C. S. Lewis on Evolution and Intelligent Design

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This article is a comprehensive study of the views of Christian author and apologist C. S. Lewis on the theory of evolution and the argument from intelligent design. It explains how he would distinguish expressly philosophical arguments for a Transcendent Mind from the current claims of the intelligent design (ID) movement to provide scientific evidence for such a reality. It also expounds Lewis's important distinction between evolution as a highly confirmed scientific theory and evolution as co-opted by naturalistic philosophy. In the end, Lewis's rich Trinitarian framework – stemming from his commitment to historic orthodoxy, or "mere Christianity" – is developed as a context for how he engaged all human knowledge, which includes his acceptance of evolution as well as his criticism of ill-conceived versions of the design argument.

Always be prepared to give an answer to everyone who asks you to give the reason for the hope that you have. But do this with gentleness and respect. 1 Peter 3:15 (NIV)

Probably no other modern Christian thinker fulfills this admonition better than C. S. Lewis as he engaged in what may be called intellectual evangelism, pre-evangelism, natural theology, or apologetics. Consider a well-known passage in Lewis:

If all the world were Christian it might not matter if all the world were uneducated. But, as it is, a cultural life will exist outside the Church whether it exists inside or not. To be ignorant and simple now - not to be able to meet the enemies on their own ground-would be to throw down our weapons [and have] no defense against ... intellectual attacks ... Good philosophy must exist, if for no other reason, because bad philosophy needs to be answered. The cool intellect must work ... against the cool intellect on the other side ...1

Lewis is saying here that Christian faith has intellectual content that can effectively engage the best information from all fields of knowledge as well as opposing points of view. This article explores how Lewis relates historic, orthodox belief—or, "mere Christianity"—to the debate between Evolution and intelligent design, and then shows how he incorporates these subjects into his Trinitarian vision of reality.²

Early in the twentieth century, some religious groups objected to Evolution because it contradicts a literal interpretation of Genesis.³ The "creation science"

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movement was formed to provide scientific support for this position, which included commitment to a young earth (approximately 6,000–10,000 years old), the fixity of biological species, and the direct creation of Adam. The Creation Museum near Cincinnati, Ohio, energetically marketed in parts of the Christian community, represents a relatively recent expression of this approach. In the late 1990s, the "intelligent design" (ID) movement emerged, still rejecting evolutionary principles and purporting to have a hot, new scientific argument for God.

What is Evolution, scientifically speaking? All too briefly, cosmic evolution refers to the process of development of the universe—beginning with the Big Bang 13.7 billion years ago and, through many stages, producing all of the chemical elements, all of the galaxies, planets, and other constituents of the cosmos. Biological evolution refers to the origin and development of life on this planet, through many forms and species, including the appearance of human beings on one branch of the Tree of Life with common genetic ties to chimpanzees and other primates. All of the natural sciences converge and tell this story, from astronomy to geology, from paleontology to biology.

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Lewis stands within the long Christian tradition of natural theology: the enterprise of giving reasons for the existence of an Ultimate Being or God, reasons that are based on some feature of the world rather than on special revelation.⁴ The classic approaches may be summarized as follows:

- *Cosmological Argument:* God as the cause of the existence of the universe
- Moral Argument: God as the source of moral law and our consciousness of it
- *Teleological Argument:* God as the cause of rational, lawful, end-directed order in the universe.

Obviously, the teleological argument is about a Transcendent Intelligence that accounts for the rational order of nature—and supreme intelligence is obviously a characteristic of the theistic deity. Historically, labels such as "argument from design" and "design argument" have also been used to refer to some versions of teleological argument. The various arguments for an Intelligence beyond nature should be seen as forming a "family" of teleological or designtype arguments. In the past several decades, a new

approach, drawing from science and articulated in elaborate mathematical detail, has been added to the family:

• The Fine-Tuning Argument: God as the source of the surprising precision and interrelation of nature's physical constants, from the beginning state of the universe onward, which makes the universe exactly suited for life, including intelligent life. (The anthropic principle involved here is that the universe is fine-tuned for intelligent life.)⁵

Clearly, natural theology as a whole includes a number of different kinds of arguments for an Ultimate Being. The cosmological argument keys on the power of the Ultimate Being while the moral argument focuses on its moral nature. Additionally, several arguments fall within the family of design-type arguments. Whereas the intelligence of the Ultimate Being is implicit in the cosmological and moral arguments, it is the explicit conclusion of design-type arguments.

As a classicist, Lewis knew about such traditional lines of reasoning pointing to an Intelligence behind nature. He also added some reasoning of his own, arguing in *Miracles* that, in order for human thought to be rational, it must be free: we must be able to form beliefs by a logical process that is not completely determined by physical processes in the brain. However, a naturalistic worldview, observes Lewis, assumes that matter and its operations are the foundation of all phenomena, including what we call rational thought. It is at this very point that he says Naturalism is self-defeating: it undercuts rational thought by subsuming it under physical causation and therefore removes any basis for regarding human thought as rational, and for regarding the naturalist's belief in Naturalism as rational.6 Lewis further argues that finite rationality is best explained by something outside of nature which must be more like a Mind than anything else. This is Lewis's "argument from reason"—not technically a design-type argument but a closely related consideration pertaining to a Transcendent Intelligence.7

Lewis also advanced a fascinating "argument from desire": it begins with the idea that every natural human desire (such as hunger and thirst) corresponds to some real object which satisfies that desire (food, water). But human beings also have a deep natural longing which cannot be satisfied by finite and temporal things, no matter how good or beautiful, and can only be satisfied by something Infinite.

This poignant human longing—which Lewis calls by the German word *Sehnsucht*—is best understood as the deep desire for enduring joy, which, of course, the temporal realm does not contain. The conclusion, then, is that there must be an Ultimate Being, which people call God, whose existence alone can satisfy this longing.⁸ I cannot pursue the nuances of this argument here, but certainly the satisfaction of this natural desire of rational creatures would require a rational Being. So, the idea of a Transcendent Intelligence is implicit in this interesting piece of reasoning.

Additionally, all readers and interpreters of Lewis know how effectively he employed his own version of the moral argument. From the arsenal of traditional natural theology, he seemed to prefer this argument, which launches the discussion in *Mere Christianity* and permeates *Abolition of Man.*⁹ And a Supreme Being as a Source of Moral Law would necessarily be rational in nature. A fair summary of Lewis, then, on the possibility of arguing for an Intelligence beyond nature is that he embraced several lines of reasoning in which this theme is either implicit or explicit. Interestingly, however, none of these lines of reasoning are really designtype arguments—and we shall explore the reasons for this shortly.

