A Science-Theology Rapprochement

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Pannenberg, Peirce, and Lonergan in Conversation

By

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On the Thirtieth Anniversary of the Hillsborough Disaster
Dedicated to the 96 Liverpool Fans that Ascended to Heaven in 1989
You'll Never be Forgotten
You'll Always be Remembered
You Are Our Angels
You Represent the Best of Us
You'll Never Walk Alone (YNWA).

TABLE OF CONTENTS

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PREFACE

This book is an original contribution to contemporary science-theology dialogue. It is a modest, but nonetheless systematic attempt, to respond to the ideologue of scientism (the mistaken notion that any truth claim that is not verifiable according to scientific laws is not tenable) using simultaneously the procedures of science and theology. The context is the science-theology dialogue that the German Lutheran theologian Wolfhart Pannenberg (1928-2014) inaugurated in the middle of the last century. I do not claim that there was no science-theology dialogue before Pannenberg, but that Pannenberg systematized for his own age what was in earlier centuries in rudimentary and fragmentary forms. Thus, working out of Pannenberg's theses and questions to scientists, I make three fundamental claims: (1). The first is that dialogue between science-theology needs a meta-level place of discussion and that philosophy is that much-needed first level or metal level place of discussion. (2). The second is that not all philosophy can play this role because some philosophies, in the twentieth century especially, abdicated the role of clarification of ideas. (3) The third is that the philosophy of the American philosopher, semiotician, and scientist, Charles Sanders Peirce (1839-1914), provides a good meta-level place of discussion for the kind of dialogue Pannenberg initiated.

The connecting thread of these ideas—the foreground, is the seminal work of the Canadian Jesuit theologian, philosopher, and economist, Bernard Lonergan (1904-1984). All three thinkers (Pannenberg, Peirce, and Lonergan) lived in different eras and all three worked out their own respective methodological approaches. They cleverly ground metaphysics (nature of beings in the world and human destiny) in the practices of the sciences and common sense. In various ways their ideas serve as anti-dotes to the counter-positions that developed out of the Anglo-American streams of thought about the nature of human knowledge and the universe. Thus, I argue that the convergence of these ideas is a valuable tool for addressing the reductionism and the ideologue of scientism that hinder modern attempt to think metaphysically (i.e., beyond this worldliness), and that it is the latter that hinders a correct understanding of the evolutionary process.

The book makes original contribution to the science-religion dialogue in three important ways. First, it is rare to find a science-religion dialogue that is grounded in semiotics. Among non-Peirce scholars, Peirce may not

be known as a faith-based thinker (say in the mold of Pannenberg and Lonergan), but he espoused religious views and philosophical ideas that make faith more comprehensible. The book offers a corrective to some misleading notions about Peirce and the praxis of faith and shows how Peirce's semiotics, an integral part of his philosophy, is inherently dialogic and stimulates interest in the exploration of the true nature of things—including the origin and goal of the universe. Second, this research clarifies what religious believers' statement "God creates" means in relation to the mechanistic determinism of some science enthusiasts. Third, the integration of the methodological approaches of Peirce, Lonergan, and Pannenberg creatively shows how to turn the old science-theology conflict or "warfare" to one of collaboration or rapprochement.

The topical issues in this book suggest a cross-disciplinary research method. I have found useful the normative pattern of recurrent and related operations, which yield cumulative and progressive results in the natural and human sciences – an operation that Lonergan made famous in his Generalized Empirical Method (GEM). In this integration of ideas, the book explores what, for example, scientists really mean by "evolution" and theologians mean by "finality" in their quest to understand the origin and end of the universe. Thus, the book affirms the need for a complementarity of classical and statistical laws, if we are to grasp fully evolution and human finality.

INTRODUCTION

For a long time, I have been an avid reader and admirer of the English theoretical physicist and Anglican priest-theologian, John Polkinghorne (1930—) whose work I have followed diligently over the years, though not without a few areas of disagreement. His work is of superior quality and I am by no means assuming anything by invoking his work here. I simply want to reiterate three key lessons from my reading of his work that come to bear in the course of working on my own book. The first is his assertion that science-theology dialogue is a contextual theology; that the dialogue between science and theology can contribute to creative theological thinking; and that the dialogue between the two disciplines complement in various ways the many other forms of contextual theologies.[1] My own works have leaned heavily on the side of constructive (contextual, if you like) theology, with particular emphasis on Africa coming of age in a World Church inaugurated by the Second Vatican Ecumenical Council (1962-65). I have been grounded in the belief that theology (however that term is defined) must take seriously the experiences and challenges arising from specific social and cultural contexts. Very much like Polkinghorne, I neither think of contextual theology as just post-colonial deconstruction of Euro-American transmitted theology, nor do I think of contextual theology merely in terms of inculturation (Africa and Asian theologies of self-determination) or liberation theologies (Latin America and Feminist critiques of European and white dominated theology).

