

**Palmer College of Chiropractic**

**Subluxation and Human Evolution:  
A Philosophical Model of Subluxation**

**A Thesis Submitted for  
The Legion of Chiropractic Philosophers**

**Philosophy Colloquium**

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## CONTENTS

ABSTRACT.....	iii
INTRODUCTION.....	1
VERTEBRAL SUBLUXATION MODELS: A SECULAR VIEW.....	2
THE VALUE OF PHILOSOPHY.....	5
SUBLUXATION MODEL: A PHILOSOPHICAL VIEW.....	6
<i>Polarity</i> .....	8
<i>Perspective</i> .....	10
<i>Evolution</i> .....	12
SUMMARY.....	16
REFERENCES.....	18

## ABSTRACT

A philosophical model of subluxation is represented in which the subluxation is viewed as a necessary component of the evolution of consciousness. A summary of current basic science and clinical models is also presented, and the commonalities of these models is used as the first step in developing the philosophical model. The value of philosophical study is addressed. Subluxation is likened to a separation from Innate Intelligence. This separation creates polarity and perspective which are necessary components of the deepening of awareness. The concepts of polarity and perspective are addressed along with a discussion of evolution of consciousness. These concepts are incorporated to create the proposed philosophical subluxation model. In viewing the subluxation from a philosophical perspective, the full potential of Chiropractic can be explored and ideas for new areas of investigation can be inspired.

Key Words: subluxation models, polarity, perspective, evolution of consciousness, awareness, philosophy

## INTRODUCTION

Our mind divides the world into heaven and earth, day and night, light and darkness, right and left, man and woman, I and you - and the more strongly we sense the separation between these poles, whatever they may be, the more powerfully do we also sense their unity.<sup>1</sup>

Karl Menninger

In recent decades, the sublaxation has typically been viewed purely from a biological perspective. Much time and energy has been spent investigating its physiological effects, and various clinical models have been developed which examine the components and implications of the sublaxation. Although this type of exploration is valuable, of equal value is the exploration of the sublaxation in a much larger context. This thesis explores the idea that the sublaxation is a necessary component of the ongoing evolution of human consciousness. The recurring theme in virtually all discussions of sublaxation is that it creates an interference in the communication pathways between the body and Innate Intelligence. This interference creates a separation not only between the body and Innate, but also between Educated Mind and Innate.<sup>2</sup> In humans, the power of Educated Mind is that it allows us the ability to reason, to will, and to remember.<sup>3</sup> We remember a feeling of connection before the separation. Reason that it can be there again, and willingly embark on a path in search of unity. The separation or polarity created by the sublaxation is the *source of the force and desire* which drives us ultimately to try to reconnect with Innate. “Polar tension is at the root of all birth and creation. It is the basis of every creative process. It shows up as rhythmic oscillation

between opposite poles, as close as our beating heart and as far as quasars pulsing at the edge of the universe.”<sup>4</sup>

In expanding the perspective of the subluxation beyond the confines of the basic scientific model to the larger context of the philosophical realm, one can get a glimpse of the full potential of Chiropractic. Chiropractic becomes not only a vital component of healing, but also a vital component of the evolution of human consciousness; and hence, the field of possible exploration and research grows exponentially.

This paper will first briefly describe some of the current scientific and clinical models of the subluxation. Then the value of expanding the subluxation models to include a philosophical perspective will be discussed. A philosophical subluxation model is then proposed in which the subluxation is seen as a necessary component to the evolution of consciousness. Concepts of polarity and perspective are discussed. Finally, ideas for possible investigative expansion are presented.

#### VERTEBRAL SUBLUXATION MODELS: A SECULAR VIEW

In the August 1996 issue of the *Journal of Vertebral Subluxation Research*, Christopher Kent D.C., reviewed various basic science and clinical models of the vertebral subluxation. A brief description of these models is presented here so that the common aspects can be noted. This will be of benefit later in the development of a philosophically based model of the subluxation. The Component Models of the Vertebral Subluxation Complex range in number from five components to nine components and describe the subluxation in terms of its pathophysiological parts, i.e., neuropathology, kinesiopathology,

inflammatory response, biochemical changes, etc. The Subluxation Degeneration Model views the subluxation in terms of the degenerative changes which occur in the spine in association with mechanisms of neurological dysfunction. In the Nerve Root Compression Model it is proposed that mechanical compression of the nerve root caused by misalignment of the vertebral segments can create nerve interference. Although this model has been criticized over the years, recent research has produced results which support the idea. The Dysafferentation Model considers the roles of nociception and mechanoreception of the spinal structures. It suggests that biomechanical dysfunction may cause a change in the afferent input to the central nervous system which in turn alters the efferent response. Stress placed on the tissues of the body by neural dysfunction is explored by the Neurodystrophic Model.<sup>5</sup>

