via media philosophy: A WESLEYAN THEORY OF PILGRIMAGE INTO DEEP TRUTHS L. Bryan Williams, Warner Pacific College Presidential Address: Wesleyan Philosophical Society <u>http://home.snu.edu/~brint/wpsjnl/</u>

I think; therefore, I am (Descartes); I move; therefore, I will become

The journey that I would now like to take relates to our responsibility to assess periodically our paradigms, or perception thereof, to explore significant areas of possible productivity. Thomas Kuhn has taught us that paradigms shift. That awareness forces us to assess routinely whether a shift has occurred or needs to occur so that we can serve the philosophical needs of science. My particular sensitivity is towards our scientists in our Christian universities. Many have struggled to serve their communities well within a context of hostility. We all must bear a responsibility to address the philosophical assumptions that have not served our colleagues in science departments well.

On a personal note, I come to you as a trained ethicist. To serve in that role, my preparation has been extremely broad academically. The warning label that I may be a "jack of all trades and master of none" deserves fair scrutiny. I am aware of the superb training of many in this room in specific areas of science and philosophy, and I ask for your forbearance on our journey. However, my generalist preparation in science, theology, and philosophy may also assist us as we journey through the meta-questions of paradigm analysis. The role of arbitrager of knowledge is mine today.

Our call to the task at hand has come from many sources. The latest comes from Pope Benedict XVI who implored that scientific investigation should be accompanied by "research into anthropology, philosophy and theology" to give insight into "man's own mystery, because no science can say who man is, where he comes from or where he is going."¹ I appreciate the call to our task; however, Pope Benedict seems to maintain an ongoing discomfort between science and theology. The thesis of this essay is that theology offers a way of imagining a hypothesis that is beneficial to science; a methodology that assists in the paradigmatic shifts that we may be experiencing. I will argue that those who remain sensitive to theology will have a superior methodological mechanism for superior scientific and philosophical research and more productive social benefit. To help us explore this ground, we will review one crucial feature of life on earth, light, from a variety of perspectives and explore its effect on methodological analysis.

Investigating light has been crucial to the intellectual journeys of theology, philosophy and science. Biblical theology, a source I will not minimize, develops its methodology on the sacred scripture of the Hebraic and Christian traditions. Both traditions affirm the significant role of Genesis in the development of intellectual

¹ Stephen Brown, "Pope revives science-versus-religion debate," Reuters, *MSNBC*, assessed from <u>http://www.msnbc.msn.com/id/22880073/</u> on January 28, 2008.

understanding. And Genesis assists our methodological analysis if we allow analysis of ancient methods derived from an ancient perspective. If the organization of Genesis 1 is seen as an introduction to ancient methodology for understanding our world, then the most important concepts for investigation are offered in sequence. In this case, the sequence becomes light (defined textually as day one), the environment of the heavens (day two) and then the environment of the earth (day three). This methodological thesis is supported when day four through six days are seen as the content of the first three days. Ancient thought begins with light and affirms a methodology offered as divine.

Exploring the attributes of light has served humanity by advancing ideas with metaphor and reality. Ancient philosophers such as Heraclitus—"a dry light dries the earth"²—have used the obvious importance of light to explain the metaphysical and physical attributes of our existence. Scientists, long known as natural philosophers, have employed light with equal value for understanding the physical attributes of existence, and yet have contributed to our metaphysical understandings.

Understanding and explaining light has also produced controversy. Seminal thinkers have attempted to assist our understanding of the attributes of light and yet they collectively produced seemingly contradictory explanations, a duality problem explored by nascent physics students. To review briefly this material for non-physicists, let us begin with Descartes. Descartes premised his explanation of light on an assumption that empty space could not exist.³ This assumption led to a particle theory of light that hypothesized that light was conjoined particles that react like a series of balls when pushed and transmit an impulse down its series in sequence.⁴ His ability to rationalize deductively led him to his conclusions, not empiric evidence.⁵ Christian Huygens (1629-93), although influenced with Cartesian ideas, relied on empiric evidence to develop a wave theory of light even if it conflicted with Cartesian propositions.⁶ He noted that "it is inconceivable to doubt that light consists in the motion of some sort of matter."⁷ However, this form of matter was not influenced when intersected with other rays of light. Huygens noted that this phenomenon was more like sound transmitting in the air

² Heraclitus, *Fragments: The Collected Wisdom of Heraclitus*, translated by Brooks Haxton, (New York: Viking Penguin, 2001), 49.

³ Rene Descartes, *The World or Treatise on Light*, Chapter Four: "On the Void, and How it Happens that our Senses are not Aware of Certain Bodies,", Assessed from <u>http://www.princeton.edu/~hos/mike/texts/descartes/world/worldfr.htm</u>, Chp. 4, Para. 8, on Jaunary 21, 2008.

⁴ Ibid., "Chapter Fourteen: On the Properties of Light," para., 7.

⁵ H. D. Anthony, *Sir Isaac Newton* (New York: Collier Books, 1961), 66.

⁶ Christiaan Huygens, *Treatise on Light*, Chapter 1: "On Rays Propagated in Straight Lines," translated by Silvanus P. Thompson, Project Gutenberg, p. 7. <u>http://www.gutenberg.org/catalog/world/readfile?fk_files=164378&pageno=1</u> Assessed on January 22, 2008.

⁷ Ibid., 8.

than particles.⁸ Huygens illustrates fundamental features of modern scientific methodology: employing Popperian falsification⁹ on the work of others and utilizing empiric evidence that trumps a dependence on logic to defend one's hypothesis. Unfortunately, his inability to explain light's properties of polarization allowed Isaac Newton to offer tentative clarifying explanations,¹⁰ a new falsification.