In the latter half of the twentieth century, inculturation theology and various aspects of liberation theologies, for good reasons, witnessed exponential growth in the academy. But the same cannot be said of the field of science-theology. The intersection of science and theology is often treated as part of an abstract mainstream European theology. Some (white) scholars may seem befuddled to see a theologian of African descent tackle head-on the issue of science-theology dialogue. To them, the field of Science-theology is an exclusive preserve of theologians of Anglo-Saxon abstraction. Perhaps this is why the multitude of literature in science-theology dialogue hardly ever treats science-theology encounter as part of contextual theology. My work in constructive theology has fueled my

[1] See John Polkinghorne, *Theology in the Context of Science* (London: SPCK, 2008), xiii and 12.

belief that one of the biggest contextual problems of our time, one that cuts across geographical boundaries and the so-called north-south theological divide, is scientism—that reductionist notion that only what can be explained scientifically is relevant. Scientism may manifest itself in all kinds of ways, but its basic notions are the same, regardless of time and geographical location.

Science deals primarily with facts. Religion deals primarily with values. Value is a transcendental notion.[2] It is arrived at by asking questions and making judgments (about human existence and the creation or evolution of the universe) with the goal of reaching satisfying answers and promoting a fully developed consciousness. Since asking questions (or the forming of hypothesis) and making judgments (testing of hypothesis) also pertain to what scientists do, there is an overlap between the world of science and the world of theology. Both theology and science make judgments of fact (state what is or is not so) and judgments of value (state what is truly good or really better).[3] Since judgments differ and can be objective or subjective, or true or false, depending on the authenticity or the inauthenticity of the person making the judgment,[4] the overlap or intersection of science and theology is not without controversy. In fact, one writer has described this coming together of science-theology as "a controversial place, filled with potholes, poisonous vines and landmines."[5] This book is an attempt to ameliorate the problem. It is, if you like, an attempt to fill some of the potholes and eliminate some of the poisonous vines and landmines. I do this by offering fresh answers to these issues on which legitimate disagreements exist by an appeal to critical realism. The crucial questions before us are these: Is scientific achievement to be conceived as an attainment of absolute truth or truth to which a scientific community has a commitment? Is it more legitimate to accept the discoveries of science without ruling out the possibility of future discoveries that might be attainable through other means with or irrespective of science?

The second takeaway from my reading of Polkinghorne is the point he makes very well, albeit without developing, i.e., that the works of Wolfhart Pannenberg (1928-2014) and his fellow twentieth century

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[2] Bernard Lonergan, *Method in Theology* (Toronto: University of Toronto Press, 1996), 34.
[3] Ibid.
[4] Ibid., 37.
[5] See Karl W. Giberson and Francis S. Collins, *The Language of Science and Faith: Straight Answers to Genuine Questions* (Downers Grove, ILL: Intervarsity Press, 2011), 8.

theologian, Bernard Lonergan (1904-1984), can be conceived as a "fertile region" or "exploratory trips into the border region between theology and the natural sciences."[6] This book is a modest attempt to tap into this goldmine and make explicit much of what needs to be discovered in the fertile works of these two thinkers who, alongside C.S. Peirce (1839-1914), developed a robust phenomenology and made serious attempts to engage modern science in the nineteenth and twentieth centuries. Together all three thinkers laid the foundational work of contemporary science-theology rapprochement by an appeal to critical realism. I should perhaps make clear here that I sometimes use the terms "science-theology" and "science-religion" interchangeably in this book because the works of these thinkers support such a notion. Lonergan particularly enunciated this best in showing that "a theology mediates between a cultural matrix and the significance and role of a religion in that matrix."[7]

Critical realism is a concept that is fundamental to the human quest for truth.[8] It has many parts, as well as a long development: a first part in which one attends to data of sense and data of consciousness, a second part in which inquiry and understanding give rise to a world mediated by meaning, a third part in which one makes reflection and judgment and through them acknowledge what is really true and worthwhile, and a fourth part in which one attains self-transcendence and become capable of making a sustained judgment, not only on one issue, but on a whole range of issues.[9] Thus, this book draws from the sophisticated works of three of the best critical realists the world has ever known—Charles Sanders Peirce in philosophy and Wolfhart Pannenberg and Bernard Lonergan in theology. All three wrote voluminous works. All three also developed architectonic systems in the best sense of the term. In their various complex and stimulating works, they argued forcefully for unity of knowledge, gave considerable attention to modern science, and attempted to reconcile the findings of science with theology. Working simultaneously as a philosopher and scientists (in the case of Peirce), and working simultaneously as philosophers and theologians operating with the scientific stricture of the twentieth century in mind (in the case of Pannenberg and Lonergan), they took the findings of science seriously, treated these findings, deservedly as they should, as data for further

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[6] John Polkinghorne, *Faith, Science, and Understanding* (New Haven: Yale University Press, 2000), 173.
[7] Lonergan, *Method in Theology*, xi.
[8] John Polkinghorne, *Science and Religion in Quest of Truth* (New Haven: Yale University Press, 2011), 11.
[9] Lonergan, *Method in Theology*, 35.

