Alister McGrath is perhaps the most prolific living theologian. Benevolent Designer just as surely as if we found a watch in the English-speaking world. He has doctorates in both molecular biophysics and theology, and has written many books on the intersection of science and theology. Darwinism and the Divine is his most recent foray into that territory. It is based on lectures McGrath gave at the University of Cambridge in 2009, which marked the 200th anniversary of Charles Darwin’s birth and the 150th anniversary of the release of Darwin’s book On the Origin of Species.

McGRATH’S BASIC ARGUMENT
McGrath has clearly read the primary literature, and in many places corrects stereotypes and myths that tend to encrust almost every discussion of faith and evolution. McGrath converses with so many authors that, at times, he articulates his own view by summarizing the views of someone else. Still, his basic argument is easy enough to discern: while Darwinism and evolutionary thought may have moved the discussion beyond William Paley (see below), they haven’t made natural theology as a whole obsolete.

McGrath challenges the idea that natural theology must be an attempt to demonstrate or prove the existence of God from the evidence of nature. This is simply the form it ended up taking in English thought in the early modern period, reaching a high water mark in William Paley’s Natural Theology. Paley famously argued that the orderly contrivances in the biological world should convince us of a benevolent Designer just as surely as if we found a watch resting on a hearth, we should conclude that a watchmaker must exist.
Paley seemed to take his argument as a proof for God’s existence, following the rhetorical conventions of his day. But “natural theology” has taken a variety of forms in Christian history. Early Christian thinkers often argued that the beauty, order, and design of nature pointed to God. In recent centuries, though, some natural theologians have had more modest aspirations. For instance, they have worked to show how Christian belief or revelation can cast light on scientific knowledge and our understanding of nature. I would call the latter a theology of nature rather than natural theology, but McGrath’s point is well taken. We shouldn’t assume that natural theology has to involve a proof or demonstration of God’s existence from nature (even if such a proof is possible).

McGrath argues that Darwin’s theory of “descent with modification” was, in large measure, the product of the English natural theology of the nineteenth century, and can’t be fully grasped outside that context. Paley’s view of the special creation of every species is the constant foil in Darwin’s Origin of Species. So even if Darwin rendered one form of natural theology inapt, it doesn’t follow that other forms aren’t worthwhile.

Natural theology, broadly defined, is “the enterprise of providing support for religious beliefs by starting from premises that neither are nor presuppose any religious beliefs” (p. 16); but that enterprise can take many different forms. While some thinkers tried (and failed) to erect a natural religion apart from special revelation, one can pursue natural theology without rejecting other sources for theology, such as Scripture. This approach gained great prestige with the triumph of Newtonian physics. Central to Newton’s view was “that the regularity of the mechanisms of nature points to their origination in the mind of God” (54). This emphasis on the mechanical aspects of nature continued to be developed, so that “the regularities of nature, not their alleged violations through miraculous intervention...would be the chief focus of English natural theology” (61).

Though this thinking began with Newton in physics and astronomy, thinkers such as John Wilkins, Robert Boyle, and John Ray turned more and more to the biological realm. This approach reached its high-water mark in William Paley’s Natural Theology with its “controlling analogy” of a watch (1802).

Though Paley treated astronomy in his book, it was his emphasis on “contrivance”—the purposeful arrangement and complexity in the biological realm—that captured the imagination of Charles Darwin. Paley argued that astronomy is marked by simplicity, whereas we “deduce design from relation, aptitude, and correspondence of parts. Some degree therefore of complexity is necessary to render a subject fit for this species of argument” (93). So it’s no surprise that he focused on biology.

Popular treatments of Paley often claim that his views were widely, if not universally, held in Victorian England prior to Darwin, but McGrath shows that natural theology had moved beyond Paley before Darwin arrived on the scene. (Moreover, Paley always had his theological critics, such as John Henry Newman.)
Alongside McGrath’s treatment of natural theology is his treatment of “Darwinism.” Part of Darwin’s genius, according to McGrath, was in framing his argument as an “inference to the best explanation.” Rather than pretending that he had a single, decisive piece of evidence establishing his theory, he sought to make sense of many different observations of nature, and to connect and unify that data in a single, elegant story. This method was more in keeping with the scientific culture of the day, and seemed more sophisticated than arguments of the previous century, including those of Paley, which purported to be proofs. Darwin argued more modestly that his theory explained better than Paley’s the “contrivances” in organisms, among other facts, such as the geographical distribution of organisms. Darwin’s theory was also much more in keeping with the evolutionary view of nature that was becoming current in his time. Paley, in contrast, had treated the natural world and biological creatures as static forms set up by God at the beginning, which had persisted until the present.