Clinical models which allow the practitioner a practical application and assessment of the subluxation have also been developed. The Segmental Model views the subluxation in terms of segmental misalignments and motion dysfunctions. A more global view of subluxation is considered in the Postural Models in which a subluxation is seen as a postural distortion. The tension on the nerves is considered in the Tonal Models, where the subluxation is described in terms of a “functional unit.” As the science of biology advances, it is predictable that more and more models will emerge. The discovery of the tensegrity matrix of the body,<sup>6</sup> the growing understanding of the role of the cell membrane and electromagnetic fields in the function of the body,<sup>7</sup> and countless other new discoveries will lead us in our pursuit to describe and understand the physiological effects of the subluxation.

Is that, however, enough? Does understanding the physiological processes of the

subluxation truly satisfy all of our desire for knowledge about the subluxation? Or does our soul and our intellect yearn for something more? Does the subluxation *itself* beckon us to delve deeper into the meaning of its existence? Do we as Chiropractors experience the same frustration as physicists, that we will not be satisfied until “the deepest and most fundamental understanding of the universe has been unveiled”?<sup>8</sup>

Even if there is only one possible unified theory, it is just a set of rules and equations. What is it that breathes fire into the equations and makes a universe for them to describe? The usual approach of science of constructing a mathematical model cannot answer the questions of why there should be a universe for the model to describe. Why does the universe go to all the bother of existing? Is the unified theory so compelling that it brings about its own existence. ...Most scientists have been too occupied with the development of new theories that describe *what* the universe is to ask the question *why*?<sup>9</sup>

Stephen Hawking

The prevalent models of subluxation brilliantly discuss the “what” but not the “why.” They describe the mechanism of the subluxation, refer to an interference in nerve function and have the intention to release that interference through the adjustment. They do not, however, explore why the subluxation exists. They are essentially secular in their approach. By secular it is meant that by nature the perspective is quantitative.<sup>10</sup> A secular model measures and describes the physical changes, but does not connect it to the larger picture. And although this approach has great value, it is by no means the last and only step. By not seeking out the deeper meaning of all things (in this case, the subluxation), the full potential of all there is to learn is missed. If one is to truly achieve the goal of what Stephen Hawking calls “knowing the mind of God,”<sup>11</sup> it is necessary to expand the area of exploration beyond that of the quantitative, and one must seek to understand the subluxation from a philosophical viewpoint.



## THE VALUE OF PHILOSOPHY

In creating a Philosophical Subluxation Model one is called to view life from a larger perspective. Philosophy, defined as “the love of wisdom,”<sup>12</sup> is the “investigation of the principles that regulate the universe and underlie all knowledge and reality.”<sup>13</sup> It is through the contemplation of life from a philosophical viewpoint that one begins to see the patterns which exist in our universe, and it is through these patterns revealing clues that will lead to a deeper understanding of all that exists can be found.<sup>14</sup> It is proposed that through the philosophical study of subluxation the door will open to the full understanding and realization of the power of the Chiropractic adjustment.

For those skeptical of the value of philosophical contemplation, consider Plato. Plato wrote, in answer to questions about the value of studying philosophical geometry:

You amuse me, you who seem worried that I impose impractical studies upon you. It does not only reside with mediocre minds, but all men have difficulty in persuading themselves that it is through these studies, as if with instructions, that one purifies the eye of the soul, and that one causes a new fire to burn in this organ which was obscured as though extinguished by the shadows of the other sciences, an organ whose conservation is more important than ten thousand eyes, since it is by it alone that we contemplate the truth.<sup>15</sup>

