Constructing a philosophy of chiropractic: evolving worldviews and postmodern core[☆]

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Abstract

Objective: The purpose of this article is to explore the postmodern, postrational, and postconventional core of DD Palmer's self-sense and philosophy.

Discussion: DD Palmer's self and philosophy can be viewed as a reaction to the self of modernity and its challenges of a fracture between mind and body, spirit, and nature. It is argued that Palmer's solution to these vexing problems facing the modern self was to use postrational and postconventional logic to overcome the dualisms. His philosophy resonates with similar postrational approaches, most notably, the German idealist Schelling.

Conclusion: It is argued that Palmer was one of the first postrational individuals in America and that chiropractic was an attempt at the first postrational health profession.

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Introduction

The philosophy of chiropractic, originally developed by chiropractic's founder, DD Palmer (1845-1913), represents a postmodern worldview because Palmer used postrational and postconventional approaches to explain life, biology, and reality. Postmodernity in this context relates to the worldviews, which emerged in response to the Western Enlightenment and its over-

emphasis on mental-rational structures of consciousness, which defined the modern era. DD Palmer's approach to chiropractic and its philosophy attempts to overcome the inherent contradictions and dissociations of the modern worldview in regard to the split between Spirit and matter, intelligence and body, life and physicality.¹ Palmer's approach was postmodern because he used the objective modern worldview and incorporated first-person approaches to knowledge stemming from premodern worldviews. Also, he included moral and systems dimensions to his philosophy, with a type of equalitarian pluralism. According to Palmer, Innate Intelligence (II) is an individualized portion of Universal Intelligence (UI). Innate functions over the nervous system in humans and can be blocked or impeded by subluxations or slight misalignments of the spinal column resulting in

[☆] Three articles have been developed focusing on premodern, modern, and postmodern elements of chiropractic's philosophical theories. These 3 articles represent "Part II" in the series on constructing a philosophy of chiropractic.

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“a mechanical interference with flow of the nerve supply,”¹ (p105) causing tension of the neuroskeleton, decreased tone, and eventually disease. A chiropractor can intervene by adjusting subluxations, thereby releasing the flow and vibration of innate and thus assisting humanity to express its divinity.

To fully capture Palmer’s perspective, which includes his systems approach, his use of premodern spiritual experiences, along with his modern and objective insights into physiology and anatomy, an extended quote is warranted. The following statement was written by Palmer at age 68 years, published posthumously by his wife, and referred to by Gaucher-Peslherbe as “the nearest thing we have to a spiritual testament.”² (p92) Palmer writes:

I believe, in fact know, that the universe consists of Intelligence and Matter. This intelligence is known to the Christian world as God. As a spiritual intelligence it finds expression through the animal and vegetable creation, man being the highest manifestation. I believe that this Intelligence is segmented into many parts as there are individual expressions of life: that spirit, whether considered as a whole or individually, is advancing upward and onward towards perfection; that in all animated nature this Intelligence is expressed through the nervous system, which is the means of communication to and from individualized spirit; that the condition known as TONE is the tension and firmness, the renitency and elasticity of tissue in a state of health, normal existence; that the mental and physical condition known as disease is a disordered state because of an unusual amount of tension above or below that of tone, that normal and abnormal amounts of strain or laxity are due to the position of the osseous framework, the neuroskeleton, which not only serves as a protector to the nervous system, but, also, as a regulator of tension; that Universal Intelligence, the Spirit as a whole or in its segmented parts, is eternal in its existence; that physiological disintegration and somatic death are changes of the material only; that the present and future make-up of individualized spirits depend upon the cumulative mental function which, like all other junctions, is modified by the structural condition of the impulsive, transmitting, nervous system; that criminality is but the result of abnormal nervous tension; that our individualized, segmented spiritual entities carry with them into the future spiritual state that which has been mentally accumulated during our physical existence, that spiritual existence, like the physical, is progressive; that a correct understanding of these principles and

the practice of them constitute the religion of chiropractic; that the existence and personal identity of individualized intelligences continue after the change known as death; that life in this world and the next is continuous—one of eternal progression. “There is a natural body, and there is a spiritual body.” -1 Cor. iv: 44.³ (p10)

In this passage, we capture much of DD Palmer’s philosophical approach to life and chiropractic, death, and the hereafter. Although, on the surface, this statement seems premodern, it is not. It shows Palmer’s postconventional attempt to integrate modern and premodern truths. His worldview combined interior experiences with objective facts and a holistic view of the body, which was set in a broader view of society’s ills, and an even deeper context of eternal Spirit progressively manifesting through matter. Palmer mentions “the religion of chiropractic,” which he later distinguishes as a moral obligation. He considered developing this as a legal argument but never implemented it as such. Overall, this quote depicts Palmer’s postconventional worldview and fourth-person perspectival thinking. The fourth-person perspective includes the objective third-person perspective, the intersubjective second-person perspective, as well as the subjective first-person perspective, all set in a context of the unfolding of time.⁴ Palmer attempted to integrate this worldview into chiropractic, which may make chiropractic the first attempt at a postconventional profession in history.

Chiropractic’s emergence as an expression of the postmodern era has been largely neglected in the literature.⁵ DD Palmer attempted to integrate body, mind, soul, and spirit along with science, culture, and the self.⁶ His approach had qualities similar to systems theory and holism, 2 postconventional approaches to life. Situating chiropractic in the context of a post-rational and postconventional response to the modern overemphasis on rationality through scientific materialism and narrow empiricism is an important step in constructing and enacting a philosophy of chiropractic. Traditional concepts can be reinterpreted in this light and so can the approach to philosophers. The accusation has been leveled at followers of Palmer’s teachings that they are dogmatic, antiscientific, and traditionalists who need to modernize and progress.⁷⁻¹¹ By reframing the discussion in terms of postconventional approaches in the postmodern era, a more accurate assessment can be levied against chiropractic philosophers to ascertain the differences between dogmatic and regressive approaches vs postconventional and more complex approaches.

Innate Intelligence and UI as concepts are rooted in premodern worldviews and phenomenological experiences, filtered through DD Palmer's self-identity, which was distinctly modern. He was a product of post-Enlightenment Western culture and, more specifically, the 19th century metaphysical religious culture of America,^{12,13} which was influenced by the Covert Enlightenment,¹⁴ with the teachings of Mesmer and Swedenborg, the German Counter Enlightenment,^{15,16} and Transcendentalism.¹³ DD Palmer's worldview, his sense of self, his philosophy, and hence chiropractic reflected elements of each of these influences.^{12,13,17,18} His modern self was attempting to reconcile the distinctions, challenges, and experiences placed on a modern self by integrating phenomenological and objective accounts of internal experience into his system of chiropractic. Combining premodern and modern worldviews was a reflection of Palmer's postconventional approach.

Methodological approaches

Articles earlier in this series described 8 fundamental perspectives disclosed through 8 methodological families differentiated according to interior/exterior, inside/outside, and individual/collective (Fig 1).^{5,6,19} The interior methodologies are phenomenology, structuralism, hermeneutics, and ethnomethodology. The exterior methodologies are autopoiesis theory, empiricism,

Fig 1. "Eight fundamental perspectives" from Esbjörn-Hargens and Wilber.²¹ (p530)

Fig 2. "Eight Methodological Zones" from Esbjörn-Hargens.²² (p17)

social autopoiesis theory, and systems theory (Fig 2). These 8 zones are central to Integral Methodological Pluralism (IMP) developed by American philosopher Ken Wilber.^{20,21} Integral Methodological Pluralism is being applied to at least 35 academic fields²² such as consciousness studies,^{23,24} medicine,^{25,26} nursing,^{27,28} psychotherapy,^{29,30} coaching,^{31,32} and ecology.^{33,34} Applying IMP to chiropractic and its philosophy is a novel way to bridge any methodological or perspectival gaps in the chiropractic profession and develop a rigorous philosophical approach to chiropractic.⁵

Chiropractic can be explored from all 8 zones.⁵ It was suggested that IMP should become a central organizing framework through which the construction of a philosophy of chiropractic can begin, one which includes every facet of chiropractic from ethics to politics to personal worldviews and from legal structures to biological systems. Although philosophy in chiropractic has been described and debated for more than 100 years, an established discipline of philosophy in chiropractic has not developed. This has led to fragmentation and discord in the chiropractic profession. The first article concluded that the individual/exterior zones were the most commonly described elements within the philosophy of chiropractic, with an emphasis on empiricism (objective facts about anatomy and physiology) and autopoiesis theory (the self-healing, self-organizing, and self-creating aspects of the organism). That article also concluded that interior zones are largely unexplored in the literature on

chiropractic and its philosophy; this includes systematic introspective and phenomenological approaches, structural and objective views of the individual's interior, as well as the inside and outside of cultural perspectives. The current article explores the construction of new frameworks from more complex worldviews. It expands on the interior zones in relation to DD Palmer's worldview and the worldviews and self-identity from which his perspectives may have emerged.

The second and third articles in this series reconstruct a genealogy of chiropractic according to 2 of the methodological families, which disclose the collective/interior zones. Hermeneutics is a systematic methodology to explore meaning making and mutual resonance in cultures. Cultural anthropology or ethnomethodology objectively explores worldviews and how they emerge and evolve in cultures. Innate Intelligence and UI were explored in this context based on the structures of consciousness and self-identity of DD Palmer as well as philosophers from the premodern and modern eras.^{6,19} The current article continues this approach by looking at various responses to the Western Enlightenment and their impact on Palmer's culture. An emphasis will be placed on similarities between Palmer and Schelling, one of the first postmodern philosophers.^{35,36}

This article continues the argument by filling in the genealogy of chiropractic's philosophy, not just in the cultural and philosophical precursors to chiropractic, but also DD Palmer's own unique development. As an individual, Palmer pioneered a new worldview, which was part of a larger cultural worldview emerging during his era. By understanding how Palmer's worldview was postmodern, a new approach to chiropractic's history and philosophy emerges. By coming to terms with this interior, personal, and collective lineage of chiropractic, a new dialogue in regard to the chiropractic profession unfolds.

Reframing the dialogue

There is a trend in the philosophy of chiropractic literature to emphasize objective and empirical approaches to knowledge and exclude interior subjective and intersubjective approaches. This trend shares a common worldview no matter how it is applied. For example, there are 2 diametrically opposed positions in regard to philosophy in chiropractic; yet both rely on objective rational worldviews to make their case. Many dismissivist³⁷ critiques of Palmer's approach to chiropractic and philosophy have generally taken the position that all premodern and "untestable" hypotheses should be replaced by modern, objective, rational, and

empirical worldviews based on scientific materialism.^{7,38-46} Some adherents of Palmer's core philosophical premises have sought to dismiss Palmer's premodern roots (such as any discussion of Spirit or soul and their integration with matter and body) and emphasize his writings on the self-healing and self-organizing nature of biology, even going so far as to embrace his ideas of UI as a self-organizing approach to matter and life, stripped of any reference to Spirit or interiors.⁴⁷⁻⁵¹ These approaches overlap in their use of objective rationality, but their intents and focus are different in regard to retaining or dismissing the philosophical terminology. None of these approaches are deeply holistic, as they leave out various perspectives and methodologies appropriate to disclosing interior dimensions of reality. A more thorough examination of these and other approaches to philosophy will be explored in the final article of this series.

By using IMP, the partialness of these philosophical approaches becomes apparent. These partial truths are especially important because DD Palmer included interior dimensions. By exploring Palmer's postmodern core, we can contextualize critiques in a much broader framework. An entirely new way of understanding what Palmer was attempting to do emerges when we interpret his postconventional approach in terms of structuralism, cultural anthropology, hermeneutics, and phenomenology. This requires a new evaluation not only of Palmer and his approach, but of all critiques of his philosophy as well as attempts to "modernize" his approach. This reevaluation could have an impact on the philosophy of chiropractic in significant ways in terms of politics, ethics, legal statutes, accreditation policies, educational programs, and daily practice.

