

Philosophy of chiropractic: lessons from the past – guidance for the future¹

Joseph Donahue, DC*

In this paper, the argument will be made that present day "chiropractic philosophy" must be rejected as a professional obstacle. It is an unscientific relic of D.D. Palmer's personal religious beliefs. A philosophy of chiropractic can only emerge from the application of philosophy of science to our scientific and clinical practices. This new philosophy should incorporate the general healing perspective of the ancient Coan tradition which will be described. This perspective can be made distinctively chiropractic by a synthesis with D.D. Palmer's principle of Tone. Discussion will focus on how our philosophy can be developed to guide us into the 21st century.
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KEY WORDS: chiropractic, chiropractic philosophy, philosophy of chiropractic, manipulation.

Cette étude affirme que la "philosophie de la chiropratique" actuelle fait obstacle à la profession et doit être rejetée. Il s'agit ici d'une relique non scientifique des croyances religieuses personnelles de D.D. Palmer. Nous ne parviendrons à une philosophie de la chiropratique qu'en appliquant la philosophie de la science à nos pratiques scientifiques et cliniques. Cette philosophie nouvelle devrait inclure la perspective générale de guérison de l'ancienne tradition Coan, décrite dans l'étude. La perspective en question s'appliquera directement à la chiropratique, en faisant la synthèse avec le principe de la tonicité D.D. Palmer. La discussion se concentre sur la manière de parfaire notre philosophie, au seuil de XXI^e siècle.
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The primary purpose of this paper is to understand the difference between "Philosophy of Chiropractic" and "Chiropractic Philosophy." The important difference is that "Chiropractic Philosophy" erroneously stresses philosophy as a doctrine, while Philosophy of Chiropractic accurately stresses it as an activity.

The shortcomings of chiropractic, the mistakes and infighting endemic to its members, indicate a misunderstanding of the role of philosophy. For too long, chiropractors have tried to accomplish the wrong things with philosophy. Commonly, it has been used as a political club to clout other chiropractors. It is the chosen field of all types of chiropractic demagogues. Yet, despite these mistakes, chiropractors desperately need the leadership only a proper philosophy can deliver.

Consider the legacy of philosophy, chiropractic style. "Philosophy" has divided our profession into two warring camps and has ostracized us from the main stream of the scientific community. It has provided fodder for political medicine to deride us. A clouded philosophy has hampered us professional-

ly to the extent that only a small percent of consumers recognize, or use, our services.

What better proof can you have of this problem than our scientific stagnation. For example, one cannot name one unique, well-accepted, scientific achievement of chiropractic. Our meager scientific output should make it obvious, profession-wide, that we have been on the wrong philosophical track.

"Chiropractic philosophy"

We must all certainly be aware of what passes for philosophy in this profession. Perhaps you, as I, have sat at some philosophy seminar, embarrassed by the shameful antics and statements of the speaker. If our seminars and literature are any indication, most chiropractors cannot tell the difference between philosophy, motivation and nonsense. The typical "philosophy" session or seminar follows a predictable "peptalk" formula.¹ The approach is always anti-intellectual. The rational mind is berated as impotent, if not dangerous. The advice is to get in touch with that "tiny man" inside your head. How? Somehow. It's claimed you are dispirited and burnt out because your rational mind plays games on you. That's why you need the seminar. To get the crowd going, an emotional issue is raised. Chiropractors are easily inflamed about the "evils" of medi-

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* Private practice, 930½ 16th Street, Peru, Illinois 6135, USA

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cine, someone stealing chiropractic, or "mixers" bringing drugs into the profession. You are reassured of chiropractic's power with plenty of slogans and childish "flagwaving." "Chiropractic works and that's what counts." "The power that made the body heals the body." "Have faith confidence and belief in your services." If slogans aren't enough, a few undocumented miracle cases are thrown in. "Patient John Doe, given up for dead, was saved through adjustments."

Not surprisingly, these ingredients are intended only to arouse emotions. Key words such as "principles," "laws" or "science" are used in vague or equivocal ways. Definitions are studiously avoided. Logical fallacies are treated as high art. These talks are usually delivered in a loud, rapid-fire way that would make any televangelist proud. The message is clear, feel — don't think.² The purpose is to disengage your rational mind and critical faculties and give you a cheap emotional "turn on." Not surprisingly, these "philosophers" get premium prices for their seminars, books and tapes.

Consider what a loss this wasted money is to our profession. These chiropractic philosophers are able to pack an auditorium at perhaps \$250 per person and then sell thousands of dollars of extras. They make hundreds of thousands off the profession while chiropractic researchers must go hat in hand to beg for a few measly dollars from whomever will listen. Meanwhile our college instructors must depend on a practice on the side just to feed their families.

Such "philosophy" can only exist because there is an intellectual vacuum. People have an ingrained desire to know about themselves and the value of their work. This drivel serves as a sorry substitute. Can any of us imagine a professor of law getting up on a podium and speaking similar nonsense and calling it philosophy of law? The worst of this tragedy is that it turns off many of our brightest doctors to the value of philosophy; while giving the "believers" a false sense of professional security.

"Chiropractic philosophy" has, as philosopher William James (1842–1910) used to say, "no cash value." It blocks the normal functions of philosophy such as self-criticism. It casually ignores hundreds of years of progress in philosophy of science. This philosophical doctrine has no rational justification for many of its claims, for example Innate Intelligence.³ Certainly, it is easier to serve up empty slogans, than explain ideas. For some chiropractors, it appears more enjoyable to reach an evangelical fever than consider serious questions with difficult answers.

Whatever justification we have given for "chiropractic philosophy" in the past, it is no longer acceptable. Whether the old dogma was seen as a rallying point against political medicine, is now only subject for historical analysis. If it was once a way of differentiating ourselves professionally, it is no longer permissible. Scientific progress, and perhaps professional existence, demands we stop our self-deceptions.

If we are ever to be a learned profession, we must drastically change the way we see and use philosophy. Proper philosophy

demands you curb emotions, not exaggerate them. Philosophy is, *sui generis*, about thinking in the most precise manner possible. Chiropractors must honestly face the error of their ways, and accept the difficult tasks of doing philosophy properly. While we can't expect pat answers from philosophical reasoning, we will find the means to create solutions to our many problems. However, a sound philosophy can provide the unity and the practical tools to develop chiropractic science.

How important is philosophy?

It is no accident that humans are defined as "the rational animal." They cannot, like an animal, depend on instinct, but must discover knowledge. Philosophy is the discipline providing the framework for knowledge acquisition. Therefore, philosophy is not an arbitrary undertaking. It is one of the most vital factors that affects humans and their professions. Because this intellectual activity helps develop knowledge and mold the mind, it thereby controls our destiny.

Few chiropractors, it seems, realize that they have no choice of whether or not to have a philosophy. The choices we have are about the kind of philosophy we wish to have. The first choice is for our philosophy to be consciously chosen, logically constructed, scientifically based and thereby useful. This position requires ceaseless intellectual work, but will ultimately bear great professional benefits. I believe that this is the correct choice.

