



# When Worldviews Collide: Maintaining a Vitalistic Perspective in Chiropractic in the Postmodern Era

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## ABSTRACT

**Objectives:** To discuss concepts of postmodernism with respect to the opposing worldviews of vitalism and mechanism, and to present an argument for a viable role for vitalism in chiropractic philosophy and research.

**Discussion:** Vitalism is only problematic if we begin with the assumption that a mechanist worldview or paradigm is the correct way to explain the world. In postmodern thought, a multiplicity of worldviews may coexist. One view is no more valid or correct than another and these divergent views are judged best by their utility under various circumstances. Exploring clinical practices and methodologies, such as whole systems research, arising from a vitalistic perspective could lead to innovations in both patient care and research, if pursued with flexible non-dogmatic thinking.

**Conclusion:** Vitalism, approached in a responsible and intelligent manner, may afford the chiropractic profession opportunities to further improve patient care and make contributions to new knowledge. (J Chiropr Humanit 2005;12:2-7)

**Key Indexing Terms:** Chiropractic; Vitalism

## INTRODUCTION

The 2003, the World Federation of Chiropractic conference convened a panel to address this question: “Is vitalism a strong foundation or quicksand for the chiropractic profession?” As one of the panelists, in order to address what I believed this question was really asking, it was necessary

to first deconstruct the question, that is, to examine its underlying assumption.<sup>1</sup>

This underlying assumption is that a mechanist worldview or paradigm is the correct way to explain the world. Based on this assumption, anything that does not fit this worldview would be a potential threat to our profession’s credibility and, therefore, must be modified to fit this view or jettisoned. Vitalism, which entails a different way of perceiving the world, poses such a threat.

This assumption must be examined rather than simply accepted. Only then will it be possible to make a conscious choice of

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which worldview we want to function within and then thoughtfully and responsibly adhere to the principles of that worldview.

## **DISCUSSION**

### **Modernism and Postmodernism**

Modernism, which has shaped Western thought since the late 18<sup>th</sup> century,<sup>2</sup> “favors a single way of explaining the world.” Postmodernist thought, which has emerged in the latter half of the 20<sup>th</sup> century, accepts diversity in values and beliefs, recognizing that all worldviews are based not on absolute reality but on their own set of *a priori* assumptions.<sup>3</sup>

What are the assumptions of the worldview which has shaped Western culture through the 19<sup>th</sup> and 20<sup>th</sup> centuries? Briefly, the premise from which other assumptions logically proceed is that the world is operationally a machine and therefore can be understood in a rational, linear manner; the whole equals no more than the sum of its parts (reductionism); and there is no reality beyond the physical (materialism).<sup>4</sup>

Vitalism, on the other hand, operates on different assumptions: that the world functions more like an organism than a machine, having self-organizing and evolutionary qualities; that the whole is something new created by the interaction of its parts; and that reality is not confined to the physical.

It is essential to understand that both the mechanistic/reductionistic and the vitalistic/holistic worldviews are merely ways of viewing the world, not the world itself. As the “father of general semantics,” Alfred Korzybski, said, “The map is not the

territory.”<sup>5</sup> In postmodern thought, a multiplicity of worldviews may coexist. One is no more valid or correct than another, and these divergent views are best judged by their utility under various circumstances.<sup>6</sup>

The mechanistic/reductionistic worldview has been extremely productive in terms of technological advances, and it is equated by many to be synonymous with science. This is the crux of the problem with vitalism: we believe that vitalism is getting in the way of our acceptance as a scientific discipline. We believe that it is keeping us out of the socially-accepted, National Institutes of Health-funded mechanist box.

### **The “Box” of the Mechanistic Worldview**

Is vitalism incompatible with a scientific approach? Ian Coulter, PhD, notes that, “...part of the problem is a misunderstanding by chiropractors about the nature of science,” that they believe is “...oriented toward the testing of the [worldview] itself under the mistaken belief that this is what scientists do. If Thomas Kuhn is correct, this is the last thing scientists do.”<sup>7</sup> According to Kuhn, one of the seminal thinkers associated with postmodern philosophy, scientists assume that their worldview is synonymous with reality, and only design and conduct studies congruent with this model.<sup>8</sup>

In other words, the worldview determines not only the type of puzzles to be solved, but also which solutions are acceptable. This means that scientists investigating puzzles arising from a reductionistic, mechanistic, and externally driven worldview (eg, how to eradicate a specific disease) will almost surely find reductionistic, mechanistic, and

**Table 1. Comparison of study design features between mechanistic/reductionistic and vitalistic/holistic approaches.\***

	<b>Mechanist/reductionist</b>	<b>Vitalist/holist</b>
<b>Research question</b>	<ul style="list-style-type: none"> <li>• Single cause, single effect (example: Does spinal manipulation decrease pain associated with dysmenorrhea?)</li> </ul>	<ul style="list-style-type: none"> <li>• Multiple causes, multiple/ systemic effects (example: Do people under chiropractic maintenance care have a decreased incidence of disease and disability?)</li> </ul>
<b>Study design</b>	<ul style="list-style-type: none"> <li>• Experimental, especially randomized controlled trial</li> </ul>	<ul style="list-style-type: none"> <li>• Observational (cohort)</li> <li>• Pragmatic intervention study</li> </ul>
<b>Study population</b>	<ul style="list-style-type: none"> <li>• Strict exclusion criteria</li> </ul>	<ul style="list-style-type: none"> <li>• General population</li> </ul>
<b>Preferred outcome measures</b>	<ul style="list-style-type: none"> <li>• Physiological, doctor-based (spirometry, range-of-motion)</li> <li>• Single dimension (visual analog scale for pain)</li> </ul>	<ul style="list-style-type: none"> <li>• Functional, patient-based (SF-36, medication use)</li> <li>• Multiple dimensions (physical, psychosocial, well-being)</li> </ul>
<b>Intervention</b>	<ul style="list-style-type: none"> <li>• Single procedure (manipulation)</li> </ul>	<ul style="list-style-type: none"> <li>• Clinical encounter (usual and customary care)</li> </ul>
<b>Comparison groups</b>	<ul style="list-style-type: none"> <li>• Placebo</li> <li>• “Gold standard” treatment</li> </ul>	<ul style="list-style-type: none"> <li>• Community-based (community residents/health plan members under chiropractic care compared to those under medical care or no care)</li> <li>• Preference</li> </ul>
<b>End points</b>	<ul style="list-style-type: none"> <li>• Short term or long term</li> </ul>	<ul style="list-style-type: none"> <li>• Long-term</li> <li>• Cross-sectional, using qualitative methods to describe complex features</li> </ul>

