹ The EKG of one person can be picked up in the EEG of another.¹ All of these studies apply directly to DD Palmer's studies because his influences included magnetic healing, learning to expand one's energetic sensitivity, and building rapport or resonating with another individual physically, energetically and personally.

DD Palmer

DD Palmer (Fig 2) developed a practical and empirical knowledge base. He had his own practice and also an extensive understanding of various topics in relation to subtle energies and energy medicine. His understanding of the body's self-organizing processes was also based on his thorough study of anatomy and physiology. Palmer's own practice first as a magnetic healer and then as a chiropractor and teacher helped him to observe many healing principles in action. As noted above, it is important to understand Palmer's concepts of vibration and tone. Another important part of Palmer's model is his explanation of consciousness. These three concepts, vibration, tone, and consciousness, were at the heart of his philosophy of chiropractic. After defining these three terms, it will be important to examine the books and pamphlets he was reading and his writings on subtle energy topics.

In order to understand the relationship between vibration, tone, and consciousness, working definitions are needed. First, vibration, is, in his terms, a state shared by "all particles of matter," living and non-living. In relation to the nerve impulse, he explains,^{12(p. 327)} "An impulse travels over a nerve by waves known as vibration, similar as a pulse-wave, only more rapid... Nerves... vibrate, oscillate." Secondly, tone,

Figure 2. DD Palmer (Photograph used by permission of Palmer College of Chiropractic).



he clearly stated, was the basis of chiropractic. "When nerves are in a normal condition, known as tone—normal tension, normal elasticity and normal renitency—impulses are transmitted by vibration in a normal manner with the usual force." Finally, on consciousness, he wrote how it is, "associated with nerve vibration; the external organs (such as the ears) focus the vibratory movements, perform the function of receiving, directing and transmitting vibrations." (This author's parenthetical addition). Palmer linked vibration, tone, and consciousness by using the nervous system. Further, according to Gaucher-Pelsherbe,^{13(p.190)} Palmer used the vertebral subluxation as a central metaphor through which he could organize all of these ideas as

well his more philosophical writings on the individual's innate intelligence and on universal intelligence.

Palmer, like other physiologists of his day, sought heat and vibration in the nerves. For example, A. Mosso and H. D. Rolleston,⁶⁰ attempted to detect heat produced in nerves in order to demonstrate the nature of the impulse. The heat, they believed, would suggest "nerve impulse" was nothing but "a wave of chemical reaction" or "a wave of molecular vibration." Interestingly, a new model of the nerve impulse is proposed by Heimburg and Jackson.⁶¹ They suggest the nerve impulse is likely a sound pulse or a shock wave, with the electrical component secondary to the mechanical component. This model proves mathematically consistent with the second law of thermodynamics. Could Palmer's theory of vibration and oscillation be more closely related to this model than the electrical model defined by the Hodgkin-Huxley equation?

There may be other models congruent with Palmer's notion of oscillation and vibration, such as Szent-Giorgyi's³⁴ and Davydov's³⁸ models of muscle contraction, Petrov's⁶² model of cells as optico-flexo-electric, Frohlich³⁷ emissions, etc... In regard to consciousness and recent theories of subtle energy, many researchers share similar notions as Palmer. For example, Ho⁶³ and Oschman³ view the connective tissue matrix as a form of body consciousness. According to Oschman, the connective tissue consciousness is evolutionarily older than the neural consciousness. Richard Gerber's classic book,⁶⁴ *Vibrational Medicine* describes the concepts of Chi and Prana and how they are related to the nerve system and to consciousness. Curtis and Hurtak³² relate their subtle energy model to the levels of consciousness associated with yogic

philosophy. Whether these ancient and recent theories can be directly applied to Palmer's ideas must be explored with care. As the founder of chiropractic practice and theory, his writings and influences should be included in any deep look at chiropractic's foundations.

Palmer's focus was on vibration and oscillation and how they were affected by tension and tone. He wrote,²⁶ "The tension and rigidity of nerve tissue determines the amount of molecular oscillation..." Accordingly, the return to natural and normal tone equated with health. The chiropractic adjustment was purported to do just that. A large part of his theories relating to the energy flowing over nerves by vibration and oscillation, came from his readings on magnetic healing, a subtle energy practice. This influence on Palmer leads us to look at his ideas about the nerves and vibration not only from a neurophysiologic perspective but also from a subtle energies and experiential perspective.

DD Palmer's Traveling Library

DD Palmer was influenced by the philosophical systems of magnetic healing and Spiritualism. In fact, Spiritualism (which according to his son BJ,⁶⁵ (p. 70) was DD's "religion"), was a combination in America of the teachings of Mesmer (the founder of animal magnetism and hypnosis) and Swedenborg (the visionary and seer). According to Catherine Albanese,²⁵ the metaphysical systems of 19th century America were popular because they were grounded in practical experiences, especially the experience of magnetic energies. Palmer's influences from both of these schools of thought are well documented in his collection of books and pamphlets known as *DD Palmer's Traveling Library*.⁶⁶

His writings are the best evidence for these linkages. *DD Palmer's Traveling Library* was attributed to DD by his biographer, Vern Gielow.¹⁴ Three of the texts have Palmer's signature and most have dates. These books can be viewed as one of the main sources of Palmer's subsequent philosophy. Some quotes from the *Traveling Library* will help the reader to draw links to the research discussed above. This type of analysis is very important as it re-orientates chiropractic in the wider context of subtle energy practices and theories from the past. And, these ideas formed the basis upon which BJ Palmer would eventually conduct his own research. Taken together, these influences place chiropractic as part of the history of energy medicine in America.