Newton's explanations of light include his understanding of "corpuscular rays" that were assumed to be "small bodies emitted every way from shining substances."¹¹ Newton's theory is clearly framed with his claim that "nothing more is requisite for putting the rays of light into fits of easy reflection and easy transmission than that they be small bodies which, by their attractive powers or some other force, stir up vibrations in what they act upon."¹² He explained his conclusions with the recognition that "rays of light seem to be hard bodies, for otherwise they would not retain different properties in their different sides."¹³ Newton concludes his analysis in optics with recognition of the role of God, a key objective of much of his analysis. For him it seemed probable that "God in the beginning formed matter in solid, massy, hard, impenetrable, movable particles, ... even so hard as never to wear or break in pieces, no ordinary power being able to divide what God himself made one in the first creation."¹⁴ Newton's theory of light held sway until Robert Hooke discerned that light "vibrations are transverse . . . to the direction of propagation," awakening Huygen's wave theory.¹⁵ The 19th century saw the wave theory hold sway.¹⁶ 18th and 19th century philosophy was used to assist in understanding this apparent contradiction. Georg Hegel's work in dialectical theory seemed to be an appropriate tool.

The promise of the dialectical method seemed to make the most sense to the observations of physics and optics in situations like light. Karl Popper in his seminal text *Conjectures and Refutations* notes how the similarity of a scientist's utilization of trail and error, illustrated in his review of the proposals of wave theory and corpuscular theory, seemed to match the theoretical analysis offered by Hegel. However, Popper refutes the utilization of the modern explanation of Hegel's dialectic—a thesis induces an antithesis that results in a synthesis that then becomes a new thesis—to define the research into light. Hegel had succeeded in finding a positive role for contradictions that are obvious in the history of the analysis of light. For Popper, science requires

¹⁰ Anthony, *Newton*, 73.

¹¹ Isaac Newton, "An Hypothesis Explaining the Properties of Light Discoursed of in My Several Letters," cited in *Newton's Philosophy of Nature: Selections from his Writings*, edited by H. S. Thayer (New York: Hafner Press, 1974), 83.

¹² Newton, "Questions from the Optics," Query 30, *Philosophy of Nature*, 157.

¹³ Ibid., 168.

⁸ Ibid., 8-9.

⁹ Popper, Conjectures, 309-313.

¹⁴ Ibid., 175-76.

¹⁵ Anthony, *Newton*, 74.

¹⁶ Jean-Claude Pecker, Understanding the Heavens (Berlin: Springer, 2000), 387.

contradictions to become the focus of attack on a thesis or analysis. While he recognizes Hegel's contribution to the history of philosophy in understanding the synthetic development of thought via thesis and antithetical propositions, he asserts clearly that science, mathematics or "any truly rational philosophy is always based on the law of contradiction."¹⁷ He also refutes the physical polarities of existence such as positive and negative electricity as acceptable examples of contradictions, preferring obvious statements of irrationality such as the body is positively charged while stating that at the same time the body is not positively charged.¹⁸ Popper's success is derived from his proposition that the "*refutability* or *falsifiability* of a theoretical system should be taken as a criterion of its demarcation."¹⁹

Science has convinced itself of its success with its critical approach that mandates confrontation from every vantage point. With Popper, we can agree that only a theory that withstands attempted refutations is able to be "confirmed or corroborated by experience."²⁰ However, the premises of Hegelian thought, not the conclusion, need to be reawakened. While the power of Hegel's thought has always been perceived to be the recognition of synthesis that results from the thesis confronting its antithesis, I will argue that the move to synthesis has been the defect that must not be seen as only one way of interpreting scientific data. The history of light illustrates that one should expect not only a thesis but also one should not to be surprised by the truth of an antithesis. The challenge to the scientific method is when both are seen as true, a premise of Hegel yet not his conclusion. Hegelian dialectical history is filled with the struggle over controlling the conclusion, the synthetic process. We will step back from those synthetic conclusions.

The 20th century saw the return to the particle theory of light with Einstein's statistical analysis of the wave length distribution of heat radiation. He then recognized the need for both the concept of waves and the concept of particles.²¹ The language of complementarity to explain similar duality in matter was introduced by Niels Bohr as he sought to understand the polarities he confronted. He notes the "the impossibility of any sharp separation between the behaviour of atomic objects and the interaction with the measuring instruments which serve to define the conditions under which the phenomena appear."²² He notes as well, "The study of the complementary phenomena demands

²¹ Gosta Ekspong, "The Dual Nature of Light as Reflected in the Nobel Archives," *Nobelprize.org*, assessed at <u>http://nobelprize.org/nobel_prizes/physics/articles/ekspong/index.html</u> on February 11, 2008.

²² Niels Bohr, "Discussions with Einstein on Epistemological Problems in Atomic Physics," *Marxists.org*, assessed at

¹⁷ Karl Raimund Popper, *Conjectures and Refutations: The Growth of Scientific Knowledge* (London: Routledge and Kegan Paul, 1963), 327-28.

¹⁸ Ibid., 329.

¹⁹ Ibid., 256.

²⁰ Ibid., 256.

mutually exclusive experimental arrangements." Bohr communicated with Einstein on the epistemological problems that their work had created. As Bohr closes off his report on his conversations with Einstein, he notes two kinds of truth: "To the one kind belong statements so simple and clear that the opposite assertion obviously could not be defended. The other kind, the so-called 'deep truths,' are statements in which the opposite also contains deep truth."²³ Let us emphasize that point: deep truths are statements in which the inversion of the statement remain true. With satisfaction, Bohr also noted that a new field to develop the intermediate stages must pass from chaos to order, but the excitement and imaginative inspiration allows the deep truths to prevail. With irony, Bohr concludes his reflections on discussions with Einstein with a frustration that a generation of physicists was "nearing the goal where logical order to a large extent allows us to avoid deep truth."²⁴ Bohr and Einstein recognized the intellectual mountains that they had conquered by affirming deep truths and yet struggled with creating context where further deep truths could be explored.

The latter half of the 20th century offers numerous attempts to create meaning from what John Casti develops as the quantum measurement and quantum interpretation problems. Casti's background and presentation in his text *Paradigms Lost* allow for a more sophisticated analysis that I could mount for this paper.²⁵ Physicists who cohabitate in philosophy have offered recommendations on appropriate responses to Einstein's and Bohr's revolutionary thought. V. F. Lenzen, a physicist who offered a Presidential Address at the Pacific section of the American Philosophical Association in 1944 recommended neutrality "with respect to the theory of knowledge."²⁶ This move, not unlike the principle of the neutrality, or original position, of the observer in John Rawls' A Theory of Justice,²⁷ suffers from Rawls' dilemma: desiring neutrality or ideal context when one must remain in one's current context. However, Rawls helps us by introducing the concept of reflective equilibrium into an understanding of discerning justice by working from each side of a social inequality.²⁸ Likewise, the scientist remains in one's context yet at times must confront opposing statements unto truth, and one's context may assist or inhibit one's scientific explorations into that tension. I will not make the same move of recommending neutrality but recommend a specific point of view while

http://www.marxists.org/reference/subject/philosophy/works/dk/bohr.htm on February 11, 2008.