\* Features and examples are only for illustrative purposes; they are not intended to cover all design issues or possible ways to address them. Table is adapted from material in: Hawk C. The wellness hypothesis. In: Leach R, editor. *The chiropractic theories*. 4<sup>th</sup> ed. Baltimore: Williams & Wilkins, 2004:399-415.

externally-driven solutions (eg, drugs). To paraphrase Heisenberg’s uncertainty principle, “...what you see depends not only on what you look for, but also on how you look for it.”<sup>9</sup> Table 1 compares examples of mechanistic/reductionistic and vitalistic/holistic approaches to various aspects of study design. For example, if a scientist designs a study based on the assumption that the active ingredient in chiropractic care is

the biomechanical force involved in spinal manipulation, then an appropriate comparison group would be soft tissue treatment that does not actively manipulate the spinal joints. This discounts as “nonspecific” all the other factors that might have a therapeutic effect - doctor-patient interactions, belief and expectations, the healing effect of physical touch. Even more significant: it assumes that a single “active”

ingredient operates independently of the entire gestalt of the clinical interaction and therefore it assumes that it can be measured in isolation. This is essentially a reductionistic and mechanistic view of chiropractic care, reducing a profession's entire approach to health care to a biomechanical procedure. In evaluating randomized controlled trials (RCTs), this model may result in the conclusion that chiropractic care is no better than placebo, although an equally valid conclusion would be that, "... some factor or combination of factors other than biomechanical force common to *both groups* produced a beneficial treatment effect."<sup>10</sup>

### **Thinking and Working Outside the Box**

In the current outcomes-driven healthcare marketplace, how can we retain a vitalistic and holistic perspective and still build the body of scientific evidence that is needed?

As Coulter has suggested, instead of testing mechanistic hypotheses, scientists could (and some already do) formulate vitalistic hypotheses, such as hypotheses based on the principle of homeostasis.<sup>7,11</sup> At this time, very few well-designed and adequately powered studies have been done from the perspective of the effect of chiropractic care on homeostatic mechanisms, such as normalization of blood pressure in hypertensive patients or changes in immune response.<sup>12,13</sup> However, it is interesting to note that cancer research is currently exploring ways to enhance physiological processes that can act as defenses against various types of cancer, such as using biomodulators to stimulate the patient's own Kupffer cells' cytotoxic capacity or using melatonin to improve survival and quality of life in cancer patients.<sup>14,15</sup> Enhancing the body's own defenses is an approach based on working with the body's self-healing capacity.

Inseparable from the concept of vitalism is holism: just as a living organism is something more than the sum of its parts, a health care or healing system cannot be explained by examining its procedures in isolation. This may be part of the reason that the results of traditional RCTs often do not reflect the magnitude of positive findings clinicians and patients seem to experience in actual practice.<sup>16</sup>

Whole systems research (WSR) is a burgeoning approach to clinical research in complementary and alternative health care. In WSR, a central concern is "model validity," which means that the research methodology must be congruent with the worldview (paradigm) of the system being studied.<sup>17,18</sup> This does not mean that entirely new research methods must be developed, or that we should abandon scientific rigor. As shown in Table 1, a vitalistic approach can often utilize well-established designs such as cohort studies; the novelty is in the perspective, not necessarily in the methodology.<sup>19</sup> Well-designed observational analytic studies, such as cohort studies, have been found to have similar results to those obtained through RCTs.<sup>20</sup> However, their advantages are greater external validity and the ability to examine complex, real-life interventions and representative populations.<sup>17</sup>

There is a great deal of opportunity for the development of innovative statistical methods and adaptations of existing observational designs to begin to examine whole systems. For example, the National Center for Complementary and Alternative Medicine co-sponsored a symposium on WSR in 2002, with what some might consider one of the bastions of Western medical research, Kaiser Permanente, also cosponsoring.<sup>21</sup> Clearly the time has come

for considering research designs arising from different worldviews.

## CONCLUSION

### Steering Our Own Course

Vitalism need not prevent our profession from gaining acceptance and credibility, especially in the postmodern age when a plurality of worldviews is becoming not only acceptable but explored by stakeholders in the biomedical establishment. Forcing our traditionally vitalistic, holistic, and patient-centered approach to care<sup>22,23</sup> into a mechanistic, reductionistic, and doctor-centered frame might buy us some temporary credibility, but, in the long run, it is a losing proposition. We may lose our chance to make unique contributions to research through innovative approaches, such as whole systems research, that might combine the best of both worldviews. We may lose our professional identity and integrity as well. However, if we refuse to remain doctors who empower others to heal from within, our patients will lose the most.

“To be in control of your own [worldview] means that you have power over what you want [your discipline] to be rather than accepting what others say it is; this consequently empowers you, not them.”<sup>24</sup>

Let us take control of, and responsibility for, being vitalistic practitioners, and explore to its fullest extent what this worldview can do for the real world.

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