This reinterpretation of chiropractic's central tenets as developed by DD Palmer is more important for chiropractic now than ever before. His was a postconventional approach in a conventional society and culture. He was bringing postmodern worldviews into a profession that was soon to be regulated by conventional and modern rational structures, such as accrediting agencies and licensing boards. This inherent tension and the conflict between Palmer's approach and modernist mental-rational worldviews are still impacting the chiropractic profession in significant ways. For example, based on the types of dismissive approaches mentioned above, the Council on Chiropractic Education (CCE), the main accrediting body for chiropractic colleges in the United States, has recently established new standards of accreditation. According to Southerland, "This will be the first wholesale rewriting of the standards in more than 3 decades."⁵²

At issue is CCE's attempt to redefine chiropractic according to modernist worldviews. That is, CCE has diminished the importance of traditional terminology such as *vertebral subluxation* from the discourse⁵³ and expanded the chiropractic scope to be more aligned with Western medical practices, even to the point of striking the words *without drugs and surgery* from chiropractic's definition.⁵⁴ Not only does this redefine a profession without the general consent of the practitioners around the world,^{55,56} practitioners who include aspects of these early philosophical premises in their daily practice, but it also forces chiropractic to go backwards in terms of worldviews. If it can be demonstrated that Palmer's approach was an advance on the modernist worldview, then any attempt to redefine his philosophy to more closely align it to modernist worldviews is a form of devolution of the structural worldviews at chiropractic's core.

Chiropractic and evolving worldviews

One of the main elements of Integral Theory is increasing levels of complexity for each quadrant-perspective.⁵⁷ Thus, for each domain of reality (intentional, behavioral, cultural, and social) (Fig 1), a corresponding increase in complexity can be tracked according to levels (Fig 3). In regard to the philosophy of chiropractic, a useful "simultracking" can be developed. Chiropractic emerged at a certain level of social complexity in the history of America and the world, at the height of the industrial revolution (social), in cultural complexity, at the transition between modern and postmodern worldviews (cultural), in behavioral complexity (brain, body and behavior), chiropractic describes the most complex understanding of the human nervous system for that time, whereas the nervous system represents the most complex biological structure

Fig 3. Some levels in the 4 quadrants of Esbjörn-Hargens and Wilber.²¹ (p527)

known, and in intentional complexity, chiropractic was expressed from DD Palmer's perspective (intentional), his unique structure of consciousness, which was an early postconventional level, or what Gebser referred to as the integral aperspectival structure.^{36,58,59}

Self-development, complexity, and center of gravity

In the previous 2 articles, the focus was on the development of cultural worldviews, structures of consciousness, and self-identity from the Greeks to Kant in relation to the chiropractic concepts of II and UI. Taken for granted in such a discussion is the idea that individuals within each culture develop.²⁰ Each individual has a very good chance of developing to the average level of thinking and worldview in his or her culture. For DD Palmer's time and for about 75% to 80% of today's Western culture,^{30,60-62} the average center of gravity was the conventional level, which corresponds to Gebser's mental-rational structure of consciousness. Wilber writes, "Thus, the center of gravity of a given culture tends to act as a 'magnet of development': if you are below that average, the magnet pulls you up; if you try to go beyond it, it pulls you down."⁶³ (p342) When enough individuals at one culture dominate with a more complex perspective, worldview, or self-identity structure, then the worldview of the collective culture evolves to the new center of gravity.^{58,59,64-66} Cook-Greuter and Soulen³⁰ refer to the individual self's center of gravity as the most complex level of meaning making the person has mastered.

According to Kegan and Lahey,⁶⁷ when the complexity of a situation grows more than the complexity of the individual, then a new level of complexity is required to emerge so that the person can adapt to the world. They write:

In reality the experience of complexity is not just a story about the world. It is also a story about people. It is a story about the fit between the demands of the world and the capacity of the person or the organization. When we experience the world as "too complex" we are not just experiencing the complexity of the world. We are experiencing a mismatch between the world's complexity and our own at this moment. There are only two logical ways to mend this mismatch—reduce the world's complexity or increase our own. The first isn't going to happen. The second has long seemed an impossibility in adulthood.⁶⁷ (p12)

This type of increasing complexity in adults does occur and can be measured objectively with various

developmental survey instruments such as the Subject-Object Interview⁶⁷ and the Leadership Development Profile.³⁰ The Subject-Object Interview explores the way individuals make as object what was subject, a hallmark of a new level of complexity. The Leadership Development Profile is based on Loevinger's⁶⁸ sentence completion test.⁶⁹ It analyzes the language people use when completing various sentences such as "A mother is ..." or "When I am angry" Based on the response, a score is given, which very accurately and objectively measures the individual's level.⁷⁰ In the case of an individual like DD Palmer, we can only intuit his center of gravity based on the evidence we have of his life and writings coupled to our knowledge of levels of consciousness disclosed through research by constructive developmental psychology.⁷¹ DD Palmer was a pioneer of postconventional thinking for his time and the founder of chiropractic. Thus, we can describe chiropractic as a pioneering postmodern profession in its early definition, its inception.

Postconventional

The objective study of individual development was pioneered by James Mark Baldwin, a contemporary of Palmer's, and then rigorously explored by Jean Piaget.⁷²⁻⁷⁴ The work of Piaget focused on the emergence of intelligence in children as they construct their world. In fact, Piaget's ideas of structuralism⁷⁵ and biology and intelligence⁷⁶ are congruent in many ways with the philosophy of chiropractic and its emphasis on the self-organizing structures of the body.⁷⁷ Piaget studied the development of cognition in children through empirical observation and delineated several levels; sensorimotor, preconceptual, preoperational, concrete operational, and formal operational.⁷⁴ Piaget established that individuals have different worldviews, which they construct as they develop. He had a significant influence on constructivist developmental psychology.⁷²

Piaget believed that cognitive development stopped at formal-operational thinking, which is the ability to take third-person perspectives and use mental-rational structures of consciousness. Many researchers since Piaget have found that there are other lines of development such as self,⁴ morals,⁷⁸ values,⁷⁹ and spirituality,⁸⁰ which continue to develop alongside cognition well into adulthood. The term *postformal development* was originally applied to development that went beyond Piaget's formal operational thinking.^{69,81}

Wilber has correlated the research of dozens of developmental researchers and concluded that the

similarities of their discoveries no matter what line of development was being studied could be grouped into 8 to 12 levels or altitudes (which he color coded for easy referencing purposes) (Fig 3) and more broadly into 4 levels: preconventional, conventional, postconventional, and post-postconventional.²⁰ Cook-Greuter's⁴ research has shown how each of these broad levels corresponds with the ability to take wider perspectives such as first-, second-, third-, fourth-, and fifth-person perspectives (Fig 4). The ability to take on fourth- and fifth-person perspectives is rare. Cook-Greuter writes, "Only approximately 10% to 20% of adults demonstrate postconventional development."³⁰ (p185) In describing what the developmental researchers may agree on, she writes:

People with later-stage mental models have likely achieved success in life because of their capacity for more integrated and complex thinking, doing, and feeling. They have broader, more flexible, and more imaginative perspective on their circumstances and are able to appreciate multiple contexts. They tend to cultivate relationships with a diversity of people, see promising connections and opportunities in novel places, and deal with problems in adaptive and proactive ways.³⁰ (p186)

Individuals at postconventional and postrational levels of consciousness also tend to embrace spirituality along with science, are comfortable with paradox, take on pluralistic perspectives, and use systems thinking. DD Palmer had all of these attributes, demonstrated through his philosophical and embodied merging of

mind and matter, his holistic view of life, and his overall inclusive embrace of all people and religions.

Interestingly, a recent study showed how BJ Palmer developed into post-postconventional levels in his values, spirituality, cognition, and self-development.⁸² BJ Palmer was the only son of DD Palmer. BJ took over the Palmer School from his father in 1906 and was president until his death in 1961. His development was assessed by Cook-Greuter⁸³ and explored with several other criteria required to assess integral leaders.⁸⁴ It was suggested that the influence of his postconventional father and the phenomenological experiences BJ Palmer was exposed to from an early age, as well as a series of crucibles marked by epiphanies, furthered BJ's development in later life.⁸² The role of post-conventional consciousness development of both DD and BJ Palmer in terms of their impact on chiropractic, society, and culture has hardly been explored.

Confusing pre and post

It is common for individuals at the conventional or rational level of consciousness to confuse the prerational stages with postrational stages, what Wilber^{63,72,85} refers to as the *pre/trans fallacy*. At the mental-rational level, anything that is not rational looks the same whether it is early magical thinking or late holistic thinking. This applies to the philosophy of chiropractic in at least 3 ways: (1) DD Palmer's thinking sometimes commits the pre/trans fallacy. (2) Critics of his philosophy, whether intending to dismantle it or

<i>K. Wilber</i>	% of US population	<i>Cook-Greuter</i> Ego Development Stages		
<i>SOUL</i> Transcendent	<u>Postpostconventional. Transpersonal. Ego-transcendent</u>			
Unitive view	<1%	6	Unitive	Global/unitive perspective
<i>VISION LOGIC</i>	<2%	5/6	Construct-aware	5th p. p.
<i>Postconventional</i> Systems view	~12%	5	Autonomous	4th p. p.
		4/5	Individualist	4th p. p.
<i>MIND</i> Conventional	~75%	4	Conscientious	3rd p. p.
		3/4	Self-conscious	2nd p. p.
		3	Conformist	
<i>BODY</i> Preconventional	~10%	2/3 (Δ)	Self-defensive	1st p. p.
		2	Impulsive	

Fig 4. Comparing levels of Wilber and Cook-Greuter with person perspective (p.p.). Adapted from Cook-Greuter.⁴ This diagram was modified by removing the third column and adding the perspectives, thus adapted.

build upon it, sometimes confuse postrational thinking with prerational thinking in regard to Palmer and his followers. (3) Distinctions between pre and post in the definition of II, such as the Objective Straight Chiropractic movement, could use IMP as a way to reintegrate the interior elements of the philosophy they have dismissed. In regard to all 3 of these points, future developers of the philosophy of chiropractic should be aware of the pre/trans fallacy and be ever vigilant not to slide backwards into prerational or preconventional ways of thinking, being, or practicing.

DD Palmer's pre/trans fallacy can be spotted in a statement such as this, "As a science chiropractic explains local and general death to be—but the result of law, a step on the road of eternal progression; that any deviation from tone, the basis of chiropractic, is disease."^{1 (p11)} Here, Palmer is equating chiropractic, the expression of health as tone, with "eternal progression." Tone and health are physiological and thus related to the body and prerational levels. Eternal progression relates to transpersonal dimensions of spirituality and postrational levels. DD Palmer even extends this to a social systems approach; he continues, "It will lessen disease, poverty and crime, empty our jails, penitentiaries and insane asylums and assist us to prepare for the existence beyond the transition called death."^{1 (p11)} Palmer's ability to see an interconnected web of relationships associated with the chiropractic adjustment, its philosophy, and science gets confusing when he equates the adjustment to biological, psychological, social, and spiritual health. Although his poetic and grandiose prose is inspiring and probably reflective of his time, it does not adequately capture the complexity of these relationships. Using methodological approaches from IMP, we can sort out this statement and explore the interconnections between physiology, health, societal problems, psychological and physical disease, and spirituality. Without such a framework, which was not available at his time, DD Palmer's approach was to combine all of these levels together.

Several scholars have responded to DD Palmer's approach. Albanese wrote, "fixing a spine and physical body could mean fixing an eternity."^{13 (p409)} Fuller referred to Palmer's approach in terms of a "total regeneration of the human condition"^{86 (p74)} Keating⁴² dismissed Palmer's philosophy as biotheology and suggested that theology should be left to theologians. Many in the profession have dismissed Palmer's spirituality and yet kept his physiological notions of the wholeness of the organism and its ability to self-heal.^{7,41,43,47-50,87-92} The pre/trans fallacy can be used

as a lens to reinterpret histories,^{13,86} critiques,⁴² and developments of chiropractic and its philosophy.

Using IMP along with an understanding of the pre/trans fallacy not only helps us to differentiate Palmer's spiritual definitions from his biological definitions of II, but it can also be applied to various approaches to the philosophy of chiropractic. Critiques of Palmer's definitions rarely differentiate preconventional and prerational levels from postconventional and postrational. For example, Keating writes:

Chiropractors can't have it both ways. Our theories cannot be both dogmatically held vitalistic constructs and be scientific at the same time. The purposiveness, consciousness, and rigidity of the Palmers' Innate should be rejected.^{93 (p10)}

In this quote, chiropractors who incorporate II are accused of being dogmatic and not scientific. Although this may be the case in some instances, Keating's stance does not acknowledge the difference in worldview or complexity for those defining II in a holistic or systems way. There is no distinction between what Cook-Greuter⁴ might refer to as second-, third-, or fourth-person perspectives on II (Fig 4). Thus, from Keating's perspective, all approaches that are not using strictly objective third-person perspectives are dismissed as dogmatic and antiscientific and, we might add, using prerational and first- or second-person perspectives. There is no inclusion of postrational or fourth-person perspective, which is when individuals become comfortable with paradox and embrace science and spirituality in the context of unfolding in time.⁴ This is a good example of not distinguishing between pre and post.