²³ Bohr, "Discussions with Einstein on Epistemological Problems in Atomic Physics," *Albert Einstein: Philosopher-Scientist*, 2nd ed., edited by Paul Arthur Schilpp (New York: Tudor Publishing Company, 1951), 240.

²⁴ Bohr, "Discussions," *Einstein*, 240.

²⁵ John L. Casti, *Paradigms Lost: Images of Man in the Mirror of Science* (New York: William Morrow and Company, Inc., 1989), 429.

²⁶ V. F. Lenzen, "The Concept of Reality in Physical Form," *The Philosophical Review* Vol. 54, No. 4 (July 1945), 341.

²⁷ John Rawls, *A Theory of Justice* (Cambridge, Mass.: The Belknap Press of Harvard University Press, 1971), 12.

²⁸ Ibid., 20.

employing reflective equilibrium: a Christian perspective for optimization of deep truths in science, philosophy, and theology. Our lives will be filled with those who attack the mysterious attributes to attempt to define reality. The question for us is whether context will allow us to contribute to the "holistic view"²⁹ of the scientist and the philosopher who are profoundly Christian.

The philosopher, theologian, and scientist must discern the relevance of statements unto truth that confront one's intellectual pursuits. Falsification becomes an effective tool for challenging simple propositional statements unto truth in an effort to affirm, amend, or dismiss them. All three communities have utilized this technique through the ages. Searching for contradictions to confront becomes a primary pathway of success for each community. As one dissects the ideas of another, the challenge to deconstruct weakness becomes a pathway to new ideas, new articles, new books, new tenure status, and old veneration in learned societies. However, falsification risks also forcing a rejection of ideas required to discern deep truths. Other scientific methodologies need analysis.

The concept of deep truths may be better understood with Thomas Kuhn's paradigmatic analysis within *The Structure of Scientific Reasoning*. Kuhn wonders how Aristotle could make so many claims that seem so incorrect. For Aristotle, material bodies are very spiritual "so that 'heavenly' bodies of airlike quality rise, while the spirit of 'earthly' bodies cause them to fall."³⁰ Kuhn transformed this analysis into a perspective that each scientist "works within a distinctive paradigm . . . that colors the way Nature is perceived."³¹ Major paradigms become, according to Casti, a pair of glasses that informs a scientist's ability to discern one's world. Change one's glasses and one changes one's view of the world and the statements unto truth it contains. An additional criterion that Kuhn explored was the recognition that one's community assists in guiding one's selection of glasses. If you want to be a member of community (scientific, philosophical, or theological), you must be aware of the framework of rationalizations that structure that community. Unfortunately, I would argue that Kuhn only helps us to understand a softer form of falsification. One paradigm yields to another in a paradigmatic shift. Casti uses the gestalt diagram of two black profiles facing each other that can also be seen as a white vase.³² Visualization will discern one perspective such as the two black human profiles; however, further examination or provocation will allow one to see the white vase in the center. The skill of seeing both at the same time seems to be a new required practice. However, Kuhn's original analysis might be helpful. Aristotle's view of the world depended on a perception that "every body seeks the location where by its nature it belongs."³³ Aristotle becomes a representative, in a

²⁹ A claim against the term worldview that delimits the conversation to the context of the "world." The paper is searching for a holistic view.

³⁰ Thomas Kuhn, *The Structure of Scientific Reasoning* 3rd edition (Chicago: University of Chicago Press, 1996), as cited in Casti, *Paradigms*, 39-42.

³¹ Casti, Paradigms, 40.

³² Ibid., 40.

³³ Ibid., 39.

reductive sense, of a synchronic perspective in contrast to modern science primary utilization of diachronic worldviews. The paradigmatic analysis of linguistics instructs us on the content of a synchronic perspective, similar instances existing at the same time and experienced cyclically, versus diachronic, something that changes over time and contributes to historicity.³⁴ Also noted is the struggle to define complex ideas such as the self, a linguistic struggle without an integration of both synchronic and diachronic components.³⁵ Recognizing the need for defining complexity with paradigmatic opposites helps us approach a better representation of Einstein's and Bohr's deep truths. However, what context might help us to utilize both images at once? Recent data helps us to understand that the theological perspective of the scientist is also a contributing factor, if not a central factor, to possible deep truth exploration by a scientist and philosopher.

The postulate that Christian theology is a central contributing factor in the development of European forms of science is not a new claim. In 1925, Alfred North Whitehead shocked his Harvard audience with the claim that science flourished in Europe because of the widespread "faith in the possibility of science . . . derivative from medieval theology."³⁶ The assumption that science and Christianity are antithetical was as dominant in his day as it may be in our day. However, Whitehead's assumption deserves reawakening for its possible supportive role with empiric data from Baylor sociologist of religion Rodney Stark in his landmark 2005 text, *The Victory of Reason: How Christianity Led to Freedom, Capitalism, and Western Success*. Stark builds on Whitehead's premise and boldly states that the determinant of Western scientific success rested "entirely on religious foundations, and the people who brought it about were devout Christians."³⁷ In our age where scholarly claims are couched in careful language, Stark's data deserves careful review to affirm his bold claims.

Truth is affirmed by reason, and Christianity is dominated by a rational theological tradition. Stark defines four victories of reason for the rise of the West: first, "the development of faith in progress within Christian theology"; second, "faith in progress translated into technical and organizational innovations"; third, Christian theology informed reason so that "responsive states, sustaining a substantial degree of personal freedom, appeared"; and fourth, reason resulted in capitalism in responsive states.³⁸ Each of these attributes contributes to the rise of science in dynamic ways.