philosophical and theological investigations. Together these three identified problems militating against one's grasp of truth— the mistaken notion that knowledge is like "taking a look," a problem Lonergan technically calls "the-already-out-there-now-real."[10] The already-out-there-now-real is a myth. Lonergan sheds light on this myth that is at the root of myriads of conflicting theories about our quest to know ourselves, our universe, and our place in it: "It is *already*: it is given prior to any questions about it. It is *out*: for it is the object of extraverted consciousness. It is *there*: as sense organs, so too sensed objects are spatial. It is *now*: for the time of sensing runs along with the time of what is sensed. It is *real*: for it is bound up with one's living and acting and so must be just as real as they are."[11] The already-out-there-now-real is a philosophical blunder. "The remedy for that philosophical blunder is, in Lonergan's terms, to break the duality of our knowing and to affirm that fully human knowing unfolds through the three dimensions of experience, understanding, and judgment."[12] The failure to recognize the duality in our knowing "is the source of the array of dialectically conflicting theories of knowing, objectivity, and reality in the history of thought."[13] Whereas science eschews the idea of metaphysics, Peirce and Lonergan pointed out "the indispensability of metaphysical thinking for anyone wishing to attain an integrated worldview."[14] Lonergan particularly identified the critical role of judgment in our grasp of the universe and the quest to come to grips with our authentic selves. Once the duality in our knowing is broken, it becomes easy to see why science and theology together constitute a necessary integrated entity in the human quest for truth.

The third and final takeaway from my reading of Polkinghorne that has bearing on this book is Polkinghorne's assertion that any serious work on science and theology must engage some or all of the following five themes: a rejection of reductionism; an understanding of an evolutionary universe that is compatible with a theological doctrine of creation continua; a revival of a cautiously revised form of natural theology; a methodological comparison of science and theology that shows common

[10] Ibid., 263.
[11] Ibid.
[12] Robert M. Doran, *The Trinity in History: A Theology of the Divine Missions*, Vol.1: Missions and Processions (Toronto: University of Toronto Press, 2012), 105.
[13] Elizabeth Murray, "Objectivity as Authentic Subjectivity," in *Subjectivity: Ancient and Modern,* eds., R.J. Snell and Steven F. McGuire, eds., (Lanham, MD: The Rowman and Littlefield, 2016), 41-58, 52.
[14] Polkinghorne, *Science and Religion in Quest of Truth*, 11.

concern for human understanding; and speculations concerning how physical process might be sufficiently open to accommodate human and divine agents.[15] This book not only takes seriously these issues, it discusses them in refreshingly new ways.

In chapter 1, I tackle the issue of reductionism, locating aspects of it in the blurring of the distinction between physics and metaphysics. The chapter argues that blurring of distinction between physics and metaphysics is not only confined to the works of physicists and philosophers, it also extends to the work of some evolutionary biologists, particularly the so-called professional atheists (sometimes called the New Atheists), who think science has adequately accounted for the God-problem with their mantra: "No Heaven, No Hell, Just Science." The chapter carefully shows how the reductionism amounts to a flight from understanding, an affliction that can befall anyone—specialists and non-specialists alike. The flight from understanding can also take different forms or manifestations—philosophic, psychiatric, moral, social, and cultural manifestations, further exacerbating science-theology conflict.

In chapter 2, I examine the rapprochement between theology and natural science that Pannenberg initiated in the twentieth century and I elaborate on his five questions to scientists. Pannenberg has been identified as one of the leading theologians in the second half of the twentieth century.[16] Foundational to his thinking is the idea that the Judeo-Christian God is the all-determining reality and that there is no realm of human inquiry from which God can be excluded. Pannenberg began dialogue of science-theology even before he posed his now famed critical questions to scientists. This chapter explicates other ideas of Pannenberg's – that scientific description of data is provisional version of objective reality and critically examines the concepts fields, contingency, and space and time that he drew from theoretical physics and for which he found analogues in theology. This was Pannenberg's way of showing that the evolutionary universe is compatible with the theological doctrine of creation continua.

In chapter 3, I examine C.S Peirce's pragmatic philosophy and semiotics, with a view to highlighting its implications for the philosophy of God (natural theology). The chapter argues that understanding intelligent and reasonable realism in the Lonergan specific sense will require a philosophical approach to knowing, the kind that Peirce offers. The chapter suggests that Peirce had a philosophical approach to knowing,

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[15] John Polkinghorne, *Belief in God in an Age of Science* (New Haven: Yale University Press, 1998), xi.
[16] Polkinghorne, *Faith, Science, and Understanding*, 156.

as well as a distinctive understanding of science as a mode of inquiry (not the only mode of inquiry) that can further our quest to understand intelligently and reasonably the universe and the human place in it. The chapter also suggests that the philosophic system of Peirce that anticipates modern scientific method, and his related idea that semiotics and metaphysics be reconstituted as forms of inquiry, complement Lonergan's ideas in *Insight*-- to help the human person understand not only what is to be understood, but also to establish "a fixed base, an invariant pattern, opening upon all further developments of understanding."[17]