Many of the texts describe ideas found in Palmer's philosophical and physiological writings. For example, some of the authors discuss not only an aura around the body, a topic Palmer would write about in his 1910 book, *The Chiropractor's Adjustor*,¹² but an aura around the nerves. The aura was made of the vital energies, which act as the link between spirit and matter. Other texts describe a flow of energy from the brain to the body. This concept is very important to examine first, as it played a role in the argument made by Cyrus Lerner⁶⁷ (a 1950s era lawyer who investigated the early history of chiropractic), suggesting philosophy in chiropractic was only a legal strategy.

The Positively Charged Brain

One of the claims made by Cyrus Lerner,⁶⁷ (p.72) in regard to the development of chiropractic philosophy was; the Palmers' appropriated the theory that there was an unseen power in the brain, which flowed to the body, from the book, *Modernized Chiropractic* by Smith, Langworthy, and Paxson.⁶⁸ *Modernized Chiropractic* was

used in 1907 in the landmark Morikubo case to show chiropractic's philosophy was central to its legality because it helped to demonstrate that chiropractic was a distinct profession. Two of the books in Palmer's traveling library contain similar concepts about an unseen power. Understanding that the Palmers were already exposed to these ideas discredits Lerner's theory that philosophy was co-opted from Smith, Langworthy, and Paxson. It also calls similar arguments based on Lerner's into question.⁶⁹ This author has previously noted, the legal strategy was a catalyst that led to the explicit use of philosophy in chiropractic. The philosophy itself dates further back to Palmer's studies.⁷⁰

The following quote from the traveling library, from the *Appendix to Psychometry and Thought Transference*,⁷¹ written by Dr. Fahnstock, is a good example as it also discusses the concept of vibration and "brain aura." Fahnstock wrote,^{71,(p. 40)}

Again, this quickened circulation increases the vibrations of the brain, which consequently attracts to itself a larger volume of brain aura from the "Astral Light," as the Orientals term it, which is a most important factor of all brain processes, as we shall ultimately show; ... for all nervo-vital vibration as substantially and truly collects, concentrates, and employs the brain aura as does the dynamo of the electric plant...

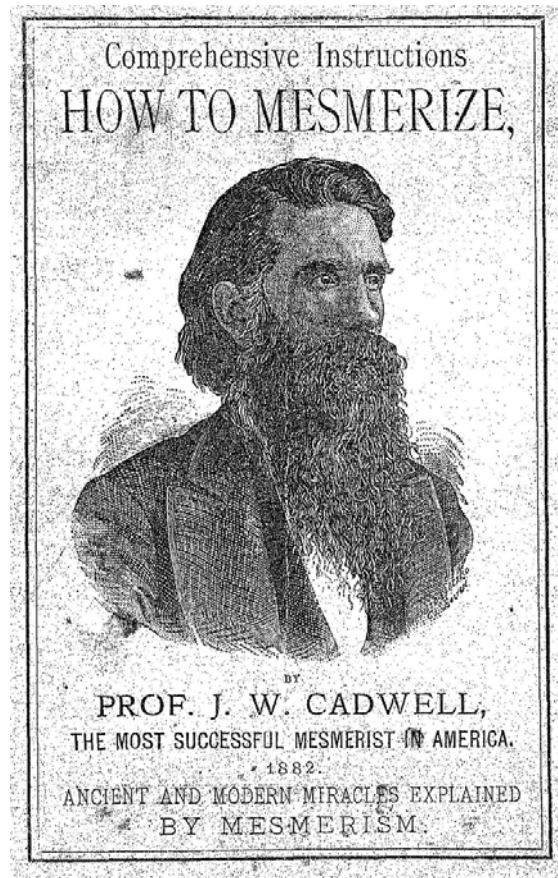
Fahnstock shows how these ideas are not just Western in their origin. There are several mentions of Eastern philosophies and practices throughout Palmer's library. Many of the authors however, wrote from direct experience. Caldwell (Fig 3) is a good example. He described himself as the most "booked" Mesmerist in America, that is, by

his account; he performed more dates before audiences than any other in his day. From *How to Mesmerize*, Caldwell wrote,^{72(p. 81)} “The best theory that I know of, supposes that every human brain is charged with electricity. This invisible something sometimes called a fluid, occupies the highest point in the scale of material things...” This quote leads us to even more esoteric writings of Palmer’s and the authors of his library, those of the nerve aura, nerve force, and auric impressions.

Nerve Aura and Nerve-Force

Though DD Palmer did not use the term “nerve-aura,” he did discuss “nerve-force,” mentioning it forty-five times in 1910.¹² In *The Chiropractor’s Adjustor*, Palmer includes a short chapter entitled “Nerve-Force is Life”.^{12(p.33)} In it, he attributes this force to the life giving energy of the body, the organs, and their functions. He postulated the generation of nerve-force from the brain and spinal cord. It is comparable to electricity; because of the power it gives the body. As noted above, Palmer viewed life as the result of vital force; here, he equates life with nerve-force. Two quotes from the library are adequate to explore this topic; from one of the earliest books in Palmer’s library, *Vital Magnetism* by Babbitt (Fig 4), we find the concept of nerve-force equated to the nerve-aura. Babbitt wrote,^{73(p.11)} “The nervaura, so often called nerve-force, is comparatively a very coarse element, a kind of animal magnetism sure enough, and yet it is the finest force excepting the mind itself...” In *Psychometry and Thought Transference*,^{74(p.10)} the author (N.C) suggests “around the brain and spinal cord of human beings...forms what is called the ‘aura.’ Where it still more closely surrounds the nerve-cells and nerve-tubes it is called the ‘nerve-aura,’ which is not the nerve-fluid, but the aura of the nerve-fluid.”

Figure 3. Cover of *How to Mesmerize*, 1882.



