

Haught, John F. God

AFTER DARWIN: A

THEOLOGY OF EVOLUTION.

2nd ed. Boulder: Westview

Press, 2008.

1

## BEYOND DESIGN

About a century and a half ago Charles Darwin surprised the world with his remarkable new theory of evolution. Theology has yet to come to grips with it. Even in the West, where many religious thinkers have given at least notional assent to Darwinian science, only a comparatively few have ever taken a long and deliberate look at it. And even those who claim to have faced up to the theory of evolution have often edited out some of its most repellent features. When they have not rejected Darwinian ideas outright, theologians have mostly ignored them, content to nod at the platitude that "evolution is God's way of creating."

If theology has fallen short of the reality of evolution, however, so also has the world of thought in general. As Hans Jonas has reminded us, philosophy also has yet to produce an understanding of reality—an ontology—adequate to evolution.<sup>1</sup> Materialism, the belief that lifeless and mindless "matter" alone is real, has provided the philosophical setting for most evolutionary science. Early in the twentieth century Alfred North Whitehead had already demonstrated that the reigning materialist metaphysics in Western philosophy choked out any sense of the emergent novelty in life's evolution, and he struggled to provide an alternative philosophical framework.<sup>2</sup> But only a minority of philosophers and scientists are familiar with or appreciative of Whitehead's thought, and to most evolutionists today there is still no persuasive alternative to

materialism—now sometimes called “physicalism”—as an intellectual setting for their science.

Our concern here, though, is with theology, and I think it is safe to say that contemporary religious thought has yet to make a complete transition to a post-Darwinian world. To a great extent theologians still think and write almost as though Darwin had never lived. Their attention remains fixed primarily on the human world and its unique concerns. The nuances of biology or, for that matter, of cosmology have not yet deeply affected current thinking about God and God’s relation to the world. Although awareness of the ecological crisis has brought the natural world back into view for many sensitive people today, the story of nature’s evolution is still not a consuming interest for most academic theologians and religious scholars, let alone for the general population of religious believers.

Scientific skeptics, of course, decided long ago that the only reasonable option Darwin leaves us is that of a totally Godless universe. That theology survives at all after Darwin is to some evolutionists a most puzzling anachronism.<sup>3</sup> We would have to agree, of course, that if atheism is the logical correlate of evolutionary science, then the day of religions and theologies is over. But, as we shall see, such a judgment is hardly warranted. I shall argue in the pages ahead that Darwin has gifted us with an account of life whose depth, beauty, and pathos—when seen in the context of the larger cosmic epic of evolution—expose us afresh to the raw reality of the sacred and to a resoundingly meaningful universe.

### Darwin’s Theory of Natural Selection

Darwin claimed that all forms of life descend from a common ancestor and that the wide array of living species can be accounted for by a process he called “natural selection.” Members of any given species will, by sheer accident, differ from one another, and from the ensuing variety nature will then “select” only the “fit,” those best “adapted” to their environmental circumstances, to survive and bear offspring. Over immense periods of time, selection of minute favorable changes in adaptability will bring about countless new and distinct forms of life, including eventually humans.

Darwin published *On the Origin of Species* in 1859, but today the majority of biologists still commend it for its general accuracy. In a synthesis

known as “neo-Darwinism” they have simply added to Darwin’s original ideas our more recent knowledge of genetics. Important internal disputes still divide evolutionary biologists, but today there is an abiding appreciation of Darwin’s genius and of the fundamental correctness of his ideas on life’s common ancestry and the mechanism of natural selection. Opinions differ about the respective roles in evolution of chance, adaptation, selection, genes, individual organisms, groups, struggle, cooperation, competition, and so on. But most scientists today do not doubt that life has evolved—at least roughly—along the lines that Darwin laid out so brilliantly.