In chapter 4, I focus exclusively on the philosophy/theology of one of the brightest and sharpest minds of the twentieth century thinkers, Bernard Lonergan who, like Pannenberg and Peirce, appeals to the unity of knowledge and the range of intelligibility to be grasped in any discipline whatsoever. Lonergan appeals to the invariant structure of the human mind, which he correctly identifies as basic to all thinking beings, regardless of time, place, or culture. He uses the criteria of intelligibility to show how God can be conceived as an unrestricted act of understanding. Trained in philosophy, theology, and economics, as the chapter shows, Lonergan "displays a degree of technical facility, deriving from his competence in mathematics."[18] This competence enables him to engage brilliantly with the specificities of physical theories.[19] The chapter also shows how Lonergan accomplished one of his central goals, i.e., to help the human person break the duality in one's knowing, by an appeal to complementarity of classical and statistical investigations—that classical investigations and statistical investigations are two types of knowing and that they complement each other. Lonergan combines both types of investigations into a single world view, in contradistinction to reductionists or a deterministic views that affirm the two investigations in terms of either/or (not both/and). The chapter concludes by showing how Lonergan's theory of world process and emergent probability adequately addresses questions arising from neo-Darwinian science. More importantly, he shows how God can be conceived as "the unrestricted act of understanding, the eternal rapture glimpsed in every Archimedean cry of Eureka."[20]

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[17] Bernard Lonergan, *Insight: A Study of Human Understanding*. Collected Works of Bernard Lonergan, vol.3, edited by Frederick E. Crowe and Robert M. Doran (Toronto: University of Toronto Press, 1992), 22.
[18] Polkinghorne, *Faith, Science, and Understanding*, 173.
[19] Polkinghorne, *Theology in the Context of Science*, 12.
[20] Lonergan, *Insight*, 706.

Chapter 5 is a fitting conclusion of an omnium-gathering of ideas of three thinkers -- Pannenberg, C.S. Peirce, and Lonergan – that relate centrally to science and the problem of cosmology, i.e., the matter of understanding the world and human person's place in it. The chapter concludes by showing that if physics can point to five major theories that have dramatically altered our view of the universe and our place in it (the Heliocentric Theory, the Electromagnetic Field Theory, the Special and General Theories of Relativity, Quantum Theory, and the Big Bang Theory), theology can equally point to some compelling revolutions that have dramatically shaped our knowledge of the cosmos and the human person's place it (what Lonergan termed the Law of the Cross, especially). Revolutions in physics and revolutions in theology make science-theology dialogue imperative. To Pannenberg belongs the credit of initiating the dialogue. To Peirce belongs the credit of providing a philosophical base or a meta-level place of meeting for such dialogue. To Lonergan belongs the credit of raising the dialogue to a quintessential art and providing a method by which theology and science may find a home.

CHAPTER ONE

THE NEW ATHEISM AND WARFARE OF SCIENCE-THEOLOGY

Scientists seek insight into ranges of phenomena.[1] The English evolutionary biologist and one of the early devotees of the Darwinian theory by natural selection, Thomas Henry Huxley (1825-1895), once remarked that almost every great step in the history of science has been made "by the 'anticipation of nature,' that is, by the invention of hypotheses which, though verifiable, often had very little foundation to start with."[2] As a rule, scientific investigations begin with some problem "and aim at an order connecting what at first sight may seem unrelated facts."[3] The ability to "perceive in some brute experience the occasion for a problem, and especially a problem whose solution has a bearing on the solution of other problems," is a hallmark of scientific genius.[4] The explanations and solutions of a perceived problem are called hypotheses when they are formulated as propositions. In so far as the functions of hypotheses are to guide inquiry, direct investigations for the order among facts, and in guiding investigations of necessity regard some facts as significant and others as not that significant or even insignificant,[5] science needs religion. Religion lays theological claims to the phenomena described by science and offers a deepened and expanded version of this phenomena described by science.[6] Neil Ormerod has suggested correctly that appropriating the intellectual conversion specified by Bernard

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[1] Bernard Lonergan, Collected Works of Bernard Lonergan, *Insight*, vol.4., edited by Frederick E. Crowe and Robert M. Doran (Toronto: University of Toronto Press, 1997), 4.

[2] See Morris R. Cohen and Ernest Nagel, *An Introduction to Logic and Scientific Method* (New York: Harcourt, Brace and Company, 1934), 197.

[3] Ibid., 200.

[4] Ibid.

[5] Ibid., 201

[6] See Wolfhart Pannenberg, *Anthropology in Theological Perspective*, translated by Matthew J. O'Connell (Philadelphia: Westminster Press, 1985), 19.

Lonergan (1904-84) is essential for addressing questions surrounding science-theology debacle.[7] Lonergan was one who paid attention, in a systematized way, to the act of organizing intelligence that brings within a single perspective the insights of scientist and people of common sense—theologians especially.[8] His explanatory unification of the insights of scientists and people of common sense flows from a well-thought out generalized empirical method or cognitional activity that lends itself to intellectual conversion.