In each of the above quotes, clear similarities to Palmer’s definitions are found. The germination of his philosophy is evident; the force and energy of the nerves was vital to life, health, and spiritual evolution.

The Human Aura

DD Palmer believed we leave some type of magnetic impression on everything we touch. In 1910, he wrote a short chapter titled, “The Human Aura.” Palmer wrote:^{12(p. 319-20)}

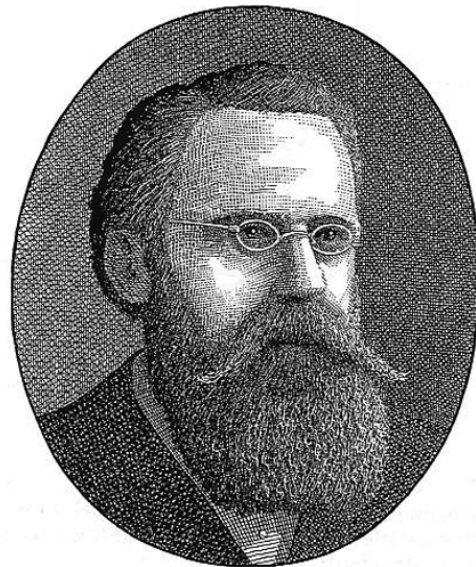
All observers realize that we are surrounded with an aura; that we pass from our bodies a subtle, invisible substance known as

magnetism... There is an emanation from us, not magical or miraculous, but a subtle, invisible substance, capable of perception, which consciously or unconsciously magnetizes, influences, more or less, every person and object with which we come in contact... Some persons seem to be surcharged with magnetism, are highly magnetic. They are always giving off their life-force, they affect not only persons, but animals and plants as well; while others seem to be shut up like clams and some are even absorbents—living upon those with whom they are associated...

What he describes, leaving an impression on your environment sounds much like the more recent research of William Tiller and associates,⁷⁵ whereby humans made impressions on water in prepared spaces, or even of the morphic fields described in Rupert Sheldrake's⁷⁶ classic book, *The Presence of the Past*.

Even more than any recent theories, these writings are reminiscent of the *Traveling Library*. For example, a similar description of the auric field emanating from the body, can found in *Philosophy of Disease* by Juliette Severance. Palmer had three of Severance's pamphlets. In this one she wrote,^{77(p. 17)} "Every organized body is surrounded by an aura, an atmosphere of finer matter - spirit essence we will call it—peculiar to itself, eliminated from the coarser material constituting the tangible body." There are other examples describing just how we *leave* and *pick up* these impressions. Palmer's roots are well founded in the texts of the *Traveling Library*. We can even find some of his seminal concepts, such as the relationship between the innate and the body.

Figure 4. E.D. Babbitt, from his 1873 book *The Principles of Light and Color*.



Palmer's Triune

It is important to discuss Palmer's triune as noted in his post-Cartesian writings above; spirit, matter, and intelligent life. Intelligent life, he also referred to as the soul, which was the symphysis of spirit and matter. In 1910, Palmer wrote,^{12(p. 691)} "Innate—Soul—Body. Innate—Intelligent Life—Body. Immaterial—Vital—Material. The life directed by intelligence is the soul (the life) of the body. The Soul (the life) is the symphysis which unites Spirit and Body. Without the connecting link, the Spiritual and Physical are separate and distinct from each other." As this is obviously a central piece of Palmer's philosophy it is interesting to note a similar triune in Babbitt's book *Vital Magnetism*.^{73(p. 19)} Babbitt wrote that the link between soul and body was the life aura, which was comprised of vital magnetism and vital electricity. This similarity will help us to understand the development of DD Palmer's thoughts and

lineage of chiropractic's philosophical models.

For Babbitt, the life aura is the link between soul and body. For DD Palmer, soul was the link between Innate and Body. These same ideas will come up again in the writings of BJ Palmer, for he too was searching for the missing link and also trying to distinguish between electrical energy and vital energy. He described a triune of matter, energy, and intelligence.^{17(p.81)} Further, the most famous triune in the philosophy of chiropractic comes from Stephenson's *Chiropractic Textbook*;⁷⁸ the triune of life, which is comprised of force, matter, and intelligence. Triunes abound in chiropractic theory.

The Magnetic Cure

Before exploring other aspects of chiropractic's history, we should dig deeper and examine some of DD Palmer's earliest writings on magnetic healing. If our case for Palmer's inclusion in the history of energy medicine in America has not been made evident yet, these writings will do so. The ideas about vital energy as distinct from electrical energy can be found in Palmer's earliest writings. During 1896-1897, Palmer wrote an advertiser called, *The Magnetic Cure*.⁷⁹ In it, we can find the precursors of many of Palmer's later concepts. We can also see his roots in energy medicine practices. In it he wrote,⁷⁹ "Animal magnetism and machine electricity are two quite different forces and differ in their uses. Magnetism is of man, the highest of creation, and is healing and life-giving, imparting vital and nerve force... Magnetism equalizes the life-forces, giving life, strength and rest, bringing both harmony and health..." In the passage, Palmer wrote of magnetism in relation to the cure of disease, and the need for a good hand healer to be healthy. The healer "must have the ability of

gathering more vitality than he needs himself, and the power to impart it to others..." Palmer's description is very similar to practices of other energy healers, chi kung masters, and subtle energy researchers. Further he wrote,⁷⁹ "The magnetic sends a life force from his hands, which most patients can feel, into that dormant organ, arousing it to action thereby assisting it to throw off the unnatural condition... A GOOD vital magnetic imparts to the organism of the patient a life-giving principle."