Because of the role it gives to the elements of chance and blind selection in the unfolding of life, the Darwinian picture makes traditional ideas of a caring and almighty God seem superfluous and possibly incoherent. Even those theologians who have bothered to examine the evolutionary terrain closely can hardly deny that it raises difficulties about what our religions have come to call “God.” After weighing the now well-founded accounts of life’s lumbering journey on Earth, any subsequent talk about a “divine plan” sounds unbelievable. And the theological claim that life can be explained adequately by divine “intelligent design” is especially suspect.

Of course, not everyone would agree. In his controversial book *Darwin’s Black Box* the biochemist Michael Behe, for example, offers an interesting variation on the old theory that life is the result of “intelligent design.” He argues that Darwin’s notion of a *gradual* evolution from simplicity to complexity cannot explain life’s intricate patterns, even at the level of the cell. For most Darwinians even the simplest living cell is a “black box” whose general functions may be known but whose inner workings escape understanding. According to Behe, however, biochemistry has now beamed its lights into Darwin’s black box, disclosing there a microworld of “irreducible complexity” for which Darwin’s theory has never given an adequate account.<sup>4</sup>

Darwin himself confessed that if it could ever be shown clearly that life’s variety comes about in any other way than by minute and gradual modifications of undirected changes, then his theory would be proven wrong. Highlighting Darwin’s proviso, Behe has sought to show that the cellular constitution of living beings could not have occurred incrementally or step by step, as a pure Darwinian would propose. The cell’s complex inner components cannot function usefully unless they are all

simultaneously present, working in tightly integrated confederation. Hence, gradual emergence, which allows the pieces of life to fall into place only one at a time, cannot really explain even the living cell, let alone the larger world of life. Using a simple analogy, Behe points out that a mousetrap will not work unless all of its constituent parts are present simultaneously. Take out only one piece, and it won't catch mice. Likewise, cellular mechanisms cannot function in the service of life unless all of their staggeringly complex and diverse components are assembled together and marching in unison.

Behe calls cellular mechanisms "irreducibly complex," meaning that they cannot be resolved into pieces or stages that have been assembled gradually over the course of time. It is hard to imagine how an enzyme or a blood-clotting mechanism, for example, could work at all without its many components being present together all at once. But if the cellular mechanism is not the product of a gradual accumulation of small changes then, Behe concludes, the Darwinian explanation of life is demonstrably erroneous. The only alternative is "intelligent design."<sup>5</sup>

To many anti-Darwinians Behe's ideas are consoling. To Darwinians, however, whatever the merits of a biochemical analysis of the cell's complexity may be, the implicit appeal to theology in the pages of a book on science is a craven cop-out. To invoke the idea of intelligent design and the implied idea of an Intelligent Designer as though these are legitimate categories in scientific understanding is a clear violation of scientific method. Moreover, Behe's proposal amounts to an arbitrary dictate that biologists should not bother to show how biochemical complexity may have come about gradually. Since the publication of Behe's book biologists such as Kenneth Miller have taken pains to show that what at first seems irreducibly complex can very well have come about step by step after all.<sup>6</sup>

The scientific objections to intelligent design are entirely justified. But what strikes the theologian after reading Behe's book is that if Darwinian theory is wanting in the full explanation of life, then so also is the notion of intelligent design. Intelligent design injudiciously passes over the disorderly, undirected aspects of evolution that are also part of the life process. It ignores the darker hues in the Darwinian story that give a tragic cast to evolution and thereby strain the credibility of any theology.

Ironically, neither the proponents of intelligent design nor their materialist opponents actually deal with *life*. Both seek to purchase intellectual

clarity only at the price of leaving out the *novelty* characteristic of living processes. Since by definition the arrival of genuine novelty always threatens to disturb present design by bringing about episodes of disorder, it is both intellectually and religiously tempting to deny that it exists. Materialist interpreters have typically dampened our intuitive sense of life's perpetual novelty by thinking of evolution only as the reshuffling of physical units (atoms, molecules, cells, or genes) already present. They have observed correctly that the emergence and flowering of life are constrained by the invariance of physical laws and that these laws are in no way violated by life's appearance. But from this truism they have wrested, without warrant, the extremely weak conclusion that since the evolution of life does not in any way violate the seemingly eternal laws of chemistry and physics, it therefore brings nothing really new into being.