It is by the contemplation of the philosophical subluxation that the truth of Chiropractic will be discovered. The evolution of science is, by and large, because of the interplay between those who experiment and quantify and those who theorize and philosophize.<sup>16</sup> The philosophers and theorists devise the grand scheme. They predict the existence of sub-atomic particles and vibrating strings, of phenomena occurring beyond the edge of our galaxy. They probe the universe with questions of why and then retrieve answers seemingly from the

cosmos, creating stories and theories of why and how the world works. Then the experimenters do the testing. They seek to prove the theory, right or wrong. Einstein's revolutionary idea of gravity, which overthrew the Newtonian view, was just a theory. There were certain aspects of his theory of special relativity that conflicted with Newton's explanation of gravity. So Einstein asked the question "why." Through the search for the "why," Einstein formulated the theory of General Relativity. This theory states that the mechanism by which gravity is transmitted is a warping in the spatial fabric of the universe. General Relativity was just a theory, an answer to Einstein's "why." It was over seven years later, when Sir Arthur Eddington, through experimentation, proved Einstein to be right and General Relativity was accepted.<sup>17</sup>

It is through the dance of the philosophy of Chiropractic with the science of Chiropractic that the art of Chiropractic will refine and the field of Chiropractic evolve.

#### SUBLUXATION MODEL: A PHILOSOPHICAL VIEW

The common theme which is present in all of the subluxation models covered in the first section of this paper, is the component of neurological involvement or nerve interference. In fact, by definition, nerve interference must be present in order for the term subluxation to be properly used. Since, "the forces of Innate Intelligence operate through or over the nervous system,"<sup>18</sup> it can be reasoned that the nerve interference creates an interference in the communication between Innate and the body. This interference in the communication can be likened to an experience of separation from Innate.

In considering various definitions of subluxation, the same idea of a separation from Innate is seen. In the more traditional terms of Stephenson's *Chiropractic Text Book*, the separation is expressed as interference of the transmission of mental impulses.

A subluxation is the condition of a vertebra that has lost its proper juxtaposition with the one above or the one below, or both; to an extent less than a luxation; which impinges nerves and interferes with the transmission of mental impulses.<sup>19</sup>

In some of the more contemporary literature, the word separation is used directly.

A subluxation means a separation from wholeness that interferes with the body's ability to function in a whole way.<sup>20</sup>

And even in more esoteric terms, this same idea of separation, i.e. a separation from light, is suggested.

sub: less than; lux: light; i.e. a condition of less than the usual amount of light in the body<sup>21</sup>

This separation is typically associated with the dis-ease which it creates in the body. Because of the dis-ease associated with it, the subluxation has been viewed as something "bad." It has been seen as an entity which should be battled and eliminated from all existence. However, in seeing only the dis-ease it creates, we miss the deeper value and purpose of the subluxation. By perceiving subluxation only with "secular" eyes we miss the gift presented by the creation of the subluxation, that gift being the separation itself.

Separation allows distance. And from distance, two qualities emerge, polarity and perspective. These qualities are ultimately what allows the experience of the subluxation to bear its fruit. The subluxation, in creating separation between Innate and the full experience of Innate, offers the individual distance. With distance, one experiences that from which one is separated and is "rewarded" with a new perspective, often "seeing" it for the first time. A pull is also felt to reconnect with that part of oneself which now feels absent. The dis-ease

experienced with the subluxation may be felt as a pain, an illness, a chemical dependency or just a vague sense that something is not quite right. It truly doesn't matter how it expresses, just that the dis-ease is expressed, because it is the dis-ease that calls one's attention to the separation. When the forces of Innate were flowing freely through the body, no note was made of it. Innate was there, requiring no conscious thought and no attention. When, however, one is separated from Innate by the subluxation, one feels the dis-ease that is the natural and uncomfortable by-product of that separation. The dis-ease draws attention to the distance that now seemingly exists between the body and Innate. Even though Innate did not leave, the distance is experienced because transmission of Innate has been altered. And so one experiences polarity and perspective, the qualities of separation which will ultimately allow not only the reconnection with Innate, but the gaining of awareness of Innate as well. In the next sub-sections, polarity and perspective are explored in more detail.