One of the most common philosophical approaches to II in the contemporary chiropractic literature is the various attempts to reduce II to biological phenomena only.^{87,90,94} This objectivist approach is generally used in 2 ways: to dismiss the philosophy or to retain it.³⁷ The dismissive approach seeks to discard all traditional chiropractic terminology, especially the term *subluxation*.⁹ Vertebral subluxation was often linked to both the biological and the spiritual definitions of II.⁹⁵ The retention approach is intended to preserve the core tenets of the philosophy of chiropractic that the body is self-organizing.

This retentionist approach has been used to retain *subluxation* as a biologically centered cornerstone of chiropractic, apart from any confusions with its Palmerian and spiritual origins.^{50,92} The usual rationale for such a distinction is to "save" the subluxation from the theology of the Palmers and from the dismissivists,

or those who seek to expand chiropractic's scope of practice to become more like Western medicine through the control of accreditation agencies, national boards, and legal definitions of chiropractic. Joe Strauss, one of the founders of the "objective modern approach,"⁹² (p230) writes, "perhaps the most important precipitating factor in the development of the Objective Phase of Straight Chiropractic was the accreditation issue."⁹² (p231) For Strauss, the sole objective of chiropractic is the correction of vertebral subluxation to allow for the expression of II. This objective approach strips II of all spiritual qualities as described by the Palmers and by other philosophical chiropractors and makes the case that a focus on subluxation alone is enough to preserve the profession as separate and distinct.

In terms of IMP, this retentionist distinction is important because it differentiates the interior from the exterior in Palmer's definitions of Innate; but in doing so, it dismisses the interiors as unimportant. This view focuses on 1 or 2 methodological approaches, empiricism and autopoiesis theory, and excludes most other methodologies (Fig 2). As noted in the "Introduction," there are methodological similarities between this approach and that of the dismissivists because they both emphasize an objective worldview. Integral Methodological Pluralism could open up a new dialogue between these approaches. For example, dismissivists have consistently ignored or were unaware of the importance of this philosophical distinction of the retentionists, separating the biological from the spiritual definitions of II. Instead, the pre/trans fallacy gets emphasized, such as focusing on the seemingly prerational and fundamentalist elements that are retained in any definition of II.⁴⁴ One could just as easily find a common ground by focusing on the postrational systems approach that is at the core of viewing the body as self-organizing.⁹⁵ Integral Methodological Pluralism may also open up new depths within these approaches by emphasizing not only interiors but also the social and legal forces shaping the philosophy of chiropractic.

The legal question

The legal question has always shaped the theory and philosophy of chiropractic. Even though DD Palmer's use of the term *Innate* dates to 1904,⁹⁶ (p641) with his studies of philosophy of disease, magnetic healing, and Spiritualism going back to the 1880s,¹⁸ philosophy in chiropractic did not become an important element until after the landmark Morikubo case in 1907.^{97,98} This

fact set the tone for a more recent dismissivist approach suggesting that the use of philosophy in chiropractic was only a legal ploy.^{9,42,91,97,98} Some of the limitations of this argument were addressed in the second article,⁶ but now we can explore the limits even further from a postconventional perspective. This is vital because of the implications not only on the philosophy but also on laws, accreditation, education, and practice.

The Morikubo case set a legal precedent by acknowledging chiropractic as a separate and distinct profession with its own science, art, and philosophy. This ruling was based on the *Nelson v Harrington* case, also in Wisconsin in 1888. One of BJ Palmer's lawyers, Arthur Holmes, explained it like this:

The rule laid down in that case is that to constitute a recognized school of medicine, there must be a theory of principles and practice concerning disease, the diagnosis, and the remedy, which all the members of that school profess and are required to follow. This means there must be some theory concerning disease or the cause thereof.⁹⁹ (p5)

The winning argument in the Morikubo case was based on the book *Modernized Chiropractic*, written by 3 of DD Palmer's students, Solon Langworthy, Oakley Smith, and Minora Paxson, who acknowledged that chiropractic had its own science, art, and philosophy.¹⁰⁰ This book provided the first instance that the term *subluxation* was published as a part of the chiropractic lexicon. Whether DD Palmer used the term in his verbal teachings before the publication of that book is unknown. After 1907, *subluxation* and the *philosophy of chiropractic* became the cornerstone of chiropractic's legal defense.

The precedent of the Morikubo case was important for DD Palmer and the future of the philosophy of chiropractic in many ways, especially because his previous involvement with legal battles was a failure. In 1906, he unsuccessfully played the role of expert witness in a case against a chiropractor in La Crosse, WI,¹⁰¹ and later that year spent 23 days in prison in Davenport, IA, for practicing medicine without a license.¹⁰² Chiropractic now had a legal strategy that involved promoting philosophy. DD Palmer began writing extensively between 1908 and 1910, the year he published his 900+-page tome entitled *The Science, Art, and Philosophy of Chiropractic (The Chiropractor's Adjustor)*.⁹⁶ The title reflected his intention to take back the philosophy and adjust the misconceptions of his many students in their writings and teachings, including his son.

In response to his son BJ Palmer's successful legal strategy, which started with the Morikubo case, DD Palmer had at one time considered turning chiropractic into a religion.¹⁰³ Ultimately, DD Palmer did not establish a religion; instead, he laid out his philosophy and defined the "the moral and religious" duties of chiropractors, further expanding his systems approach.^{1 (p9)} Palmer writes:

I do not propose to change chiropractic, either in its science, art or philosophy into a religion. The moral and religious duties of a chiropractor are not synonymous with the science, art and philosophy of chiropractic. There is a vast difference between a theological religion and a religious duty; between the precepts and practices of religion and that of chiropractic. A person may be a conscientious devotee of any theological creed and yet be a strict, upright, exalted principled practitioner of chiropractic.^{1 (p15)}

DD Palmer did not need to establish a religion for legal reasons because BJ Palmer's legal strategy was beginning to work. Chiropractic philosophy became a legal defense supported by BJ's new protective association, the Universal Chiropractors Association, led by BJ and Tom Morris, the lawyer from the Morikubo case.¹⁰⁴ Their legal strategy led to 80% success rates in court battles for the next 20 years in the United States¹⁰⁵ and is codified in the 1924 book *Malpractice as Applied to Chiropractors* by Arthur Holmes.⁹⁹ The book defined chiropractic philosophical terminology as well as strategies for patient education and "straight" chiropractic practice. The Universal Chiropractors Association could not use their legal strategy successfully to defend chiropractors that "mixed" other therapies, modalities, or medical practices into chiropractic.¹⁰⁵

The arguments calling for a dismissal of Palmer's philosophy by assuming it was merely a legal ploy along with the other dismissivist approaches mentioned above have indirect ramifications for the definition and identity of chiropractic. For example, recent actions mentioned in the "Introduction," such as the CCE changing its accreditation standards in regard to "subluxation" and other key philosophical foundations of chiropractic, can be traced to these arguments.^{53-56,106} When constructing a philosophy of chiropractic using IMP, it is important to challenge the dismissivist approaches when warranted, which is when such arguments either commit the pre/trans fallacy or leave out methodological approaches. The legal ploy argument does both. The argument is originally based on Lerner's⁹⁷ 1950s interpretation of early chiropractic history. Lerner did

not fully account for the depth of DD Palmer's philosophical studies because Palmer's collection of books and pamphlets on Spiritualism and magnetic healing were not available to researchers from the Palmer archives until the 1990s.¹⁸ But the real problem with the "legal ploy" argument, besides its overreliance on the social/legal forces,⁶ is that it does not account for complexities of self-development and the use of multiple perspectives, characteristic of postconventional structures of consciousness (Fig 4). Central to the legal argument is a modernist worldview based on scientific materialism.^{42,107,108} Although there were definitely legal and social forces dictating the need for philosophy in chiropractic, the core of that philosophy was postconventional worldviews, systems thinking, and a holistic orientation. The legal ploy argument is generally used in an attempt to try and fit chiropractic into a conventional, rational, and modernist worldview, without acknowledging the possibility of a pre/trans fallacy being committed.⁹ Going from a more complex worldview to a less complex worldview is a devolution of worldviews.¹⁰⁹

By trying to understand Palmer from his own context, that is, his postconventional worldview, we can best evaluate any attempts to redefine chiropractic, especially if it is based on conventional worldviews. Gaucher-Peslherbe wrote of a similar approach to DD Palmer's work. He suggested that Palmer's successors should strive to understand him based on "his position" rather than their own "superior knowledge." Gaucher-Peslherbe wrote:

A science must be constantly on its guard against this kind of attempt to manipulate its history, or it will be cheated of its heritage even if it is cheated by itself. Chiropractic will not be a properly constituted science until it can disentangle itself from its history, but neither will it last long as a science if it does not accept the truth about this history.^{2 (p169)}

To more fully understand Palmer's position, or rather his perspective, it is important to explore the integral aperspectival structure of consciousness described by Gebser.⁵⁸

The integral aperspectival structure of consciousness

To come to terms with Palmer's advanced self-sense characteristic of a postconventional approach to reality, it is important to describe what Gebser⁵⁸ referred to as the *integral-aperspectival structure of consciousness*. Gebser found evidence for a mutation to this new

structure of consciousness at the turn of the 19th century and into the 20th century in art, poetry, science, mathematics, and music.⁵⁸ Gebser described a mutation of consciousness in terms of “transcending and superseding” the previous structure. He writes:

These remarks, and those that follow, are intended to clarify the fact that the mutational process we are speaking of is spiritual and not biological or historical. It would be tantamount to a misrepresentation if the concept of mutation used here were to be understood by association as biological. It is important to emphasize that biological and consciousness mutations are, indeed, similar in their spontaneous, non-temporal creation of new genera, potentialities, or structures which, having been once acquired, are hereditary. But there is also an essential difference: biological mutation leads to a specialization of functions within a particular environment—a minus mutation. Consciousness mutation, by contrast, unfolds toward overdetermination: toward structural enrichment and dimensional increment; it is intensifying and inductive—a plus mutation.⁵⁸ (pp37-38)

Gebser referred to this new structure of consciousness as *integral-aperspectival* because it was comprehensive and even incorporated a fourth dimension of time into its worldview. The Integral Structure draws from all previous structures (Archaic, Magic, Mythic, and Mental) and includes multiple perspectives.⁵⁸ Combs⁵⁹ offers 2 examples of the Integral Structure: Picasso’s *Guernica* painting, which gives the viewer the feeling of an entire battle from all perspectives happening at once, and Heisenberg’s matrix mathematics. This was a dramatic shift in worldview, just as significant as the development from the mythic structure to the rational structure. The second article of this series described for example how art is reflective of these developing perspectives, such as the development from preperspectival art such as cave paintings and medieval tapestries to perspectival art such as Renaissance architecture and painting. The example of art helped us to better understand how Palmer’s views on II and UI were perspectivally different from similar conceptions in premodern times.⁶ The postmodern shift in consciousness is from perspectival to aperspectival. To make this point in regard to art, Mickunas wrote:

If you notice the difference between the Renaissance for example, and Picasso’s paintings, you will find that in Renaissance art you could read the point in time of the painting even if the artist took three years. The shadow cast was precise. You

could say that the painting was depicting 12:05 in 1719 on July the third. With Picasso the shadows are cast in such a way as to show that there is no succession of time, it is four dimensional, also known as integral.¹¹⁰(p11)

The cast of a shadow and the way the light hit the subject of the painting in Renaissance art were attempts to capture 3-dimensional reality. Art is one way of expanding new worldviews throughout a culture, spreading a cultural meme.⁶⁴ Palmer found many ways to spread his new insights: through writing; teaching; developing new institutions and practices, such as chiropractic; and developing philosophical and moral approaches to science, life, society, and healing. Palmer’s aperspectival approach was evident in his comprehensive view of chiropractic as simultaneously affecting physiology, sanity, society, culture, and the evolution of spiritual progress in this life and beyond.

Wilber³⁶ has suggested that Gebser’s use of the term *integral* represents at least 3 levels of consciousness that are all postconventional, what Wilber refers to as *vision-logic* (Fig 4). Combs notes that Gebser’s research did not include today’s literature on adult human development and so he viewed all of the higher structures of consciousness as one structure, which he named *integral*. Combs writes:

On reflection, I suspect that many of the qualities that he attributed to a single integral structure of consciousness are actually features of a number of these higher and more refined structures. It is, perhaps, as if Gebser were looking through these higher structures vertically, and thus seeing their qualities telescoped into a single view.⁵⁹ (pp75-76)

As noted above, researchers have found several postconventional levels of adult human development that are more complex and take on more perspectives than the mental-rational level (Fig 4).^{4,29,67,69,78} The worldviews of the postmodern era are part of these underlying postconventional or postrational structures of consciousness.^{29,61,68,69,72} The need to stop the overemphasis on scientific materialism, which was the hallmark of the modern era, and embrace humanism, spirituality, ecological thinking, systems, and holism was central to this new pluralistic way of thinking.