The recent ID argument gets some support in the evangelical community because it taps into the conviction that "in some important sense" God is a Designer or Intelligent Agent behind the universe. This new argument, however, is not the first to go by the rubric of "intelligent design," since designtype arguments have a long history, as noted earlier. In assessing the viability of all arguments from some orderly feature of the world to an Intelligence beyond the world, we must make some crucial distinctions. There are significant differences between traditional teleological or design arguments, on the one hand, and the new ID argument, on the other. These differences are reflected in their respective answers to two key questions: In what exact sense is God the Designer? And, what sorts of considerations, if any, legitimately point to a Designer? Although a comprehensive treatment of the intellectual history and logical structure of design-type arguments would review a generous handful of versions, here we will simply employ a two-fold classification: traditional teleological approaches and the much newer ID

approach, as two very different ways of answering these questions.

Natural theology through the centuries includes a range of design-type arguments - from Aquinas's reasoning to a Transcendent Intelligence as the best account of the teleology of natural objects, to Richard Swinburne's contention that a Supremely Rational Mind is required to think and uphold natural laws. 10 In 2004, the news broke that Antony Flew, one of the most famous atheistic philosophers of the twentieth century, had announced that he had come to embrace a more or less Deistic belief that there is a Supreme Being who intelligently structured the universe but neither interacts with it nor underwrites an afterlife. Soon thereafter, Flew's book There Is a God: How the World's Most Notorious Atheist Changed His Mind appeared and provided a lucid retelling of his intellectual journey – a journey shaped by engaging the findings of science with insights from the traditional teleological argument, the finetuning argument (including the anthropic principle), and the cosmological argument.11 Throughout the book, Flew repeatedly explains that his arguments for a Supreme Mind are distinctively philosophical in nature, grounded in philosophical reflections on recent scientific findings as well as on the scientific enterprise itself. Flew distinguishes his approach from misguided attempts to provide scientific arguments for a Supreme Mind. Francis Collins and John Polkinghorne, both severe critics of ID, wrote enthusiastic recommendations of Flew's book.

Flew, who deceased on April 8, 2010, is also interesting here because of his exposure to Lewis during the 1950s when Lewis was chair of the Socratic Club at Oxford. Flew's approach to the present subject reflects a classical outlook similar to Lewis's: a deep respect for the enterprise of science and informed awareness of the phenomena it studies, combined with the insight that both science and its important findings require philosophical explanation. Why does physical nature conform to mathematically precise laws? Why are there conscious minds which perceive this? And why does life seem inherently end-directed? Flew came to answer these sorts of philosophical questions by positing a Supreme Mind. ID, by contrast, is critical of mainstream science and seeks to develop an argument for a Transcendent Intelligence from within its remodeled version of science, as we shall soon see. One last fascinating point concerning Flew's change of mind: from his

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newly adopted position of Deism, he considers Christianity to be the most rationally respectable living religion. He even includes in his book an appendix written by N. T. Wright, Bishop of Durham, presenting reasons why orthodox Christian claims about the historical Jesus are credible.

ID views itself as reviving and updating the eighteenth-century argument for God which assumes that science can discover traces of a designing intelligence in the natural world. William Dembski, founder and leading spokesperson for ID, states that "God's design is ... accessible to scientific inquiry." The ID movement claims to work within the field of biology (specifically, biochemistry) in order to show that an Intelligence above nature is a better explanation of certain phenomena than is Evolution. Dembski says that mainstream biology operates on the evolutionary assumption that complex life forms developed gradually from simpler forms over long periods of time as natural selection winnows through genetic variations which occur by blind chance. This means that biological complexity should be reducible to simpler components—and we do, indeed, have such reducible complexity in a wide variety of organic forms. Yet, some special cases, Dembski claims, are "irreducibly complex." Irreducibly complex forms have parts which themselves have complete and complex functions of their own, making it highly unlikely that all independently working parts could come together through evolutionary processes. Dembski writes: "The irreducible complexity of ... biochemical systems counts powerfully against the Darwinian mechanism and indeed against any naturalistic evolutionary mechanism proposed to date."12 Dembski and his allies, such as Michael Behe, have advanced several muchdiscussed examples of irreducible complexitysuch as the bacterial flagellum, the blood-clotting mechanism, and the eye.¹³

IDers formulate statistical arguments to show how mathematically improbable it is that random genetic variations plus natural selection, even over great spans of time, could result in the highly complex structures they identify. These arguments involve lots of zeroes after a decimal point. Think of this strategy in terms of probabilities in poker. The probability of being dealt a royal flush on one hand is 0.000002. The probability of being dealt two royal flushes in a row is this number squared (0.000002² or 0.0000000000004). If a person keeps getting dealt royal

flushes, we have to suspect cheating, which is a sort of "intelligent design" in cards.

Back to ID calculations: the probability of irreducibly complex forms being brought about by evolution is argued to be infinitesimally small, making ID the only reasonable alternative. Behe cites the bloodclotting mechanism as a case in point. Animals with blood-clotting cascades have about 10,000 genes, and each gene has three pieces. This totals 30,000 gene pieces. TPA (tissue plasminogen activator) has four different types of domains. As Behe argues, the odds that the right pieces can come together for bloodclotting to occur are therefore supposed to be 1 in $30,000^4$ (or 0.0000000000000000012407). Behe estimates that it would take about a thousand billion years before blood-clotting occurred, whereas the earth is only about 6 billion years old, and even the simplest life forms did not occur until perhaps about 3 billion years ago. 14 So, blood-clotting represents too many royal flushes in a row, so to speak. Behe's claim, then, is that natural laws plus time simply cannot account for the phenomenon. According to the new ID argument, it is much more probable that an intelligence beyond nature instantaneously brought about this fully functioning mechanism. In effect, blood-clotting becomes a candidate for special creation, a miracle. Now, IDers will not say that the Intelligent Being behind nature is God, but it is clear that they think they are establishing two attributes of God: (1) intelligence and (2) the power to act on intelligent planning.

Three Features of ID and Lewis's Reaction to Each

1. ID claims to be an alternative way of doing science.

Mainstream science restricts its investigation to the natural world—and the world of modern biology is a world of evolutionary processes. However, IDers insist that certain biological structures are better explained scientifically by referring to intelligent design than to blind, random evolutionary processes. The clash over these two approaches to science has been at the heart of recent academic debates, cultural divides, and court cases. In their crusade against establishment biology, IDers style themselves as the oppressed minority who cannot get a fair hearing. Ben Stein took up their cause in the recent film *Expelled*. ¹⁵ (I have to admit that I strongly dislike this film: both its logical fallacies and its convenient

editing that makes some experts who were interviewed seem to support ID although they are on record in many other venues criticizing it.) Also, the Discovery Institute, established in Seattle in 1990, supports, among other projects, intelligent design research that challenges the accepted Darwinian approach. So far, the Institute has made no ground-breaking discoveries or overturned any widely accepted biological explanations.