Finally, this is the type of healing studied recently in some interesting detail using magnometers, galvonmeters, and other instrumentation. Author, professor, and researcher, Gary Schwartz, PhD, was transformed by what his research showed about the nature of energy and healing. He wrote,^{1(p. 177)} "Energy healing can be thought of in a narrow sense as a set of complementary methods used for healing and health. It can also be thought of, in a wider sense, as an emerging paradigm for understanding the nature of all healing and even of the nature of existence itself."

Schwartz and DD Palmer shared a similar insight. BJ Palmer, too, was quite literally transformed by his research into the human energies, research related directly to the chiropractic adjustment. One last quote from DD Palmer is appropriate before delving into BJ's research. DD Palmer wrote,^{12(p. 111)} "While Chiropractic is an outgrowth of magnetic healing, it is not magnetic healing advanced, is not the climax of magnetism or any other method." In this sense, chiropractic was emergent.

BJ Palmer's Research

In 1935, the year BJ Palmer opened his research clinic, he wrote a well-documented

book, *The Known Man or An Explanation of "The Phenomena of Life," Volume 19*.¹⁶ That book as well as a follow-up 16 years later, *Chiropractic Clinical Controlled Research, Volume 25*,¹⁷ helps us link his research directly to the research of his day. Taken together, these books place BJ Palmer at the forefront of subtle energy research in the twentieth century. This section completes the historical loop between chiropractic and contemporary subtle energies research because much of BJ's own empirical and scholastic studies of subtle energies were rooted in the theoretical models and practices handed down from his father (Fig 5).

A decade before the opening of his clinic, BJ introduced a thermography instrument to the chiropractic profession. Designed by an

Figure 5. BJ Palmer and DD Palmer (Photograph used by permission of Palmer College of Chiropractic).



engineer, Dossa Evins, the instrument was called the neurocalometer, or NCM. Its purpose was to measure the heat of the nerves in relation to vertebral subluxation. For Palmer, this invention meant he could scientifically determine exactly where the nerves were being interfered with in the spine.¹⁸ Though Palmer and others thought they were measuring heat from the nerves themselves, today we know better. Thermography remains commonly used throughout the chiropractic profession, although the rationale for its use is different. Current models show the dissipation of heat from the spine is more directly related to vascular flow and autonomic function.⁸⁰⁻⁸²

The mechanistic NCM in 1924, like Palmer's introduction of x-rays into chiropractic in 1909, was met with unrest in the profession.⁶⁹ The NCM was costly. BJ wanted every chiropractor to lease one from him. The historical research of Walter Wardwell and Joe Keating have each suggested his motives were ego and greed.^{69,83} Augustus Dye suggested that his motives were scientific progress.⁸⁴ Viewed alongside his later inventions and his writings about them, as well as his own personal development, perhaps both sets of views were partially correct.⁸⁵

In the research clinic during the 1930s, BJ Palmer developed shielded grounded booths to increase accuracy of NCM readings. He suggested chiropractors should install the booths in their own clinics. In 1936, with the development of the research clinic, Palmer offered to see the most difficult cases. This offer was especially directed to all chiropractors, not able to afford x-rays, NCMs, and shielded booths. They would send their most difficult cases to his clinic, where a full analysis would be performed, and then the patient would be returned to the referring office. Chiropractors responded in

droves, commonly sending family members for examination.¹⁶⁻¹⁸

Shielded Grounded Booths

This section will look at why Palmer chose to develop shielded and grounded booths. This development combined with his earlier invention of the NCM led to his third major technological innovation, the timpograph or more fully known as electroencephaloneuromentimograph (which will be discussed below). Combined, the research conducted during these 16 years greatly influenced Palmer's theoretical model of vertebral subluxation and also his philosophical perspectives. Palmer understood the literature of the day. The contemporary research he was conducting, was in many ways decades ahead.

BJ Palmer developed the shielded grounded booths, where, he wrote,^{17(p.25)} “We record human energies.” He felt he would never get an accurate reading of the energetic mental impulse if the body was busy adapting to the external fields. He wanted to get the “constant” not the “variable” when analyzing for vertebral subluxation. Palmer wanted to be sure all external variables were accounted for, so he developed the booth to block out; magnetic north-south waves, Hertzian waves, radio waves, and electromagnetic waves. All wiring was grounded. He even used rubber floor mats and gloves to ground the static electricity of the patient and technicians. Palmer wrote,^{16(p. 35)} “What matters it that instrument is grounded if patient and operator contain external variable and transfer them to instrument?” The patient was greeted by someone who was touching a ground in order to dissipate the patient’s static electricity.

Figure 6. Shielded and grounded booth, as shown in BJ Palmer’s book, *The Known Man* (Photograph used by permission of Palmer College of Chiropractic).



Many of the ideas leading to the development of the booth (Fig 6) were found in various publications Palmer was reading. For example, after reading an article in *National Geographic* in 1936 on Cosmic Rays, he recognized the impossibility of shielding the patient from these rays. He also learned about the adverse effects radio frequencies could have on the body after reading *The General Radio Experimenter* by J.W. Horton.⁴⁵ The article described how the internal and external tissues of the body were related to electrical properties that should be considered,^{16(p.262)} “... in any study of the correlation between electrical impedance and pathological condition.” He was also aware of the biological effects of ions in the atmosphere.^{16(p.222-39),86} He also used these booths to conduct lie detector tests and so he was very interested in the relationship between human emotion and human energy.^{16(p. 237),}

BJ Palmer's Experiments

In addition to his extensive study of the literature available to him, BJ Palmer did his own experiments on the relationship between the human energies and the external energies.^{16(p.37-45)} Some of these were done to test the completeness of the shielding. Others were out of sheer curiosity. Some of Palmer's tests were as follows; to eliminate discharges between rooms, to be sure there was no radio reception in labs, to determine whether the human body could act as an antenna (this led to the need for rubber mats and gloves), and to prove that electrical energy was in the air outside and thus penetrating human bodies. He also noted, on days when the radio station broadcast static, the NCM readings were affected. Of this phenomenon, Palmer wrote,^{16(p.45)} "These are byproduct effects of external variables breaking thru skin insulation of atmospheric static electricity and backing into human receiving set, throwing NCM sensitive meter readings off usual constants established on regular days when static was absent."