Aspects of the new postconventional worldview can be found across many disciplines of that era. Palmer’s first chiropractic text, *The Science, Art, and Philosophy of Chiropractic*,⁹⁶ was written at the same general time as Einstein’s¹¹¹ relativity theory, Husserl’s¹¹² phenomenology, Kandinsky’s¹¹³ modern art, Bergson’s¹¹⁴

elán vital, the start of organismic and systems biology,¹¹⁵ Baldwin's⁷³ developmental psychology, Freud's¹¹⁶ psychoanalytic approach, Smuts' ¹¹⁷ holism, as well as Morgan's¹¹⁸ emergence, and, in the 1920s, Whitehead's¹¹⁹ process philosophy. During this time, the chiropractic profession was developing as a postmodern approach to life, health, science, spirituality, and morality, alongside other similar systems of thought in the cultural milieu. Chiropractic was emerging historically at the start of this new cultural worldview. DD Palmer was a fully modern self because of his objective view of the self; his ability to use mental-rational thinking to distinguish between body, mind, soul, and spirit; and his ability to push into a new postmodern way of viewing the world by bringing a systems and postconventional approach to his creation of chiropractic and its philosophy. Chiropractic is thus an expression of his attempt to create a postconventional profession.

DD Palmer as postconventional pioneer

Three historians (including the current author) have intuitively placed DD Palmer as an early pioneer of postconventional thinking, although not always using that terminology.^{2,18,120,121} There is some validity to an individual's ability to intuitively assess another's level of consciousness.⁷¹ Gaucher-Peslherbe² compared DD Palmer to other postconventional pioneers such as William James, Merleau-Ponty, Henri Bergson, and Sigmund Freud. He even considered psychoanalysis and chiropractic to be 2 complementary branches from the same tree: magnetism. Gaucher-Peslherbe wrote, "Both chiropractic and psychoanalysis are off springs of magnetism."² (p198) This observation is especially important because Palmer wrote, "Chiropractic is an outgrowth of the study of magnetic healing."¹ (p847) Gaucher-Peslherbe believed that Palmer's originality showed up in many ways: attempts to include spirituality and science, a holistic view of the body, a spinal dynamic, a new interpretation of the concept of tone as a self-regulating mechanism of the neuroskeleton, and his use of linguistics centering on embodiment. This author¹²¹ placed Palmer at the relativistic-pluralism stage in terms of Clare Graves' system of development.^{64,79} This was due to his ability to infuse into chiropractic his overall systems view, self-mastery of anatomy and physiology,¹²² his esoteric studies,¹⁸ and the wisdom learned from years as a magnetic healer. Alana Callender¹²⁰ showed similarities between Palmer's thinking and Ludwig von

Bertalanffy, the father of general systems theory (another postconventional thinker). Callender wrote, "The philosophical writings of DD Palmer and Ralph Stephenson and much of the work of BJ Palmer predate that of von Bertalanffy by half a century and yet foreshadow the 'new' approach to viewing how individuals and their environments interact."¹²⁰ (p8) Callender was able to develop an objective genealogy of systems theory and thus linked the ideas of Palmer and von Bertalanffy in content and philosophical lineage. She traces ideas of nature and Kosmos from Aristotle to Descartes, Bernard to Holism, and Organicism to Systems Theory. Palmer and his students were part of the lineage leading up to a systems and thus postconventional approach.

DD Palmer's evolutionary thinking

One of the hallmarks of the integral-aperspectival structure of consciousness is that it incorporates time.⁵⁸ The Mental structure incorporated space in its ability to view reality from a 3-dimensional perspective; such as Renaissance art (perspectival), space travel (telescopic), and the genome project (microscopic). Time is incorporated into consciousness in the aperspectival structure in different ways: everything from evolutionary and systems thinking to developmental and holistic thinking. Cook-Greuter's research shows that individuals at the early postconventional levels think contextually and "they need to understand and watch how things unfold."⁴ (p23) This 4-dimensional way of thinking was evident in Palmer's writings and also in some of his direct influences such as Spiritualist writers and other authors he was studying.^{12,18,102,121,123} Palmer wrote:

Life is evolutionary in its development. The mineral, vegetable and animal kingdoms are looking forward and upward, seeking a more refined and better method of expression. Growth, unfoldment is seen everywhere. Each individualized portion of matter is but an epitome of the universe, each growing and developing toward a higher sphere of action; intelligence expressing itself through matter.¹ (p772)

Palmer's incorporation of time was based on his understanding of the individual's ability to progressively access the divine in their body, mind, and spirit. Fuller writes, "Palmer was envisioning an immanent divine force progressively actualizing itself through the evolutionary process."⁸⁶ (p72) As the Palmer quote above demonstrates, for DD Palmer, chiropractic was a method to assist in something much bigger.

Linking time to UI, as the progressive actualization of the divine, could be considered a postmodern approach according to Charles Taylor.⁶⁶ For Taylor, one of the hallmarks of the modern self is that there are no longer any “ontic” or outer sources of morality.⁶⁶ The modern self looks within for sources of morality. One of the tasks of the modern self, according to Taylor, is to retrieve an external source of morality. We could say that Palmer found a higher source of Goodness in UI, a new source for the self’s growth. Taylor suggests that a “moral ontology” is required to retrieve an external source of morality, something beyond the modern self’s internal sources.¹²⁴ A moral ontology centers on a life well lived, oriented to the good, and situated in a story, a narrative, or some quest. Each life is viewed in the context of the good, or how you have become and what you are becoming.⁶⁶ DD Palmer embodied this. Palmer wrote:

Universal Intelligence, collectively or individualized, desires to express itself in the best manner possible. It has been struggling for countless ages to improve upon itself to express itself intellectually and physically higher in the scale of evolution. Man’s aspirations should be to advance to a superior level, to make himself better, physically, mentally and spiritually.

This marvelous existence of many systems, harmoniously associated and controlled by the I AM, constitutes the duality of man.^{1 (p674)}

This quote suggests that DD Palmer perceived the Self as the universe evolving, and this was clearest in the individual life. A similar notion can be found in the philosophy of Schelling, who had one of the greatest influences on postconventional and postmodern thinking.^{35,36}

Chiropractic's philosophical core

Postmodernism and pluralistic worldviews did not come into vogue until the second half of the 20th century; yet according to Wilber, the seeds were planted at the turn of that century and even earlier with the Idealists like Schelling and Hegel.^{20,36,63,72} On the same note, philosopher Frederick Beiser writes, “The German Counter-Enlightenment is indeed still very much with us today in the form of ‘postmodernism.’”^{125 (p106)} Wilber is obviously not alone, as the Counter-Enlightenment can be viewed as a precursor to postmodernity.^{35,125,126} According to Gare,³⁵ Schelling, one of the leaders of

19th century German philosophy, had historical influence on philosophers such as Bergson, Whitehead, Pierce, Nietzsche, Heidegger, and Foucault. We might add that all of these philosophers influenced IMP, which provides an even deeper cultural and philosophical rationale for using IMP in constructing a philosophy of chiropractic. Schelling’s philosophy not only shared many common ideas with DD Palmer’s philosophy, but it can be viewed as one of the cultural forces that helped shape Palmer’s philosophy and worldview.

The reaction to the overreach of rationalism into all spheres of knowledge goes back to the Counter-Enlightenment of the 18th century.^{127,128} In terms of chiropractic’s philosophical origins, we must also include the Covert Enlightenment, which centers on the works of Mesmer and Swedenborg.¹⁴ The need to stop what Wilber refers to as the *colonization* of the value spheres of morals and aesthetics by objective science steadily grew in the years after Descartes and Locke.³⁶ The developing postconventional worldviews attempted to include morals and aesthetics alongside objective science. DD Palmer reflected this new worldview, which set his philosophical thoughts far apart from previous eras and at the leading edge of his own era.

Where Kant showed how all knowledge is mediated through the structures of the mind, the postmodernists from Heidegger to Derrida to Foucault showed that all knowledge must be situated in cultural worldviews, as these shape how we perceive.^{36,126} This is why Wilber and Esbjörn-Hargens refer to IMP as post-Kantian and post-Heideggerian because IMP starts with these approaches and then goes even further toward integration of the value spheres.^{5,129} Any construction of a philosophy of chiropractic must come to terms with this as well, by including the cultural, social, behavioral, and subjective context from which chiropractic emerged.¹⁹

Postmodern identity

Kant split the modern world in three: Science (pure reason), Morals (practical reason), and Aesthetics (judgment). According to Wilber, the next role of philosophy and the postmodern self was to integrate these three. The German Idealists Fichte (1762-1814), Schelling (1775-1854), and Hegel (1770-1831) would attempt to do so.

Fichte’s solution was to destroy the world that Kant claimed we had no direct access to, the “thing in itself.” According to Kant, we can only know the world through the structures of the mind. We can never truly know the world, the “thing in itself.” Instead, Fichte

suggested that the world is one Life process looking at itself from various vantage points. The Self now expanded to include all of nature and things. We can ultimately know this self in a Plotinian type of ascent to the One. In this sense, the One is the Self. This approach allows for an expanded and deeper view of the Self while retaining the unique self of modernity.³⁶ By combining premodern approaches to the self, such as Plotinus' ascent to the oneness, with modern approaches to the self, such as viewing the self as separate from nature, Fichte's philosophy shares some common elements to Palmer's philosophy.^{6,19}

Fichte inspired Schelling, both of whom influenced the cultural milieu from which DD Palmer's philosophy and self-identity would emerge. As noted in the second article in this series,¹⁹ Palmer shared some similarities to Plotinus in his emanationist type of cosmology. The point made in that article was that the premodern source of morality, Goodness, and the Self was exterior, or "ontic." For Palmer, UI manifests through matter in a hierarchical fashion including spirit, soul, mind, and body. Thus, it came from within. Palmer writes:

Spirit, soul, mind and body are separate and distinct entities. An entity is a being, whether in thought or in fact. Spirit. Universal, is the sum total of the conscious intelligent element or factor manifested in the universe. Individualized spirit is the segmented portion embodied in each individual. The body, as an entity, is the organized substance which we recognize as a human being. The mind is the intellectual part, that which is conscious, that which understands, reasons, wills and thinks. The soul is intelligent life—life guided by intelligence. It resides throughout the body wherever life is manifested.^{1 (p165)}

The distinction of Plotinus' premodern worldview with its exterior sources of morality was based on Plato's *The Good*. Palmer's modern worldview, which cleaved distinctions between matter, soul, mind, and body as manifestations of Spirit, was an attempt to bridge the premodern and the modern. Fichte attempted something similar, but he did not capture the progressive evolutionary stance that Palmer embodied. Schelling did.

Schelling: philosopher of life

According to Wilber,³⁶ Fichte's emphasis on ascent to the One misses the equally important descent to the many, originated by Plato. Fichte thus misses the contribution of Spinoza to the modern self, whereby matter can be understood as substance of God (the divine

is what all matter is as its substance). Schelling included this approach in an evolutionary way. He considered Nature to be "slumbering Spirit," a "self-organizing dynamic system," and "as a unified-self-developing super-organism."^{36 (p487)} Because of Schelling's dynamic approach to life as Spirit, Jason Wirth names him "a great—and greatly neglected—philosopher of life."^{130 (p1)} In Schelling's writings, we come closest yet to Palmer's philosophy. The self itself is the Spirit awakened in an individual self-organizing and self-healing form. Wilber writes about Schelling:

He maintained, we have to go forward beyond Reason in order to discover that Mind and Nature are both simply different movements of one absolute Spirit, a Spirit that manifests itself in its own successive stages of unfoldment and enfoldment. As Hegel would soon put it, Spirit is not One apart from Many, but the very process of the One expressing itself in successive unfolding in and through the Many—it is infinite activity expressing itself in and as the finite process of development itself (or evolution).^{36 (p486)}

For Schelling, Nature is an evolution in time of Spirit manifesting itself through the Self, or self-consciousness. This was how Schelling came to terms with the Kantian split of the value spheres to propose that we can know "the thing in itself" because the Self is nature waking up. Siegel notes that Schelling was the first philosopher to describe development in biology and in individuals from a "reflective" stance. Reflectivity for Siegel is one of the hallmarks of the modern self since Descartes and Locke because now we can reflect not only on nature as an object but on our consciousness as an object as well. Thus, Schelling extends this to "the ego's progressive self-realization."^{131 (p33)} As noted above, this was central to Palmer's philosophy.