After laying these historical foundations, McGrath then defends what he calls (following T. H. Huxley) a “wider teleology” in the natural world. “Teleology,” according to McGrath, “is widely understood to designate the perception of purposeful behavior, direction, or goals” (189). This evidence of teleology is open to a Christian interpretation, even though it doesn’t amount to a natural proof for God’s existence. McGrath points to the fine-tuning of physical constants, the surprising fitness of chemistry for life, and the apparent “directionality” of both cosmic and biological evolution as evidence for this wider teleology. So, even if Darwinian evolution were true, the universe would have to be set up a certain way in order for complex life to emerge. The production of hydrogen and carbon, for instance, depends on exquisite fine-tuning at the level of physics and chemistry. These and many other features of the natural world encourage a teleological understanding.

McGrath further argues that while we cannot directly observe design from these facts, we can reasonably infer it. The logic of his argument, like Darwin’s, is “abductive”—a so-called inference to the best explanation—rather than a formal proof. The argument looks something like this: We observe many processes in physics, cosmology, and the history of life that seem teleological, that seem directed toward the existence of complex, intelligent life. If the universe were designed, it would explain better than the alternatives why the universe has these features. Since the universe has these features, we have some reason to believe that the design hypothesis is true (199). The argument doesn’t prove the hypothesis of design, but it does confirm it. As it happens, McGrath’s argument here takes the same form as the one advanced by Darwin in the Origin of Species.

Since McGrath defends a teleological view of nature, you might expect him to critique Darwinism. But he doesn’t do that. Instead, he attempts to narrow the distance between Darwin and teleology. By “teleology,” McGrath seems to mean only that something appears purposeful, whether or not it really is. Here he is partly following Aristotle, who argued that natural objects, including organisms, must be explained in terms of their end, “final cause,” or telos. Though Thomas Aquinas understood this in Christian and theistic terms, Aristotle (according to some interpreters) apparently did
not. For Aristotle, the teleology of natural objects was something like an “internalized goal,” “an expression of natural laws and natural order” (189). It didn’t represent the purposes of a conscious agent. Though Aristotle seemed to treat stars, planets, and other objects as if they were intelligent agents, strictly speaking, he seemed to want the benefits of teleological explanation without a purposive creator.

If you find this view obscure, you’re not alone. Since Aristotle had no doctrine of creation and supposed the world had gone along as it does in the present from all eternity, he may have felt less need to resolve the problem of where that teleology came from. He could just extrapolate from his ordinary observation of frogs giving rise to frogs. It’s frogs all the way back.

McGrath argues, similarly, that while the idea of “design” implies an external agent, teleology need not do so. This is a central part of McGrath’s argument. In the concluding paragraph of the book, he says that “a renewed natural theology is...capable of engaging with a Darwinian view of reality. Teleology, for example, may have been redefined; it has not been destroyed or invalidated” (268). Given this broad definition of teleology, McGrath is able to describe Darwinism itself as a teleological view. After all, survival and reproduction seem to function as “ends” or “goals” within a Darwinian framework. And Darwin constantly used teleological language.

Although McGrath usually displays admirable clarity, on this point he seems to have opted for peace with the gatekeepers of scientific orthodoxy rather than precision.

**DARWINISM, TELEOLOGY, AND DESIGN**

McGrath recognizes that Darwinism is often “metaphysically inflated” into a grand materialistic ideology. He even admits that “Darwinism is vulnerable to those wishing to inflate it metaphysically” (38). Unfortunately, I don’t think he sees that “metaphysical inflation” as an intrinsic part of Darwinism. McGrath speaks of Darwin uncovering the laws of biology much as Newton uncovered the laws of motion. But Darwin’s theory, if it can be called that, is qualitatively different from Newtonian physics, quantum physics, and most other theories in natural science. These physical theories make very precise predictions that can be verified again and again. Newton’s law, for instance, is $F=G\frac{m_1m_2}{r^2}$. If you know it and a few other things, you can predict the next solar eclipse and the exact location of Jupiter in the sky next Christmas Day. You can’t use it to describe everything, of course, and it has limits; but the law explains a certain set of facts, and very reliably.