One of the more interesting experiments studied the effects of the earth's magnetic fields on the body. It took 19x less energy to sleep with the head pointed north. Incidentally, BJ wrote about his father sleeping with his head pointed north, for years.^{16(p.162)} Instructions to sleep with the head pointed north can be found in one of the books from DD Palmer's Traveling Library. Babbitt^{73(p.88)} cites the research of a German magnetic healer and researcher Reichenbach and his experiments with patients. As strange as the experiment might seem, German scientists were studying the same phenomenon a few years prior to the publication of BJ's book. The German scientists even developed a bed with a crank putting the bed back into a normal position during the day.⁸⁷ There were several

researchers of his day working with similar ideas as Palmer's. Burr's⁴² research was the most famous. Others such as Crile^{88,89} and Speransky⁹⁰ will be discussed below after we explore Palmer's further insights into electropollution, his distinction between intellectual and ignorant energies, and his technological tour de force, the timpograph.

Electropollution in 1935

Becker wrote a book in 1990 called, *Cross Currents: the Perils of Electropollution*.⁹¹ He is often acknowledged as one of the earliest researchers to notice the possible health risks of electromagnetic fields on human physiology. BJ Palmer was writing on the subject in 1935.¹⁶ Palmer's writing on this was unique, because he wrote from the perspective of chiropractic's philosophical models. He wrote from the perspective of innate intelligence. An extended quote on this subject is warranted, as it is even more relevant today. Palmer wrote,^{16(p.33-34)}

Man today, in city or country, does not live under natural conditions. He is forced to exist under artificial energetic conditions. One must adopt and adapt one energy to the other. If man were internally normal and elements were externally natural, there would be no variables; all would be constant. What we deal with here is an internal abnormal pathological condition (because of vertebral subluxations) in man trying to intellectually adapt itself to an external artificial manufactured environment outside man, both being variables within themselves and to each other.

Now that we have radio waves and commercial electricity, we build cabinets to exclude them to shield

man against them; not in a therapeutical, treating, or curative value as that comes from within man, but to eliminate external artificial variables only so far as ascertaining the constants of man, in facts and records, to gain knowledge; to know what, where, when, and how to do those things at those places which release that normal flow from within, so he can get well.

These quotes go to the core of BJ Palmer's understanding of the natural and the unnatural, the energies of life and the energies created by man's intellect. Along with these studies, he was beginning to view the world from the perspective of an energetic entity. In 1948, for example, after 13 years of research he wrote,^{92(p.32)} "It is true we are spiritual using the body as an instrument." This understanding was more than just a philosophical rumination; it was based on empirical research. Much like Schwartz's insight about the universe itself as energetic, BJ was learning to view the world in a new way.

Intelligent and Ignorant Energies

We already noted the distinctions made by one of DD Palmer's influences, Babbitt,⁷³ about magnetic and vital energy. There are similar distinctions made by DD Palmer¹² and also by Smith, Langworthy, and Paxson.⁶⁸ What made BJ's writings so distinctive was his recognition that external energies could interfere with the body's innate or vital energies. He was not just saying vital energies were different (such as DD Palmer and the authors of his traveling library), or describing the way universal forces affect them (such as BJ's early writings,⁹³ and the writings of his staff like John Craven⁹³ and Ralph Stephenson⁷⁸).

Instead, he wrote of the ways in which the artificial energies could damage the body's natural energies. BJ Palmer wrote,^{16(p. 62)}

We admit a distinction between internal intellectual energy necessary to regulate and control function of a living healthy body, and external ignorant energies (and this is a poor term) that try to get in and run it as a substitute for Innate Intelligence... That they are dangerous foes to body welfare when entering wrong way, at back door, is evident or we wouldn't now be setting up a method of trapping, shielding and grounding them out to gain internal constants.

This quote is important because it traces the development of these ideas from Babbitt to DD and now BJ, only with BJ we can see how they are rooted in scientific empiricism rather than experiential practice.

Electroencephaloneuromentimpograph

To further understand how BJ Palmer developed such distinctions, we need to explore his major technological innovation, the timpograph. Instead of just using palpation with hands coupled with an internal sense, such as his father did, BJ utilized technology, and this added another dimension to the validity of his theories. The development of the timpograph really took BJ's understanding of human energies and their relationship to vertebral subluxation to new heights.

Palmer developed his upper-cervical chiropractic technique based on his research with the NCM in the 1920s and 1930s. After the development of the electroencephaloneuromentimpograph (Fig 7), he expanded the theoretical model of vertebral

subluxation. This new model viewed the flow of mental impulses from the brain to the body as a full-fledged subtle energies approach to health, wellbeing, and human transformation. Research with this instrument allowed Palmer to view the mental impulse as an energetic carrier wave generated in the positive brain and transmitted to the more negative body. When the upper cervical spine was in a subluxated state, the energy of these impulses would get “damned up” and the body would be in a state of energetic “starvation.”^{17(p.21)} He even coined the terms, “superior brain congestion” and “inferior body starvation” to explain this energetic phenomenon. Once the “flood gates” of energy were released, the flow of energy to the body would be reestablished and the balance of energies in the body would be guided by the innate intelligence, restoring health. He even asked patients after the adjustment, whether the head felt clearer as though a “load had been lifted,” if the limbs and body felt a warm glow, was there a feeling of tiredness, and if the patient was aware of a sudden hunger. Each of these, for Palmer, represented the result of the restoration of the current-flow.^{17(p.20-21)}

Palmer developed the timpograph to more accurately detect the minute current of energy of the mental impulse. The mental impulse was the key to the innate intelligence’s ability to restore health via the nervous system. He wrote,^{17(p.244)} “The electroencephaloneuromentimpograph is a very delicate instrument which detects, amplifies, and records flowing and active mental impulses in a living body. The mental impulse registers five-millionths of a volt or less, of current. It is then amplified four hundred trillion times.” When compared to other similar instruments of the day, Palmer was not too far off. For example, in the extensive appendices to *The*

Figure 7. BJ Palmer with patient connected to eight leads (Photograph used by permission of Palmer College of Chiropractic).