In so far as science-theology dialogue is an act of organizing and unifying the insights of scientists and people of common sense, the success of any science-theology debate hinges on a recovery of genuine philosophy and metaphysical frame that will be verifiable. "Just as every statement in theoretical science can be shown to imply statements regarding sensible fact, so every statement in philosophy and metaphysics can be shown to imply statements regarding cognitional fact."[9] Expanding on Lonergan's idea on the need for a metaphysics that can be verified, Ormerod explains that a proper metaphysical frame that stands independently of the actual findings of science is crucial to avoiding errors, like that of the American theoretical physicist, Lawrence Krauss (1954—) who was "caught in a notion of reality as 'already-out-there now,' a reality conditioned by space and time."[10] This chapter will show how the blurring of the distinction between physics and metaphysics that Lonergan decried in *Insight* is much more pervasive than have been previously acknowledged—that the problem is not confined to the work of physicists and "professional philosophers" alone.[11] It also extends to some evolutionary biologists, particularly the so-called professional atheists (sometimes called the New Atheists), who think science has adequately accounted for the God-problem. Adam Eakman has traced the origin of the term "New Atheism" to November 2006 issue of WIRED Magazine. The Magazine carried a cover story with the caption, "The New Atheism: No Heaven, No Hell, Just Science," a caption that succinctly captures the core

[7] See Neil Ormerod, "Bernard Lonergan and the Recovery of a Metaphysical Frame," *Theological Studies* 74 (2013) 960-82.
[8] Lonergan, *Insight*, 4.
[9] Ibid., 5.
[10] Ibid., 966. See Lawrence Krauss, *A Universe from Nothing: Why There Is Something Rather than Nothing* (New York: Free, 2012).
[11] Lonergan, *Insight*, 967.

belief of the New Atheists, i.e., not just that God is dead but also that science, which has replaced the need for God, is out to prove it.[12]

The position New Atheists advance under the guise of science validates Lonergan's warning that we be careful about oversights or what he calls the flight from understanding. "Besides the dynamic context of detached and disinterested inquiry in which insights emerge with a notable frequency, there are contrary dynamic contexts of the flight from understanding in which oversights occur regularly and one might almost say systematically."[13] The flight from understanding is pervasive and can afflict anyone—specialists and non-specialists alike. It can take different forms or manifestations—philosophic, psychiatric, moral, social, and cultural manifestations.[14] The case of the New Atheist Movement might be considered an instance of the philosophic, social, and cultural manifestations of the flight from understanding.

Counter-Positions and the New Atheist Movement

In the last decade, most notably in Great Britain and the United States, a flurry of intellectual activities revolving around the advocacy of atheism has upped the tempo to banish all God-talk and religious faith from our understanding of reality and everyday practices.[15] A cadre of professional atheists who call themselves the Four Horsemen—Richard Dawkins, Sam Harris,[16] Christopher Hitchens,[17] and Daniel Dennett[18]—has taken over

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[12] See Adam Eakman, "Addressing the New Atheism: How Science Can Defend Theology," *Journal of Theta Alpha Kappa* 35 (2011), 61-76, 62. See also Gary Wolf, "The Church of the NonBelievers," WIRED 14, no. 11 (November 2006). Online: http://www.wired.com/wired/archive/14.11/atheism.html.

[13] Lonergan, *Insight*, 5.

[14] Ibid., 8.

[15] J. Thomas Howe, "Affirmations after God: Friedrich Nietzsche and Richard Dawkins on Atheism," *Zygon* 47 (2012), 140-55, 140.

[16] See Sam Harris, *The End of Faith: Religion, Terror, and the Future of Reason* (New York: W. W. Norton, 2004), *Waking Up: A Guide to Spirituality Without Religion* (New York: Simon & Schuster, 2014), and *The Moral Landscape: How Science Can Determine Human Values* (New York: Free Press, 2011).

[17] Christopher Hitchens, *God is not Great: How Religion Poisons Everything* (Twelve Books, 2009) and *The Portable Atheist: Essential Readings for the Nonbeliever* (Boston, MA Da Capo Press, 2007).

[18] Daniel C. Dennett's *Breaking the Spell: Religion as a Natural Phenomenon* (New York: Penguin Books, 2007) and Darwin's *Dangerous Idea: Evolution and the Meanings of Life* (New York: Simon and Schuster, 1996).

leadership of this ever expanding Anglo-American movement.[19] Why does their opinion on science matter? Why should we care? Their opinions matter and we should care because they are tapping into a deep tradition of European skepticism, which they assume many Europeans and Americans share.[20] They also seem to be tapping "into a vein of public discontent with religious fundamentalism in the wake of horrific terrorist attacks in the United States and Europe."[21] In addition, either directly or by implication, the New Atheists think that their positions are not only consistent with science but also that to some varying degree their positions are supported by science.[22] For these and other reasons to be fleshed out later in the chapter, we should take their opinions about science seriously. Nancey Murphy has helped to summarize their common theme into a four-part thesis:

First, all four argue for naturalistic, rather than theistic accounts of the origin of religion.[23] Second, they all speculate on why people continue to hold religious beliefs even after the "primitive" origins of religions had been duly explained to them in epic books.[24] Third, the epic books, which they all subscribe to as a gold mine of information about some of the most ridiculous religious beliefs and practices that anthropologists have dug up, detail the cargo cults that originated in the Pacific islands in the nineteenth century. The cargo cults were quasi-religious practices that were performed to provoke the return of European or American ships with their "supernatural" technology."[25] Fourth, there is their double concern with the relation between religion and morality. Not only do they all attack the idea that good morals depend on religion, they set out to show that, in fact, most of the evil in the world comes from religion.[26]

The New Atheists, as evidenced in the writings of their most vociferous representative Richard Dawkins, see their project as "the

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[19] Scott Hann and Benjamin Wiker, *Answering the New Atheism: Dismantling Dawkins' Case Against God* (Steubenville, OH: Emmaus Road Publishing, 2008), 1.
[20] Ian S. Markham, *Against Atheism: Why Dawkins, Hitchens and Harris are Fundamentally Wrong* (Malden, MA: Blackwell, 2010), 6.
[21] Gregory R. Peterson, "Why the New Atheism Shouldn't be Completely Dismissed," *Zygon* 42, 803-806, 804.
[22] Nancey Murphy, "Robert John Russell versus The New Atheists," *Zygon* 45 (2010), 193-212, 194.
[23] Ibid., 200.
[24] Ibid., 201.
[25] Ibid.
[26] Ibid.

debunking of cosmic sentimentality,"[27] in addition to proving the existence of a godless universe, i.e., cosmic and existential nihilism.[28] New Atheism represents a growing worrisome trend in western culture that believes that science and religion are in conflict.[29] Alister McGrath, like many others who refute their warfare model, faults Dawkins for his commitment to the warfare model of science and religion. For McGrath, it is this obsolete model that informs some of Dawkins' "unwise and indefensible judgments"[30] Dawkins seems to think, McGrath concludes, "that scientists who believe in or contribute to a positive working relationship between science and religion represent the 'Neville Chamberlin' school," i.e., stigmatizing them as "appeasers."[31]

Dawkins is an ethologist and evolutionary biologist who not only subscribes, but also intends to revive Darwin's theory of evolution through natural selection, which he thinks, "has been widely neglected."[32] Natural selection, for Dawkins, "has built us, and it is natural selection we must understand if we are to comprehend our own identities."[33] For this reason, Dawkins calls for revolution in the study of evolution, and even more than the other three horsemen, takes up "the public mantle of Neo-Darwinism."[34] While Dawkins represents Neo-Darwinism, the American paleontologist and evolutionary biologist Stephen Jay Gould (1941-2002) represents the alternative theories to Neo-Darwinism, which some label non-Darwinian evolution. In spite of few areas of disagreement, essentially Neo-Darwinism and non-Darwinian evolutionary theories have much in common. Both accept the fact of evolution—"that the earth is very old, that a variety of species have flourished and perished over geological time, and that chronologically later organisms evolved from some of the earlier ones."[35] In other words, the Neo-Darwinism of

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[27] Richard Dawkins, *Unweaving the Rainbow: Science, Delusion and Appetite for Wonder* (New York: Haughton Mifflin, 1998), ix.
[28] Howe, "Affirmations after God," 141-42.
[29] Eakman, "Addressing the New Atheism: How Science Can Defend Theology," 62.
[30] Allister E. McGrath and Joanna Collicutt McGrath, *The Dawkins Delusion? Atheist Fundamentalism and the Denial of the Divine* (Downers Grove, ILL: Intervarsity Press, 2007), 47.
[31] Ibid.
[32] Richard Dawkins, *The Selfish Gene*, 30th Anniversary Edition (Oxford: Oxford University Press, 2006), xix.
[33] Ibid.
[34] Gregory R. Peterson, "Whose Evolution? Which Theology?," *Zygon* 35 (2000), 221-32, 222.
[35] Ibid., 224-25.

Dawkins' stripe and the non-Darwinian evolution of Gould agree on "common descent through modification," although they may differ on why and how the modification takes place. Like Dawkins, Gould is very combative in his use of language. He uses language like ''pre-emptive strike'' against those he perceives as his enemies and seeks in return their ''destruction.'' He frequently uses such words as ''battle,'' "jealousy," ''conflict,'' ''retreat,'' and ''victory'' and also speaks of how ultimately ''we won.''[36] If ever there were disagreements between Neo-Darwinism, as represented by Dawkins, and non-Darwinian evolutionary theory, as represented by Gould, it would come down to these two areas: first, there is disagreement on the mode and tempo of evolution. "In this sense, each school of thought represents a competing paradigm or research program." Second, there is disagreement regarding the interpretation of the pattern of evolution, i.e., disagreement on what evolution means for us. The latter that has proven to be most significant for theology.[37]