### *Polarity*

Polarity is the driving force in all of nature and all living things. It is responsible for the reaction of chemicals, the movement of planets, the changes in the weather, and the creation of life. All personal relationships have at their core the tension between opposite poles. The essence of all movement, growth and evolution is the constant swing between active and passive, attraction and repulsion, contraction and expansion, matter and energy, health and disease, love and hate, male and female, judgement and mercy. The list goes on. The paradox of the polarity or dyad is that in creating the separation from Unity, it also

creates a desire to return to Unity. In feeling the separation and division one yearns for the feeling of wholeness lost and remembering the source moves toward wholeness again.<sup>22</sup>

The opposite poles of the Dyad retain their memory of the One. At every chance they seek to merge and become whole again. Like a lover, lightning leaps a gap to meet and dissolve with its opposite charge where they can both return to a state of unity and peace.<sup>23</sup>

Michael S. Schneider

The sublaxation creates a separation of the body and of Educated Mind from Innate.<sup>24</sup> Educated Mind by its very nature is conscious, and has the ability to remember, to understand and to think.<sup>25</sup> It is conscious, on some level, of the separation that has occurred and will desire reconnection. The human mind is unique in this way. It possesses not only a primary consciousness, but also a higher-order consciousness. Primary consciousness is essentially a perceptual awareness. All animals possess this type of consciousness. They are self-aware in that they sense their body in space and can respond to environmental demands. They also possess the perceptual ability to construct and create scenes and give these scenes meaning. Higher-order consciousness is, however, unique to humans. The idea of self-awareness takes on a new dimension in that one has a conceptual notion of one's self. Humans have the ability to remember and see their life as a whole, to imagine other possibilities and perspectives, to contemplate their mortality, to think theoretically. They are not only aware of themselves in the world, but are aware of being aware.<sup>26</sup> This awareness offers an opportunity to further evolve our state of consciousness. One's life can be seen in retrospect. A larger perspective of life is viewed in relation to people, to nature, to the world, to the universe. One recognizes patterns and order, and senses that there is an organizing force which is much greater than the individual. In recognizing this force, it can be sensed internally. And it

can be sensed when that feeling of connection and wholeness is not there. In the formation of the subluxation, a separation is felt.

Educated Mind then begins to ask the question “Why”? Why is there a feeling of dis-ease? What is the cause of it? Is something present now that wasn’t before? Or is something missing now that before was present? Because these questions arise, one cannot help but embark on a path toward answering them, a journey to understanding. The polarity between the ease that was once felt and the present feeling of dis-ease is the inspiration along the path of inquiry. This path leads us closer to the source of ease, to the feeling of connection. The polar tension constantly moves the individual forward. In the movement toward connection, one gains a deeper awareness of that which was lost and is being sought again.

### *Perspective*

Awareness is gained through the second aspect of separation, perspective. Perspective allows distance from oneself. Without this distance the “self” cannot be viewed. The forest cannot be seen because of the trees.

Innate is the vital life force in the body. It permeates and is a part of every cell.<sup>27</sup> When the forces of Innate are flowing freely, the relative experience is that of uniformity. The cycles of the body may be noticed, the temperature fluctuates, the body excretes, the heart beats, the eyes blink; but it is all part of the natural cycle and over time will go unnoticed.

The sun rises everyday. That fact is accepted. It is so much a part of daily life that little thought is given as to why or how. However, if one day the sun did not rise, having been “separated” from that experience, the sun’s existence would be contemplated. How it works, why it works, the vital role the sun plays in the sustenance of life on earth would be investigated. So it is with Innate.

Innate is so omnipresent that the details of its workings and existence are generally taken for granted. The cycles of the body’s internal environment flow with ease and therefore are not recognized. Life is uniform with no great changes. Even if the body is challenged by the forces of the universe, Innate adapts so effortlessly that the process goes relatively unnoticed.

According to Prirogine, in this type of uniform environment there would be no experience of movement or change and so no perception of space. And with no experience of movement in space, there would be no perception of time. There would only be uniformity. Life depends on the expansive contractive flow between uniformity and chaos, between unity and separation. It is what mathematicians call broken symmetries.<sup>28</sup>

The sublaxation creates broken symmetries. That break in symmetry marks a place in space and time; a place where we no longer feel connected. The uniform flow of the body is interrupted and perhaps ceases. Dis-ease is felt and the reason for the dis-ease is sought. Educated Mind remembers when the connection was there. It sees it from a distance, and remembering the feeling, the flow, the life, Educated Mind seeks to understand. The dis-ease and ease, the connection and separation, the cycles which were once present, but are now absent, are all considered in great detail. Educated Mind seeks to understand

and know, and at this point one becomes object and observer.