What would Lewis say about an alternative science that claims to detect Intelligent Agency beyond nature? Lewis was a purist regarding the role of science and rejected any notion that its methods can deal with qualitative matters and values, let alone prove (or disprove) a Transcendent Intelligence or God. Although he was a scholar and lover of the humanities, Lewis still appreciated established science and the integrity of its method. As a Christian theist, Lewis envisioned the constellation of all fields of knowledge as providing different avenues for discovering various kinds of truths about God's creation (historical, mathematical, scientific, and so forth). Not that every scientific theory is always correct or that the findings of science can never be revised as science progresses, but that the method of science is geared only for discovering the linkages between natural causes and natural effects. In Lewis's own words:

Science works by experiments. It watches how things behave. Every scientific statement in the long run, however complicated it looks, really means something like, "I pointed the telescope to such and such a part of the sky at 2:20 am on January 15th and saw so-and-so," or, "I put some of this stuff in a pot and heated it to such-and-such a temperature and it did so-and-so." Do not think I am saying anything against science: I am only saying what its job is.

And the more scientific a man is, the more (I believe) he would agree with me that this is the job of science—and a very useful and necessary job it is too. But why anything comes to be there at all, and whether there is anything behind the things science observes—something of a different kind—this is not a scientific question. If there is "Something Behind," then either it will have to remain altogether unknown to men or else make itself known in some different way. The statement that there is any such thing, and the statement that there is no such thing,

are neither of them statements that science can make. And real scientists do not usually make them. It is usually the journalists and popular novelists who have picked up a few odds and ends of half-baked science from textbooks who go in for them. After all, it really is a matter of common sense. Supposing science ever became complete so that it knew every single thing in the whole universe. Is it not plain that the questions, "Why is there a universe?" "Why does it go on as it does?" "Has it any meaning?" would remain just as they were?

This brief sketch of the descriptive aspect of science should be augmented with information about the testing of hypotheses, which is central to science as it pursues its explanatory mission. But Lewis's critical point for present purposes, in current parlance, is that we must distinguish the appropriate methodological naturalism of science from philosophical naturalism something ID fails to do. Methodological naturalism is the scientific approach of restricting the explanation of natural phenomena to natural causes. Philosophical naturalism, on the other hand, is the philosophical view that nature alone is real, that there is no supernatural. Confusing these two definitions leads to the misunderstanding that mainstream science is inherently atheistic. In reality, methodological naturalism is completely neutral as to whether God exists or life has meaning; such lofty matters take us into the areas of theology and philosophy.¹⁷

2. ID makes its living on what it takes to be deficiencies, incompletions, or gaps in existing science.

This specific strategy for formulating a design argument was first developed during the European Enlightenment when the scientific picture of the universe was that it is like a vast machine operating according to completely specifiable scientific laws. Many people looked for divine activity in this clockwork universe in events that science had not yet explained. Isaac Newton, for example, developed a precise mathematical formula "on paper" to describe how the planets move, but the actual motion of the planets varied slightly from the formula. So, Newton suggested that God periodically adjusts their orbits. The problem with god-of-the-gaps arguments was that they were already semi-Deist (admitting that God is only involved in special cases) and readily gave way to total Deism as science found natural explanations for what was previously explained by

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reference to God. In fact, historically, Deism eventually gave way to Naturalism, as God's explanatory role in the scientific world was progressively eliminated. The mistake of making God-explanations competitive with natural explanations is now classic.

Yet this is exactly the mistake that ID is repeating. As ID arguments—regarding the irreducible complexity of the bacterial flagellum, the eye, etc.—are rapidly being undercut by new and existing scientific knowledge, educated people, particularly scientists, wonder about the intellectual credibility of the underlying faith that seems to motivate the arguments. By contrast, Lewis calls us to a richer, more nuanced understanding of what kinds of explanations are appropriate within the various disciplines – e.g., empirical and scientific questions require natural explanations as distinct from questions about ultimates, values, and meaning, which require philosophical and theological explanations. Grasping this distinction allows us to explore more productively how different types of explanation are not necessarily mutually exclusive but can be entirely compatible – e.g., explanation in terms of physical causes and explanation in terms of personal agency. Consider a personal anecdote which makes the point. While driving on a family vacation many years ago, I asked my two sons why a certain billboard was standing along the highway. Adam, who was six years old and fascinated by building things, said, "Because trucks and high lifts came in and built it." Aaron, twelve years old and wiser about life, responded, "Because the owner of that business wants to market a product and make a profit." Here we have a causal and mechanical explanation alongside an explanation referring to intelligent agency. Both explanations of the billboard are correct, not at odds. The key is to be clear about the kind of question we are asking and what disciplines properly address it. The flaw in the ID argument is that it treats natural causes and supernatural action as incompatible, such that the explanation of some selected phenomenon must always be one type of cause or the other.¹⁸

3. ID trades on a number of misleading dichotomies.

If space permitted, we could more fully expose the dichotomies between theology and science, divine action and physical process, primary and secondary cause, efficient and final causality, and so on. One dichotomy in ID that Lewis would certainly address in the present context involves pitting purpose and

design against chance and evolution. Lewis rejects the view that reality exists completely by chance and without purpose as inconsistent with Theism, as we shall later see. But for biology to identify chance as a factor in the unfolding life process does not imply that the world is purposeless and not guided by a greater intelligence. The assertion that the biological realm involves chance as nondetermined contingency and thus the potential for development is not equivalent to the declaration that existence is ultimately without meaning or purpose. There are finer distinctions to be made in thinking carefully about the roles and levels of chance in relation to intelligent guidance.

Let us turn from a Lewisian evaluation of certain characteristics of ID per se to a more general and very perceptive point that Lewis makes. In *The Problem of Pain*, Lewis categorically rejects unqualified, stand-alone intelligent design arguments—and, of course, this would include ID arguments—because their strategy for explaining order in the world in terms of God's guidance is always countered by the problem of suffering:

You ask me to believe that this is the work of a benevolent and omnipotent spirit, I reply that all the evidence points in the opposite direction. Either there is no spirit behind the universe, or else a spirit indifferent to good and evil, or else an evil spirit ... [Regarding the basis of religion, reasoning] from ... this world to the goodness and wisdom [or intelligence] of the Creator [is] preposterous.¹⁹

In nearby passages, Lewis states the scientific fact that the universe is running down and that all life will ultimately come to an end, as well as the obvious fact that pain is experienced by all sentient animals, including human beings. Lewis knows that such important facts must be included in the complete rational evaluation of any case for an Ultimate Being or Transcendent Intelligence. This is why Lewis would say that it is too glib – and conveniently selective – for IDers to argue that a Transcendent Intelligence is the best explanation of selected complex forms (e.g., the whip-like tail of a certain bacterium) while ignoring other phenomena in the biological realm such as carnage, pain, and death. Lewis clearly believed that, when the arguments for and against God are weighed, Theism indeed appears more rational than any other philosophical position. Yet his knowledge of the relevant arguments on both sides makes him sensitive to

weak or fallacious forms of theistic argument which he felt no obligation to defend. This is why Lewis's own apologetic approach is helpfully characterized as a "cumulative case" which connects some of the stronger individual arguments for specific divine attributes, such that all of the arguments taken together provide coherent and convergent philosophical support for a theistic deity.²⁰