Another is to deny the need for philosophy. A "philosophy" still forms but it is unrecognized as such. It consists of vague opinions and the unexamined ideas of others, mixed with a few scientific facts, leaving a philosophy which is unconscious, often contradictory and therefore impotent.⁴ This is what we call "mixer" philosophy.

A third choice is to accept chiropractic philosophy in its present form. That philosophy, while conscious, contradicts the underlying beliefs of science. Being metaphysically divided on the best source of knowledge, it must choose between mystical intuition from innate intelligence or the exercising of man's rational faculty. Need I remind you how B.J. and his followers decided on this question? Surely, you have not forgotten what they had to say about "educated" minds. This is the sorry legacy "straight" philosophy hands us.

The last two choices do not present much of a future for our profession. "Straight" philosophy is my present concern because "mixer" philosophy is largely an empty backlash against it.

In the introduction, the advice was given that the reader at least grasp the notion that philosophy is not a body of doctrine but rather an intellectual activity. Certainly, what laymen usually mean by the word philosophy is a doctrine of "strongly held belief." They limit philosophy to John Doe's philosophy or their own religious philosophy. Chiropractors typically use the word philosophy in this "doctrinal" way. Unfortunately, this is very different from how philosophy is thought of and used to advantage in the academic/scientific world.

In the academic world, philosophy performs crucial intellec-

tual functions, such as criticism and analysis.⁵ We will explore the specific nature of that activity later. For now, let's understand that for a science, philosophy contributes the very important service of questioning everything. No assumption, concept or theory is taken for granted. Because humans are all too error prone, constant scrutiny is necessary. Philosopher Bertrand Russell said:

"Philosophy may claim justly that it diminishes the risk of error, and that in some cases it renders the risk so small as to be practically negligible."⁶

Chiropractors are in great need of learning about this benefit of philosophy. Surely, there has never in history been a professional group who talked so much about philosophy and got so little benefit from such talk.

Chiropractors, having accepted the notion that philosophy is doctrine, take one of the two familiar positions. "Straights" see the profession as a "philosophical doctrine" with a science. "Mixers" contend chiropractic is a science not requiring philosophy. Before exploring the source of this mistake, a basic philosophical fact must be established. This significant fact concerns the three mutually exclusive perspectives that all philosophies take to explain life and the universe. These three perspectives emphasize either 1) God, 2) man, or 3) nature.⁷ Science takes the third perspective, nature. This philosophy is known variously as naturalism, materialism or positivism.⁸

Today this naturalistic perspective is so ingrained in scientific method, that it is largely ignored by practicing scientists. Its meaning, if put into common sense terms, would be that the universe is knowable and follows natural and predictable laws.⁹ Its root metaphor is that the world can be understood in terms of natural objects without recourse to immaterial explanations such as God or Innate.¹⁰

If we accept that chiropractic is a science, we must conclude that certain things must follow philosophically. Unfortunately, such a conclusion has escaped the bulk of the chiropractic community.

What's the source of confusion?

Certainly, it is paramount to identify the source of all the confusion. D.D. Palmer declared that chiropractic was a "philosophical science."¹¹ He further stated that he originated the "theosophical philosophy" behind chiropractic science.¹² Suffice it to say that D.D. Palmer tried to wed his personal theistic philosophy with science. Obviously, Dr. Palmer ignored the fact that science has a "naturalistic" philosophical perspective.

Perpetuating and expanding upon this confusion was D.D.'s son, B.J. Palmer. B.J. Palmer constantly hammered home the theme that "there are two theories of life . . . the materialistic and spiritualistic."¹³ Like his father, he claimed chiropractic consisted of a science guided by a spiritualistic philosophy. B.J.'s teachings created a gullible audience of chiropractors with the impression that scientists were not cognizant of, or

deliberately ignored, these two "theories" of life. His works give the impression that science sprang up suddenly, as if in some philosophical vacuum.

Unfortunately, for the Palmers and chiropractic in general, this is all nonsense. Science is more than a method that needs a "special" philosophy to guide it. All sciences use philosophy of science to guide their development and to critically examine specific issues. In fact, the first scientists referred to themselves as natural philosophers.¹⁴

Despite B.J.'s assertions, the question of the "true" nature of life has been debated for centuries in the slowly evolving divergence of "natural" philosophy from theistic philosophy. It was in Europe in the 16th and 17th centuries that a "truce" was reached, whereby the church claimed the spiritual world, and science, the natural. Natural philosophers learned that accumulating scientific knowledge required limiting their efforts to observable and measurable data gleaned from their senses. As a result, in the 1800's, science purged itself of appeals to vital spirits and invisible ethers to "explain" the unknown. Unfortunately, our founder was swimming against this philosophic current when he introduced Innate Philosophy.

Dr. Palmer's persuasion won the day in chiropractic thinking. And, unfortunately, there has never been a chiropractic philosopher . . . a chiropractic Aristotle to counter his influence. No one has yet produced a complete and accurate perspective of a definitive Philosophy of Chiropractic.¹⁵

Other reasons, beyond just the Palmers, also account for the state of affairs in our philosophy. Chiropractic lacks the luxury of intellectuals devoted exclusively to the discipline of philosophy. Our self-supporting institutions lack the governmental funding which medical institutions enjoy. Couple this with the cost and professional isolation created by the damaging opposition of political medicine and it's easy to appreciate there are extenuating circumstances behind our philosophic shortcomings.¹⁶ Consequently, chiropractic colleges can scarcely afford such "extras" as philosophy.

Philosophy, therefore, falls on the shoulders of a few overworked and under-paid instructors and administrators. This allows charismatic speakers to profit from poor quality, and often, anti-intellectual "philosophy." Such "philosophy" continues to be a primary source of internal divisiveness and external ridicule, while adding some of the sorriest chapters to chiropractic history.^{17,18,19}

What is "philosophy of science?"

If chiropractic is truly a science, certain things follow philosophically. I have described how all science utilizes a nature centered perspective for its philosophy. From this philosophic perspective derives a "purpose" for philosophizing. This purpose has been described as "an attempt to step back from science and look at it as a whole."²⁰ In that way, philosophy helps scientists better understand the nature of the scientific enterprise.

Philosophy of science can also be viewed as complementary

activity to science. While science is largely a physical activity involving apparatus, observations and record keeping; the philosophy of science is largely an intellectual activity of a verbal, analytic, and reflective nature.²¹

Misunderstanding philosophy's purpose is deadly to the growth and development of any science, since the philosophy of science orients a profession. Lacking such guidance, a profession certainly cannot develop and grow in a consistent, coherent manner.

Unfortunately, chiropractors still remain ignorant of this scientific, philosophic tradition. Chiropractic history is a grim and constant reminder of the danger in assuming that someone, even with the genius of a D.D. Palmer, couldn't be mistaken.

Palmer and philosophy

How did Palmer go astray philosophically? D.D. Palmer was very much interested in the liberal religious ideas of his time. He was greatly influenced by peculiar religious notions about what philosophy was or could accomplish. The biggest influences were two nineteenth century religious movements, spiritualism and theosophy.