Known Man, he had several references to the new electroencephalogram (EEG).^{16(p.235-7,271-3,281-90)} The timpograph was distinct from the EEG as he developed pinpoint pads to detect the energy flow from individual nerves. He also believed that the brain waves detected by EEG were variables and that he was locating the waves of individual nerves.^{17(p.266)} Based on his reading about the EEG, it is evident that researchers were trying to understand the mind/body connection through measuring electrical currents. In an article by Teale, published in 1936 in *Popular Science Monthly*, Palmer learned of the importance of shielding the cables, the new model of brain waves, and currents “less than a millionth of a volt,” could be measured.^{16(p.235-7)}

Of the current Palmer detected, as well as his subsequent research, he claimed to have found a; “continuity energy potential,”^{17(p.61)} and “nerve-energy flow graph wave patterns.”^{17(p. 233)} He was also not sure whether the current was a “pulsatile” or a “carrier wave,” as he was picking up both an AC (alternating current) and a DC (direct

current) current.^{17(p. 318)} He was certain the timpograph,^{17(p. 261)} “... picks up NERVE ENERGY QUANTITY CURRENT FLOW DIRECT.” Taken in context with his broader theory of innate intelligence, this energetic perspective was closer to a description of Oschman’s Connective Tissue Matrix,³ and even Rubik’s biofield,²⁹ than models of the nervous system. Palmer wrote,^{17(p. 315)} “Research proves: - a spiritual, electrical, mechanical, chemical background of a knowledge of Innate Intelligence mental impulse flow.”

The Un/Known Man

The topic of “The Known Man,” was the main title of Volume 19.¹⁶ Chapter one from Palmer’s second work about research, *Chiropractic Clinical Controlled Research*, Volume 25,¹⁷ was 476 pages, and was, titled, *Researching the Unknown Man*. The chapter summed up his 16 years of research and also cited hundreds of pages of references supporting his theoretical model of energy as an organizing force in the body. He borrowed the phrase from the infamous 1936 book *Man the Unknown* by Alexis Carrell. (While Palmer quotes 15 pages from Carrell’s book in Volume 19,^{16(p.245-60)} he seemed to be unaware of Carrell’s more offensive writings taken up by the Nazis a few years later.)

In Volume 25, BJ Palmer quoted several authors extensively. The two most important ones were Speransky and Crile. Speransky, was a Russian physiologist. His neurodystrophic theory was very important for Palmer as it concluded; an input to any aspect of the nervous system could have global consequences. Speransky is viewed as one of the inspirations of psychoneuroimmunology.⁹⁴ George Washington Crile had an even larger impact on Palmer. Crile’s writings will take up the rest of this

section. Prior to quoting over two hundred pages of authors he found kinship with, BJ Palmer wrote,^{17(p.80-1)} “We shall quote sections, insofar as such have a direct bearing upon the purpose of RESEARCHING THE UNKNOWN MAN, pointing the way to proof of the Chiropractic principle in its application to proving there is an energy and that it does have a direct bearing upon cause of dis-ease and its correction.” The subtitle, of Volume 19, *An Explanation of the Phenomena of Life*, came from Crile’s 1936 book, *The Phenomenon of Life*. Palmer admired Crile’s work. In it he found scientific validation for his own theories.

GW Crile’s Bipolar Theory of Life

George Washington Crile (Fig 8) taught physiology and surgery for 35 years. In the 1920s, he started a biophysics lab to conduct research on his theories. He was one of the first researchers to do extensive research with animal subjects. Crile was best known for his surgical innovations as well as his work with surgical shock.⁹⁵ Two of his books, *The Bipolar Theory of Living Processes* and *The Phenomenon of Life*, were viewed by BJ Palmer as definitive proof within the medical community of his own theories and vindication of his research focus.

Crile was one of Palmer’s primary sources in both Volumes 19 and 25. Crile’s theories of life were criticized by the medical community although his contributions to surgery were significant. Palmer found great insight even without Crile’s embrace of the innate philosophy. Palmer wrote:^{17(p.81)}

There are THREE break-down analytical phases of this problem of LIVING MATTER.

1. MATTER.

2. ENERGY which moves matter.
3. INTELLIGENCE that directs motion of energy that moves matter...

Kirke denies the existence of human energy. Crile presents the “theory” of existence of “electrical potential.” Chiropractic goes ONE STEP FURTHER, viz., admits existence of matter, energy, and of INTELLIGENCE. Watch the struggling of the minds as they present evidence; how, once in a while, Crile gets up to the very edge then backs down – backs away from making the third step.

Crile’s theories of energy in relation to the organism go back to 1914, when he proposed the Kinetic System (made up of brain, thyroid, adrenals, liver, and muscles).⁹⁶ It was his writings from the 1920s and 1930s where BJ Palmer saw a kindred spirit. In his 1926 book, Crile wrote how he was searching for the principle of life. He found the brain was positive and the liver was negative, this set up a bipolarity in the system that was crucial in health and pathology, life and vitality. He even wrote of a bipolar theory of cancer.⁹⁷ In discussing his bipolar theory, Crile wrote,^{17(p.89)} “We may consider then that electricity keeps the ‘flame of life’ burning in the cell: and that the flame (oxidation) supplies the electricity which is the ‘vital force’ of the animal...”