And yet it is Wilber who fully captures the essence of Schelling's (and his once roommate, Hegel's) advance on the modern self. This is important for our story because DD Palmer's philosophy is an echo of Schelling's. Wilber continues from the quote above by writing:

Thus, for both Schelling and Hegel, Spirit goes out of itself to produce objective Nature, awakens to itself in subjective Mind, and then recovers itself in pure Nondual perception, where subject and object are one pure act of nondual awareness that unifies both Nature and Mind in realized Spirit. Spirit knows itself objectively as Nature; knows itself subjectively as Mind; and knows itself absolutely as Spirit....^{36 (p488)}

This resonates with DD Palmer's view completely. Although the nondual stance is not overt in Palmer's writings, he did write the following:

Psychological investigation reveals the fact that the spirit of man is a part of the All Wise Spirit, the Great Creator, and as such possesses in an infinitesimal degree all the potentialities of omniscience and omnipotence existing in God, just as one drop of the ocean contains, in miniature, all the qualities of the briny deep as a whole.¹ (p19)

DD Palmer felt that Spirit manifested itself through matter in living forms. Innate would then direct the life processes and mirror the Educated Intelligence (conscious mind) but on the interior. The two would work together to care for the organism. He writes:

Intelligent life—the soul—is the bond of union which holds spirit and body together as one. Mind is the product of soul and body—of a living body. Through the mind, Innate (spirit) conducts the functions which control the body, and looks after its external welfare.¹ (p166)

The chiropractic adjustment was intended to allow for the soul, Innate, the individualized portion of the Divine Spark, to express or manifest through every part of the body. DD Palmer wrote, "Spiritual progress toward perfection is dependent upon physical and spiritual growth."³⁶ (p30) And thus perfecting and evolving the body would influence not only this physical and mental life but the spiritual essence and the evolution that came after. But it was the actual practice of chiropractic that really sets Palmer's philosophy apart from Schelling.

According to Wilber, the Idealism of Hegel and Schelling collapsed because it was based on Reason and contemplation and there was no injunction or practice with which to enact the paradigm. Jennifer Gidley¹³² recently challenged this hypothesis by noting that Schelling indeed did have his own injunctions or practices. She indirectly cites Wirth's discussion of Schelling's practices of "intellectual intuition."¹³⁰ (p3) Schelling did not consider himself a mystic because he used subjectivity and objectivity to go beyond reason. Using one's "intellectual intuition" may be a practice, such as a form of contemplation or meditation, but there is no real evidence that he taught such a practice to his students. This is important because it brings us to Palmer's embodied practice, chiropractic.

It could be argued that DD Palmer believed that he had the injunctions to heal the fractures of modernity between Spirit and Matter, Mind, and Body because he not only

included a contemplative practice, which was similar to Schelling's "intellectual intuition," but he had a physical practice, the chiropractic adjustment. Palmer writes:

Therefore, inasmuch as the light of life was revealed to me in order that I should enlighten the world, and as our physical health and the intellectual progress of the personified portion of the Universal Intelligence depend upon the proper alignment of the skeletal frame, I feel it my right and bounden duty to replace any displaced portion thereof, so that our physical and spiritual faculties may be fully and normally expressed; thereby not only enhancing our present condition, but making ourselves the better prepared to enter the next stage of existence, to which this earthly existence is but a preliminary, a preparatory step.¹ (p21)

The chiropractic adjustment supported by the contemplation of the vastness and interconnection of UI and II was his injunction.¹⁸ His philosophical premise was that these could be used to enlighten the world or, we might add, to enact his new paradigm of an embodied spiritualized evolutionary worldview for human beings. Chiropractic has not yet enlightened the world in the way Palmer envisioned. It has had a significant impact because it is the third largest health profession. Perhaps, his philosophy and practice would have gone further towards his aims if he was aware of the pre/trans fallacy or other methodological approaches.

His son BJ Palmer would go further in the development of chiropractic and its philosophy as an injunction to reach a form of enlightenment. This is important because it shows how DD Palmer's insights continued to be developed and passed on from teacher to student throughout the 20th century, a lineage that is still a potent force in chiropractic today, in the 21st century. BJ Palmer systematically cultivated his own intuitive intelligence to a very advanced degree. BJ Palmer's development of these ideas was a direct extension of his father's insights; and more specifically, BJ developed a much more coherent and systematic way to actualize awakened states through paying attention to II. In his 70s, BJ Palmer¹³³ described the process and practice of receiving "thot flashes" from Innate to Educated and then acting upon them as the key to awakening into an infinite or cosmic awareness. He too felt that the chiropractic adjustment was central to this process and continually refined his techniques.¹³⁴ BJ Palmer¹³⁵ also expanded upon his father's evolutionary approach by describing a basic understanding of individual and cultural interior development.⁸²

Schelling died in 1854, 9 years after DD Palmer's birth. Schelling's philosophical impact on Palmer's era and our own was historically pivotal.^{35,126} Another linkage between their philosophies can be inferred by Schelling's exposure to the thought of Mesmer and Swedenborg; both were well known influences on Palmer. This just provides more evidence that there were shared cultural ideas and worldviews between Palmer and Schelling. For example, several of Schelling's students were interested in Mesmeric healing; and Schelling had some relationship to Swedenborgianism.¹³⁶ Palmer was a magnetic healer for 9 years¹ and "leaned to" Spiritualism,¹³⁷ (p64) which grew from a combination of the thought and practices of Mesmer and Swedenborg.¹⁴ Like Schelling's radical approach to Spirit as slumbering nature waking up to itself in our individual consciousness, Palmer viewed UI as God, the ground of matter, the drive behind evolution. DD Palmer writes:

I chose the name Innate. Innate—born with. And so far I would not change it except to replace it with the name of that individualized entity which really is a part or portion of that All Wise Almighty, Universal Intelligence, the Great Spirit, the Greek's Theos, the Christian's God, the Hebrew's Helohim, the Mahometan's Allah, Hahneman's Vital Force, new thought's Divine Spark, the Indian's Great Spirit, Hudson's Subconscious Mind, the Christian Scientist's All Goodness, the Allopath's Vis Medicatrix Nature—the healing power of nature.¹ (p525)

DD Palmer's attempt to combine premodern conceptions of the Divine with modern ideas of biology and evolution was characteristic of his time. Schelling influenced many of the postconventional leaders of Palmer's era, including the biological thinkers like Bergson, Whitehead, and Baldwin. He was read by Emerson,¹⁶ who likely influenced Palmer.¹⁷ I suggest that DD Palmer's worldview and his philosophy were the products of his age and that he was on the leading edge of postrational thinking for his time, making chiropractic an attempt at establishing one of the first postconventional professions.

Chiropractic's early postconventional elements

Palmer's vision and worldview extended into the chiropractic profession and the early philosophy in several ways, which show how chiropractic as a profession can be described as postconventional. Some

of these elements of chiropractic have been discussed elsewhere, such as organismic thinking and the issues of integrating science and spirit.^{18,77,95,115,120,121,138} Another important element is the inclusion of time, addressed above and most well known in Stephenson's chiropractic principle, "No. 6. The Principle of Time. There is no process that does not require time."¹³⁹ (pxxxii) Three other elements, which indicate how chiropractic was developed as a postconventional profession, are communication through touch; an attempt to unite the value spheres of science, art, and morals; and chiropractic's unique relationship to science. It is by exploring these three, touch, uniting the value spheres, and science, which will help us to further understand chiropractic's postconventional core.

Chiropractic communication through touch

The focus of chiropractic through the senses via touch can be viewed as an integration of science and feeling. Sensitivity is a hallmark of early postconventional worldviews.⁷² Refining the skill of palpation to glean clinical information while communicating to the patient through touch has been noted as an important distinction in chiropractic.¹⁴⁰ Albanese¹⁴¹ has contrasted chiropractic's use of touch with Foucault's observation that mechanistic medicine is founded upon the "clinical gaze." In a similar approach, Leder and Krucoff write, "Vision, the objectifying sense par excellence, seems to yield a detached register of what lies outside. Touch's intimacy of contact can make us aware of the reciprocity of inner and outer, as well as that of body and world, self and other."¹⁴² (p324) Vision and 3-dimensional perspectives are hallmarks of the Mental structure of consciousness.^{19,58,59} Touch, coupled to scientific rationality as a primary form of diagnostic or analytic tool, can be viewed as a hallmark of the Integral aperspectival structure of consciousness. Chiropractic's use of touch can also be viewed as a form of hermeneutical communication,¹⁴⁰ a postmodern form of sensitive insight,² and a form of transmission of information not only from doctor to patient but also from teacher to student in the form of a professional lineage.¹⁸

Science, art, and morals

DD Palmer's attempt in his final writings to unite the value spheres of science, art, and morals is an important element to understanding his worldview in his final years before his death in 1913. It is my view that Palmer was motivated to write by his frustration about chiropractic's new legal necessity to incorporate

philosophy into the profession after 1907. Gaucher-Peslherbe writes, “We must now attempt to place D.D. Palmer in context in the years 1908-1909, when he took up his pen to correct some of the wilder notions of his ‘brother’ chiropractors.”² (p82) Add to this the fact that his many students, including his son, who was advertising the Palmer school as “The Fountain Head,” were now publishing their own books, publishing their own interpretations of chiropractic’s philosophy, and opening schools. Palmer writes:

If you want first hand goods you go to the first-hand man. If you desire Chiropractic first handed, you go to The Fountain Head from which originated the first principle, not to any of those who were his pupils.⁹⁶ (p728)

After all, DD Palmer had spent about 30 years studying the philosophy of healing and Spiritualism¹² and probably 10 or more years studying science.¹²² Philosophy being a legal necessity was especially troubling because he had not yet taken the time to write down his philosophy and he was striving to prove it as a science.² He was too busy developing the science, teaching, and surviving legal struggles to write. Just as Kant was awakened from his dogmatic slumber by Hume, Palmer began to systematically write down his thoughts on all things chiropractic, including philosophy, after the landmark Morikubo trial of 1907. Gaucher-Peslherbe continues from the quote above when he writes:

At that time, there were enough chiropractors for Palmer, who was now sixty-four, to feel that what he had started as the result of one simple action in 1895 would not die with him. All his thoughts and energy were now directed towards a single end: to put on firmer basis than he had been able to do so far the art, science, and philosophy of the practice he called chiropractic....

It was in 1908 that Palmer realized that the profession he had founded was escaping him; it not only was developing without him, but also at times in opposition to him, for many of his former pupils had parted company with him. In some cases they went so far as to suggest that he did not understand what he was doing, in the hope of claiming for themselves the honor of being recognized as the founders, if not the discoverers, of the new science.² (p82)

This attempt to take back his profession was evidenced by his voluminous writings from 1908 to

1910.⁹⁶ Once Palmer saw the profession slipping away from him, he was motivated to write down his ideas.

Palmer authored 2 books in his life: one was published 1910, *The Science, Art, and Philosophy of Chiropractic*⁹⁶; the other was published by his widow a year after his death in 1914, *The Chiropractor*.³ The 1914 text opens with a 10-page argument entitled “The Moral and Religious Duty of the Chiropractor.” An excerpt from that essay was quoted at the start of this article. In this essay, there was an explicit attempt to shore up the legal argument for chiropractic. But that is only part of his intent; the other part is to make his moral case.^{18,121} Palmer makes his case for morality as one of the central reasons for chiropractic to exist not only in his 1914 book but also in his 1910 text. He writes:

This linking together of the spiritual and physical makes it our duty to so keep the corporeal frame in proper alignment that the spirit may manifest itself in a natural manner. It is not only our inalienable right, but our moral duty....⁹⁶ (p718)

After the landmark Morikubo decision, the common phrase “Science, Art, and Philosophy” was important. The case established chiropractic’s legal defense against medical laws based on the argument that chiropractic had a separate science, art, and philosophy from medicine. Palmer accepted that phrase, as is obvious in the title of his first book⁹⁶; but in his final writings, he made a clear case for science, art, and morals. Morals capture the intersubjective domain, which becomes even more important to integrate for individuals who develop to post-rational thinking.^{4,64,67,72} Palmer’s emphasis on morals in his final years is further evidence of his post-conventional stance. But even more so, he used the moral argument to bridge the divides in Western culture between the value spheres of The Beautiful (Art), The Good (Morals), and The True (Science).