The One looking at itself, and in so doing, becoming subject and object.....  
the distance between subject and object is Knowledge<sup>29</sup>

Jill Purce

Educated mind gains knowledge of Innate through separation. The sublaxation gives Educated Mind perspective, removing it from the ocean of Spirit or Innate<sup>30</sup> so that Spirit can be “seen.” Through seeing comes knowing. Educated, now experiencing a separation from Innate, will contemplate the existence of Innate and in so doing will gain greater and greater awareness and knowledge of Innate.

### *Evolution*

It has been shown that through the qualities of polarity and perspective the sublaxation can be used as a tool for gaining awareness of Innate. The necessary component in this process is the adjustment. The adjustment initiates the process of the release of nerve interference, thus freeing Innate’s expression. As the Innate forces flow freely, the feeling of ease and connection returns. Without the adjustment, the sublaxation is allowed to persist in its separation of self and Innate, and therefore, greater and greater dis-ease results. As more and more sublaxations are created in the body, the gap of the separation widens. It eventually reaches a point where the gap is so wide, it seems almost impossible to traverse; so that instead of unifying, the sublaxation serves to separate further. This separation leads to suffering, a feeling of disconnection with all of life. With this the individual experiences



and expresses judgement, individuation, and loneliness. The connection is forgotten and so movement toward wholeness ceases or diminishes.<sup>31</sup> All that is required to begin motion again is the adjustment. With the adjustment, Innate is once again allowed to express freely and movement toward wholeness results.

With each contraction or separation created by the subluxation, and each expansion or reconnection created by the adjustment, our Educated Mind gains greater and greater awareness of Innate and of itself. As one travels this path of expansion/contraction, one not only regains the experience of Spirit/Innate, but also gains an awareness or knowledge of Innate. This awareness exemplifies the evolution of consciousness. An individual's life begins connected to Spirit and then through life's experiences, self-identification is begun through separation. Life is then a series of expansions to wholeness and contractions to self. Back and forth each time, the individual gains more knowledge until ultimately one acquires full awareness of all that is and the cycle is completed by reconnecting with Spirit.<sup>32</sup>

There are many models of the evolution of consciousness. Each one describes various stages called by different names. Consistent in all, however, is the idea of deepening awareness. As consciousness evolves to what is considered its highest stage, the awareness of the self and its relation to Unity expands until ultimately there is *no separation*. There is full awareness of all aspects of life. In Duane Elgin's book entitled *Awakening Earth*, this highest stage of awareness is referred to as "integral awareness." In this stage of consciousness, "the divine unity is expressed through diversity, individuals are harmonized with their universal Ground, and personal will is joined with the cosmic action."<sup>33</sup>

The subluxation and the Chiropractic adjustment are integral parts of the evolution of individual consciousness. Through the process of the creation of subluxation and then the release, Educated Mind is afforded the opportunity to gain awareness of Innate. This creates greater self-awareness in the individual.

The process of evolution is not, however, limited only to the individual's embarking on the path. Each individual engaged in the process has an impact on and affects the evolution of human consciousness as a whole. This happens on the obvious scale, i.e. if enough individuals have a shift in consciousness and change their thought patterns and actions, then the world will change.<sup>34</sup> This shift has been seen throughout history. The reality of everyday existence has shifted and changed from one culture to the next and from one time period to the next, dictated by individual consciousness united.<sup>34</sup> The gladiator events, in which people were brutally killed for sport, now in our present state of consciousness, seem barbaric. Treating children and wives as property in some countries of the world seems archaic, but in others is a way of life. Giving drugs and performing surgery, to some, is the only way to work with a body which is expressing dis-ease, while to others it is the last resort. If the consciousness of enough individuals shifts, the consciousness of the world shifts. If enough individuals become aware of the power and presence of Innate Intelligence, imagine how the world view might change. In the deepening awareness and knowledge of Innate, comes a realization of the power of the body to heal, an experience of the connection of all things, and a change that would affect every aspect of life from health care to ecology and from politics to personal relationships.