³⁴ Ferdinand de Saussure, *Course in General Linguistics* (Hightstown, NJ: McGraw Hill Humanities, 1965), as defined by Bob Trubshaw, *foamy custard*, Heart of Albion Press, assesed at <u>http://www.indigogroup.co.uk/foamycustard/fc026.htm</u> on February 17, 2008. s.v. diachronic and synchronic.

³⁵ Trubshaw, *foamy*, s.v. diachronic and synchronic.

³⁶ Alfred North Whitehead, *Science and the Modern World* (New York: Free Press, 1967 as cited in Rodney Stark, *The Victory of Reason: How Christianity Led to Freedom, Capitalism, and Western Success* (New York: Random House Trade Paperbacks, 2006), 14.

³⁷ Stark, *The Victory of Reason*, xi.

³⁸ Ibid., xiii.

Science becomes a "natural outgrowth of Christian doctrine: nature exists because it was created by God. In order to love and honor God, it is necessary to fully appreciate the wonders of his handiwork. Because God is perfect, his handiwork functions in accord with *immutable principles*. By the full use of our God-given powers of reason and observation, it ought to be possible to discover these principles."³⁹ With these premises, Stark confronts the perception and nomenclature of the era of the "Dark Ages." In this period, the innovations in Christian contexts such as the water wheel allowed for water power that mechanized many ancient hand traditions: sawing lumber, grinding metal implements, drawing wire, and producing paper, to name a few.⁴⁰ The twelfth century realized the innovation of the university, profoundly Christian institutions, by encouraging innovation, not merely repeating ancient knowledge but invoking criticism, correction, and complementary perspectives of ancient and new ideas.⁴¹ And faculty were profoundly Christian, usually organized into holy orders. Stark draws upon Jean Gimpel's quote in *The Medieval Machine* that Christianity understood progress as "normal" and that "new inventions would always be forthcoming."⁴² If our secularized educational resources have minimized the role of Christianity during significant portions of world history, might we also underestimate the role Christianity serves in the future of science. Stark recognizes the lack of a Christian warrant for science to thrive in the 21st century. Christianity is now in the background of science. However, can Christianity contribute to our search for deep truths in the 21st century?

As globalization integrates the world, one is invited to wonder how Christianity might continue to influence science in a productive way. Stark notes that Christianity may be the most significant movement being globalized in the dynamic process of globalization. The Christianization of Africa is proceeding at startling pace and yet that process may be eclipsed by the influence of Christianity into China.⁴³ If Stark's thesis is helpful, the positive effect on science in European and American contexts may be forecasted to be the future of Christianizing countries. Christianity may also provide a central interpretive scheme that allows for openness to "deep truths" in the future.

However, we might benefit by confronting Auguste Comte's thesis concerning *Positive Philosophy* to assist us with the perceptions of Christianity's weaknesses. Comte, a father of Sociology or the philosophy of Society, build his major premises on the primitiveness of theological determinants: "The theological period must be regarded as still subsisting, as long a moral and political ideas retain a theological character, though other intellectual categories may have passed into the metaphysical state, and some few of the simplest even into the positive."⁴⁴ Theology becomes the simplifying of

⁴² Jean Gimpel, *The Medieval Machine: The Industrial Revolution of the Middle Ages* (New York: Penguin Books, 1977), 148 as cited in Stark, *The Victory of Reason*, 55.

⁴³ Stark, *The Victory of Reason*, 234.

⁴⁴ Auguste Comte, *The Positive Philosophy of Auguste Comte* (London: George Bell and Sons, 1896), 6.

³⁹ Ibid., 22-3.

⁴⁰ Ibid., 38-9.

⁴¹ Ibid., 52-3.

Bossuet's starting-point of the human mind, "Everything was God, except God himself," with the number of gods then decreasing until one arrives at monotheism."⁴⁵ Every substance or phenomenon which attracts attention becomes deified. This perspective then allows the person "passively to yield to [one's] propensity to transfer to outward objects the sense of existence which serves [one] for an explanation of [one's] own phenomena, and therefore for an absolute explanation of all out of [oneself]."⁴⁶ Comte helps to revisit the formation of the scientist in ancient times as a "contemplative class, composed of free men, intelligent and at leisure, with no determinate social function, and therefore more purely speculative than theocratic dignitaries."⁴⁷ The passing in Greek thought from theology to metaphysics through mathematics, passing from the "mysteries of numbers to those of forms . . . and at length comprehended both classes of ideas"⁴⁸ is shown. The metaphysical with its generalities and abstractions gives way in Comte's analysis to positive philosophy which offers "a quantitative description of sensory phenomena."49 Comte offers a modification on falsification of previous thought: one gives way to the other and then the final preferred methodology yields positive reinforcement. However, his theoretical resources seem limited to simple truths, valuable but incomplete. By inverting his pathway, we create a complementary pathway that leads us back to theology.

Comte's presuppositions of Greek contributions to the development of science have been dramatically challenged by Stark's analysis. After exploring Greek theological inadequacies, its failure to offer a sense of progress amidst a cyclical worldview, and looking at Greek and Roman thought after Plato and Aristotle, Stark defines how Greek learning "stagnated of its own inner logic." Little happened after Aristotle, and the immediate cultures that were constructed on Greek thought did not prompt significant intellectual progress. Stark proclaims that "Greek learning was a barrier to the rise of science! It did not lead to science among the Greeks or the Romans, and it stifled intellectual progress in Islam, where it was carefully preserved and studied."⁵⁰ Christianity and the theoretical supports of Christianity became the catalysts of significant development in what will be defined as western science. One will note the employment of falsification and rhetorical flourish in this thesis but it may help us recover a new vision of Christianity and science. However, before I build on this point, one dominating perspective, postmodernism, and one last theoretician, Feyerabend, needs exploration.

The postmodernism that encompasses our theoretical worldview finds much to assimilate from the work of Paul Feyerabend on scientific anarchy. His proposal that

⁴⁵ Ibid., 9.

⁴⁶ Ibid., 10.

⁴⁷ Ibid., 68.

⁴⁸ Ibid., 70.

⁴⁹ Casti, Paradigms, 32.

⁵⁰ Stark, *Victory of Reason*, 19-20.