For Christian theists to identify the defects of ID's core argument from irreducible complexity is not to dismiss all design arguments in a wholesale way or to abandon the idea of God as intelligent Creator and Sustainer of nature. It is simply to analyze objectively the strategy of one highly specific line of argument based on an understanding of what counts as good theistic argumentation and a commitment to the integrity of various fields of knowledge. Understandably, many people mistakenly associate ID with the larger family of design-type and design-related arguments, both historic and recent. In fact, in the past decade or so, discussions of ID such as those collected on the website of the Discovery Institute, have touched on various philosophical arguments from natural theology: the fine-tuning argument, the traditional teleological argument, the cosmological argument, and the moral argument.²¹ As we know, Lewis believed in the effectiveness of many of these types of arguments, making it possible to acquire the misimpression that Lewis would endorse ID, or that perhaps he had offered his own argument for intelligent design. We should note, too, that ID advocates have also proposed that their position be viewed as—or at least be closely associated with—a theory of information, particularly regarding the intelligent origin of information embedded in organic nature.²² While interesting and important, information theory really forms the basis for yet another distinct design-type argument that must be distinguished from ID's irreducible complexity argument. The argument from information is a relative newcomer to the family of design arguments and will need to survive legitimate scrutiny on its own terms.

The basic point here is that well-constructed design arguments, when conjoined with other well-constructed theistic arguments, can mount a formidable case for a Transcendent Intelligence—which even Antony Flew felt was compelling. But these other intelligent design considerations originated independently of ID, have their own inherent philosophical weight, and do not logically lend support

to ID's quite specific assumptions and strategy. No doubt it is helpful to find a number of designtype and design-related arguments assembled in one location, such as on the Discovery Institute's website; but these arguments can be found in many other locations and without association with ID's idiosyncratic approach. Wisdom counsels us, then, to distinguish between the arguments for a Transcendent Intelligence that are specific to ID and the broader lines of teleological reasoning. It is entirely possible to reject the ID movement's attempt to prove this Intelligence from within science while endorsing expressly philosophical arguments for it. The philosophical approach is to consider critically what is required for the very existence of science, its rational nature, and the overall structure of the world it studies, as well as to reflect on the significant findings of science in an effort to find their larger meaning and relevance to theology.

We may now employ the distinctions above in developing judicious answers to the two previous questions. To make important distinctions between ID and traditional teleological argumentation, we first asked: In what exact sense is God the Designer? We learned that Christians need not accept the notion that there are complex biological structures created directly by God without antecedent forms; they may hold a different view of how God brought about biological complexity. Avoiding ID's dichotomy between primary and secondary causes, for example, allows natural process (including evolutionary process) to be seen as the manner in which God brings about complex forms or the presence of complex information. The second question was, What sorts of considerations, if any, legitimately point to a Designer? Again, a Christian believer can be critical of attempts to prove scientifically that there is an intelligent designer while still embracing insightful philosophical renditions of the teleological argument. Progress is made in this discussion when we avoid the category mistake of proposing God as a scientific explanation of certain phenomena and instead consider God philosophically – and, of course, theologically-as the best ultimate explanation of nature, science, and human rationality.

Lewis on Evolution

Since Lewis rejects ID in the narrower sense, what does he think about Evolution? Lewis accepted both cosmic and biological evolution as highly confirmed

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scientific theories. He understood that when a scientific theory—which is a proposal about how some natural phenomenon is caused by some natural mechanism—is confirmed by many factors, we call it a fact. We should not understand the terms *theory* and *fact* as though "theory" means "not a fact" or "lacking adequate support." Sometimes Lewis uses the term "hypothesis" as synonymous with a scientific theory, as do many scientists.

Regarding cosmic evolution, Lewis comments that his Space Trilogy contains "only enough science" to lift the reader's imagination away from the ordinary; but the science it does contain is informed by the basic scientific picture of the cosmos and space and the planets. In his more overtly philosophical (and apologetic) books, Lewis sometimes alludes to well-known information about the universe. In *The Problem of Pain*, he writes,

Look at the universe ... By far the greatest part of it consists of empty space, completely dark and unimaginably cold. The bodies which move in this space are ... few and so small in comparison with the [vastness] of space ...²³

Elsewhere Lewis speaks of "nebulae" coming into being in the early history of the cosmos; therefore he knew something about cosmology and astronomy.

Lewis then transitions to biological evolution in that same passage in *The Problem of Pain*:

[I]n our own [galaxy and solar] system it is improbable that any planet except the Earth sustains life. And Earth herself existed without life for millions of years and may exist for millions more when life has left her. And what is life like while it lasts? ... [A]ll the forms ... can live only by preying upon one another.²⁴

Here he reflects on what science tells us about key elements of organic evolution—the struggle for survival and natural selection. He continues:

[T]hat man is physically descended from animals, I have no objection ... For centuries God perfected the animal form which was to become the vehicle of humanity and the image of Himself ... The creature may have existed for ages in this state before it became man ... [I]n the fullness of time, God caused to descend upon this organism ... a new kind of consciousness which could say "I" and "me," ... which knew God ... [and] could make judgements of truth, beauty, and goodness ...²⁵

Clearly, Lewis accepts the Darwinian concept of "common descent with modification." In other writings, he calls biological evolution a "genuine scientific hypothesis" and scientists who study it "real biologists" and "real scientists." He even refers in various locations to the age of "monsters," "dragons," "huge, very heavily armored creatures," the great reptiles, dinosaurs, which had to pass so that mammalian life could emerge and flourish. 28

So, Lewis never voices any objection to the scientific facts of Evolution as though they are somehow incompatible with orthodox Christian doctrines—and, in fact, he was completely comfortable integrating Evolution into a comprehensive worldview. For Lewis, positively engaging the growing body of human knowledge does not mean accommodating the latest fad but responsibly reflecting on how the Christian vision makes best sense of the facts and broad principles we learn from a variety of sources, including the sciences. Since Lewis's time, of course, the findings of the sciences have converged more strongly on the truths of Evolution, such that it now has as high a degree of confirmation as anything else we know in science.²⁹

Why do certain religious groups continue to have problems with Evolution? One factor is the low quality of science education in our schools that makes it difficult to have informed discussion in which all parties adequately understand the methods and aims of science. Also, we noted earlier the perception that Evolution contradicts a literal reading of Genesis, which, for Christian fundamentalism, violates biblical authority. But the factor that requires attention here is that some people—both Christian and non-Christian – see Evolution as implying that there is no God, as being a form of atheism. So, Evolution becomes identified with the view that matter alone is real, chance and randomness eliminate design and purpose, moral absolutes do not exist, and a human being is merely a complex animal with no special dignity. However, these are not scientific claims; they define the philosophical worldview of Naturalism (or Materialism).