Theological fixation on intelligent design, however, is no less inclined to ignore the novelty essential to life. It sloughs off the fact that living systems require the continual *breakdown* of fixed order. It ignores the fact that life requires the dissolution of rigid "design," precisely in order to be alive at all. Instinctively we all know this to be the case, but a theology based too securely on the notion of design abstracts habitually from this most fundamental truth. It ignores the *dissolution* that inevitably accompanies the appearance and extension of life. What is worse, by associating the idea of God only with the fact of order at the expense of novelty, a theology based on design is likely to attribute nature's disorder to the demonic. By exonerating ultimate reality of any complicity in chaos, such a theology removes God from the flow of life itself.

A theology obsessed with order is ill-prepared for evolution. But it is even less ready to embrace some of the more profound and disturbing aspects of religious experience itself, thus rendering it all the less capable of meaningful contact with the messiness of evolution. What makes evolution seem incompatible with the idea of God is not so much the startling Darwinian news about nature's struggle and strife, but theology's own failure to reflect deeply the divine pathos. What Darwin does—and this is part of what I shall call his "gift to theology"—is challenge religious thought to recapture the tragic aspects of divine creativity. Evolutionary science compels theology to reclaim features of religious faith that are all too easily smothered by the deadening disguise of order and design.

Although they remain rancorous antagonists, both materialist scientists and intelligent design theorists share the compulsion to suppress a

vibrant sense of life's openness to *new* creation. Almost by definition scientific materialism leaves out everything that common wisdom means by "life." But the focus by much religious thought on intelligent design likewise turns away from the novelty and instability without which life is reduced to death. By contrast, Darwin's own portrait of nature evolving is at least able to communicate a sense of real life with all the novelty, disturbance, and drama it involves. His science, when not suffocated by the stale climate of a materialist metaphysics, can give considerable depth and richness to our sense of the great mystery into which our religions attempt to initiate us.

Many good scientists, of course, will not see it this way. For a century and a half skeptics among them have found in evolution the decisive confirmation of a strain of fatalism that has hovered over modern science almost from the beginning. For an outspoken few Darwin has definitively laid to rest all the millennia of our species' religious ignorance. To speak of an evolutionary "theology," as this book does, will seem to be the most laughable of projects. To some scientific thinkers the evolutionary process is, in the words of David Hull, "rife with happenstance, contingency, incredible waste, death, pain and horror." Thus, any God who would oversee such a hash must be "careless, indifferent, almost diabolical." This is not, says Hull, "the sort of God to whom anyone would be inclined to pray."<sup>7</sup>

As long as we think of God only in terms of a narrowly human notion of "order" or "design," the "atheism" of many evolutionists will seem appropriate enough. Evolution does indeed upset a certain sense of order; and if "God" means simply "source of order," even the most elementary perusal of the fossil record will render this ancient idea suspect. But what if God is not just an originator of order but also the disturbing wellspring of *novelty*? And, moreover, what if the cosmos is not just an "order" (which is what "cosmos" means in Greek) but a still *unfinished process*? Suppose we look carefully at the undeniable evidence that the universe is still coming into being. And suppose also that God is less concerned with imposing a plan or design on this process than with providing it opportunities to participate in its own creation. If we make these conceptual adjustments, as both contemporary science and a consistent theology actually require that we do, the idea of God not only becomes compatible with evolution but also logically anticipates the kind of life-world that neo-Darwinian biology sets before us.

Such objections as Hull's notwithstanding, religion and evolution can become the most natural of partners. During the many years I have studied the so-called "problem" of science and religion I have grown increasingly convinced that a Darwinian (or, now, "neo-Darwinian") view of nature answers to the deepest intuitions of religion. In fact, a serious theological engagement with evolution can bring us to a fuller and more satisfying understanding of the many religious references to an "ultimate reality" than we might otherwise have ever attained.