"the only principle that does not impede progress is anything goes."⁵¹ Feverabend offers a similar thesis as Stark: an environment of freedom will have profound results in scientific results. However, Feyerabend rejects religion as limiting the requisite freedom. He posits: "A person's religion, for example, or his metaphysics, or his sense of humor . . . must not have the slightest connection with his scientific activity. His imagination is restrained, and even his language ceases to be his own."⁵² For Feyerabend, the scientist must not be restrained by tradition for two reasons: one, the largely unexplored regions of the cosmos deserve openness to discover the "deep-lying secrets of nature"⁵³; and two, the scientist cannot be a humanitarian, but must be an individual. Anarchy is Feyerabend's solution to produce freedom to find truth; Stark persuasively offers Christianity, Christianity, properly organized and lived, produces abundant openness and freedom. Feyerabend strives to remove science from its premier pedestal in postmodern society; on this point, John Wesley agrees. Science becomes one form of knowledge that does not deserve its privileged status. There are many ways to truth, and science deserves our thanks for the truths that it has opened before our eves; however, its success has led us to the point of a tyranny of ideas and its products and that result requires new perspectives.

The tyranny of ideas and its products is not limited to intellectual destruction of its predecessors or radical individualism; it has been noted often by those who live with the consequences of that tyranny. We live in an age when a pill, a therapeutic modality that is the result of effective scientific and technological innovation encapsulated in free corporations, becomes devastating and often enslaving to those afflicted when the disease is assuaged but the costs destroy a patient financially. John Wesley fought against those who inflicted misery on others via scientific and philosophical enterprises. He noted that those of a philosophical turn were not satisfied with the social healing of one person informing another of the experimental results that helped the other. Theories began to replace practical experiments of trial and error of the ancient practitioner; complexity replaced simple remedies; esoteric language filled the descriptive books; profit and honor were offered to those who could prescribe only obtuse philosophical explanations; the requirements of education eliminated those who might prosper with the knowledge: and physician and pharmacist conspired to cut off the vast majority of humanity "from helping either themselves or their neighbors, or once daring to attempt it."⁵⁴ Wesley saw that the professionals of his day were breaking the neighborly demand of the common good; he would certainly have extended his critique to a higher level against those scientists affirmed as Christian who continue to oppress their neighbors. Today, would Wesley's critique not extend to all professionals including aademics? Have we participated in a system that has systematically oppressed our neighbors by restricting

⁵¹ Paul Feyerabend, *Against Method* 3rd ed. (London: Verso, 1994) cited in Casti, *Paradigms*, 38.

⁵² Feyerabend, Against Method, 11.

⁵³ Ibid., 12.

⁵⁴ John Wesley, "Primitive Physic: Or, and Easy and Natural Method of Curing Most Disease," *The Works of John Wesley* 3rd edition, volume XIV (Kansas City, Missouri: Beacon Hill Press, 1978), 307-11.

knowledge from the poor and protecting the fruits of our intellectual labor to exclude those who cannot pay to learn the product of our intellect? Professional employment of a tool such as falsification has been a methodology that can become deceptive and possibly oppressive in science as well as philosophy and theology.

Academics of all types are honored and remunerated when they successfully discover and describe. The demand of tenured or productive faculty on one's career path is clear: produce results. As we have discovered, the highest possibility of success in the acquisition of new knowledge comes from offering simple truths. The development of these truths usually comes as a response to previous discoveries that are reversed or altered to reframe the idea into a new context or understanding. The demand for freedom to accomplish this task has been provided by society with the concept of personal and academic freedom. My contribution to an understanding of Academic Freedom in Church-related Academic Institutions has just been published freely in didache.nts.edu.55 The societal attribute of expected progress has provided a context of high expectations of new discoveries and a ready market to generate substantial rewards for meeting society's thirst for new product innovation. The rational structure of our philosophical superstructure informs the mathematical presuppositions of our scientific enterprise. Christianity, as usually portrayed, does not seem beneficial, and, if poorly constructed, may restrict effective scientific enterprise. However, the entire scientific enterprise continues the oppression that Wesley castigated in scientists of his day. A new way of thinking may help us escape the oppression of our methods.

May I offer an ancient theological concept for a new way of considering philosophy and science: via media philosophy. The following is a quote from my forthcoming book *via media philosophy: a pilgrimage through Holiness Unto Truth:*

via media philosophy is a conceptual technique that seeks truth between known statements unto truths. The power of bringing diverse statements unto truth together is the potential of additional discoveries of truth. When a truthful tradition meets another truthful but different, if not opposing, tradition, the potential rewards of new truthful insights are often worth the risk of the convergence. However, the risks are also significant. One's repertoire of statements unto truth form an integral part of one's identity and the identity of one's mutually organized communities such as religious and scientific groups. The techniques of *via media philosophy* risk affirmation, alteration, or rejection of any exposed truth claim. One is also sensitive that any alteration of a statement unto truth claim makes an individual vulnerable within one's communities of truth.

⁵⁵ L. Bryan Williams, *Academic Freedom in a Church-related Institution, Didache,* Assessed from <u>http://didache.nts.edu/index.php?option=com_docman&task=doc_view&gid=732&Itemi</u>

<u>d</u>= on February 17, 2008.

An intellectual lag time exists between any individual with a new idea and one's community. The older the community, the greater the intellectual lag time and the longer it will take for the presentation of new statements unto truth to be accepted. A scholar always risks being ahead of one's community and must be prepared to deal with the destabilization of introducing a new idea to a community.

To assist in a definition of via media, the following proposal also comes from *via media philosophy:*

Within theological circles, the concept of Via Media is firmly attached to the theological tradition centering on John Wesley's Anglicanism and John Henry Newman. Wesley and Newman are noted for negotiating between the major theological ideas of their day. via media will be defined as the desire to integrate new concepts productively while negotiating between the dominant currents of scholarly thought. This is a routine practice for seekers of wisdom; a practice that resides under a variety of conceptual definitions such as Aristotle's Doctrine of the Mean and dialectic thought. The distinctiveness of this rendition of philosophic thought will be in the commitments proposed for the participant: a commitment to understand the often conflicting and sometimes polar ideas that frame many truthful scientific, philosophical, or theological conversations; a commitment to value truthful ideas regardless of one's dogmatic presuppositions; a commitment to seek a holistic range of all truth regardless of one's dogmatic presuppositions; and a commitment to transmit prudently appropriate truths into new contexts that would benefit from new understanding even if it creates dissonance with one's dogmatic presuppositions. While the concept of via media has been well conceived within theological circles, the concept will benefit from accentuation in additional philosophical and scientific contexts.56

What will reduce the impact of via media philosophy will be falsification.