Lewis, of course, was a sworn opponent of Naturalism, but not of Evolution. He carefully distinguished Evolution as science from Evolution as co-opted by philosophical naturalism.³⁰ Naturalism has been around since the dawn of philosophical thought in Greece 2,500 years ago. Its advocates have always claimed that "Naturalism-plus-the-science-

of-the-day" explains all that needs to be explained, and that therefore theological and metaphysical explanations are obsolete. In our day, thinkers who take this approach have been dubbed "the New Atheists." Lewis shrewdly cautions us not to fall for their spin:

Please do not think that one of these views [i.e., either Naturalism or Supernaturalism] was held a long time ago and that the other has gradually taken its place. Wherever there have been thinking men both views turn up ... You cannot find out which view is the right one by science in the ordinary sense.³¹

Lewis is making two important points: (1) That it is pure propaganda that Supernaturalism was believed when people were prescientific and intellectually unsophisticated, but that science has now shown that Naturalism is true. In point of fact, classical Christian orthodoxy is always capable of the most sophisticated engagement with any new information. (2) That science - legitimately operating by methodological naturalism – cannot decide between the two philosophical options of Naturalism and Supernaturalism. For naturalists to think that science itself provides evidence for Naturalism is, ironically, to commit the same category mistake earlier attributed to ID: failing to distinguish what sorts of issues are properly addressed in the fields of science and philosophy, respectively. The New Atheists fallaciously claim that their philosophical position is closely linked to a scientific case for atheism which is supported by evolutionary science, whereas ID proponents fallaciously claim that their version of science exposes weaknesses in evolutionary approaches and thus provides grounds for thinking that something like Theism is true.

Lewis's incisive criticisms of Naturalism masquerading as evolutionary science are still very relevant to the growing cultural discussion. Consider two famous examples of scientists promoting Naturalism in the name of science. In the 1980s, Cornell astronomer Carl Sagan burst on the scene with his book *Cosmos* and the PBS series it inspired. The first sentence of the book declares: "The cosmos is all that is or ever was or ever will be." The sum total of reality is matter, continually and endlessly changing in space. There is no intelligent and benevolent being behind it all.

More recently, Oxford zoologist Richard Dawkins makes the *New York Times* Best Seller List from time

to time with books arguing that Evolution combined with philosophical naturalism provides a complete and compelling explanation of the world. As a leader of the New Atheism, he writes,

An atheist before Darwin could have said, following Hume: "I have no explanation for complex biological design. All I know is that God isn't a good explanation, so we must wait and hope that somebody comes up with a better one." I can't help feeling that such a position, though logically sound, would have left one feeling pretty unsatisfied, and that although atheism might have been *logically* tenable before Darwin, Darwin made it possible to be an *intellectually fulfilled atheist*.³³ [emphasis added]

So, for Sagan and Dawkins, the philosophical view that physical stuff is ultimate reality can now be coupled with a comprehensive scientific account of how the physical realm developed and operates. You have the complete package: Naturalism co-opts Evolutionary Science. No need for a Creator-God; the physical realm simply explains itself!

Lewis was extremely critical of Evolutionary Naturalism as a total package because Naturalism involves the denial of God, moral relativism, and human devaluation. What science legitimately reveals about Evolution is then pressed into the service of a completely secular and godless vision that justifies the technological and political manipulation of humans - and this is touted as a "progressive scientific outlook." Lewis's Space Trilogy is not primarily about advanced space travel or futuristic warfare but about the irreconcilable conflict between the Christian tradition and the "developmental" or "progressive" tendencies of modern thought. Professor Weston and Richard Devine, for example, represent different versions of the secular scientific vision. In *That Hideous Strength*, the final book of the trilogy, Lord Feverstone (Devine who has become politically influential) reveals the real purpose of N.I.C.E. (the National Institute of Coordinated Experiments) to Mark Studdock, a young sociologist he is recruiting as a propagandist for the cause:

If science is given a free hand it can now take over the human race and re-condition it: make man a really efficient animal ... [T]he question of what humanity is to be is going to be decided in the next sixty years ... Man has got to take charge of Man. That means, remember, that some men have got to take charge of the rest ... You

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and I want to be the people who do the taking charge, not the ones who are taken charge of.³⁴

In "The Funeral of a Great Myth," Lewis explains that the myth of Developmentalism or Evolutionism or Progressivism—i.e., the "Scientific Outlook"—twists Darwin's achievement in biology into a grand, sentimental narrative about how - from elemental beginnings, against all odds, over enormous spans of time – life and then consciousness and then rational thought arose. The narrative continues: although the distant future is bleak and all existence ultimately meaningless, this courageous creature that the universe has produced, Homo sapiens, can now shape its own future.35 In The Abolition of Man, Lewis warns about people of this persuasion who gain political power and calls them "the Conditioners." 36 No doubt, Hitler's insidious crusade to "improve the species" through eugenics helped fuel Lewis's incisive critique. Of course, Lewis knew that Darwin's theory of organic evolution had been used to defend despicable acts toward humanity; but the preeminently logical Lewis knew full well that anyone could fallaciously dismiss any genuine fact by pointing out some misuse of it.

Unpublished correspondence with his friend Captain Bernard Acworth displays Lewis's distress that Darwin's theory had "run mad" and become the basis for the most fanatical views about the inevitable progress and limitless possibilities of the human race. Yet Lewis cannily describes his own thinking on this subject as the process of measuring scientific claims (as well as any other claims) by whether they contradict Christian orthodoxy - "the Creed," as he says.³⁷ Since scientific evolution does not conflict with orthodoxy, he politely refuses to reject it and equally politely declines to write a recommendatory preface to Acworth's antievolutionary book, The Lie of Evolution. Some commentators place undue emphasis on Lewis's remark that he has come to regard Evolution as "the central and radical lie in the whole web of falsehood" which so strongly influences modern thought. Such interpretations fail to account for the many contextual clues in the letters indicating that Lewis is not making this pronouncement about Evolution as science but about evolutionary science turned into a philosophical viewpoint which is naturalistic at its core. Although the correspondence transpires later in Lewis's life, it is consistent with Lewis's earlier published writings. The little-known letters to Acworth still show a lucid Lewis who remains focused on Progressive Evolutionary Philosophy, commonly known as Social Darwinism, as his real target, not the science of Evolution. He is not concerned about the prospect of our subhuman ancestry but consistently attacks the reductionism of our personhood in theory which leads ultimately to dehumanization in practice.³⁸ "Reductionism," of course, is reducing something to what it is not—qualitative matters to quantitative, the rich dimensions of our humanity to the purely physical.