The understanding of ultimate reality that I shall be working with in this book has been shaped primarily by my own Christian experience of religious faith and theology. As a Roman Catholic I learned from an early age that there can be no genuine conflict between scientific truth and religious faith. I consider it my good fortune to have been advised throughout my life that believers in God should not look to biblical texts or religious creeds for information of a scientific nature.<sup>8</sup> For many Catholics and other Christians this simple instruction has been the source of both religious and intellectual liberation. By allowing us to distinguish clearly between the literal and religious senses of scripture, it implies that we do not have to place the cosmology of *Genesis* in a competitive relationship with Darwin's theory. The Bible is not trying to teach us science, but beneath and through its historically conditioned cosmological depictions it is inviting us to share a vision of ultimate reality that does not depend for its plausibility upon any particular view of nature. Throughout the past three thousand years ideas about God have in fact outlived potential absorption into many different cosmologies.

Not all Christians or former Christians, of course, have found it so simple a matter to let the core teachings of faith slip out of their traditional cosmological apparel. For many, adherence to an ancient conception of nature is indispensable to the contemporary affirmation of religious doctrine. Surely, they would insist, the inerrant scriptures, of all things, would not give us a faulty picture of nature. Such anachronistic demands on the ancient texts may seem to be a distinctive mark of the religiously naive. Yet even scientific skeptics treat the Bible as a failure because it does not accurately present a "true" picture of nature. While reading sociobiologist E. O. Wilson's recent book *Consilience*, I was reminded of how deep-seated is the expectation that the Bible, if it is to live up to its reputation as the revelation of truth, should also be

scientifically faultless. It was in college, Wilson says, that he first learned about evolution, and this knowledge liberated him from his former biblical beliefs:

I had been raised a Southern Baptist, laid backward on the sturdy arm of a pastor, been born again. I knew the healing power of redemption. Faith, hope and charity were in my bones, and with millions of others I knew that my savior Jesus Christ would grant me eternal life. More pious than the average teenager, I read the Bible cover to cover, twice. But now at college, steroid-driven into moods of adolescent rebellion, I chose to doubt. I found it hard to accept that our deepest beliefs were set in stone by agricultural societies of the eastern Mediterranean more than two thousand years ago.

“Baptist theology,” Wilson goes on to lament, “made no provision for evolution. The biblical authors had missed the most important revelation of all!”<sup>9</sup>

Especially noteworthy here is Wilson’s implicit expectation that biblical authors and Baptist theologians should have been doing better science. And if they expected us to take them seriously, they should have done it much better than Darwin in the first place! Having apparently never shaken off the fundamentalist assumptions he brought with him to college, Wilson continues to reject biblical religion, ostensibly because it is scientifically unreliable. He puts Darwinian science into competition with biblical stories of origin, which have disappointed him by not providing a quality grade of information about the natural world. In this respect the difference between his views and those of today’s “creation scientists” is only that the latter judge the biblical accounts to be good science, whereas Wilson rejects them as inferior.

What I need to make clear at the outset, therefore, is that theology does not have to share Wilson’s assumption that “revelation” in science is of the same stripe as that testified to by religious believers. The two are not really comparable. Religious revelation can be encountered only by allowing oneself to be grasped by it, not by grasping it. Scientific discovery, as Wilson’s writings insinuate, is a matter of our grasping hold of nature rather than of being grasped by anything. Deliberately pursuing Francis Bacon’s Promethean ideal, Wilson claims that nature yields her secrets to us only if we seize her and, through the coercive application of

scientific method and technological know-how, deliver her of any pretense to mystery. Awareness of religious revelation, on the other hand, entails a sense of our being drawn into a great mystery that liberates the human spirit in a radical way from imprisonment in the mind’s own sphere of competence, and in so doing places us in the clearing horizon of unending transcendence.