The primary culprit of possible neighborly oppression is the principle of falsification. While the benefit of falsification is clear: a statement unto truth is clarified

⁵⁶ L. Bryan Williams, via media philosophy: a pilgrimage through Holiness Unto Truth. Intersections between Wesleyan and Catholic Philosophers (Cambridge, GB: Cambridge Scholars Publishing, forthcoming), n.p.

to benefit of all and eliminated if in error, the tyranny of honor and gain at the expense of the neighbor encourages falsification to eliminate competitors even when they may be true. The possibility of deep truths demands consideration of a new mechanism to be added to our methodological arsenal.

I think; therefore I am (Descartes)

As I reflect on our reductive journey through a few points of scientific methodology, I am drawn back to Descartes' Discourse on Method. After introducing in Part I his pleasure in mathematics as a solid foundation, he notes disappointment with its lack of structure while pagan thought was all structure and no foundation; his reverence of theology and its goals confronts his disappointment in its demand for heavenly aid to understand it; and his awe of the philosophical contributions meets disappointment at the disputations. He then walks us through development leading up to his most famous claim: I think, hence I am, his first principle.⁵⁷ Then his ideas carried him to a Perfect Being.⁵⁸ He defined his material reality, a statement unto truth, and it should be noted that I am not interested in classic forms of Cartesian materialism and the philosophy of the mind as it relates to consciousness, however, I am interested in recognizing the material interpreted as physical reality and nonmaterial, an inverted statement unto truth, the inverted term of material that I am using to circumscribe everything else including reason and God. I use the term 'nonmaterial' instead of 'immaterial' to define clearly the inversion from the material and not carry the additional baggage of the word 'immaterial.' The nonmaterial, reason, was essential for his understanding of the material—his body, stars and earth—that then defined the perfect nonmaterial for him. God. His dualism becomes successful with a technique Richard Huber notes, "Dividing the dissension into only two camps increases clarity at the expense of nuance."⁵⁹ Yet there is no reason to remain in his productive dualism. His materialism can be subdivided into infinity, the nonmaterial; his nonmaterial can be subdivided to produce a myriad of products, thoughts or idols. His nonmaterial "think" becomes his material "am." Our question today is what we can learn from my interpretation of his methodology?

Let us try our own inverted statement unto truth: "We move; therefore we will become." I have tried to invert all of Descartes' moves with their complements, what I argue to be a rational move on my part. Across the phrases, Descartes' singularity "I" becomes a plurality "we". His rationality "think" becomes our activity, "move". His present "am" becomes our future "will become." Within the phrase, our materialism "move" becomes what could be understood as nonmaterialism, "will become." We now have the resources to reverse the course of Cartesian duality. And we could then enjoy

⁵⁷ Rene Descartes, *Discourse on Method*, Part IV (The Harvard Classics 1909-1914 edition), 1. Assessed at <u>http://www.bartleby.com/34/1/4.html</u> on February 28, 2008.

⁵⁸ Ibid., 6.

⁵⁹ Richard M. Huber, *How Professors Play the Cat Guarding the Cream: Why We're Paying More and Getting Less in Higher Education* (Fairfax, Virginia: George Mason University Press, 1992), 42.

the possibility of the journey of putting all the parts together back to recreate wholeness or fragment in postmodern pieces. The recent desire to integrate into monism⁶⁰ is encouraged with the application of inversion. The developed truth of one well worn statement unto truth is confronted with the potential of truth of its opposite. Either journey is productive. Neither should be denied.

My point is that philosophers deserve the same Wesleyan critique that I have leveled against scientists. Philosophical literature is filled with the conversation of dualism versus monism, metaphysical idealism versus materialism, epistemological idealism versus realism, or realism versus nominalism. The philosophical definitions ring out over one section of the epistemic battlements: monism offers a clearer form of understanding than the ether of dualism; dualism offers a clearer form of understanding than monism. The intellectual wars continue with language reaching into the esoteric stratosphere with each volley. Yet this accomplishes, if well done, the honor and gain that we have seen in the scientific community. Books are sold and tenure is offered to those who climb the perceptions of the highest intellectual terrains; however, how much of the conversation remains an oscillation of simple truths. Esoteric language is usually meaningless for anyone other than professional philosophers. Discernment of complex truth is also challenging. The formal logical presuppositions that build effective rationalization are designed to defeat the logic of truthful opposites and therefore rational philosophy is limited in its ability to understand what are perceived as irrationalities. However, a philosopher in a Christian setting may have additional resources to engage more effectively in the challenge of ambiguity. The intellectual struggle of Bohr and Einstein encourages us to move past the simplicity of one statement unto truth in distinction to its perceived opposite. They both may be true yet opposite.

My central argument is that Christianity, when able to provide healthy contexts and resources, provides the orientation for clarifying deep truths. Although the Christian faith may be portrayed as dealing in the mysterious, it can also be shown to be a highly rationalized process. The theological development of the creedal formulations of Christianity has a similar pattern that we experienced in our overview of clarifying light. One community emphasized Jesus' humanity, an obvious attribute for an historical person with significant evidence in sections of sacred scripture. Another community supported the affirmation of the divinity of Jesus, also a fairly routine understanding for an emperor-level political leader during the Roman Empire, also citing significant scriptural resources. The Creed of Chalcedon offers its solution to the struggles: "Lord Jesus Christ, the same perfect in Godhead and also perfect in manhood; truly God and truly man."⁶¹ Although dissent continued, the issued became settled for many and remains the dominant understanding of Jesus Christ. The definition of the Lord Jesus Christ as truly human and truly divine exists, with only minor variations, in the vast

⁶⁰ Well defined as nonreductive physicalism in Warren S. Brown, Nancey Murphey, and H. Newton Malony, *Whatever Happened to the Soul? Scientific and Theological Portraits of Human Nature* (Minneapolis: Fortress Press, 1998), 25.