The real debate is between the worldviews of Naturalism and Theism, or, really, Christian Theism. To demonstrate the conceptual advantages of Christian Theism, Lewis uncompromisingly works at such questions as, Which philosophical perspective provides a better explanation of everything we know? Which provides a more adequate vision of reality as a framework for making sense of important features of life and the world? Throughout his writings, Lewis hammers away at Naturalism's inadequacies, at its reduction of many important features of reality to a deterministic material process. He is particularly worried about the distortions of consciousness of moral law, rational thought, and finite personhood. Christian Theism, as he argues in many venues, is philosophically far superior to Naturalism – which is frequently encountered in the guise of "the Scientific Outlook" — in explaining these fundamental phenomena. He also argues that Christian Theism is superior to Naturalism in explaining science itself, since Naturalism undercuts the validity of rational thought, which is essential for science. Lewis maintains that science as a knowledge-gathering enterprise makes best sense within a Christian worldview, which affirms that a rational God creates and upholds a rational finite reality and gives human beings the rational powers to investigate it.39 As Lewis says, "The scientific point of view cannot fit in ... even science itself. I believe in Christianity as I believe that the Sun has risen, not only because I see it, but because by it I see everything else."40

Furthermore, since Lewis affirms that "all truth is God's truth, wherever it may be found," he refuses to surrender the scientific truths of Evolution to Naturalism. One reason for this is that he believes that the facts are what they are and must be accepted when properly established. This allowed Lewis to see evolutionary science as revealing fascinating details about how God's physical creation has developed and continues to function. Another reason is

that Lewis believed that the very character of the scientific facts can reveal something about God and his ways. In this regard, he perceives compatibilities and even deep resonances between Christian Theism and Evolution that are important to the articulation of a comprehensive and informed Christian worldview.42 Lewis knew that the doctrine of creation entails that, in principle, all truths fit together as a consistent, unified whole; they are not disparate beads on a string. But in practice we are always working toward greater comprehension, trying to perceive more connections and develop a holistic perspective – in other words, we practice "faith seeking understanding."43 Lewis himself is a wonderful model of a Christian mind seeking understanding of the role of science in the human search for knowledge and insight into the evolutionary contours of the universe which science investigates.

In *Miracles*, Lewis offers a charming description of what it is to see Nature properly as a creature—a description that even heightens our awareness of the resonances between Christian faith and Evolution:

Only Supernaturalists really see Nature. You must go a little away from her, and then turn round, and look back. Then at last the true landscape will become visible. You must have tasted, however briefly, the pure water from beyond the world before you can be distinctly conscious of the hot, salty tang of Nature's current. To treat her as God, or as Everything, is to lose the whole pith and pleasure of her. Come out, look back, and then you will see.⁴⁴

Supernaturalism—not just any old supernaturalism, but orthodox Christian Theism-is the best vantage point for understanding the natural world. Lewis affirmed that an infinite personal Creator willed that the physical universe come into being and, through a long and complicated process, bring forth a special kind of being, the human being, in which rationality and animality are united.⁴⁵ From this perspective, the evolutionary character of the universe can be seen as physical nature's exploration of contingent possibilities within lawful structure, but still as having a divinely willed trajectory leading to a creature who could relate to God. Classical Christian theology does not entail that either the natural world or the human enterprise was created without chanciness and contingency, without the potential for development along alternative possible routes, and therefore strictly determined. Evolution in the physical realm

and free will in the moral realm mutually attest to the significant degree of openness in God's creation.

Lewis's Trinitarian Vision

Both Classical Christian Theology and Evolution suggest a dynamic, self-actualizing aspect to reality. Lewis is insightful about this congruence and incorporates it into his articulation of the Christian vision. In doing this, he is clearly a Christian Theistic Evolutionist, or an Evolutionary Christian Theist. So, what does Lewis say God is up to in this evolutionary universe? In answering this question, Lewis is at his best.

Book Four of *Mere Christianity* is entitled "Beyond Personality: Or First Steps in the Doctrine of the Trinity." In this section, Lewis summarizes the ancient vision of the church: that the heart of reality is a Self-Living, Self-Giving Life which created everything else and seeks relationship with it. The Triune God is inherently personal and interpersonal, meaning that his created universe is deeply relational, a context for finite persons to enter loving relations with God and others. The Triune God is the original Person and the fulfillment of our own creaturely personhood. Evolutionary science investigates *Bios*, as Lewis calls it, or the very important but finite biological life we possess. However, Lewis explains that God offers us Zoe: the higher kind of life, the life of unspeakable and unending joy and beatitude radiating from God's own life. Bios is not opposed to Zoe, not contradictory to it. Bios is not evil or the root of sin. It is simply the physical life with which human rational nature is intimately and essentially identified. But *Bios* is invited to be taken up into *Zoe*—to be completed, transformed, and given ultimate significance by Zoe. This is amazing! Our destiny is beyond the physical, not by diminution or rejection of the physical but by its inclusion in a higher dimension of reality, the very Life of God.⁴⁶

Lewis paints a word picture of the Higher Life in a compelling discussion of the Trinity and the essential love relations among the Divine Persons:

God is not a static thing—not even a person—but a dynamic, pulsating activity, a life, almost a kind of drama. Almost, if you will not think me irreverent, a kind of dance ... The whole dance, or drama, or pattern of this three-Personal life is to be played out in each one of us: or (putting it the other way round) each one of us has got to enter that pattern, take his place in that dance.

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There is no other way to the happiness for which we were made. Good things as well as bad, you know, are caught by a kind of infection. If you want to get warm you must stand near the fire: if you want to be wet you must get into the water. If you want joy, power, peace, eternal life, you must get close to, or even into, the thing that has them. They are not a sort of prize which God could, if He chose, just hand out to anyone. They are a great fountain of energy and beauty spurting up at the very centre of reality. If you are close to it, the spray will wet you: if you are not, you will remain dry. Once a man is united to God, how could he not live forever? Once a man is separated from God, what can he do but wither and die?47

The Great Dance is a major theme in Lewis's writings: that the relational reality God has created is about giving and receiving, about cooperation with God as our True Center; but we have gotten out of step and need to find our way again in the Dance. In Perelandra (Book Two of the Space Trilogy), Lewis spends several pages developing this theme.⁴⁸ But it is not novel; it is a creative restatement of a profound idea stemming from the ancient church. St. Gregory of Nazianzus (Great Patriarch of Constantinople in the fourth-century Eastern Church) characterized God's inner life as "the Great Dance." This was Gregory's way of portraying the idea of "mutual indwelling" (perichoresis) in Jesus's comments in chapters 14-17 of the Gospel of John (about the mutual indwelling of the Father and the Son, the Son and believers, and so forth). This is a deeply relational universe, a perichoretic universe. And although we have broken relations at all levels, God's faithful redemptive activity is at work to heal, uplift, and restore us. Our transformation is the goal.

The last lines of *Mere Christianity* incorporate Evolution into the Christian vision while rejecting human engineering based on a misuse of evolutionary ideas. Let us meditate on these lines and allow them to serve as a fitting benediction to this study:

Perhaps a modern man can understand the Christian idea [of transformation] best if he takes it in connection with Evolution. Everyone now knows ... that man has evolved from lower types of life. Consequently, people often wonder, "What is the next step?" "When is the thing beyond man going to appear?" ... [Some suppose a] "Superman" [will appear] with extra legs or arms ... [P]opular guesses at the Next

Step [envision] men developing great brains and getting greater mastery over nature ... [But] I cannot help but think that the Next Step will be really new ... I should expect the next stage not to be a stage in Evolution [as science studies it] at all. And I should not be surprised if, when the thing happened, very few people noticed that it was happening.