**Darwin’s Dangerous Story-Telling**

The Darwinian “mechanism” of natural selection and random variation isn’t like that at all. Darwin simply proposed a designer-substitute by extrapolating from a somewhat trivial, known set of facts about artificial breeding. In the twentieth century, the random variation proposed by Darwin came to be identified with genetic mutations (that’s why it’s called “Neo-Darwinism”). And yet, despite some trivial examples— variations in the thickness of finch beaks, antibiotic resistance in bacteria that never become anything
but bacteria—the power of this “mechanism” to explain as much as Darwin intended has not been demonstrated. We don’t even have reason to believe that natural selection and directed genetic mutations can do much creative work.¹ My point is not that Darwinism is therefore unscientific. We shouldn’t expect a historical hypothesis to be confirmed the same way we test a chemical reaction in a lab. My point is this: we have no reason to believe that Darwin’s mechanism can explain most of what Darwin wanted it to explain.

Darwinism, in practice, has been far more like Freudianism and Marxism than Newtonian or quantum physics. That is, Darwinists have tended to read materialist assumptions into the evidence itself, rather than merely adding metaphysical glosses to a useful body of empirical results. And by excluding the leader competition (design or teleology) they’ve declared it the champion by default. Darwin did not refute Paley so much as offer a materialist alternative to design that was far more plausible than the previous alternative—namely, mere chance.

I agree with McGrath that we should do our best to separate the evidential wheat from the metaphysical chaff in Darwinism. But there’s not much wheat. Materialism and antitheological assumptions are not glosses added by popularizers such as Richard Dawkins. They started with Darwin himself. No one can read the Origin of Species carefully without noticing that Darwin’s arguments are explicitly theological and metaphysical from beginning to end. Over and over, he argues along these lines: “Here’s an observation of nature. God wouldn’t have done things that way. Therefore, it must have evolved (largely by natural selection acting on random variations).” What other scientific theories have been advanced this way? Newton did not propose his laws of motion as a way of getting God out of the planet business. (As John Lennox has written, Newton never said: “Now that I have the law of gravity, I don’t need God.”²) Quite the contrary. Darwin, however, clearly did intend for his theory to get God out of the life business.

Darwin wanted to exclude the idea that evolution was guided. In fact, he avoided the very word “evolution” for years, because at the time, “evolution” suggested that life had unfolded according to a preexisting, purposeful plan. He said that he saw “no more design in the variability of organic beings, and in the action of natural selection, than in the course which the wind blows.”³ He did write that he was “inclined to look at everything as resulting from designed laws, with the details, whether good or bad, left to the working out of what we may call chance.”⁴ Whether he believed this or added it as a rhetorical flourish is a subject of controversy. (I suspect it’s a flourish.) Whatever Darwin’s private beliefs, however, most who have followed him have been thoroughgoing in their materialism. So when contemporary Darwinists describe the evolutionary process as “blind” and “purposeless,” they are not hijacking Darwin’s theory, but fulfilling it.

It’s true that Darwin used teleological reasoning. He often treated natural selection as an intelligent agent, choosing one thing and rejecting another. Darwinists do the same thing. This is not because Darwin intended to offer a teleological alternative to Paley; it’s because no one can talk about biology without using
teleological language. That tells us something about the nature of the evidence, not the nature of Darwin’s theory. In fact, Darwinists bemoan the use of “purpose language” in evolutionary biology, and sometimes try, unsuccessfully, to purge it from their discourse.\(^5\)

What’s most perplexing about McGrath’s argument is that he clearly knows the problems with Darwinism. For instance, he says: “It is now widely agreed that there are significant difficulties with the central concept of ‘natural selection’...Darwin introduced the notion to explain evolutionary change; the idea, however, is better seen as an explanation of the maintenance of adaptation. This ‘dynamic stabilization’ does not explain the origin of species or adaptations, though it is unquestionably helpful in accounting for their spread” (31). Later, he says: “It is widely conceded that natural selection does not account for how biological forms and phenotypes arise in the first place” (188).

Natural selection doesn’t explain evolutionary change, adaptations, or the origin of biological forms? Talk about burying the lede! Critics of Darwinism, citing a hundred and fifty years of empirical evidence, have been saying this for years. (See, e.g., Michael Behe’s book, The Edge of Evolution.) McGrath agrees, though the inattentive reader might miss it. He says, almost in passing, that Darwin’s key mechanism doesn’t explain what Darwin (and other Darwinists) meant for it to explain. It is merely a conservative force that can preserve the survival of the fittest, but not the arrival of the fittest. So why does McGrath go to such lengths to accommodate a theory that he knows has been so profoundly oversold?