⁶¹ Chalcedonian Creed 451 A.D., *Christian Apologetics and Research Ministry*, Assessed at <u>http://www.carm.org/creeds/chalcedonian.htm</u> on March 2, 2008.

majority of Christian and Wesleyan denominations. It uses a deep truth to define an effective solution to a problem. The usage in a creed in 451 AD is also consistent with other deep truths of the faith. In Christian sacred literature, one is confronted with loving one's enemies,⁶² being living stones,⁶³ and a father exclaiming, "I believe, help my unbelief."⁶⁴ A logical person seems only to be able to shake one's head in confusion and remain in mystery with these claims.

Yet these perceptions of mysteries were consonant with the ancient literature of the Hebrew people. Theology is constructed on God being portrayed as transcendent is significant portions of scripture and then as immanent in others. In Isaiah 57:15 (RSV), one reads: "For thus says the high and lofty One who inhabits eternity, whose name is Holy: I dwell in the high and holy place, and also with him who is of a contrite and humble spirit." Stanley Grenz and Roger Olson have noted that "because the Bible presents God as both beyond the world and present to the world, theologians in every era are confronted with the challenge of articulating the Christian understanding of the nature of God in a manner that . . . holds in creative tension the twin truths."⁶⁵ Without an effective management of this tension, serious problems emerge: emphasizing transcendence leads to cultural irrelevance; emphasizing immanence leads to cultural captivity.⁶⁶ However, this knowledge also leads to a moral impulse. Centers of Christianity that emphasize transcendence need leaders who emphasize immanence to achieve healthy communities and vice versa. This becomes the impulse of healthy communities in all settings: the scientist in the lab; the philosopher in the classroom; or the theologian in the church. Effective discernment will require an analysis of the deep truths of one's environment and the courage to offer healthy antidotes to local situations and problems.

The metaphor I have chosen to utilize for employment of this social antidote is the pilgrimage. Ancient civilizations demanded journeys to sacred centers to transition from child to adult or from layman to shaman. Those on journeys of transformation were expected to confront their weaknesses and magnify their strengths. Once on sacred ground, the moment of transformation was effected in the midst of what would seem like an epiphany or theophany. Names were often altered and the newly transformed person returns to one's routine setting transformed and ready to serve others.

The metaphor of pilgrimage that I am seeking to use envisions a perspective of journeying between statements unto truth and inverted statements unto truth (see Appendix 1). This journey demands maintenance of diligence to remain committed to both perspectives. The tendency of rational humanity is to focus on the statement unto truth that one understands or is defending. That tendency causes one to walk

- ⁶² Matthew 5: 44 (RSV)
- ⁶³ 1 Peter 2:5 (RSV).
- ⁶⁴ Mark 9:24 (RSV)

⁶⁵ Stanley J. Grenz and Roger E. Olson, 20th Century Theology: God and The World in a Transitional Age (Downers Grove, Illinois: InterVarsity Press, 1992), 11.

⁶⁶ Ibid., 12.

metaphorically sideways with one's back to the inverted statement unto truth behind: scientists who reject dynamic theism or creationists who reject dynamic science; monists who reject dualism, dualists who reject monism; and sovereignty theologians who reject immanence, relational theologians who reject transcendence. While I appreciate the contributions of minimally or non-theistic scientific explorations, I trust the work of those who are prepared to affirm a context of complexity such as Christianity, a context that demands awareness of statements unto truths and inverted statements unto truth. I affirm the potential of Christian institutions to create a healthy context of investigation into deep truths. While I appreciate the contributions of minimally-scientific theists, I am deeply distressed at the ongoing failure by many in that community to offer the virtues of Christianity, especially love of one's enemies, to Christian scientists. Similar critiques may be offered to philosophy and theology. A healthy pilgrimage is recommended for all.

As we enjoy our professional time together, let us also use our time to begin a pilgrimage of transformation, a Wesleyan pilgrimage of the mind and feet. Let us join those who have gone before us and enjoy a journey with statements unto truth and inverted statements unto truth.

Let us work together as Christian communities of scholars: loving ourselves, loving those we affirm, and loving our enemies. Let us help build healthy communities where diversity and conflicts of thought are recognized as a crucial methodology toward deep truths.

Let us explore our world with the freedom of one who has the privilege of investigating the simple truths and falsifying those that need to be eliminated. Yet let us remember that falsification may be eliminating truth that may construct a deep truth.

Let us continue to maintain our faith in progress; yet let us have faith in the traditions of our faith.

Let us develop helpful explanations of the truths of our journeys. Let us enjoy the fruits of our labor as we present our knowledge to others; however, let us covenant with each other that we will remember to pass on our knowledge to those who cannot pay for it.

Let us broaden our knowledge to open the potential of deep truths. Let us seek out colleagues who disagree with us and explore those whose ideas confront us. Let those in metaphysical areas of investigation work closely with those in physical areas of investigation. Let us create oneness together.

Let us expect to explore perfect nonmaterialism in our investigations, the transcendent God. Let us enjoy the relationship of perfect nonmaterialism becoming perfect materialism: an immanent God, the Lord Jesus Christ.

Let us cultivate our centers of service—home, church, communities, and universities—to enable these covenants. Yet, let us recognize that we may suffer as we transition our centers of service to health. However, may we journey regardless!

I think, therefore I am We move; therefore we will become

Selected Bibliography

Anthony, H. D. Sir Isaac Newton. New York: Collier Books, 1961.

- Bohr, Niels. "Discussions with Einstein on Epistemological Problems in Atomic Physics." *Marxists.org.* Assessed at <u>http://www.marxists.org/reference/subject/philosophy/works/dk/bohr.htm</u> on February 11, 2008.
- Brown, Stephen. "Pope revives science-versus-religion debate." Reuters. *MSNBC*. Assessed from <u>http://www.msnbc.msn.com/id/22880073/</u> on January 28, 2008.
- Brown, Warren S., Nancey Murphey, and H. Newton Malony. *Whatever Happened to the Soul? Scientific and Theological Portraits of Human Nature*. Minneapolis: Fortress Press, 1998.
- Casti, John L. *Paradigms Lost: Images of Man in the Mirror of Science*. New York: William Morrow and Company, Inc., 1989.
- Chalcedonian Creed 451 A.D. *Christian Apologetics and Research Ministry*. Assessed at <u>http://www.carm.org/creeds/chalcedonian.htm</u> on March 2, 2008.
- Comte, Auguste. *The Positive Philosophy of Auguste Comte*. London: George Bell and Sons, 1896.
- Descartes, Rene. "On the Void, and How it Happens that our Senses are not Aware of Certain Bodies." *The World or Treatise on Light*. Assessed from <u>http://www.princeton.edu/~hos/mike/texts/descartes/world/worldfr.htm</u>, Chp. 4, Para. 8, on Jaunary 21, 2008.