Spiritualism has roots in antiquity and is nondenominational. Although practiced today, in Palmer's time it was something of a phenomena in North America and Europe. It can be briefly described as a belief in the ability for the living to communicate with departed spirits through the use of a medium or trance state.²²

Palmer shared a number of beliefs with spiritualists. Among these was the belief . . . "that the phenomena of nature, both physical and spiritual, are the expression of Infinite Intelligence." Or that, "communication with the dead is a so-called fact, scientifically proven."²³ Palmer's writings are laced with these typical spiritualistic beliefs.²⁴

Theosophy was founded in 1875 by spiritualist Helena Blavatsky. Organized as a society, its objectives included . . . "the study of ancient and modern religions, philosophies, and sciences, and the demonstration of such study."²⁵ Theosophy especially influenced Palmer relative to reconciling orthodox religion with the rapid advance of science. Theosophists attempted "to discover hidden spiritual laws, while believing that ultimately both spiritual and natural laws will be discovered to be one."²⁶

Palmer probably became a magnetic healer due to his spiritual investigations. While a "magnetic", questions about the true nature of disease occurred to him. In his patients, he observed the poor results of prior medical treatment.²⁷ A theosophically inspired respect for science, probably led him to study anatomy and physiology in conjunction with the "philosophy" behind various healing systems. Within a few years he came to reject all these healing systems, as but variations of the same centuries old disease model. Fortunately, these factors led to his discovery of chiropractic.²⁸ Unfortunately, they also created a philosophical confusion due to Palmer's limited knowledge of philosophy.

Palmer's philosophical era

To better understand Palmer, let us return to his philosophical era. We've noted Palmer made crucial mistakes about the philosophical perspective and the use of philosophy. However, these errors were pardonable in the early years, stemming as they did, from the limited scientific and philosophical knowledge of the time.

The philosophy of science, although a recognized discipline for about fifty years by 1900, was far from the practical tool we know today. In Palmer's time, the majority of scientists were self taught amateurs, incapable of wrestling with the complexities of both science and philosophy. Several decades later, scientists and philosophers alike were commonly on an university level. By this time, the philosophy of science became a well demarcated, special field of philosophic study.^{29,30}

Unfortunately, chiropractic didn't change with the times. Palmer's misconceptions about the nature and purposes of philosophy were sustained. These misconceptions were institutionalized and ultimately perpetuated many of the problems our profession faces today. Problems such as the inability to agree on a universal definition of chiropractic, or the difficulty in creating a well-defined scope of practice.

To a great extent, the "mixer" and "straight" philosophical groups, result from one unexamined assumption. Both sides generally agree that chiropractic philosophy is the equivalent to the Palmer doctrine of "Innate philosophy".

The main quarrel seems to be whether one accepts or rejects that philosophy. As a consequence, over the years the "mixers" seeing the incongruities between science and the Palmer theistic philosophy, have therefore charged that philosophy has no place in a science.^{31,32,33} The "straight" side has strongly argued that "Palmer philosophy" was necessary and "right". They reasoned, along with the Palmers, that chiropractic was a "philosophical science."

Palmer's grand misconception

Palmer's writings betray his lack of sophistication about philosophy. Certainly, his religious background explains his approach to "chiropractic" philosophy.³⁴ It led him to believe that chiropractic philosophy was a "special" body of knowledge inclusive of, but greater than, the science and art.³⁵ Even more grandiose, Palmer claimed, "it deals with subjective, ethical religion - the science which treats of the existence, character and attributes of God, the All-pervading Universal Intelligence."³⁶ He went so far as to state, "as a philosophy it is the science of all sciences."³⁷

To Palmer, chiropractic was but an earthly extension of his heavenly "metaphysical knowledge". Today, chiropractors can rest content that the study of God is in the capable hands of Theologians and professional philosophers where it ought to be. Perhaps, today "straights" can finally, like the rest of science, take a more modest view of philosophy. And hopefully, "mixers" can finally discover legitimate philosophy.

The misunderstood purpose of philosophy

Dr. Palmer was obviously no great philosopher. But the damage his philosophical beliefs created would have been far less, if things had stopped there. However, he passed on another philosophical blunder as evidenced by his poor grasp of the differing roles philosophy and science play. Palmer claimed chiropractic "philosophy deals with the knowledge of biological phenomena."³⁸ How was philosophy suppose to "deal with" biological knowledge? Palmer believed that philosophy "explains" or "consists of the reasons for" chiropractic science.^{39,40}

Scientific tradition, to the contrary, clearly sees philosophy's central purpose as minimizing scientific error by careful analysis and criticism. It is the science that creates the explanation, not the philosophy. And, science creates "explanation" in a specific manner using standard methods.

But D.D. Palmer saw science as only "systematized knowledge."⁴¹ And for generations, chiropractors have based their scientific knowledge on this Palmerian belief.⁴² Until recently, with a few exceptions, chiropractors have "systemized" a few basic medical science facts to create their theories. This they called science. Unfortunately, as chiropractors are beginning to realize there is no science until a theory undergoes confirmation by clinical testing. At least, if chiropractors hadn't accepted this Palmer view of science, we might have advanced our science better.

Since Palmer's erroneous views of philosophy became entrenched in the profession, is it any wonder why chiropractic has remained a marginal profession for ninety years? Perhaps we chiropractors are finally ready to learn these lessons from the past.

Even if "chiropractic philosophy" is discarded, this does not assure that chiropractors can agree on a substitute philosophy. Do chiropractors share enough philosophical accord to pull together under a united philosophy? I believe the great majority of chiropractors do share enough of the basic beliefs and desires necessary to forge such a unification.

As chiropractors, we generally see our profession as a unique and separate health science, finding it desirable to maintain a health perspective different from the dominant allopathic one. As such, we feel that the profession should remain a primary portal of entry for the health consumer. Yet most are awakening to the need to make our model of health and disease more explicit, logical and scientific.

Given our general agreement on these fundamental beliefs of uniqueness, scientific adherence and the building of a rational model of health, chiropractors have ample accord with which to create a proper philosophy. Like philosophy of medicine, philosophy of chiropractic can be considered a "subsystem," of the philosophy of science.

Philosophy of science

The philosophy of science is an aid to understanding and gaug-

ing the accuracy of the scientific enterprise. But, the distinction between science and philosophy of science is not a sharp one. Largely, it lies in a difference of intent.

If science can be seen as a primary level activity, then philosophy of science is an observation point once removed from science itself. The distinction to be made is between doing science and contemplating how science "ought" to be done.⁴³

The philosophy of science, as a second level activity, uses the concepts, procedures and structures of the various sciences as its subject matter. For instance, it may aid the scientist by analyzing particular concepts he uses. From this, logical fallacies, or equivocations might be identified.

Angeles defined the philosophy of science as . . .

"the study and justification of the reasoning processes used in science and its symbolic structure. The study of how various sciences are interrelated, similar, or different and the degree to which they exemplify a paradigm of scientific methods".⁴⁴

Philosophy of chiropractic is, strictly speaking, the application of the philosophy of science to the problems of chiropractic science and art.