Wilber describes the role of philosophy as the bringing together of “The Big Three,” which are the value spheres of morals, science, and art. Wilber writes:

I refer to these three value spheres as the “Big Three” because they are three of the most significant of modernity’s differentiations, destined to play a crucial role in so many areas of life. This is not simply my own idea. The Big Three are recognized by an influential number of scholars. They are Sir Karl Popper’s three worlds: subjective (I), cultural (WE), and objective (IT). They are Habermas’s three validity claims: subjective sincerity (I), intersubjective justness (WE), and objective truth (IT). They are Plato’s Beautiful, Good, and True.¹⁴³ (p62)

Bringing those three together is the integrative impulse of the postmodern era.³⁶ It is what is demanded of the modern fragmented self to become whole. Perhaps, this may have been DD Palmer’s final attempt to imbue his postconventional worldview into the profession, not only his philosophical, artistic, and scientific interpretations but also his moral vision. Chiropractic was an attempt to integrate the Big Three, which is yet another indication that it was an attempt at a postconventional profession at the dawn of the postmodern era.

Chiropractic and science

An Integral approach can help us to interpret the complex relationship between chiropractic and science and begin to sort out the differences between preconventional, conventional, and postconventional approaches to science within chiropractic. The literature on Integral Science is one way to begin to explore the different epistemological levels involved with any pursuit of science. For example, Kurt Koller has described an Integral Scientific Method based on IMP, which includes multiple methodologies, as an opportunity for Science to capture a more complete “embodiment of truth”¹⁴⁴ (p161) along with the various “levels of science.”¹⁴⁵ (p256) Esbjörn-Hargens and Wilber²¹ compare these different levels of science based on worldviews (Fig 5). One of the most important ways we can begin to discuss this topic in more detail is to explore how the conventional levels of consciousness interpret and deal with science; then we can explore just how the philosophy of chiropractic has approached science from a postconventional stance.

Cook-Greuter⁴ estimates that 80% of the adult population of the United States and Europe is at the Conventional level. According to her research, there are 3 levels of Conventional ego development, which she refers to as *Conformist*, *Expert*, and *Conscientious*. At the Conformist stage, fundamentalism and non-critical acceptance of truth is common. The Expert or Technician stage is when the individual begins to use

third-person perspectives, which often leads to creation of new solutions. This can also lead to thinking “they know all the answers,” which makes this stage “very resistant and stable”⁴ (p16) and prone to an argumentative position. The late Conventional self or Conscientious stage is the level of ego development that embraces the scientific method as the appropriate method to find truth. Cook-Greuter refers to this achiever level as *the target stage for Western culture* because this is the stage that we expect and encourage individuals in a modern democracy to develop to as “rationally competent and independent adults.”⁴ (p17) This is the level of Piaget’s formal operational thinking. This level can view any level below it or above it as nonrational. All of these stages can be included when exploring the history and philosophy of chiropractic in regard to science.

The chiropractic literature has explored the need to embrace the scientific method or orthodox science,^{146,147} as well as the problems of antiscience and scientism.^{46,148-150} From an IMP perspective, an antiscience approach may be taken from a preconventional, early-conventional, or postconventional perspectives; and scientism is when the objective empirical approach to reality is viewed as absolute,¹⁴⁴ what Werbach has referred to as when *science is worshipped as a religion*.¹⁵¹ (p14) Keating, Green, and Johnson¹⁴⁷ described the first 50 years of research in chiropractic and its lack of accumulated research data in terms of a variety of reasons such as misunderstandings of the scientific method, a focus on clinical empiricism rather than laboratory research, attempts to use science and research as a form of marketing, and other social and economic forces on the profession, such as the common practice of chiropractic techniques being developed and taught to students who were sworn to secrecy rather than exploring the techniques through research, collaboration, and dissemination. There is little in the chiropractic literature exploring postconventional approaches to science.

Chiropractic’s relationship to science can also be described in terms of its aperspectival and postconven-

<u>Science</u>	<u>Religion</u>
Transpersonal science: Meditation	Transpersonal religion: Mysticism
Post-modern science: Systems Theory	Post-modern religion: Religious pluralism
Rational science: Physics and Biology	Rational religion : Deism
Mythic science: Scientism	Mythic religion : Fundamentalism
Magic science: Folk science	Magic religion : Voodoo and Paganism

Fig 5. Levels of science and religion and some examples from Esbjörn-Hargens and Wilber.²¹ (p541)

tional worldview. According to Martin,¹⁵² chiropractic's self-identity was marked by its unique relationship to science by emphasizing clinical observations, challenging science's dominance, and believing a morally superior approach to science includes vitalism and spirituality. Martin writes that chiropractors believed "true science incorporated a patient-centered system of values that embraced the integration of mind, body, and soul."¹⁵² (p227) Martin is pointing to what we might consider the postconventional reaction against the strictly rational or conventional approach to orthodox science. The Integral-aperspectival structure of consciousness arose in reaction to the Mental-rational structure of consciousness and its overreliance on rationality. Cook-Greuter refers to the first of the postconventional or *General Systems Stages*, according to an ability to hold fourth-person perspectives (Individualist stage). She writes:

Individualists abandon purely rational analysis in favor of a more holistic, organismic approach in which feelings and context are taken into account and the process becomes as intriguing as the product or outcome. Individualists also favor more relativistic or psycho-logical approaches over merely logical ones."⁴ (p22)

Cook-Greuter continues:

There is a new sense of body/mind connection. Therefore, the shift from conventional to post-conventional stages also reflects a shift from a more intellectual to a more organismic or embodied awareness."⁴ (p23)

Martin's analysis points to some of these attributes and suggests that the philosophy of chiropractic traditionally embraces a postconventional approach to science.

Examining the postconventional elements of the philosophy of chiropractic in regard to science by no means suggests that all approaches to philosophy and science in chiropractic are postconventional. As noted above, an attitude of "anti-science" has been pointed out in the literature in regard to the history and philosophy of chiropractic.^{147,150,152} This can be interpreted as preconventional (magical-mythic thinking) or postconventional (systems thinking). Future writing on the subject should carefully consider the empirical research of developmental psychology, which may help to distinguish between these levels of "anti-science."^{4,29,60,67,69} Postconventional approaches may embrace an overreaction to rationality and also include earlier structures of consciousness. Gebser refers

to vitalism in 20th century biology (in regard to its inclusion of the magical structure of consciousness) as a "deficient" form of the integral aperspectival structure, what he refers to as *deficient integrality*.⁵⁸ (p382) The current trend in chiropractic in terms of using "vitalism" as a characterizing paradigm or framework usually refers to organismic and systems approaches to biology rather than magical thinking.^{48,91,115,153} Other researchers have noted that the early postconventional stage is prone to an extreme relative or pluralistic position, where all truth is relative, even truth disclosed through the scientific method.⁴ Such an extreme relativism may also resist a deeper systems or holistic approach based on natural hierarchies such as developmental structuralism.⁷² An IMP approach to science in chiropractic with an emphasis on the structural lens of consciousness reframes any discussion of the relationship between science and chiropractic and opens up a more inclusive approach toward understanding how the philosophy of chiropractic has been used to relate to science and how it can be used in the future to construct a philosophy of chiropractic.

Integral pluralism: chiropractic's future

For chiropractic as a profession to successfully develop a postrational and postconventional philosophy deeply resonating with Palmer's vision, Integral Pluralism (IP), which developed from Integral Theory, will be essential. Integral Theory integrates the domains of "I" (art, aesthetics, and beauty), "We" (culture, morals/goodness, shared and mutual resonance), and "It" (objective facts/truth, systems, and nature) (Fig 1). It is these 3 domains that comprise Wilber's 4 quadrants of "I, We, It, and Its," described in the first article in this series.⁵ The 4 quadrants represent distinct and interpenetrating dimensions of reality for each sentient being. To approach reality from a postconventional worldview is to incorporate all 4 of these aspects of the self into your being.

Integral Pluralism combines multiple levels of self-development (Integral Epistemological Pluralism) along with multiple methodological approaches to knowledge acquisition (IMP) based on the 8 fundamental perspectives (Fig 2).¹⁵⁴ Integral Pluralism takes into account the structural level of consciousness (way of knowing or epistemology) an individual looks through as well as the methodological approaches (how one brings forth knowledge). By using IP, chiropractic and its philosophy become a "multiple object," where it is a different "thing" (ontology) based on what level the

individual is looking at it from and what method he or she is using.^{154,155} Esbjörn-Hargens refers to this as *Integral Ontological Pluralism*. Esbjörn-Hargens describes IP in terms of “epistemological distance (the Who), methodological variety (the How), and ontological complexity (the What).”¹⁵⁴ (p143) Integral Pluralism acknowledges that individuals acquire knowledge through at least 8 methodologies (IMP), viewed through the filters of their own structural lens of consciousness such as preconventional, conventional, or postconventional (Integral Epistemological Pluralism), resulting in knowledge of each thing that is specific to the complexity of the level looked through and method used (Integral Ontological Pluralism).

One of the central elements of IP and Integral Theory is increasing levels of complexity, which equate to increasing value. This idea embraces a pluralism of all forms of truth as valid and valued, but it places a higher value on higher levels of complexity when this represents a deeper and wider embrace of reality. For example, in terms of personal development, a preconventional stance embraces “me and my ego”; a conventional stance embraces “my people, my nation, or us”; and a postconventional stance embraces “all people or all of us.”⁵⁷ More value is simply equated to a wider embrace from a deeper perspective, such as first-, second-, third-, or fourth-person perspectives (fourth being the deepest). Add to the complexity of perspective, more methodological approaches used to acquire knowledge; and even more complexity and thus more value emerge because more domains of truth are being encompassed, disclosed, and enacted. This approach allows for the relative and pluralistic truth of all perspectives but does not allow the object, in our case, the philosophy chiropractic, to sink into an extreme relativism of “no truth is any better than any other truth.” A type of value-metric is thus established to determine how complex any approach to the philosophy of chiropractic is and, quite possibly, how valued that approach should be in terms of the profession’s identity.

Palmer’s original philosophy may have situated chiropractic as one of the first postconventional professions. Exploring this possibility reframes traditional discussions and debates in the philosophy of chiropractic in a new light. Most notably, it calls into question the current debates in the profession of chiropractic around what it means to progress. In a recent article, Paul Carey writes:

Segments of the profession refuse to let go of their old beliefs. I think this places the chiropractic profession at a cross roads. Down one path is

continued isolation and separation from main stream health care. If this path is taken there is a real risk it will lead to our eventual demise. The chiropractic profession would become irrelevant because other professions can and will do what we do but, from within the system. (p147)

The argument is based on the premise that the philosophy of chiropractic is prerational and preconventional and reliant on belief systems. This article demonstrates the problems with such an argument and how easy it is to have such confusion, especially if one is looking at the philosophy from a conventional or rational perspective because, from that perspective, anything nonrational (pre or post) is equated. This is not to suggest that all adherents of philosophy in chiropractic are personally viewing the world through a postconventional structure of consciousness, which adds to the complexity of the crossroads. The final article in this series will explore various approaches in the literature by applying developmental perspective to particular arguments on philosophy and chiropractic.

Similar arguments against the philosophy of chiropractic developed by its founder, DD Palmer, have led to the recent move by the CCE to dismiss traditional language from its definition of chiropractic, such as *without drugs and surgery*, and minimize the central reason for chiropractic’s existence, *the vertebral subluxation*.⁵³ Some of the history of this debate and current crisis within chiropractic in regard to its identity¹⁰⁶ stems from its approach to science and philosophy as well as confusions surrounding the original spiritual/biological definitions of IP put forth by DD Palmer and expanded upon by his son, BJ Palmer. By applying IP to the philosophy of chiropractic and establishing DD Palmer as a postconventional thinker, with a postmodern worldview at the core of his identity, a new interpretation of chiropractic emerges, one that forces us to reevaluate not only the current dilemma but the identity of chiropractic as a profession.

Postconventional and postrational perspectives are viewed in terms of developmental research on increasingly complex ways humans develop to make meaning in their world.^{60,70} These structures emerged in the course of human history and represent new ways of being and thinking.^{36,58,59,64-66,79} DD Palmer lived at a time when one of these new structures was emerging, the integral-aperspectival structure according to Gebser⁵⁸ and the vision-logic altitude according to Wilber,⁶⁵ and generalized by several researchers as the postconventional level.^{4,72} By understanding chiropractic’s emergence from this

perspective and adding to that insight into the confusions between preconventional and postconventional thinking,⁸⁵ many of the dismissivist approaches to the philosophy of chiropractic from the legal ploy argument to dismissing all premodern and phenomenological approaches to IP^{9,47,92} should be reevaluated.