In the Neo-Darwinism that Dawkins represents we can point to four central claims. First, evolution is a gradual process. "Evolution occurs in geologic time, in which a geological instant is on the order of 100, 000 years."[38] Second, Neo-Darwinism presupposes random, modest mutations.[39] Third, the unit of selection is individualistic, which can be isolated. While for Dawkins this unit is individual gene, for others it may be individual organism itself.[40] Fourth, "selection is primarily a process of local optimization. In any given generation, those who survive are the one best adapted for their given environment. They then pass on their genes to the next generation, whose members must go through the process themselves."[41]

Dawkins does not limit his musings about evolution to strictly scientific matters. He feels compelled "to extend his theorizing to philosophical, theological, and occasionally ethical claims as well."[42] He

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[36] See Francisco Ayala, "The Structure of Evolutionary Theory: On Stephen Jay Gould's Monumental Masterpiece," *Theology and Science* 3 (2005), 97-117, 113. Online http://www.stephenjaygould.org/reviews/ayala_structure.pdf; accessed April 27, 2016.
[37] Peterson, "Whose Evolution?, 225.
[38] Ibid.
[39] Ibid. According to Peterson, this claim has been the most successful because with the modern genetics it is now possible to isolate and track mutations within species lineage.
[40] Ibid.
[41] Ibid.
[42] Ibid., 222.

asserts that natural selection obviates the need for any designer and therefore replaces God with blind watchmaker of natural selection.[43] Very much like the physicist Krauss who was caught in a notion of reality as "already-out-there now," Dawkins seems to blur distinctions between physics and metaphysics in the way he presupposes that science engenders atheism. Lonergan's prescient remark that the flight from understanding, though covert and devious, is "resourceful and inventive, effective and extraordinarily plausible"[44] comes to bear here. If the flight from understanding has the tenacity to block "the occurrence of the insights that would upset its comfortable equilibrium,"[45] Dawkins shows us how in the way he mumbles metaphysical and anti-metaphysical positions.

We return to our question: Does evolution matter to theology? Why should theology care about what Dawkins thinks? Evolutionary theory affects many aspects of human life: origin of living organism, human origins, creation, and eschatology, etc. Since it affects questions of human origins, it also affects questions of original sin. Since it affects questions of original since, it also affects concepts of human nature, human behavior and human destiny. "It affects the question of human uniqueness, and thus the understanding of the image of God. It may even affect the formation and evolution of religious belief itself. Because soteriology and Christology are based partly on these prior theological claims, they are affected as well."[46] The question of God is an inescapable question that may be posed in several ways: Does there necessarily exist a transcendent, intelligent ground of the universe or not? Is that ground or us humans the primary instance of moral consciousness? Are cosmogenesis, biological evolution, and historical processes cognate to us as moral beings or are they indifferent and alien to us?[47] If science can prove the non-existence of God, as Dawkins and the New Atheists claim it can, then how is moral enterprise consonant with the universe?[48] "Is the universe on our side, or are we just gamblers and, if gamblers, are we not, perhaps foods, individually struggling for authenticity and collectively endeavoring to snatch progress from the ever mounter welter of decline?"[49] To answer these questions effectively is to mount a campaign against the flight from

[43] Ibid., 222-23.
[44] Lonergan, *Insight*, 6.
[45] Ibid.
[46] Peterson, "Whose Evolution?" 224.
[47] See Bernard Lonergan, *Method in Theology* (New York: Herder and Herder, 1972), 102-103.
[48] Ibid., 102.
[49] Ibid.

understanding,[50] to borrow a phrase from Lonergan. We will explore these questions in detail keeping in mind Lonergan's admonition that half measures are of no avail in the fight against flight from understanding. "Only a comprehensive strategy can be successful. To disregard any stronghold of the flight from understanding is to leave intact a base from which a counteroffensive promptly will be launched."[51]

Does Science Engender Atheism?

Lonergan once remarked, in what seems like an intellectual sarcasm, that "there are those that date the dawn of human intelligence from the publication of Darwin's *Origin of Species* in 1859."[52] Obviously one of such was Dawkins who nevertheless writes with erudition and sophistication on matters of evolutionary biology.[53] Since the 1970s, Dawkins has distinguished himself as the most articulate spokesperson for evolutionary biology.[54] He is convinced (even if mistaken) that he can show, through evolutionary biology, the improbability, irrationality, and moral bankruptcy of belief in God.[55] In *The God Delusion*, he sets out to show how science, i.e., his version of science, has put the God question to rest. As his critics understand him, Dawkins seems to suggest that those who do not see that science has disproved the existence of God are "simply obscurantist, superstitious reactionaries, who are in complete denial about the victorious advance of the sciences, which have eliminated God from even the most miniscule gaps in our understanding of the universe."[56] In fact, this idea, which he at times amplifies, runs through his writings. In *River Out of Eden*, for example, he writes that science and religion both share a common belief that they can answer deep questions about human origins, the nature of life, and the cosmos as a whole. "But there the resemblance ends. Scientific beliefs are supported by evidence, and they get results. Myths and faiths are not and do not."[57] For Dawkins,