Chiropractic and philosophy of science

Chiropractic like medicine, architecture or electronics is considered an applied science. Naturally, like medicine, chiropractic is closely allied with the Life Sciences. Both professions "apply" the facts developed by the many sciences making up this scientific branch. Sciences such as anatomy and physiology are the bedrock upon which each profession depends to formulate their models of health and disease. Chiropractic and medical researchers also depend on the disciplines of mathematics and logic to develop, analyze and measure their research methods and projects.

Chiropractic has a special need for the careful use of philosophy of science, precisely because it is an applied science. For the pure sciences, such as chemistry or physics, incorporating philosophy of science presents fewer difficulties. Inanimate objects "stand still" better for the researcher. They can be "reduced" to simple physio-chemical processes.

Philosophers in the Life and Social Sciences recognize the different and often more difficult intellectual problems their scientists face because they must deal with living systems. The Life scientist, by comparison to Physical scientists, confronts relative chaos. At a certain point of "reduction", an organism ceases to be an organism. Living systems have many properties not met in inanimate systems. And, the philosophical problems mount exponentially in an applied health science such as chiropractic. Consider the complex problems created by the limitless patient and environmental factors. Each chiropractor is held responsible for the clinical, legal, scientific and ethical implications of his/her decisions. Therefore, an explicit philosophy is very necessary.

No health science can ever be a scientific activity in the sense that chemistry, physics or even biology are. Chiropractic science, for instance, becomes chiropractic practice only when it melds its science and art together for the care of a patient. Each patient and his circumstances are unique requiring an unique approach. Philosophically it is a straightforward matter to investigate the essence of an atom in comparison to deciphering the difficulties, needs and best approach to a sick and distressed human being.

Clearly, philosophy of chiropractic is a scholarly activity, not some home-spun activity that makes anyone's opinion equal to any others. It cannot be dispensed in slogans. Neither can it justify beliefs in terms of "authorities" from the past who, themselves, have not justified their ideas in acceptable philosophic manner.

Today's chiropractor must stand up to the responsibilities and challenges of a scientific discipline and healing art. Far too many chiropractors want philosophy to deliver them a professional "faith". Philosophy of chiropractic cannot and should not pander to these passive minds. It must foster active scientific minds that demand true professionalism.

Philosophy is analysis

Earlier, the point was made that philosophy had one over-all function, to promote criticism. More specifically, philosophy of chiropractic, like all philosophy operates by the principle of critical analysis.⁴⁵

By analysis is meant the examination of the research methods, procedures and assumptive foundations of chiropractic science. These examinations lead, hopefully, to useful criticism. Criticism that yields clarification of concepts, clearer definitions and a better understanding of the principles underlying chiropractic.

Chiropractic has avoided analysis to its own detriment. We have been particularly negligent in analyzing chiropractic's underlying nature. This primary need must focus on what kind of profession we are and what scientific health perspective we champion. Then we can begin to integrate ourselves onto the community of science. Philosophy of chiropractic can then start to provide guidance for future action and for the acquisition of greater knowledge. Scientific research flows best from such a fundamental understanding.

A chiropractic health perspective

The doctrinal approach of Palmer Innate Philosophy did appeal to the very real need for a "chiropractic" health perspective. Even if philosophy is largely an intellectual tool, that tool is anchored in some perspective. The perspective adopted by chiropractic must reflect our best attempt to apply scientific methods to questions about human health.

We have already established that any such perspective is limited by the specific metaphysical constraints of science. This perspective must assume a lawful universe knowable through sense data. But, just as surely that perspective is decidedly not

"medical" in the usual sense of the word. What is needed is an unique perspective that serves as an intellectual guide (i.e. a heuristic device). Chiropractors have struggled to articulate such a perspective. Unfortunately, that "uniqueness" is usually too rigidly bound to some reference to allopathic medicine. For instance, some see our perspective as opposite of medicine, others as complementary.⁴⁶

A somewhat different approach is the idea of a perspective shift away from sickness to wellness care.⁴⁷ This idea is very useful because it flows well with one of the two fundamental perspectives about patient care that have been with us since ancient times. Generally speaking, if every philosopher is either an Aristotelian or a Platonist, then in health care every doctor is either a Coan or a Cnidian. Permit me to explain.

Cos and Cnidus were ancient cities along the coast of Asia Minor that championed two opposing schools of healing. At Cos, influenced by Hippocrates, the "whole man" in health (wellness) and disease was studied. In rival Cnidus, the physicians concentrated on the parts or organs and viewed disease in terms of type. For Coans, disease was a disruption of the functional unity of the body. Each case was considered on its own merits. Disease was seen as a natural process resulting from climate, diet, environment or the patient's way of life. Therapeutics were directed toward re-establishing the body's functional unity by assisting the *Vis Medicatrix Naturae*. Cnidians, on the other hand, believed diseases to be entities situated in organs or parts. Such diseases were classifiable by identifying their effects in terms of special characters or symptoms. Accordingly, treatment was directed against the invading disease rather than in consideration of the sick person.^{48,49}

Modern day Coans

Chiropractors, I submit, are the modern day version of the Coans. And, although from time to time we chiropractors allude to this ancient tradition, we don't exploit it fully in our philosophy of health.⁵⁰

Chiropractors should awaken to how the Coan perspective gives us many advantages. It is an honorable position that is recognized by the academic/scientific community. That tradition also leaves much room for healthy scientific disagreement among chiropractors. And, it has the potential for providing a philosophical perspective well into the future. Furthermore, D.D. Palmer actually utilized a Coan-like perspective in founding chiropractic.

If we discard Dr. Palmer's mystical Innate philosophy, we are still left with a usable "Coan" perspective. After all, D.D. said "disease is too much or not enough function." Dr. Palmer reminded us that disease was not some entity that attacked the body. He also told us that he discovered chiropractic by questioning how two people similarly employed, eating similar food should be so dissimilar in health matters. This is D.D.'s "other" health philosophy, often lost in the confusion of Innate philosophy.

To be sure, chiropractors must decide how they are to develop

their profession within a Coan-like perspective. There are no hard and fast walls dividing a Coan from a Cnidian perspective. Neither can we claim one perspective is right and the other wrong. There is no need to disprove medicine in order to prove chiropractic. Each profession offers a valuable perspective in its own right. Reality, as philosophers have told us for centuries, is forever closed to the human mind. That is why perspectives are needed as heuristic devices to aid our thinking. Certainly, no healing profession should believe they have "the answer." But, certain scientific perspectives, such as the Coan and Cnidian in the healing arts, have passed the test of time and are therefore intellectually attractive.