DD Palmer incorporated phenomenological spiritual experiences (premodern),¹⁹ objective rational thinking (modern),⁶ and systems and holistic thinking (postmodern).^{2,18,120} His philosophy is reflective of other philosophers who influenced his time, such as Fichte and Schelling. DD Palmer's ability to combine premodern, modern, and postmodern worldviews into an embodied philosophy centered on touch, time, integrating physical and spiritual, and a postrational systems approach to science gives us a profession that is postconventional and postmodern in its inception. Since the earliest days of chiropractic, chiropractic philosophers and historians have sought to fit Palmer's vision of chiropractic into a conventional mold.⁴² Others have sought to expand on the postconventional aspects and even develop post-postconventional approaches.⁸² And yet, with any attempt to update, revise, and evolve the philosophy of chiropractic, there is always the danger of dogmatic thinking, scientism, and dismissivist approaches based on limited perspectives, methods, and worldviews. Constructing a philosophy of chiropractic using IP is one way to overcome such obstacles while advancing the philosophy to ever more postconventional perspectives by including all levels, all perspectives, and all methodologies. Integral Pluralism, which developed as a late-postconventional approach to all known forms of knowledge acquisition and interpretation, is congruent with chiropractic's original early postconventional approach and ideal to assist the chiropractic profession to evolve its worldviews for the 21st century.

Conclusions

DD Palmer was one of the first postrational individuals in America, and chiropractic was an attempt at the first postrational health profession. The philosophy of chiropractic, as it was originally developed by DD Palmer, is a postconventional and postmodern approach to the complexities and challenges of the modern world. DD Palmer's philosophy describes a practice designed to assist human beings to express their innate divinity as a result of the chiropractic adjustment. Although this approach seems at first glance as a throwback to 19th century Spiritualism and

magnetic healing, a deeper look at Palmer's philosophical writings reveals something else. Palmer's approach incorporates the nuanced distinctions of a modern self, one who can view his or her own consciousness objectively and apart from Nature. DD Palmer described a separation between body, mind, soul, and spirit. He also described a type of nondual interpretation of how each of those levels arose from one source as a manifestation of Spirit or UI. Chiropractic, for Palmer, centered on the expression of Spirit as Innate in the body vibrating along pathways through or over the nervous system. Misalignments of the skeletal frame, centered on the spine, termed *subluxations*, blocked the flow of innate, caused tension in the neuroskeleton and a disruption of tone, and ultimately resulted in disease, insanity, societal discord, and an inability for spirit to more fully express in the physical world and beyond after bodily death. By incorporating the progressive actualization of this divinization process, Palmer showed an ability to include fourth-person perspectives, one of the hallmarks of a postconventional and postmodern self. This advanced self-sense broke with the norms of conventional cultural worldviews, including the conventional approaches to science.

DD Palmer's postconventional worldview can be ascertained through his use of embodied language, his systems approach, his inclusion of subjective and objective perspectives, as well as his attempts to integrate science, art, and morality. As a result, chiropractic's status as a postconventional profession is evidenced in several areas, including its unorthodox relationship to science, the inclusion of science and spirituality, the focus on touch, the inclusion of time, as well as its systems and holistic approach. Attempts within chiropractic to highlight conventional worldviews should do so in light of chiropractic's more comprehensive approach to life and reality as a way to strengthen its postconventional center of gravity, rather than try to restrain it to a conventional approach, which would ultimately be a backward step in the history of human consciousness, philosophy, and worldview evolution, of which chiropractic is a part.

References

1. Palmer B, editor. The chiropractic adjuster; a compilation of the writings of D.D. Palmer. Davenport, IA: Palmer School of Chiropractic; 1921.
2. Gaucher-Peslherbe P. Chiropractic: early concepts in their historical setting. Chicago: National College of Chiropractic; 1993.
3. Palmer DD. The chiropractor. Los Angeles: Press of Beacon Light Printing Company; 1914.

4. Cook-Greuter S. Ego development: nine levels of increasing embrace. Wayland, MA: Cook-Greuter & Associates; 2007.
5. Senzon S. Constructing a philosophy of chiropractic I: an integral map of the territory. *J Chiropr Human* 2010;17(17):6-21.
6. Senzon S. Constructing a philosophy of chiropractic: when worldviews evolve and modern roots. *J Chiropr Humanit* 2011.
7. Donahue J. D.D. Palmer and innate intelligence: development, division, and derision. *Chiropr Hist* 1986;6:31-6.
8. Keating J. Purpose-straight chiropractic: not science, not health care. *J Man Phys Ther* 1995;18(6):416-8.
9. Keating J, Charton K, Grod J, Perle S, Sikorski D, Winterstein J. Subluxation: dogma or science. *Chiropr Osteopathy* 2005;13(17).
10. Carey P. The chiropractic dilemma. To be isolated or integrated. *J Can Chir Assoc* 2011;55(3):147-8.
11. Murphy D, Schneider M, Seaman D, Perle S, Nelson C. How can chiropractic become a respected mainstream profession? The Example of Podiatry. *Chiropr Osteopathy* 2008;16(10).
12. Moore S. Chiropractic in America: the history of a medical alternative. Baltimore: Johns Hopkins University Press; 1993.
13. Albanese C. A Republic of mind and spirit: a cultural history of American metaphysical religion. New Haven: Yale University Press; 2007.
14. Gabay A. The covert enlightenment: eighteenth-century counterculture and its aftermath. Pennsylvania: Swedenborg Foundation Publishers; 2005.
15. Taylor E. Shadow culture; psychology and spirituality in America. Washington, D.C: Counterpoint; 1999.
16. Wellek R. Emerson and German philosophy. *N Engl Q* 1943;16(1).
17. Miller A. Transcendentalism's inspiration to chiropractic philosophy and practice. *Today's Chiropr* 2000;29(2).
18. Senzon S. Chiropractic foundations: D.D. Palmer's traveling library. Asheville, NC: Self published; 2007.
19. Senzon S. Constructing a philosophy of chiropractic: when worldviews evolve and Premodern roots. *J Chiropr Humanit* 2011.
20. Wilber K. Integral spirituality: a startling new role for religion in the modern and postmodern world. Boston: Shambhala; 2006.
21. Esbjörn-Hargens S, Wilber K. Toward a comprehensive integration of science and religion: a post-metaphysical approach. In: Clayton P, Simpson Z, editors. *The Oxford handbook of religion and science*. Oxford: Oxford University Press; 2006. p. 523-46.
22. Esbjörn-Hargens S. An overview of integral theory: an all inclusive framework for the 21st century. *Integral Institute*. 2009; Resource Paper No. 1 (March 2009):1-24.
23. Wilber K. An integral theory of consciousness. *J Conscious Stud* 1997;4(1):71-92.
24. Wilber K. Waves, streams, states, and self: further considerations for an Integral theory of consciousness. *J Conscious Stud* 2000;7(11-12):145-76.
25. Schlitz M. The integral model: answering the call for whole systems health care. *Permanente J* 2008;12(2):61-8.
26. George L. Diagnostics in integral medicine. *J Integral Theory Pract* 2006;1(3):60-71.
27. Jarrin O. An integral philosophy and definition of nursing. *J Integral Theory Pract* 2007;2(5):79-101.
28. Fiandt K, Forman J, Megel E, Pakieser R, Burge S. Integral nursing: an emerging framework for engaging the evolution of the profession. *Nurs Outlook* 2003;51(3):130-7.
29. Ingersoll E, Zeitler D. Integral psychotherapy: inside out/ outside. Albany: SUNY; 2010.
30. Cook-Greuter S, Soulen J. The developmental perspective in integral counseling. *Couns Values* 2007;51(3):180-92.
31. Divine L. Looking AT and looking AS the client: the quadrants as a type structure lens. *J Integral Theory Pract* 2009;4(1):21-40.
32. Hunt J. Transcending and including our current way of being: an introduction to integral coaching. *J Integral Theory Pract* 2009;4(1):1-20.
33. Esbjörn-Hargens S, Zimmerman M. Integral ecology: uniting multiple perspectives on the natural world. New York, NY: Random House/Integral Books; 2009.
34. Esbjörn-Hargens S, Zimmerman M. Overview of integral ecology: comprehensive approach to today's complex planetary issues. *Integral Institute* 2009:1-14.
35. Gare A. The roots of postmodernism; Schelling and process philosophy, and postructuralism. In: Keller C, Daniell A, editors. *Process and difference; between cosmological and postructuralisms*. New York: SUNY Press; 2002.
36. Wilber K. Sex, ecology, spirituality: the spirit of evolution. Boston, MA: Shambhala; 1995.
37. McAulay B. Rigor in the philosophy of chiropractic: beyond the dismissivism/authoritarian polemic. *J Chiropr Humanit* 2005;12:16-32.
38. Beideman R. The role of the encyclopedic Howard System in the professionalization of Chiropractic National College, 1906-1981. *Chiropr Hist* 1996;16(2):29-41.
39. Coulter I. Chiropractic philosophy has no future. *Chiropr J Austr* 1991;21(4):129-31.
40. Donahue J. Philosophy of chiropractic: lessons from the past— guidance for the future. *J Can Chiropr Assoc* 1990;34(4):194-205.
41. Jamison J. Looking to the future: from chiropractic philosophy to the philosophy of chiropractic. *Chiropr J Austr* 1991;21(4):168-75.
42. Keating J. Philosophy in chiropractic. In: Haldeman S, editor. *Principles and practice of chiropractic*. New York: McGraw Hill Companies, Inc; 2005. p. 77-97.
43. Leach R, Phillips R. Philosophy: foundation for theory development. 4th ed. Philadelphia, PA: Lippincott Williams & Wilkins; 2004.
44. Phillips R. The battle for innate: a perspective on fundamentalism in chiropractic. *J Chiropr Humanit* 2004;11:2-8.
45. Seaman D. Philosophy and science versus dogmatism in the practice of chiropractic. *J Chiropr Humanit* 1998;8:55-66.
46. Winterstein J. Philosophy of chiropractic: a contemporary perspective (pt 1). *ACA J Chiropr* 1994.
47. Cleveland A, Phillips R, Clum G. The chiropractic paradigm. In: Redwood D, Cleveland C, editors. *Fundamentals of chiropractic*. St. Louis: Mosby; 2003.
48. Coulter I. Chiropractic: a philosophy for alternative health care. Woburn, MA: Butterworth-Heinemann; 1999.
49. Hawk C. When worldviews collide: maintaining a vitalistic perspective in chiropractic in the postmodern era. *J Chiropr Humanit* 2005;12:2-7.
50. Koch D. Contemporary chiropractic philosophy: an introduction. Roswell, GA: Roswell Pub. Co.; 2008.