[T]he Christian view is precisely that the Next Step has already appeared. And it is really new. It is not a change from brainy men into brainier men: it is a change that goes off in a totally different direction—a change from being creatures of God to being sons of God. The first instance appeared in Palestine two thousand years ago. In a sense, the change is not "Evolution" at all, because it is not something arising out of the natural process of events but something coming into nature from outside. But that is what I should expect. We arrived at our idea of "Evolution" from studying the past. If there are real novelties in store then of course our idea, based on the past, will not really cover them ...

At the earlier stages living organisms ... had ... no choice or very little choice about taking the new step ... But the next step ... of being turned from creatures into sons is voluntary ... I have called Christ the "first instance" of the new man. But of course He is something much more than that ... He is ... the new man [who takes Bios up into Zoe] ...

At the beginning I said there were Personalities in God. I will go further now. There are no real personalities anywhere else. Until you have given up your self to Him you will not have a real self ... But there must be a real giving up of the self. You must throw it away "blindly" so to speak ... Submit to death, death of your ambitions and favourite wishes every day and death of your whole body in the end: submit with every fibre of your being, and you will find eternal life. Keep back nothing. Nothing that you have not given away will be really yours. Nothing in you that has not died will ever be raised from the dead. Look for yourself, and you will find in the long run only hatred, loneliness, despair, rage, ruin, and decay. But look for Christ and you will find Him, and with Him everything else thrown in.49

Notes

¹C. S. Lewis, "On Learning in Wartime" in *The Weight of Glory: And Other Addresses*, ed. Walter Hooper (1949; revised, New York: HarperOne, 1980), 47–63.

²This article is an expanded version of my presentation at the Science for Ministry Conference "Exploring the Wonders of God's World" held at Asbury Theological Seminary, March 10, 2010.

³It will soon become apparent that, throughout this article, I adopt Lewis's convention of capitalizing important nouns. Admittedly, this convention was more common in Lewis's day and is not standard contemporary American usage.

4See Peterson et al., Reason and Religious Belief: An Introduction to the Philosophy of Religion, 4th ed. (New York: Oxford University Press, 2009), 8 and 90-122. It should be noted that the Reformed objection to natural theology (advanced by Alvin Plantinga and others) argues both that some assumptions underlying the argument strategy of natural theology are too strong and that there are conditions under which a person is rationally warranted in believing in God without providing an argument for God's existence. But this simply means that we must refine our understanding of the project of natural theology and its arguments, not that there is no viable conception of natural theology. For further discussion of this approach, see Reason and Religious Belief, 123-4. To consult key primary sources on natural theology as well as the Reformed objection, consult the companion volume: Peterson et al., eds., Philosophy of Religion: Selected Readings, 4th ed. (New York: Oxford University Press, 2010), Parts 5

⁵See Peterson, *Reason and Religious Belief*, 206–8. See also Peterson, *Philosophy of Religion*, 222–30. Owen Gingerich, "What is the 'fine-tuning' of the universe, and how does it serve as a 'pointer to God'?" http://biologos.org/questions/fine-tuning/ (last accessed September 22, 2010)

⁶This argument is made in "The Cardinal Difficulty of Naturalism" in Lewis, Miracles (1947; reprint, San Francisco, CA: HarperSanFrancisco, 1960), chap. 3. More recently, Alvin Plantinga has offered his own argument, quite reminiscent of Lewis's, that Naturalism is self-defeating: Plantinga's evolutionary argument against Naturalism is that the conjunction of biological evolutionary theory and philosophical naturalism makes the probability low that we have reliable cognitive faculties that can produce warranted beliefs. On the other hand, there is no such low probability on the conjunction of biological evolution and Theism. Plantinga first proposed the argument in Warrant and Proper Function but improves it in his Warranted Christian Belief (New York: Oxford University Press, 2000), 228-9. For a helpful discussion of this approach, see James Beilby, ed., Naturalism Defeated? Essays on Plantinga's Evolutionary Argument against Naturalism (Ithaca, NY: Cornell University Press, 2002). For a book-length debate which involves this argument, see Daniel Dennett and Alvin Plantinga, Science and Religion: Are They Compatible? (New York: Oxford University Press, forthcoming 2011).

7In Miracles, Lewis develops his "argument from reason," which is the logical complement of his case for the irrationality and self-defeating character of Naturalism. See also Victor Reppert, C. S. Lewis's Dangerous Idea: In Defense of

the Argument from Reason (Downers Grove, IL: InterVarsity Press, 2003).

⁸Chapter on "Hope" in *Mere Christianity* (1952; reprint, San Francisco, CA: HarperSanFrancisco, 1980), Bk. III, chap. 10. The best-known location for this position is *The Weight of Glory*, especially pp. 32–3. An earlier statement of this argument appears in his *The Pilgrim's Regress* (1933; reprint, Grand Rapids, MI: Eerdmans, 1943).

⁹Lewis, Mere Christianity, Book I; The Abolition of Man (1947; reprint, New York: HarperOne, 1974).

¹⁰Aquinas, Summa Theologica, trans. Fathers of the English Dominican Province (Westminster, MD: Christian Classics, 1948), Question 2, Art 3. Richard Swinburne, The Existence of God (Oxford: Oxford University Press, 2004), 153–91. See also Laura Garcia, "Teleological and Design Arguments" in A Companion to Philosophy of Religion, 2d ed., ed. Charles Taliaferro, Paul Draper, and Philip L. Quinn (Oxford: Wiley-Blackwell, 2010), 375–84.

¹¹Antony Flew, *There Is a God: How the World's Most Notorious Atheist Changed His Mind* (New York: HarperOne, 2007).

¹²William Dembski, *Intelligent Design: The Bridge between Science and Theology* (Downers Grove, IL: InterVarsity Press, 1999), 148.

¹³Critics of ID have provided sound scientific explanations for these phenomena without reference to a transcendent intelligence. See, for example, Philip Kitcher, Living with *Darwin: Evolution, Design, and the Future of Faith* (New York: Oxford University Press, 2007); Francisco Ayala, Darwin and Intelligent Design (Minneapolis, MN: Fortress Press, 2006) _, Darwin's Gift to Science and Religion (Washington, DC: Joseph Henry Press, 2007). It is particularly fascinating to account for the significant weight that the mapping of the Human Genome lends to the confirmation of biological evolution. Francis Collins, Director of the Human Genome Project in the 1990s and now Director of the NIH, who was greatly influenced in his faith by Lewis's Mere Christianity, makes the scientific case for evolution based on the amazing accomplishments of research in molecular biology in recent years. See Collins's The Language of God: A Scientist Presents Evidence for Belief (New York: Simon and Schuster, 2006). Collins founded the Biologos Foundation to promote engagement of science and faith as well as to help navigate various errors committed by both secular and religious perspectives (http://biologos.org, last accessed September 22, 2010).

¹⁴Michael Behe, *Darwin's Black Box: The Biochemical Challenge to Evolution* (New York: Free Press, 1996), 94.

¹⁵Expelled, Ben Stein (Director), Premise Media Corporation, 2008.

¹⁶Lewis, *Mere Christianity*, 22–3.