Crile’s theory was ahead of its time. Schneider and Sagan wrote of a similar process, in their book, *Into the Cool*, 81 years later.⁹⁸ In their extensive history of the theory of non-equilibrium thermodynamics (NET), or how the living cell burns with the flame of life to reduce gradients, they do not mention Crile’s pioneering work.

Figure 8. George Washington Crile.



BJ cited Crile’s work, using capital letters for emphasis; Crile continues,^{17(p.89)}

Since in a bipolar mechanism, the electric current must flow from areas of higher to areas of lower potential, it is necessary to cite such facts as may tend to support the conception that the cells of the brain ARE THE PRINCIPAL SOURCE of the electric energy THAT COORDINATES THE BODY and to show how the direction of the fabricated current is established....

ANY DISABLING INFLUENCE WHEREBY EITHER THE CONNECTION OF THE BRAIN WITH A PART OF THE BODY IS BROKEN OR THE FUNCTION OF THE BRAIN IS DISABLED OR LOST RENDERS THE BODY HELPLESS.

BJ Palmer's love of this theory is evident in his use of capitals. This bipolar theory was precursor to Becker's theory of the body electric,³⁵ as Becker also discussed that there was a polarity in the body and also Oschman's theory of the connective tissue matrix.³ Crile was building a case for the self-organizing capacity of the organism first based on electrical polarity and then, as if foreshadowing Frohlich,³⁷ Popp,² Ho,⁵⁵ and others, how visible light may play a role in this process.

GW Crile's Theory or Radiant Energy

In 1936, Crile expanded upon his explanation of life to include a radiant energy in conjunction with his theories of life and pathology. Pathology was viewed as a change in polarity, what he came to call, "radio-electric pathology."^{17(p.121)} For Palmer, this was congruent with the heat measured by the NCM and was felt with the backs of hands by chiropractors for decades. Today, we might attribute it to the radiation not only of heat but biophotons. Crile wrote,^{16(p.265)} "When the organs of the body are oxidized...visible light is produced, the radiations varying from the short infra-red to the ultraviolet." It is not clear upon writing this paper whether Crile was influenced by research of Gurwitsch, whose theory of mitogenic radiation in the 1920s showed how living systems used photons in biological processes.⁹⁹

Comparing Crile and DD

From another perspective, we might understand Palmer's attraction to Crile's work based on similarities to the writing of his father. And this shows how much DD Palmer's writing foreshadowed future theories. Figure 9 is a comparison of two of Crile's quotes to two of DD Palmer's. Crile seemed to vindicate not only BJ's theories,

but those of his late father as well. It is a wonder why Crile's theories are not discussed in the literature of subtle energies research.

Quoting Crile's References

Crile's references are notable. His study of previous examinations of energy and heat in living systems is comprehensive. This scholarship is important because it shows BJ Palmer was exposed to some of this research. Even if Palmer was not studying the peer-reviewed literature, and was not aware of Burr, he was aware of some of the pioneers of energy research. For example, in 1936, BJ Palmer quotes ten pages from Crile's 1936 book, including a section examining the use of thermocouples relating heat in the body to nerve currents. He also references, Amy Rowland, SW Wallace, Lillian Jacobson, Becquerel, Breschet, and

Figure 9. Comparison of DD Palmer's and GW Crile's writings.

DD: "vibration as the kinetic energy, means used by Innate to transmit its impulses, to arouse energy, to functionate..."^{12(p.725)}

CRILE: "The kinetic system converts latent energy into motion or heat in response to adequate stimuli." (as quoted in B.J.'s v.19, 1936).^{16(p.265)}

DD: "Organized beings are constantly undergoing a change of material, yet remain practically the same."^{12(p. 106)}

CRILE: "That is, the energy and structure of the organism is constantly changing and yet apparently the structure and the energy remain constantly unchanged." (as quoted in B.J.'s Volume 25).^{17(p.99)}

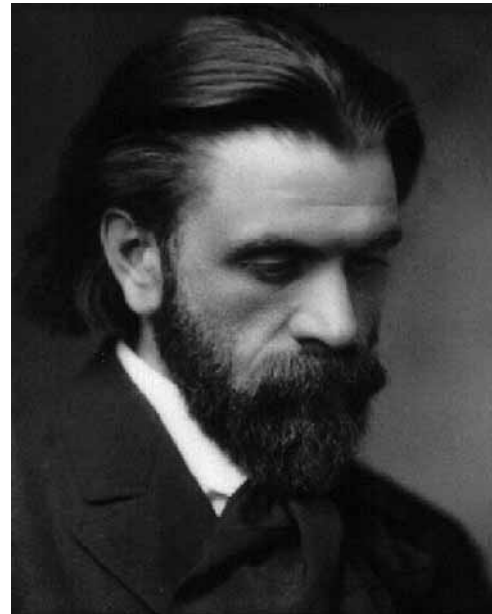
Schiff. Of this last researcher, Palmer boldfaced sections of the quote, noting Schiff's experiments. Schiff did not think the heat being detected was vascular heat; he thought it was rather the result of excitation of the nerve elements. What Crile called the "radio-electric action current" other "biophysicists" referenced in these ten pages; Lillie, Loeb, Osterhout, Mathews, McClendon, Hill, and Lucas. Of these, Loeb seems to be the only one mentioned in the literature today.^{17(p.266-68)}