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[50] Lonergan, *Insight*, 7.
[51] Ibid.
[52] Ibid., 154.
[53] See Allister McGrath, "Has Science Eliminated God?—Richard Dawkins and the Meaning of Life," *Science and Christian Belief* 17 (2005), 115-35, 116.
[54] See Michael Kunz, "Answering an Intellectually Fulfilled Atheist," *Direction* 40 2011, 17-27, 17.
[55] Ibid., 18.
[56] McGrath and McGrath, *The Dawkins Delusion?*, 33.
[57] Richard Dawkins, *River Out of Eden: A Darwinian View of Life* (New York: Basic Books, 1995), 33.

"there are no 'gaps' in which God can hide. Science will explain everything—including why some still believe in such a ridiculous idea as God."[58]

Dawkins has no problem showing that science and theism are antithetical and that science provides justification for atheism. He thinks the cosmos provokes even in great scientists who espouse religious faith nothing but "poetic naturalism."[59] He defines atheism in a way that fits his well-constructed grand narrative—that an atheist is a philosophical naturalist who "believes there is nothing beyond the natural, physical world, no supernatural creative intelligence lurking behind the observable universe, no soul that outlasts the body and no miracles – except in the sense of natural phenomena that we don't yet understand."[60] Dawkins' adherence (even to the point of dogmatism) to atheism has led critics to suggest that his prior held views of atheism predetermine his conclusions about God, natural world, and our place in it. Anthony Flew, one of those who espouse this position, accuses Dawkins of obscurantism that makes him neglect "Einstein's most relevant report—that there must be a Divine Intelligence behind the physical world."[61]

Dawkins is aware of Flew's criticism and responded accordingly. Flew, like Dawkins, began his career as an atheist until his search for truth led him to accept "the existence of a self-existent, immutable, immaterial, omnipotent, and omniscient Being."[62] Dawkins is also not oblivious of the tendency by some religious thinkers to interpret the scientific conclusions of the German born theoretical physicist, Albert Einstein (1879-195), along theistic (or in the least deistic) lines. Einstein's theory of relativity revolutionized science and theoretical physics, something Dawkins is mindful of and on which he differs with religious thinkers. In *The God Delusion,* Dawkins scrutinizes the matter of Einstein's statements, which he thinks are cherry-picked by religious apologists who "try to claim Einstein as one of their own."[63] He takes time to examine some statements of Einstein's, which he thinks have been deliberately taken out of their original contexts by people he dubbed religious apologists:

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[58] McGrath and McGrath, *The Dawkins Delusion?*, 35-36.
[59] Richard Dawkins, *The God Delusion* (Boston: Houghton Mifflin, 2006), 14.
[60] Ibid.
[61] Anthony Flew, "Documentation: A Reply to Richard Dawkins," *First Things* 188 (2008), 21-22, 21.
[62] Anthony Flew, *There is a God: How the World's Most Notorious Atheist Changed His Mind* (New York: HarperOne, 2007), 155.
[63] Dawkins, *The God Delusion*, 15.

- Science without religion is lame and religion without science is blind.
- God is subtle but he is not malicious.
- God does not play dice and
- Did God have a choice in creating the Universe?

Dawkins suggests that in these statements Einstein was simply using the term "God" in a metaphysical and poetic way, not in the sense of a supreme Creator God that religious believers see as the designer of the universe.[64] According to Dawkins, Einstein's statement that God does not play dice, for example, is Einstein's way of showing that "Randomness does not lie at the heart of all things."[65] He also interprets Einstein's statement "Did God have a choice in creating the Universe?" as Einstein's way of saying "Could the universe have begun in any other way?"[66] In all, Dawkins argues that the word "God," as found in Einstein's statements, does not mean a personal God of Judeo-Christian or any religion, but simply a set of physical laws that govern the universe.[67]

Dawkins, in fairness, is offering nothing but a plausible interpretation of Einstein's statements, particularly when viewed in light of Einstein's other statements, which the so-called Christian apologists hardly ever cite. For example, Einstein was said to have said, "The idea of a personal God is quite alien to me and seem even naïve."[68] As one who knows his stuff, Dawkins supports his argument with a lengthy quotation from none other than Einstein himself:

> It was, of course, a lie what you read about my religious convictions, a lie which is being systematically repeated. I do not believe in a personal God and I have never denied this but have expressed it clearly. If something is in me which can be called religious then it is the unbounded admiration for the structure of the world so far as our science can reveal it.[69]

Using this kind of quotation to back up his claims, Dawkins suggests that the metaphorical God, as used by Einstein and physicists, "is light years away from the interventionist, miracle-wreaking, thought-reading, sin-punishing, prayer-answering God of the Bible, of priests, mullahs and

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[64] Ibid., 18.
[65] Ibid.
[66] Ibid.
[67] Ibid., 19.
[68] Ibid., 15.
[69] Ibid., 15.