This same “group effect” also happens on a more subtle scale. Consciousness is thought to permeate the entire universe. It is present in various degrees in all matter. At the level of consciousness there is no separation between the physical and mental, and no separation between individuals.

Consciousness contains the whole of objective reality - the entire history of biological life on the planet, the world’s religions and mythologies, and the dynamics of both blood cells and stars.<sup>35</sup>

Michael Talbot

Consciousness is a universal phenomenon. In their book *The Living Energy Universe*, Drs. Gary Schwartz and Linda Russek, present the idea of a universal living memory or systemic memory. Their hypothesis suggests that the information and energy of consciousness not only persists after the death of the individual, but also continues to evolve.<sup>36</sup> D. D. Palmer writes of a similar idea. He states, “Innate will retain throughout eternity all the information obtained by Educated.”<sup>37</sup> Both ideas suggest that the expansion of awareness gained during one’s life persists through eternity, and continues to evolve as part of universal consciousness. In this way, the evolution of consciousness becomes a part of the evolution of group consciousness. Thus, it can be seen in this Philosophical Subluxation Model that the subluxation is a necessary component to the evolution of human consciousness. The subluxation creates an experience of separation from Innate. It is then through the separation, that Educated is given the polarity and perspective necessary to gain awareness of Innate.

To think of Chiropractic in these terms seems almost beyond conception, but it is through this philosophical contemplation that new ideas emerge. Throughout the history of science, theoretical and philosophical ideas have sparked intense scientific investigation. By delving into the field of Chiropractic possibilities, new areas of investigation may be inspired.

Not only the physiological effects of subluxations could be investigated, but also the societal and global effects. The field of Chiropractic could be linked to the fields of psychology, anthropology and physics. Cooperative studies could be done which measure human potential, consciousness and energy dynamics in relation to Chiropractic. The possibilities are endless. All that is required is that we open our eyes.

The fairest thing we can experience is the mysterioius. It is the fundamental emotion which stands at the cradle of true art and true science.....enough for me the mystery of the eternity of life, and the inkling of the marvelous structure of reality, together with the single-hearted endeavor to comprehend.<sup>38</sup>

Albert Einstein

## SUMMARY

The concept of an interference of the nervous system is present in all of the current models and definitions of subluxation. This interference impedes the expression of Innate Intelligence and in philosophical terms can be likened to a separation of the self from Spirit. This separation from Spirit has long been considered to be the force which drives one back to Unity. The polarity created by the separation is the force which moves all things back toward wholeness. This separation also creates perspective. With perspective, Educated Mind, which has the ability to reason and remember, is able to observe Innate from a distance. This affords Educated the opportunity to gain awareness of Innate while on the path back to wholeness. This deepening of awareness is the process the individual must engage in to evolve consciousness. Considered from this point of view, the subluxation becomes something more than the creator of dis-ease. It is a *vital* component of the evolution of

consciousness. The subluxation creates the polarity and perspective required to gain an awareness and knowledge of Innate. As an individual's awareness deepens, consciousness evolves, not only that of the individual, but also that of humankind.

Philosophical discussion has been the spark which has lit the fires of experimentation and debate for centuries. Exploration as to the philosophical meaning and implications of concepts like the subluxation are necessary for the continued evolution of Chiropractic.