BJ's New Perspectives

As noted in the first section of this paper, BJ Palmer's research in the clinic during his 16 years of study changed his definition of the vertebral subluxation, as it was now more explicitly related to energy flow. As quoted above, he wrote,^{17 (p. 209)} "Vertebral subluxation shorts energy flow - vertebral adjustment restores it and restores health." It is important to note, Palmer also expands upon Stephenson's 33 principles (principles that are still taught today as a foundation of the philosophy and theory of chiropractic). In Volume 25, Palmer offers 75 principles, mostly to update his readers of his latest findings. This 'update' comes from chapter two in the text, which was a re-publication of Palmer's 1931 Lyceum speech. Thus, it predates the research clinic, and is more reflective of his early NCM research.^{17(p.492-516)}

Finally, it is also in this period, when BJ Palmer (Fig 10) has a new burst of creativity, writing over 16 books in 10 years, and at least 2 major spiritual awakenings. Sometime between 1938 and 1949 according to this author's research,¹⁹ Palmer stopped using the pronoun "I" in reference to his self. Instead he began to use "We" to represent his innate and educated minds

Figure 10. BJ Palmer (Photograph used by permission of Palmer College of Chiropractic).



speaking with one voice.¹⁰⁰ In the late 1950s, just before his death, by this author's account,¹⁹ his next spiritual awakening occurred. In this period, he wrote some of his most profoundly spiritual statements. For example, in 1957, he wrote,^{101(p. 9)}

Should that time come when his finite mind could and did KNOW the infinite mind WITHIN, then his external finite mind would cease to be, because it would then be infinite in scope, understanding and application.

It is important to include the transformation of BJ Palmer's consciousness in this context. We noted DD's own development and also the statement of Gary Schwartz¹ above, in regard to understanding the universe in a new way. It is evident that the contemplation and experience of subtle energies has long been a path towards spiritual development. Wilber²⁷ has shown

that we could discuss such a relationship by correlating the verifiable and putative energies with the internal experience of the individual. For centuries, mystics, yogis and sages, acupuncturists and ayurvedic doctors, martial arts masters and healers have taught that a contemplation of the energies had profound effects on states and stages of consciousness. The anatomy of subtle energies in and around the body, such as meridians and auras, was observed long before modern technology. These observations were made using the uniquely human faculties.^{102,103} And most importantly, the experience and contemplation of these energies is considered by many spiritual traditions to be the fastest path to spiritual development. It is possible that their observations and experiences with the body's energies inspired both Palmers in their own personal development as well as the development of chiropractic.

CONCLUSION

Philosophy Born of Theory and Experience

This final point helps link philosophy and theory. It also adds new depth to possible research agendas. The contemplation of subtle energies has long been attributed to profound states of consciousness, often associated with expanded awareness and models of a seamless and interconnected universe. Philosophy in chiropractic may have been formed from such contemplation. Moore¹⁵ described how chiropractic grew from the harmonialist tradition of 19th century America. This historical approach provides links to the traditions mentioned and indirectly to the more contemplative practices of yoga, martial arts, and meditation. It also links the research and philosophy of chiropractic to a long history

of subtle energies research going back to Reichenbach and Mesmer and even further back to the practices of the alchemists of the middle ages. The main difference of course, is the epoch. Both Palmers attempted to integrate experience and science, spirit and matter. Chiropractic was an attempt to advance the traditions of the past and the mechanistic scientific worldview. By focusing a re-interpretation of chiropractic around energy medicine and subtle energies, this attempt is closer to being fulfilled.

By understanding the connection between subtle energies, consciousness, and philosophical system building, we may begin to understand the birth of chiropractic's philosophical theories in new light. The Palmers' writings make this evident. DD Palmer wrote,²⁶ "The universe is composed of spirit and matter. All living material is animated by spirit. The process of physical and spiritual growth are so intimately blended that it is difficult to separate one from the other. Our bodies are animated by spirit through molecular vibration; without vital force there would be no action guided by intelligence."

Further, BJ Palmer wrote,^{17(p.57)} "If we asked you whether you "believed" or that there was, or knew there was a force, energy, or intelligence which governed and is governing the Universe, you would admit such...We might differ as to whether to CALL it Nature, The Great Spirit, God, or Jehovah, or some other term."

This approach to contemplating energies and the individual's relationship to the universal spirit goes back to Palmer's *Traveling Library*. From N.C.'s appendix, Fahstock wrote,^{72,(p. 40)}

Let the aspirations of your whole
being quietly ascend for conjunction

with the universal spirit of life. Remember the object is not to promote thought, but the reverse. Your first need is to gather of the Astral, Cosmic, and Celestial Aura; to thereby restore and strengthen your inner nature...Drink of this fountain until you are filled with a deep, pulsing life. It will renew you from the innermost...

The important link between inner contemplation and external observation is crucial. Just like doctors of today have learned the critical skills of diagnosis through observation of the gross physical matter, other traditions have emphasized a more subtle observation of matter's energies. For example, if acupuncturists were able to detect meridians thousands of years ago and these meridians are now being verified with technology, is it possible that the human being has a natural affinity to locate and detect these energies? Did DD and BJ Palmer each cultivate such skills and did that inform their theory?

This verifiable insight can be shown to exist in physical reality. The literature is replete with examples that there are indeed levels of energy in the body, connective tissue matrices, and fields within fields organizing the body. And much of the research is being correlated to human health, wellness, and internal states of personal growth.

The research that follows from BJ Palmer's pioneering approach to chiropractic is congruent with the scientific literature available today.^{7,9,83} None of the current papers are informed by the rich history presented in this paper. Making such links will reinvigorate the philosophy, research, and theory of chiropractic in regard to overall health, energy, and wellbeing. Hopefully this wider view of chiropractic's

lineage and shared history with energy medicine will also open up new research avenues and inspire a new generation of chiropractors, researchers, and philosophers.

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