Utilizing a Coan perspective can still lead our profession in any of several directions. As Wardwell has noted, chiropractic might

- 1 become a medical specialty, such as dentistry;
- 2 practice under medical prescription like Physical Therapists;
- 3 merge with medicine;
- 4 develop a parallel but separate profession as did osteopathy; or
- 5 the unlikely, eventually disappear.⁵¹

To be sure, of the five possibilities, only developing into a medical specialty or a parallel profession would interest most of us. But, chiropractors must choose their own course, otherwise outside forces will determine their fate. The general consensus seems to favor remaining a separate and parallel profession to medicine. Undoubtedly, the Coan tradition runs too deeply in our professional psyche for many of us to opt for a Cnidian existence as a medical specialty.

Still, we are left to decide how to guide ourselves into the twenty-first century with this very broad Coan perspective. How should we decide on issues of scope of practice? Do we yield to the Cnidian elements among us and pursue limited pharmaceutical rights, such as dentists or optometrists? Do we side with the conservative element and limit the types or kinds of conditions we treat to the neuro-musculo-skeletal systems? Should we follow the fearless liberal Coans among us who take the patient, any patient, and try to re-establish his physical harmony? As we puzzle over these never ending questions, we wonder how philosophy can help provide direction? Can we turn to the authority of chiropractic pioneers? Or, does science itself have an authoritative way of resolving such questions?

A "chiropractic" Coan perspective

To determine a "chiropractic" Coan-like perspective requires that we answer the question, "What is Chiropractic?" Chiropractors tend to have quick and ready answers for that question. Unfortunately, those answers tend only to reflect the college graduated from, organizations belonged to, or influences of colleagues. Let's ignore such "answers" and instead pursue an answer in a different way. Consider not how you *would* answer, but rather how you *should* answer such a question as, "What is chiropractic?" To solve this meddlesome problem in this way requires that we decide what constitutes proof or authority.

A good place to begin is to consider how "straights" and "mixers" try to justify their beliefs about this question. Certainly, the "straights" appear to have taken the moral high ground. "Mixers" largely ignore the question of justifying their belief about what chiropractic is. If questioned, a "mixer" might mumble something about practicing within the "scope" of his/her legal jurisdiction. If questioned what logical, philosophical or scientific "authority" any such law appeals to, they would likely have to concede it only reflects the political health climate in their locale. If pushed to justify such a law, our "mixer" respondent would likely claim that his/her "scope" reflects the needs of the patient. Unfortunately, we have gained no ground. The "needs" of patients is a personal and subjective assessment carrying no cognitive satisfaction. At this point, most "mixers" have run out of justifications.

"Straights," particularly in the United States, commonly justify their position with a similar legal ploy. They claim courts continuously "adjudicate and confine" chiropractic to a narrow spinal scope.⁵² Courts, of course, only enforce the law, legislatures write it. At bottom, "straights" must agree that legislatures have written practice acts in terms of political influences. Legislatures could not have acted in regard to the type of justification we seek here.

At this point a "straight", if questioned further, would likely appeal to the word of D.D. Palmer himself. They follow his belief that he, as the founder, had the "right" to say what chiropractic is.⁵³ And, Dr. Palmer told us time and again that we were subluxation fixers . . . period. Now consider for a moment if you feel D.D. Palmer had such a "right."

I can see nothing persuasive about such an argument. When D.D. Palmer called his discovery a science – and began to teach it to others – he placed it into the public domain of science. He, nor his "straight" descendants, "own" the science any more than Hippocrates owned medicine. If Palmer had chosen to pass it on as a trade or craft perhaps he could claim the right to define chiropractic's parameters. But since he didn't, no one has the "right" to say what chiropractic is.

Having rejected such arguments, how do we answer our question? Recall again our assumption, that "if chiropractic is a science then certain things follow philosophically." What follows is that we must seek the justification for our answer by looking to science as a discipline. We must consider how the discipline of science delineates one science from another.

Relative to "what chiropractic is" looms one significant philosophical breakthrough that occurred in the 1970's. At that time, Canadian chiropractors were the first to heed Dr. L.K. Griffin's advice to define our science similarly to other sciences. That is, chiropractic should be defined in terms of an "area of study."^{54,55}

Previous to this, our place (and also our duties) within the community of sciences was obscured by our definitions. For instance, we often defined chiropractic in terms of procedures, such as vertebral adjustments or the subluxation theory. But, a science is not its theories, rather it's what generates and investi-

gates theories. Medicine, for instance, is not defined in terms of Germ Theory.

Dr. Griffin's observations eliminated a great deal of confusion which helped foster the beginning of modern Philosophy of Chiropractic.

So the first step in determining, "What is chiropractic?" has at last been accomplished. We chiropractors have followed correct lexicography and defined ourselves in terms of a science. But definitions are one thing, fully answering our question is another. The chiropractic definitions can only describe an "area of study." It cannot enlighten us as to how best to study that "area."

What adds to the profession's confusion in pursuing a scientific course is the common belief that the chiropractic subluxation is a "philosophical principle."^{56,57,58} Certainly, the subluxation was central to the founding of chiropractic but it is after all a scientific theory and not an underlying principle. Chiropractors would have been helped more if they had thought to ask what philosophical perspective underlies the concept of subluxation. And, D.D. Palmer provided just such an answer.

Palmer claimed the principle of Tone to be that which he based all of chiropractic on. He said:

"The science and philosophy of Chiropractic is built on tone. The source of every Chiropractic principle, whether physiological or pathological, is founded upon tone. That one word means much to a Chiropractor who desires to comprehend the basis of Chiropractic in its scientific or philosophical phase.

Tone is that state or condition of a body, or any of its organs or parts, in which the organic or animal functions are performed with due vigor.

The tone or tension of muscles and organs depends upon the tonicity of the nervous system.

Tone, in biology, is the normal tension or firmness of nerves, muscles or organs, the renitent, elastic force acting against an impulse. Any deviation from normal tone, that of being too tense or too slack, causes a condition of renitence, too much elastic force, too great resistance, a condition expressed in function as disease."⁵⁹

I will argue that the principle of tone can be a useful aid to exploring our scientific "area of study." Palmer's principle of tone can give a uniqueness to the previously mentioned Coan-like perspective. But the question that should occur to a thinking person is, "What disturbs or disrupts tone?" Dr. Palmer claimed to have answered that question for all time when he discovered the chiropractic subluxation. Accepting Palmer's claim, "straights" never understood how subluxation should be intellectually handled. They treat it with such reverence that they consider it professional heresy for a chiropractor to critically analyse this theory. When a theory is treated as above criticism or falsification, then science is replaced by dogma. Physics did not stop with Newton's theories.

A "tonal" perspective

Theories or hypotheses are the joint product of a scientific perspective applied to the basic science, such as anatomy or physiology. The vertebral subluxation resulted from D.D. Palmer's "tonal" perspective applied to those basic sciences. What is important is that there is no good reason that other theories or hypotheses, based upon tone and the basic sciences, cannot be generated. The chiropractic "area of study" should be a rich source of new hypotheses some of which may even challenge the notion of the chiropractic subluxation. We chiropractors should be eager to let our theories stand on their own merit.