51. Strauss J. Toward a better understanding of the philosophy of chiropractic. Levittown, PA: Foundation for the Advancement of Chiropractic Education; 1999.
52. Southerland R. Redefining rules: the CCE changes its standards from quantitative to qualitative. *Today's Chiropractic Lifestyle* 2011.
53. Education USDo. The Council on Chiropractic Education, Commission on Accreditation Action for Consideration: petition for renewal of recognition: transcript of proceedings. *J Philos Princ Pract Chiropr* 2011;17-52.
54. Edwards J. The profession has spoken... But will the CCE Listen? *Dyn Chiropr* 2010;28(25).
55. International Chiropractors Association. ICA files extensive comments on wide range of CCE issues with US Department of Education. ICA News. Available from: <http://members.chiropractic.org/asset/docs/CCEUSDECCommentsbyICAnewsrelease091911.pdf>. 2011.
56. Kent C. Foundation for vertebral subluxation complaint against the Council on Chiropractic Education (CCE) and third-party comments concerning CCE. Available from: http://www.mccoypress.net/subluxation/docs/cce_fvs.pdf. 2011.
57. Wilber K. Introduction to integral theory and practice: IOS basic and the AQAL Map. *J Integral Theory Pract* 2006;1(1).
58. Gebser J. The ever-present origin. Athens, OH: Ohio University Press; 1949.
59. Combs A. Consciousness explained better: towards an integral understanding of the multifaceted nature of consciousness. St. Paul: Paragon House; 2009.
60. Kegan R. The evolving self: problem and process in human development. Cambridge: Harvard University Press; 1982.
61. Kegan R. In over our heads: the mental demands of modern life. Cambridge: Harvard University Press; 1994.
62. Cook-Greuter S. Maps for living: ego-development stages from symbiosis to conscious universal embeddedness. In: Commons M, Armon C, Kohlberg L, Richards F, Grotzner T, Sinnott J, editors. *Adult development; volume 2: models and methods in the study of adolescent and adult thought*. New York: Praeger; 1990.
63. Wilber K. The eye of spirit: an integral vision for a world gone slightly mad. Boston: Shambhala; 1997.
64. Beck D, Cowan C. *Spiral dynamics: mastering values, leadership, and change*. Oxford: Blackwell Publishers; 1996.
65. Wilber K. *Up from Eden: a transpersonal view of human evolution*. Wheaton, OH: Quest Books; 1982.
66. Taylor C. *Sources of the self: the making of the modern identity*. Cambridge: Cambridge University Press; 1991.
67. Kegan R, Lahey L. *The immunity to change: how to overcome it and unlock the potential in yourself and your organization*. Cambridge, MA: Harvard University Press; 2009.
68. Loevinger J. *Ego development*. San Francisco: Jossey-Bass; 1976.
69. Cook-Greuter S. *Postautonomous ego development: a study of its nature and measurement [dissertation]*. Ann Arbor: UMI; 1999.
70. Cook-Greuter S. Making the case for a developmental perspective. *Ind Commercial Train* 2004;36(7):275-81.
71. Stein Z. *Intuitions of altitude: researching the conditions of the possibility for developmental assessment*. 1st Biennial Integral Theory Conference, Pleasant Hill, CA. August 2008. Pleasant Hill, CA; 2008.
72. Wilber K. *Integral psychology: consciousness, spirit, psychology, therapy*. Boston: Shambhala; 2000.
73. Baldwin J. *Thought and things: a study of the development and meaning of thought or genetic logic*. New York: Arno Press; 1906/1975.
74. Piaget J. *The principles of genetic epistemology: collected works*. London: Routledge; 1997.
75. Piaget J. *Structuralism*. New York: Harper & Row; 1970.
76. Piaget J. *Biology and knowledge: an essay on the relations between organic regulations and cognitive processes*. Chicago: University of Chicago Press; 1971.
77. Senzon S. Causation related to self-organization and health related quality of life expression based on the vertebral subluxation model, the philosophy of chiropractic, and the new biology. *J Vertebral Subluxation Res* 1999;3: 104-12.
78. Kohlberg L. *The philosophy of moral development: moral stages and the idea of justice*. San Francisco: Harper and Row; 1981.
79. Graves C. Human nature prepares for a momentous leap. *Futurist* 1974;72-87.
80. Fowler J. *Stages of faith: the psychology of human development and the quest for meaning*. HarperCollins: San Francisco; 1995.
81. Commons M, Richards FA, Armon C, editors. *Beyond formal operations: late adolescent and adult cognitive development*. New York: Praeger; 1984.
82. Senzon S, B.J. Palmer: an integral biography. *J Integral Theory Pract* 2010;5(3):118-36.
83. Senzon S. *Success, health, and happiness: the epigrams of B.J. Palmer*. Asheville, NC: Integral Altitude; 2010.
84. Pauchant T. Integral leadership: a research proposal. *J Organ Change Manag* 2005;18(3):211-29.
85. Wilber K. The pre/trans fallacy. *J Hum Psych* 1981;22(2):5-43.
86. Fuller R. *Alternative medicine and American religious life*. New York: Oxford University Press; 1989.
87. Chapman-Smith E. Philosophy, practice and identity: why agreement is needed and what is being done. *Chiropr Rep* 2003;17(3):1-8.
88. Janse J. History of the development of chiropractic concepts: chiropractic terminology. In: Goldstein M, editor. *The research status of spinal manipulative therapy: a workshop held at the National Institutes of Health, February 2-4, 1975*. Bethesda: U.S. Department of Health, Education, and Welfare; 1975. p. 25-42.
89. Keating J. *Toward a philosophy of the science of chiropractic: a primer for clinicians*. Stockton, CA: Stockton Foundation for Chiropractic Research; 1992.
90. McDonald W, editor. *Chiropractic Peace*. Victoria, BC, Canada: Foundation for Chiropractic Education and Research; 2009.
91. Phillips R. The evolution of vitalism and materialism and its impact on philosophy in chiropractic. In: Haldeman S, editor. *Principles and practice of chiropractic*. New York: McGraw Hill Companies, Inc; 2005. p. 65-75.
92. Strauss J. *Refined by fire: the evolution of straight chiropractic*. Levittown, PA: Foundation for the Advancement of Chiropractic Education; 1994.
93. Keating J. The meanings of innate. *J Can Chir Assoc* 2002;46(1):4-10.
94. Association of Chiropractic Colleges. *The ACC chiropractic paradigm*. Available from: http://wwwchirocollegesorg/paradigm_scope_practicehtml. 1996.

95. Senzon S. An integral approach to unifying the philosophy of chiropractic: B.J. Palmer's model of consciousness. *J Integral Stud* 2000;1(2).
96. Palmer DD. The science, art, and philosophy of chiropractic. Portland, OR: Portland Printing House; 1910.
97. Lerner C. The Lerner report. Davenport, IA: Palmer College Archives; 1952.
98. Rehm W. Legally defensible: chiropractic in the courtroom and after, 1907. *Chiropr History* 1986;6:51.
99. Holmes A. Malpractice as applied to chiropractors. Davenport: Palmer College; 1924.
100. Paxson M, Smith O, Langworthy S. A textbook of modernized chiropractic. Cedar Rapids, IA: American School of Chiropractic.; 1906.
101. Keating J, Troyanovich S. Wisconsin versus chiropractic: the trials at LaCrosse and the birth of a chiropractic champion. *Chiropr History* 2005;25(1):37-45.
102. Geilow V. Old dad chiro: a biography of D.D. Palmer founder of chiropractic. La Crosse, WI: Fred Barge; 1982.
103. Senzon S. The secret history of chiropractic. Asheville, NC: Self Published; 2006.
104. Callender A. B.J. Palmer, the Universal Chiropractic Association, and civil disobedience. *Chiropr History* 2004;24(2):75-80.
105. Keating J. B.J. of Davenport: the early years of chiropractic. Davenport, Iowa: Association for the History of Chiropractic.; 1997.
106. Edwards J. Exposing the CCE charade. *Dyn Chiropr* 2011;29(8).
107. Seaman D. A cure for the curse of chiropractic, part one. *Dyn Chiropr* 2007;25(3).
108. Seaman D. A cure for the curse of chiropractic, part two. *Dyn Chiropr* 2007;25(4).
109. Dupuy J, Morelli M. Toward an integral recovery model for drug and alcohol addiction. *J Integral Theory Pract* 2007;2(3):26-42.
110. Mickunas A. An introduction to the philosophy of Jean Gebser. *Integr Explorations* 1997;4(1):1-13.
111. Einstein A. On the electrodynamics of moving bodies. *Annalen der Physik* 1905.
112. Husserl E. Phenomenology and the crisis of philosophy. New York: Harper & Row; 1965.
113. Kandinsky W. Concerning the spiritual in art. 6 ed. New York: Dover Publications; 1911/1977.
114. Bergson H. Creative evolution. Landham, MD: University Press of America; 1910/1983.
115. Senzon S. What is life? *J Vertebr Subl Res* 2003;1-4.
116. Freud S. A general introduction to psychoanalysis. New York: Boni and Liveright; 1920.
117. Smuts J. Holism and evolution. New York: Macmillan Co; 1926.
118. Morgan C. Emergent evolution: the Gifford Lectures, delivered in the University of St. Andrews in the year 1922. London: Williams and Norgate; 1923.
119. Whitehead AN. Process and reality: an essay in cosmology; Gifford lectures delivered in the University of Edinburgh during the session 1927-28. New York: The Macmillan Co.; 1929.
120. Callendar A. The mechanistic/vitalistic dualism of chiropractic and general systems theory: Daniel D. Palmer and Ludwig von Bertalanffy. *J Chiropr Humanit* 2007;14:1-21.
121. Senzon S. The secret history of chiropractic: D.D. Palmer's spiritual writings. Asheville, NC: Self published; 2005.
122. Gaucher-Pelherbe P, Wiese G, Donahue J. Daniel David Palmer's medical library: the founder was "into the Literature." *Chiropr Hist* 1995;15(2):63-9.
123. National Spiritualist Association of Churches. Spiritualist manual. Cassadaga, FL: National Spiritualist Association; 1980.
124. Kerr F. In: Abbey R, editor. The self and the good; Taylor's moral ontology. Cambridge: Cambridge University Press; 2004.
125. Beiser F. Berlin and the German counter-enlightenment. In: Mali J, Wokler R, editors. Isaiah Berlin's counter-enlightenment. Philadelphia: American Philosophical Society; 2003. p. 91-104.
126. Hampson G. Integral reviews postmodernism; the way out is through. *Integral Rev* 2007;4:108-73.
127. Garrard G. Counter-enlightenments: from the eighteenth century to the present. New York: Routledge Taylor and Francis Group; 2006.
128. Gaukroger S. The enlightenment revolt against rationalism. Sydney: The Australian Review of Public Affairs; 2005.
129. Esbjörn-Hargens S, Wilber K. Toward a comprehensive integration of science and religion: a postmetaphysical approach. In: Clayton P, Simpson Z, editors. The Oxford handbook of religion and science. Oxford, UK: Oxford University Press; 2006.
130. Wirth JM. The conspiracy of life; meditations on Schelling and his time. Albany, NC: State University of New York Press; 2003.
131. Siegel J. The idea of the self; thought and experience in western Europe since the seventeenth century. Cambridge: Cambridge University Press; 2005.
132. Gidley J. The evolution of consciousness as a planetary imperative: an integration of integral views. *Integral Rev* 2007;5:4-226.
133. Palmer B. The bigness of the fellow within; vol. 22. Davenport, IA: Palmer College; 1949.
134. Palmer B. Our masterpiece; vol. 39. Davenport, IA: Palmer College; 1966.
135. Palmer B. The great divide; vol. 38. Davenport, IA: Palmer College; 1966.
136. Horn F, Dole GT. Schelling and Swedenborg: mysticism and German idealism. West Chester, PA: Swedenborg Foundation; 1997.
137. Palmer B. Fight to climb; vol 24. Davenport, IA: Palmer College; 1950.
138. Senzon S. Chiropractic and energy medicine: a shared history. *J Chiropr Humanit* 2008;15:27-54.
139. Stephenson R. Chiropractic textbook. Davenport: Palmer School of Chiropractic; 1927.
140. O'Malley J. Toward a reconstruction of the philosophy of chiropractic. *J Manipulative Phys Ther* 1995;18:285-92.
141. Albanese C. The poetics of healing: root metaphors and rituals in nineteenth-century America. *Soundings* 1980;63(4):381-406.
142. Leder D, Krucoff M. The touch that heals: the uses and meanings of touch in the in the clinical encounter. *J Altern Complement Med* 2008;14(3):321-7.
143. Wilber K. The marriage of sense and soul. Boston: Shambhala; 1998.
144. Koller K. The data and methodologies of integral science. *J Integral Theory Pract* 2006;1(3):158-83.

145. Koller K. Architecture of an integral science. *J Integral Theory Pract* 2006;1(2):250-75.
146. Keating J. Rationalism and empiricism vs. the philosophy of science in chiropractic. *Chiropr Hist* 1990;10(2):23-7.
147. Keating J, Green B, Johnson C. "Research" and "Science" in the first half of the chiropractic century. *J Manipulative Phys Ther* 1995;18(6):357-78.
148. Kleynhans A. A chiropractic conceptual framework: part 1: foundations. *Chiropr J Austr* 1998;28:91-109.
149. Cleveland A. Teaching philosophy in chiropractic education today: evolving into the twenty-first century or doing more of the same? *Proceedings of World Federation of Chiropractic 10th Biennial Conference*; 2009 Apr 3-May 2; Montreal, Quebec, Canada Toronto: WFC; 2009.
150. Donahue J. Metaphysics, rationality and science. *J Manipulative Phys Ther* 1994;17(1):54-5.
151. Werbach M. Medical science and scientism: when is belief in science a religion? *Altern Therapies* 2004;10(3):14-5,92.
152. Martin S. "The only true scientific method of healing": chiropractic and American science. *Isis* 1994;85(2):207-27.
153. Koch D. Has vitalism been a help or a hindrance to the science and art of chiropractic? *J Chiropr Humanit* 1997;6:18-22.
154. Esbjörn-Hargens S. An ontology of climate change: integral pluralism and the enactment of multiple objects. *J Integral Theory Pract* 2010;5(1):143-74.
155. Mol A. *The body multiple: ontology in medical practice*. Duke University Press; 2002.