_____. *Discourse on Method*. The Harvard Classics 1909-1914 edition. Assessed at <u>http://www.bartleby.com/34/1/4.html</u> on February 28, 2008.

- Eistein, Albert. "Einstein's Reply to Criticisms." *Albert Einstein: Philosopher-Scientist.* Cambridge: Cambridge University Press, 1949.
- Ekspong, Gosta. "The Dual Nature of Light as Reflected in the Nobel Archives." *Nobelprize.org.* Assessed at <u>http://nobelprize.org/nobel_prizes/physics/articles/ekspong/index.html</u> on February 11, 2008.

Feyerabend, Paul. Against Method. 3rd ed. London: Verso, 1994.

- Gimpel, Jean. *The Medieval Machine: The Industrial Revolution of the Middle Ages.* New York: Penguin Books, 1977.
- Grenz, Stanley J., and Roger E. Olson. 20th Century Theology: God and The World in a Transitional Age. Downers Grove, Illinois: InterVarsity Press, 1992.
- Heraclitus. *Fragments: The Collected Wisdom of Heraclitus*. Translated by Brooks Haxton. New York: Viking Penguin, 2001.
- Huber, Richard M. How Professors Play the Cat Guarding the Cream: Why We're Paying More and Getting Less in Higher Education. Fairfax, Virginia: George Mason University Press, 1992.
- Huygens, Christiaan. "On Rays Propagated in Straight Lines." *Treatise on Light*. Translated by Silvanus P. Thompson, Project Gutenberg, p. 7. <u>http://www.gutenberg.org/catalog/world/readfile?fk_files=164378&pageno=1</u> Assessed on January 22, 2008.
- Kuhn, Thomas. *The Structure of Scientific Reasoning*. 3rd edition. Chicago: University of Chicago Press, 1996.
- Lenzen, V. F. "The Concept of Reality in Physical Form." *The Philosophical Review* Vol. 54, No. 4 (July 1945): 321-344.
- Newton, Isaac. "An Hypothesis Explaining the Properties of Light Discoursed of in My Several Letters," *Newton's Philosophy of Nature: Selections from his Writings*. Edited by H. S. Thayer. New York: Hafner Press, 1974.

. Newton's Philosophy of Nature: Selections from his Writings. Edited by H. S. Thayer (New York: Hafner Press, 1974.

- Popper, Karl Raimund. Conjectures and Refutations: The Growth of Scientific Knowledge. London: Routledge and Kegan Paul, 1963.
- Rawls, John. A Theory of Justice. Oxford: Oxford University Press, ####.
- Saussure, Ferdinand de. *Course in General Linguistics*. Hightstown, NJ: McGraw Hill Humanities, 1965.
- Schilpp, Paul Arthur, ed. *Albert Einstein: Philosopher-Scientist*, 2nd ed. New York: Tudor Publishing Company, 1951.
- Spinoza, Benedict de. *The Chief Works of Benedict de Spinoza*. Translated by R. H. M. Elwes, Vol. II. New York: Dover Publications, Inc., 1951.
- Wesley, John. "Primitive Physic: Or, and Easy and Natural Method of Curing Most Disease." *The Works of John Wesley*. 3rd edition. Volume XIV. Kansas City, Missouri: Beacon Hill Press, 1978.

Whitehead, Alfred North. Science and the Modern World. New York: Free Press, 1967.

Williams, L. Bryan. via media philosophy: a pilgrimage through Holiness Unto Truth. Intersections between Wesleyan and Catholic Philosophers (Cambridge, England: Cambridge Scholars Publishing, forthcoming.

____. "Academic Freedom in a Church-related Institution," *Didache.*, Assessed from

http://didache.nts.edu/index.php?option=com_docman&task=doc_view&gid=732 &Itemid= on February 17, 2008.

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Ap	pendix	I

Wesleyan Intellectual Pilgrimage*

Statement unto Truth	To God	Inverted Statement unto Truth	Source
I believe;	Guu	help my unbelief	Mark 9: 24 (RSV)
God's immanence	Р	God's transcendence	Gen 2-3; Gen 1
	A	Thus says the high and loft One who inhabits eternity, whose name is Holy: I dwell in the high and holy place,	Isaiah 57: 15 (RSV)
and also with him who is of contrite and humble spirit	T H	r dwen in the high and hory place,	
The Lord repented that he had made Saul king.	Ο	The Glory of Israel will not lie or repent ; for he is not a man, that he should repent.	1 Samuel 15: 35; 1 Samuel 15: 29 (RSV)
Love one another	F	Love your enemies	John 13:34; Matthew
Stone	Р	Living	1 Peter 2:5
Jesus of Nazareth is truly human	Ι	Jesus of Nazareth is truly divine	Creed of Chalcedon
God is three persons	L	God is One	Trinity
A Christian man is the most dutiful servant of all, and subject to every one.	R I	A Christian man is the most free lord of all, and subject to none,	Martin Luther, Freedom of the Christian
I think, therefore I am	Μ	We move; therefore we become	Descartes/Williams
[God sanctifies] in many instances;	A G	and yet there is a gradual work, both before and after that moment	John Wesley, <i>Plain</i> Account of Perfection
Deductive evolution/genetics	E	Complex Creation	Darwin, Origin of Species; Gen 1-3, In the
	In Christ		beginning
Light is particles	With	Light is waves	Newton; Huygens
* Examples to be a part of our intellectual heritage and not definitive of deep truths.	the Holy Spirit	Each example is sufficiently complex to contain the other; however, I use these examples as a way to provoke conversation.	