The concept of Tone is a good choice to help us study our science for a variety of reasons. Certainly, a "Coan" approach is overly broad and intimates at that tired, over-used term "holistic" medicine. Tone besides being a "traditional" concept, has a uniquely chiropractic appeal. In the term, tone, a chiropractor senses a "physicalness" that he/she observes and palpates in his/her patients daily. Tone lends a "physical reality" to the Coan tradition that might otherwise be elusive and "airy." D.D. Palmer assessed his patient's "tone" in terms of their symptoms and clinical signs (especially respiration, heart rate and temperature). Surely, chiropractors can find new and better ways to assess "tone." Undoubtedly, researchers can discover exacting ways to measure and quantify the "tone" of body parts or systems.

Our philosophical work in regard to issues, such as research or scope of practice, will be much easier if we bear in mind the three perspectives discussed so far. At our very core is the naturalistic perspective shared with all science. We narrowed this perspective to the field of health in terms of a Coan perspective. We then distilled chiropractic's "tonal" perspective from the wider Coan tradition. This "tonal" perspective can provide the metaphysical nucleus around which philosophy of science can congeal into philosophy of chiropractic.

Three areas of philosophy

Philosophy of Chiropractic can be studied relative to three main branches common to all philosophy. These three branches are: 1) metaphysics, 2) epistemology, and 3) ethics. They constitute three basic philosophic themes around which problems cluster. The following is a brief introduction to each branch.

Metaphysics is that branch that studies the basic concepts (e.g. disease) and underlying assumptions (e.g. disease is a process not an entity) with which we think. Although, the basic concepts and assumptions are not themselves empirically testable, they can, and should, be rationally examined.⁶⁰ Proper examination helps a profession avoid unwarranted, hidden or inexplicit assumptions (e.g. chiropractic is a "philosophical" science). Metaphysical study also helps us clarify concepts (e.g. subluxation's evolution to a five component complex). Further, it can allow us to better choose from among competing concepts (e.g. subluxation versus somatic dysfunction). At a broader level, metaphysical thinking allows us, for example, to estimate

the best (e.g. Coan) scientific perspective that chiropractic can assume at this time. Certainly, this brief description can only hint at the importance of metaphysical study to our philosophers, researchers and practitioners.

Epistemology is the philosophical branch concerned with man's means of acquiring and verifying knowledge. It studies, for instance, how hypotheses should be generated or constructed. The main epistemological vehicle for any science is known as "the scientific method." Naturally, metaphysics and epistemology are intimately related and form the essence of philosophy of chiropractic.

Ethics, the third branch, gives a human or profession a moral code, a code for right action. A chiropractor needs rational guidelines to provide the most humane patient care possible. Our ethics must be rationally tied to the basic beliefs and knowledge inherent in chiropractic. These ethics must be unique and useful to chiropractors, not a second hand copy of medicine or a patch-work moral code. For instance, it should answer ethical questions about hospital privileges, scope of practice, and advertising, all the while depending upon metaphysics and epistemology for its meaning.

There is a lot of talk these days about professional unity. But unity based on no more than a handshake will not last long. There must be a synthesis . . . a reconciliation in terms of shared core values and ideas. We chiropractors must rally around a philosophy of chiropractic, where we accept the same basic metaphysics, epistemology and ethics.

We can benefit from proper utilization of philosophy in tangible ways. Obviously, philosophy offers us an inexpensive way to streamline our thinking. Its analysis can purge our science of the illogical, the irrelevant and the quasi-scientific. Philosophy will save us countless research dollars by helping us to think clearly before we act. This "purge" will create better individual disciplines of our science and art. Ultimately, better philosophy translates into better patient care.

Philosophy and research

Chiropractors are becoming increasingly aware of the need for research and standards of care. They also are beginning to fathom the need for publication in peer reviewed journals. Among other things, this insures higher quality work by professional scrutiny. Further, such journals allow for better indexing allowing anyone interested the opportunity to make use of the work.

What is little appreciated here is the need for philosophical guidance. There is a prevalent attitude that research is the basic need upon which the rest of our professional concerns eventually depend. Many believe research can release the "trapped" facts about the nature of disease. Then we can use these "facts" to reveal the "truths" and "laws" of health. Unfortunately, a pile of "facts" leads us no nearer to being a unique, specific system of care – a profession.

Science is not a neutral enterprise.⁶¹ Researchers cannot

impartially harness the scientific method to reveal "reality." Research is always "tainted" from both a professional and a personal side. All researchers exist within a professional milieu that provides some idea of what their profession is, what are suitable research projects, and how best to approach them. That milieu may be clear or it may be ambiguous.

Researchers are people. They have all the strengths and weaknesses of any group. Their research flows as much from their personality as from their intellect. And, they work from hunches and intuition as much as any group involved in creative work. Further, they must obtain funds from sources who have their own ideas and prejudices about proper research. And while researchers chip away at the smaller picture of professional reality, who is to watch out for the big picture?

Consider one likely scenario if we allow our professional identity to be formed strictly by research. What happens as we move beyond reliability/validity studies and get down to "cases?" How will researchers likely select "cases" to study? The obvious temptation will be to use medical diagnoses and classification to evaluate chiropractic's effectiveness versus standard medical care. Certainly, success for our therapy over medicine will be professionally advantageous in dealing with such things as insurance reimbursement. But, what are the long-term consequences of research of this nature?

It would seem that too much reliance on medical disease classification has pitfalls. Where do we draw the line? Undoubtedly, if researchers rely on medical diagnosis that will be reflected back into our college curriculums, continuing education and standards of care. With this "medicalization" of our profession, what becomes of our "tonal" perspective? How quickly will we slip from a Coan to Cnidian approach to disease? Wouldn't research in such a direction lose the unique individual patient to the general category? If chiropractic is truly different in kind from medicine, how can we rely on their system of disease classification? It would appear that such an approach would leave chiropractic in some sort of metaphysical limbo, like naturopathy. The nature of disease would cease to be the crucial metaphysical issue it has traditionally been to chiropractors. The issue would shift from a difference in kind (relative to the nature of disease) to one of simply the degree of invasiveness of the treatment.

Another likely professional scenario is for research to follow development along lines similar to present day chiropractic techniques. Such research could study existing techniques, attempt to combine old ones, or even create new ones. The philosophical impetus would continue to come, as at present, from individual colleges and trade organizations. The scientific result, although better than present, would be the continuation of professional discord. We would retain the same difficulties in communication. Each group would speak its own professional language and often use the same words in very different ways. Chiropractic would remain, as today, a loose confederation of shifting ideological bands. The only guiding force would be the whim of the moment.

Philosophy and the profession

There is another possibility. We can seek, with the help of chiropractic philosophers, to steer a clear professional course. Philosophers can help the whole profession grasp the metaphysical nature of chiropractic. This of course begins in a "tonal" perspective but goes hand in hand with an understanding of disease. Our philosophers must tell us anew, "What is disease?" To date, chiropractors have generally agreed with D.D. Palmer's "tonal" view that "disease is too much or not enough function." We have acknowledged that disease is created by structural abnormality (e.g. subluxation). But what does the researcher do with those limited beliefs?