## REFERENCES

1. Michael S. Schneider, *A Beginner's Guide to Constructing the Universe: The Mathematical Archetypes of Nature, Art and Science*, (Oregon, Harper Perennial), 21
2. D. D. Palmer, *The Science, Art and Philosophy of Chiropractic*, (Oregon, Portland Printing House), 494
3. R. W. Stephenson, *Chiropractic Text Book*, (Iowa, Palmer School of Chiropractic), 23
4. Michael S. Schneider, *A Beginner's Guide to Constructing the Universe: The Mathematical Archetypes of Nature, Art and Science*, (Oregon, Harper Perennial), 24-25
5. Christopher Kent, D.C., *Models of Vertebral Subluxation: A Review*, (Journal of Vertebral Subluxation Research), Vol.1, No.1, 11-17
6. Donald E. Ingber, *The Architecture of Life*, (Scientific American), January 1998, 48-57
7. B. H. Lipton, *The Evolving Science of Chiropractic Philosophy*, (Today's Chiropractic) Sept/Oct 1998, 16-19
8. Brian Greene, *The Elegant Universe*, (New York, W.W. Norton & Company), 117
9. Stephen Hawking, *A Brief History of Time*, (New York, Bantam Books), 190
10. Michael S. Schneider, *A Beginner's Guide to Constructing the Universe: The Mathematical Archetypes of Nature, Art and Science*, (Oregon, Harper Perennial), xix
11. Stephen Hawking, *A Brief History of Time*, (New York, Bantam Books), 191
12. Webster's New World Dictionary, (Cleveland and New York, The World Publishing Company), 1099
13. Webster's New World Dictionary, (Cleveland and New York, The World Publishing Company), 1099
14. Michael S. Schneider, *A Beginner's Guide to Constructing the Universe: The Mathematical Archetypes of Nature, Art and Science*, (Oregon, Harper Perennial), xx

15. Republic, as quoted by Theon of Smyrna, *The Mathematics Useful for Understanding Plato* (trs. from Greek/French edn of J. Dupirisby R & D Lawlor), San Diego, Wizards Bookshelf, 1979, VII, 527d,e
16. Leon Lederman, *The God Particle*, (New York, Dell Publishing), 13-16
17. Brian Greene, *The Elegant Universe*, (New York, W.W. Norton & Company), 53-84
18. R.W. Stephenson, *Chiropractic Text Book*, (Iowa, Palmer School of Chiropractic), 270
19. R.W. Stephenson, *Chiropractic Text Book*, (Iowa, Palmer School of Chiropractic), 2
20. Holder, J., D.C., *The End to Addictions: A Startling New Tx for Reversing all Addictions*, (Alternative Medicine Digest), Issue 7, 14-19
21. Arno Burnier, *Masterpiece Training Camp*, Chiropractic Philosophy Lecture, June 1999
22. Michael S. Schneider, *A Beginner's Guide to Constructing the Universe: The Mathematical Archetypes of Nature, Art and Science*, (Oregon, Harper Perennial), 24-25
23. Michael S. Schneider, *A Beginner's Guide to Constructing the Universe: The Mathematical Archetypes of Nature, Art and Science*, (Oregon, Harper Perennial), 36
24. D. D. Palmer, *The Science, Art and Philosophy of Chiropractic*, (Oregon, Portland Printing House), 494
25. D. D. Palmer, *The Science, Art and Philosophy of Chiropractic*, (Oregon, Portland Printing House), 56
26. Christian Wertenbaker, *The Nature of Consciousness*, (Parabola), Fall 1997, 20-30
27. D. D. Palmer, *The Science, Art and Philosophy of Chiropractic*, (Oregon, Portland Printing House), 491-502
28. Gregoire Nicolis & Ilya Prirogine, *Exploring Complexity: An Introduction*, (New York, W. H. Freeman & Co.), 1989, 9-10
29. Jill Purce, *The Mystic Spiral*, (New York, Thames & Hudson), 11

30. D. Palmer, *The Science, Art and Philosophy of Chiropractic*, (Oregon, Portland Printing House), 19, 91, 170
31. Stephen Wolinsky, *The Tao of Chaos*, (Connecticut, Bramble Books), 29-33
32. Jill Purce, *The Mystic Spiral*, (New York, Thames & Hudson), 7-20
33. Duane Elgin, *Awakening Earth*, (New York, Wm. Morrow & Co., Inc.) 1993, 1st ed, 324
34. Marilyn Schlitz, PhD., *On Consciousness, Causation, and Evolution*, (Alternative Therapies), July 1998, Vol. 4 No. 4, 82-90
35. Michael Talbot, *The Holographic Universe*, (New York, Harper Perennial), 50-51, 81
36. Gary Schwartz and Linda Russek, *The Living Energy Universe*, (Virginia, Hampton Roads), 3-13
37. D. D. Palmer, *The Science, Art and Philosophy of Chiropractic*, (Oregon, Portland Printing House), 19, 91, 170
38. Albert Einstein, *The World As I See It*, (New Jersey, Citadel Press, Carol Publishing Group), 5