¹⁷Again, in the words of Lewis, science—including evolution as "a purely biological theorem"—"makes no cosmic statements, no metaphysical statements, no eschatological statements." See Lewis, "The Funeral of a Great Myth," *Christian Reflections*, ed. Walter Hooper (Grand Rapids, MI: Eerdmans, 1967), 86.

¹⁸For a thorough discussion of this point, see Michael J. Murray, "Natural Providence (Or Design Trouble)," *Faith and Philosophy: Journal of the Society of Christian Philosophers* 20, no. 3 (July 2003): 307–27.

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¹⁹Lewis, *The Problem of Pain* (New York: The Macmillan Company, 1962), 14–6.

²⁰On the possibility of a cumulative case, see Peterson, *Reason and Religious Belief*, 115–6.

²¹Ironically, these arguments are at home within the ambit of natural theology; but Dembski is extremely critical of natural theology. For example, see William Dembski, *Intelligent Design*, 107.

²²See, for example, David Myer, *Signature in the Cell: DNA and the Evidence for Intelligent Design* (New York: HarperOne, 2009).

²³Lewis, *The Problem of Pain*, 13.

²⁴Ibid., 13-4.

²⁵Ibid., 72-7.

²⁶Lewis, "The Funeral of a Great Myth," 83.

²⁷Ibid., 85

²⁸Ibid., 87; Lewis, Mere Christianity, 218.

²⁹It is actually quite fair to say that evolution shares equal status with such established concepts as the roundness of the earth, its revolution around the sun, and the molecular composition of matter. See Ayala, *Darwin's Gift*, 130–2.

³⁰Lewis, "The Funeral of a Great Myth," 83.

³¹Lewis, Mere Christianity, 22.

³²Carl Sagan, Cosmos (New York: Ballantine, 1980), 1.

³³Richard Dawkins, *The Blind Watchmaker* (New York: W.W. Norton & Co., 1986), 6.

³⁴C. S. Lewis, *That Hideous Strength* (1945; reprint, New York: Scribner, 1974), 39–40.

³⁵Lewis, "The Funeral of a Great Myth," 83; Lewis, *The Problem of Pain*, 14–5.

³⁶Lewis, *The Abolition of Man*, Book 3.

³⁷See Lewis's Letter, September 23, 1944, reproduced and discussed in Gary B. Ferngren and Ronald L. Numbers, "C. S. Lewis on Creation and Evolution: The Acworth Letters, 1944–1960," *Perspectives on Science and Christian Faith: Journal of the Scientific Affiliation* 48 (March 1996): 28–33. The Creed here is probably the Apostles' Creed, but it could be the universal ecumenical Nicene Creed, which is Lewis's shorthand way of alluding to one of his most important themes: concentrating on and working intellectually out of the framework of doctrine that "has been common to nearly all Christians at all times" (*Mere Christianity*, Preface, viii).

³⁸Reading all of Lewis's letters to Acworth, we see Lewis basically reacting to the evidences against evolution that Acworth proposed by saying that at his age he could not become an expert and adjudicate such matters. He was certainly open-minded and willing to consider all putative evidence for any view. But any suspicion Lewis expressed about the factual nature of Evolution can be overblown by fastening on just a comment or two. The larger context which Lewis always establishes for any particular remarks about Evolution is his deep hostility toward Evolution as a kind of secular theological creed. Misunderstanding this aspect of Lewis, Marxist geneticist J. B. S. Haldane wrote an inflammatory article accusing Lewis of engaging in wrongfully degrading scientists in his fictional novels. See "Auld Hornie, F.R.S.," Modern Quarterly, n.s., 1 (Autumn 1946): 32-40. Although never completed, Lewis's partial rejoinder can be found in "A Reply to Professor Haldane" in Of Other Worlds: Essays and Stories, ed. Walter Hooper (London: Geoffrey Bles, 1966), 74-85.

³⁹Lewis, "Is Theology Poetry?" in *The Weight of Glory*, 139–40. This point again picks up on the recurrent theme in Lewis (found in *Miracles, Mere Christianity*, etc.) that reason cannot be ultimately derived from and dependent on matter. Lewis explores supporting themes in "Meditations in a Toolshed" in *God in the Dock: Essays on Theology and Ethics*, ed. Walter Hooper (Grand Rapids, MI: Eerdmans, 1974), 212–5.

⁴⁰Lewis, "Is Theology Poetry?" 140.

⁴¹Arthur Holmes is well known for coining this felicitous and quite profound statement which is the title for his *All Truth Is God's Truth* (Downers Grove, IL: InterVarsity Press, 1983). The idea behind this statement, of course, has deep roots in Christian history: the doctrine of creation, the concept of Christ as *Logos*, Augustine's writings (on creation, the light of the mind, etc.), and Aquinas's magisterial works (aimed at interpreting and synthesizing all knowledge under Christian understanding). Not surprisingly, the idea is pervasive in the Lewis corpus.

⁴²I explore this point in depth in Peterson, "Evolution and the Deep Resonances between Science and Theology" in *The Continuing Relevance of Wesleyan Theology: Essays in Honor of Laurence W. Wood* (Eugene, OR: Wipf & Stock Publishers, forthcoming 2011).

⁴³This famous phrase (Latin: *fides quaerens intellectum*) echoes throughout the writings of the great medieval Christian thinkers from Augustine to Aquinas. But it is usually attributed more directly to Anselm of Canterbury. See his *Proslogion* in *The Major Works*, ed. Brian Davies and G. R. Evans, trans. M. J. Charlesworth (New York: Oxford University Press, 1998), 83.

⁴⁴Lewis, *Miracles*, 104–5.

⁴⁵"God has guided nature up to the point of producing creatures which can [be turned] into 'gods.'" See Lewis, *Mere Christianity*, 222. Here again Lewis is reflecting another ancient theme of the church: that proper human destiny is participation in the divine life. See also Lewis's restatement of the classical Aristotelian definition of Man—as "an animal, yet also a reasonable soul"—in *Perelandra* (1944; reprint, New York: Scribner, 1972), 178.

⁴⁶Lewis writes: "The whole purpose for which we exist is to be thus taken into the life of God." See *Mere Christianity*, 161. Note that all of Book 4 should be read carefully to understand Lewis's Trinitarian vision of the amazing meaning of human destiny.

⁴⁷Lewis, Mere Christianity, 175–6.

⁴⁸Lewis, *Perelandra*, chapter 17. Note that the Great Dance is envisaged as the mutual love exchange among Maleldil and his creatures. This is a relational reality—which has been graciously populated with created personal beings—in which "all is gift" and "the best fruits are plucked for each by some hand that is not his own" (p. 180). Although Maleldil's joy is not dependent on created things, all was made so that Maleldil's loving purposes might be realized: "Where Maleldil is, there is the centre. He is in every place ... Each thing was made for Him. He is the centre. Because we are with Him, each of us is at the centre ... He has immeasurable use for each thing that is made, that His love and splendour may flow forth ..." (pp. 185–6).

⁴⁹Lewis, *Mere Christianity*, 218–27.