How is the researcher to classify patients if not in terms of medical disease entities? Chiropractic philosophers, working with researchers, must form some sort of clearly described categorizations of patients.⁶² While it may be acceptable in some cases to use categories such as low back pain, other types of categories must be formed. Surely, we must desire to find descriptive categories for wellness/maintenance care. What will these categorizations be like? An example is S.O.T.'s system of three categories of patients. Such a system is applicable whether a patient has symptoms or not and has the unique attribute of potentially predicting what will happen, physically, to a patient if left uncorrected. Understand, I am not specifically endorsing S.O.T., I know little about it myself. I just want to stress how it has its own particular approach to disease classification that might serve as a model.

The profession can only develop as a result of an interplay between philosophers, researchers and practitioners. But, the most basic need is for philosophers to create a clearly defined professional perspective within which researchers can function. And while the day to day activity of philosophers is analysis, they also are responsible for helping create the "big picture." Consider how often philosophers have had a lasting and powerful influence on mankind. Whether in art, economics, medicine, law, politics, religion, or social reform, philosophers and philosophy often led the way. In medicine, for example, consideration focuses on a Hippocrates, Virchow or Sydenham. While time and knowledge erase specific ideas these philosophers espoused, they do not erase the force of the general (i.e. philosophical) idea behind their thoughts. While we chiropractors do not use the ancient "Coan" treatments of Hippocrates, we do continue to believe in the "philosophy" behind them. Let's move on now to how chiropractic can develop philosophy of chiropractic.

Philosophical development requires understanding the obstacles to that development. Realistically, initially teaching students about proper philosophy is the best approach. But, awareness of the uses and benefits of proper philosophy must be attained throughout the profession. Certainly, the status-quo will be hard to change. Fortunately, you can be heartened that a small percentage of dedicated people can change things in a profession. Look how the Virchow's and Pasteur's changed the face of medicine.

Proposals for future change

As usual, our colleges must be at the forefront of change. As they implement philosophical change, they should aim to make future practitioners better consumers of chiropractic science and art. For instance, teaching students how adjusting techniques are most useful when the practitioners realize techniques are only "viewing screens" of reality, not reality itself. Further, the colleges must ensure our future researchers acquire a well-rounded understanding of philosophy to better grasp the methodology of scientific research. Then these researchers can also bring an uniquely chiropractic perspective to their work. Our colleges must also intellectually nourish our future chiropractic philosophers to ensure future guidance for the profession.

At minimum, chiropractic colleges should require a prerequisite course in general philosophy to acquaint students with philosophical thought. Better yet, would be the inclusion of a course in philosophy of science.

Colleges must certainly find ways to develop better courses in philosophy of chiropractic. This has to begin by giving instructors better tools to work with. A start could be to have Philosophy Departments utilize the better indexing and retrieval capabilities of modern chiropractic libraries. Chiropractic librarians, working with Philosophy Departments, can assemble selected reading lists for philosophical topics. Such a list can become the core material for teaching Philosophy of Chiropractic. Presently, individual instructors lack the time to ferret out the useful articles, let alone pursue philosophical topics of interest. Eventually textbooks of "selected readings", arranged according to areas, such as ethics, could be created. Other texts could be developed around important topics like "The history of chiropractic philosophy" or "The philosophical basis of chiropractic." In time, with a philosophical core to work with, individual authors can begin to fill much of the need for instructional texts.

It was recently proposed to create an annual philosophy conference.⁶³ Such a conference, requiring scholarly refereed papers, would go a long way toward creating a contemporary body of philosophical work for study and further development.

If the Philosophy Departments of all our colleges participated and authored only one paper a year, this would profoundly change how philosophy is taught and used. Hopefully, professional contact between our college's philosophy departments would break down political tensions among colleges. Certainly, such conferences would encourage our institutions to define their philosophical positions and eliminate stagnant, dead thought.

Annual conferences would force educators out of the safety of the classroom and make them substantiate their ideas before their peers. It is one thing to pontificate before uninformed students and another to survive peer review. At present, ongoing publication by any of our philosophy instructors is rare. In the future, it is hoped that philosophy instructors would be required to consistently publish in peer reviewed journals to keep their positions.

As an outgrowth of such a conference, the profession would need a peer reviewed philosophy journal. Such a journal is needed for the orderly and timely dissemination of ideas. Present peer reviewed journals are more geared for publishing research and case studies than philosophy.

The profession should seek to create and encourage the development of philosophical scholars. Our schools and trade associations could offer scholarships to qualified chiropractors to pursue philosophical studies at the graduate level. Scholarship money could be solicited from trade associations and chiropractic suppliers. As far as possible, it would be well for chiropractic colleges to share scholars on a reciprocating basis. They could be guest speakers for philosophy classes or brought in for seminars and conferences.

Individual responsibilities

Philosophy of chiropractic must ultimately find support in the field. Each of you must recognize "chiropractic philosophy" is the enemy within. You must understand this enemy feeds on your money and complacency. Stop feeding it.

As individuals we must stop supporting seminars and teachers that continue to preach that "old-time" philosophy. We must help destroy the base of false seminar philosophers by speaking out against them to students and colleagues. We must be intolerant to the inclusion of these "philosophers" in conferences, continuing education programs and trade journals. No one has a "right" to be unscientific in a science profession. Failure to actively eliminate them will only prolong their stay. This can only slow our movement into legitimate academia and public acceptance. These "philosophers" will run from the pressure of professional criticism and rational ideas. Do not be afraid that publicly denouncing them will give political medicine more ammunition to use against us. It might in the short-run, but ultimately it will strengthen us.

Chiropractors need to start training their minds with the aid of philosophy. Scientific knowledge is quickly expanding. The truly practical chiropractor realizes he cannot be a mere technician. Today's pace of change requires a flexible doctor capable of re-adjustment and intellectual expansion. Philosophy is the only discipline that can teach you such "flexibility".

A well-rounded philosophical basis also has the very settling effect of increasing one's satisfaction and happiness with what he/she is doing. Certainly, the "philosophical" doctor can better appreciate the value in being a chiropractor.

A final proposal is for more practicing chiropractors to contribute to the philosophical literature. While scientific research projects may be beyond the expertise of but a few, philosophical articles are within the grasp of many more. Not only does the writer grow intellectually, but the profession profits. Surely, each of you can also encourage our colleges and associations to provide philosophical presentations whenever possible. When our colleges respond, send a short note of thanks to the administrators and teachers to encourage them to schedule more.

The beginning

Most of the major problems we suffer can be dealt with by rational chiropractors. The vast majority of us will see a contemporary philosophy of chiropractic for what it is and greet it like a long lost friend.

Surely, we are not too late to heal our wounds and move into the future, confident and philosophically united. We have many critical decisions to make in the near future that can lead to a confirmation and expansion of chiropractic's role. I feel we can become the force in the field of health care that D.D. Palmer thought we would be. Our pressing need is for a proper philosophy, and for competent philosophers to utilize it. Surely, if history is any indication, finding, developing and encouraging those philosophers may be a difficult task.