I assume that McGrath is seeking a rhetorical advantage. By referring to Darwinism as teleological, he can then defend a teleological interpretation of cosmic and biological history, without appearing to depart too far from Darwinism. Perhaps this will keep the New Atheists at bay (though I doubt it), but it introduces fog and confusion precisely where the reader has every reason to expect clarity and distinction. He may have saved the word “teleology” from the universal acid of materialism, but he’s blurred its common-sense meaning.

What McGrath could easily have said (and surely understands) is that Darwin wanted to explain the appearance of purpose/design/teleology in biology without accepting that it was real. Darwin did not seek to explain or defend teleology in biology, but rather sought to explain it away. Natural selection acting on random variation within a reproducing population could, he proposed, give rise to creatures that look like they exist for a purpose, even though they don’t. Every person with a Darwin fish on his car bumper understands that this is the point of Darwin’s theory.

**Two Types Of Teleology**

To see the difference between real teleology and the Darwinian substitute, mere apparent teleology, just remember one thing: foresight. Foresight is the ability to envision the outcome of a process, to imagine a blueprint and then bring it about. It is the exclusive jurisdiction of intelligent agents. The Darwinism selection-variation mechanism, in contrast, has no foresight. It can only select for current function. It can’t
hold a dozen proteins in reserve for a couple million years until a fortuitous mutation comes along that allows it to build a new organ. So, if we find systems in biology that require foresight, then we have evidence for real teleology and against the Darwinian mechanism. In other words, there’s both a logical and an empirical difference between teleology and Darwin’s hypothesis, and so we have every reason to distinguish them.

These points will seem obvious to anyone who has dipped into the literature on intelligent design. McGrath’s book, however, doesn’t engage with the work of contemporary intelligent design (ID) theorists, even those that bear directly on Darwinism. I’m thinking especially of books such as Darwin’s Black Box and The Edge of Evolution by Michael Behe, and, to some extent, Stephen Meyer’s Signature in the Cell (which deals mostly with origin-of-life theories). Nor does he engage William Dembski’s analysis of the design inference (in books such as The Design Inference and The Design Revolution). Of course, no book can deal with everything, but readers would rightly expect a book on Darwinism and the Divine to engage, at least a little, with these thinkers.

McGrath does mention ID on three pages (33–35) when discussing Darwinism as an ideology. Though the book is packed with references, his only quote from an ID proponent is from an obscure article written by Phillip Johnson in 1993. Since McGrath is so well read, I can only assume that he has chosen to avoid the works of ID proponents. This is unfortunate, since McGrath’s approach is, in some ways, quite similar to that of ID. For instance, the “abductive” approach that McGrath prefers for natural theology is widely endorsed by ID proponents. Stephen Meyer has been writing on the subject for years, and constructs his argument for the intelligent origin of biological information as an “inference to the best explanation.” (See, e.g., chapter 15 of Meyer’s Signature in the Cell.) Guillermo Gonzalez and I also take this approach in our book The Privileged Planet.

So what should we say? Darwinism and the Divine is a significant piece of scholarship by a first-rate Christian intellectual at the top of his game. There is far more to the book than I can mention here. I highly recommend it to anyone interested in the relationship between evolutionary thought and theology. At the same time, the book provides a snapshot of the depressing moment in which we live. A leading, well-informed scholar knows that Darwin’s mechanism can’t do what its partisans insist it can do. He even says so in print. And yet he feels the need to engage in obscure philosophical gymnastics to accommodate it. Such is the power of an intellectual orthodoxy. We can only hope that Darwinism will soon attain the obsolescence that it so richly deserves.

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NOTES
Its antiteleological purpose makes Darwinism different even from other theories of biological evolution, such as endosymbiosis and convergence. No one, so far as I know, has ever said that convergence makes it possible to be an intellectually fulfilled atheist. Denyse O'Leary in “Coffee!! Which of These Theories Is Not Like the Others?” Uncommon Descent (February 20, 2010); http://www.uncommondescent.com/evolution/coffee-which-of-these-theories-is-not-like-the-others/.

John Lennox, God and Stephen Hawking (Oxford: Lion Hudson, 2010), 37.


Ibid., 2:312; http://darwinonline.org.uk/content/frameset?viewtype=side&itemID=F1452.2&pageseq=328.


He says that “the creationist and ‘Intelligent Design’ movements in North America vigorously oppose the teaching of evolution in school, arguing that ‘Darwinism is intrinsically atheistic.’” But a quick Google search would have showed McGrath that no identifiable ID proponent has ever opposed the teaching of evolution in school. ID proponents do complain that materialism is often smuggled in to the teaching of evolution (and other subjects). But I doubt that McGrath would dispute that.