Certainly, our colleges must carry much of the responsibility for nurturing philosophical thought. However, it is ultimately up to you, the practicing chiropractor, to be part of the solution rather than remain part of the problem. Your profession and the public demands at least that.

As Helen Keller said, "I am only one; but still I am one. I cannot do everything, but I can still do something. I will not refuse to do the something I can do."

References

- 1 Weiant CW. God and the Devil in chiropractic: reflections on the cultism in our midst. *Journal of Clinical Chiropractic*, Spring 1973: 110.
- 2 Charlton KH. Data and dogma: the use and abuse of information. *J Aust Chiropractor's Assoc* 1987; 17:48.
- 3 Donahue JH. Dis-Ease in our principles: the case against innate intelligence. *American J Chiropractic Medicine* 1988; 1(2):86-88.
- 4 Rand A. *Philosophy: who needs it*. New York: The Bobbs-Merrill Co., Inc., 1982: vii-xi.
- 5 Trueblood DE. *General philosophy*. New York: Harper & Row, 1963: 11.
- 6 Russell B. *The problems of philosophy*. New York: Oxford University Press, 1979: 151.
- 7 Koestenbaum P. *Philosophy: a general introduction*. New York: American Book Company, 1969: 21.
- 8 *Ibid.* 22.
- 9 Trueblood DE. *General philosophy*. New York: Harper & Row, 1963: 126.
- 10 Kostenbaum. *Philosophy*. 268.
- 11 Palmer DD. *The chiropractor's adjuster*. Portland: Portland Printing Press, 1910: 502.
- 12 *Ibid.* 642.
- 13 Palmer BJ. *The bigness of the fellow within*. 2nd ed. Spartanburg, S.C.: Sherman College of Chiropractic, 1978: 28.
- 14 *Dictionary of the history of science*. Princeton: Princeton University Press, 1984: 381.
- 15 Williams SE. *Chiropractic philosophy: the road not yet taken*. *Today's Chiropractic* 1981 (Feb): 6-7.
- 16 Bittner H, Harper WD, Homewood AE, Janse J, Weiant CW. *Chiropractic of today*. *ACA Journal of Chiropractic* 1973 (Nov.); VII: 86.

- 17 Weiant CW. Chiropractic philosophy: the misnomer that plagues the profession. *Archives of the CCA* 1981; 5(1):155-22.
- 18 Keating JC. Innate intelligence: another perspective. *Chiropractic Physician* 1984 (July): 4-5.
- 19 Donahue JH. "D.D. Palmer and innate intelligence: development, division and derision." *Chiropractic History* 1986; 6:31-36.
- 20 Mannoia J. What is science? An introduction to the structure and methodology of science. Lanham: University Press of America, 1980: 5.
- 21 Klemke ED, Hollinger R, Kline AD. Introductory readings in the philosophy of science. New York: Prometheus Books 1980: 5.
- 22 McHargue G. Facts, frauds and phantasms. Garden City: Doubleday & Co., Inc., 1972.
- 23 Judah JS. The history and philosophy of the metaphysical movements in America. Philadelphia: Westminster Press: 64-65.
- 24 Palmer. The aduster. 64-65.
- 25 Judah. Metaphysical movement. 93.
- 26 Ibid. 108.
- 27 Palmer, The aduster. 17-19.
- 28 Ibid.
- 29 Morris G. Science and anti-science. Ann Arbor: Science Publishers Inc., 1974: 85-86.
- 30 Encyclopedia of Philosophy. New York: MacMillan, Inc., 1972. "Philosophy of Science, History of": Vol 6:289-296.
- 31 Savage LJ. Is there a fifth column in chiropractic. *ACA Journal* (May) 1983; 20:24-26.
- 32 Gillet H. Chiropractic philosophy. *International Review of Chiropractic*, 1971; Nov:5.
- 33 Dallas W. Is philosophy necessary? No. *Chiropractic Journal* 1988; (Oct): 4.
- 34 Donahue JH. "D.D. Palmer and the metaphysical movement in the 19th century". *Chiropractic History* 1987; 7:23-27.
- 35 Palmer. The adjuster. 116.
- 36 Palmer DD. The chiropractor. Los Angeles: Press of Beacon Light Printing Co.; 1914:3.
- 37 Ibid.: 3.
- 38 Palmer. Aduster: 404.
- 39 Palmer. The chiropractor: 13.
- 40 Palmer. Aduster: 879.
- 41 Palmer. The Adjuster: 818-822.
- 42 Bittner et al. Chiropractic of today. 82-83.
- 43 Losee J. A historical introduction to the philosophy of science. New York: Oxford University Press, 1980: 2-3.
- 44 Angeles PA. Dictionary of philosophy. New York: Harper & Row, 1981: 301-302.
- 45 Randall JH, Buchler J. Philosophy: an introduction. New York: Barnes & Noble Books, 1971: 8.
- 46 Jamison JR. Chiropractic and medical models of health care - a contemporary perspective. *J Manipulative Physiol Thera* 1985; 8(1):17-22.
- 47 Coulter ID. The patient, the practitioner, and wellness: paradigm lost, paradigm gained. *J Manipulative Physiol Thera* 1990; 13(2):107-111.
- 48 Crookshank FG. Introductory essay. The history of medicine, New York: Dorset Press, 1987: xxx-xxxii.
- 49 Ibanez FM. The epic of medicine., New York: Bramhall House, 1962: 64-66.
- 50 Janse J. History of the development of chiropractic concepts; chiropractic terminology. (ed) Murray Goldstein. NINCDS Monograph No. 15. Bethesda, Maryland. 25-42.
- 51 Wardell W. The present and future role of the chiropractor. In: Modern developments in the principles and practice of chiropractic. (ed) Scott Haideman. Norwalk: Appleton-Century-Crofts, 1980: 25-41.
- 52 Barge F. "Thots". *International Review of Chiropractic* 1989; Nov/Dec: 7.
- 53 Palmer, The aduster. 16
- 54 Griffin LK. Chiropractic science or a system of medicine. *ACA Journal of Chiropractic* 1973; June:28-30.
- 55 Griffin LK. Importance of defining chiropractic science. *Today's Chiropractic* 1975; May/June:16,18.
- 56 Vear HJ. The principles of chiropractic practice - an academic approach. *Archives of CCA* 1981; 5(1):45.
- 57 Stephenson RW. Chiropractic text book. Davenport: Palmer School Press, 1948; xiv-xv.
- 58 Strang V. Essential principles of chiropractic. Davenport: Palmer College of Chiropractic, 1984: 52.
- 59 Palmer. The adjuster. 659.
- 60 Harre R. The philosophies of science. New York: Oxford University Press, 1988: 16-17,100-101.
- 61 Charlton KH. The nature and environment of knowledge production, chiropractic theory and future progress. *J Aust Chiropractors' Association*; 16(3):95-96.
- 62 Keating JC. What price research? A response to Dr. Homewood. *Dynamic Chiropractic*, 1989; March:v25.
- 63 Donahue JH. A proposal for the development of a contemporary philosophy of chiropractic. *American J Chiropractic Medicine* 1989; 2(2):51-53.