Theology’s fundamental task, as I see it, is that of awakening us to the infinitely liberating openness and generosity of this mystery; theology should avoid enclosing discussion about God within a mundane preoccupation with “design.” Contrary to what Wilson supposes, the mystery-oriented mission of theology in no way conflicts with science’s effort to display—at its own level and according to its own distinctive method—the boundless secrets of nature. A wholesome expansion of our sense of divine mystery can exist in complete harmony with the scientific disclosure of previously hidden aspects of nature. And irrespective of continuing developments in Darwinian science’s grasp of life’s hitherto unmanifested intricacies, we can trust that there abides in the depths of the universe a forever fresh wellspring of novelty, unthreatened by the ongoing accumulation of scientific knowledge. It is to this faithful source of endlessly novel forms of life that a theology of evolution points, and to which the word “God” most appropriately refers.

In any case, the notion of God as an intelligent designer is inadequate. The God of evolution is an inexhaustible and unsettling source of new modes of being, forever eluding encapsulation in orderly schemata. Looking beneath the anxious quest for intelligent design, a theology of evolution seeks to highlight the disquieting—but ultimately fulfilling—presence of a promise and power of renewal that lives, in Gerard Manley Hopkins’s familiar words, “deep down things.” Such a theology is no threat to what Wilson speaks of as science’s own work of “revelation.” In fact, by envisaging a universe that satisfies science’s implicit need for ever new frontiers of discovery, a theology of evolution points us toward the very soil within which science can forever find fresh nourishment.

### Evolution and the Religions

Although this book is a Christian theologian’s appreciation of evolutionary science, it will approach the topic with an eye to other religious

outlooks as well. Since for many scientists today evolution clearly implies a meaningless universe, *all religions* must be concerned about it. Evolutionists raise questions not only about the Christian God but also about notions of ultimate reality or cosmic meaning as these are understood by many of the world's other religious traditions. If they were to look closely at its contemporary scientific presentations, Jews, Muslims, Hindus, Buddhists, Jains, Taoists, native peoples, and others as well would see that evolution is a shock to their belief systems. Almost all religions—not just Christianity—have envisaged the cosmos as the expression of a transcending “order,” “wisdom,” or “rightness,” rather than as an irreversibly evolving process. Most religions have held that there is some unfathomable “point” to the universe, and that the cosmos is enshrouded by a meaning over which we can have no intellectual control, and to which we must in the end surrender humbly. However, given the long, haphazard, and often cruel way in which evolution appears to work, is it still feasible for *any* of the religions to think of the universe as grounded in the ordering principle to which their ideas of ultimate reality generally point?

Sacred traditions have held consistently that the cosmos is here for a reason, even though they may not have been able to specify clearly just what this reason might be. Now, however, they must *all* respond to the claim made by Wilson and others that “Darwinism” has wiped away the many centuries of scientifically uninformed religious optimism. People of all faiths are faced with the question of whether their venerable teachings can honestly survive evolutionary portrayals of nature, humanity, ethics, and religion. The key word here is “honestly,” for there is no question that religions still endure, and in some cases thrive, in most parts of the world. But is their persistence perhaps made too easy by a general ignorance of science and, especially, of evolution? What would religious people think about their central teachings, about the existence of a transcendent principle of meaning, or about the authority of their moral codes if they were to become fully cognizant of evolution and the puzzling story of life that it narrates?

I think it is time for all religious communities to give these questions much more dedicated attention than they have done previously, especially now that Darwinian science is experiencing such a vigorous renewal in the contemporary intellectual world. Updated evolutionary interpretations of life, language, behavior, morality, and even religion have lately been gaining unprecedented acceptance by natural scientists, philosophers, linguists, ethicists, social scientists, and, more recently, the

medical community. And so it seems both important and timely that the world's various faiths collectively and painstakingly examine just what the latest and most reliable versions of evolutionary science are telling us about life, the universe, morality, and religion itself.

Hasn't Darwin's evolutionary science placed in serious doubt the religious sense that we inhabit a meaningful universe? Or is it instead possible that what scientific skeptics often take to be the religiously ruinous consequences of Darwinian thought are in fact fresh openings to mysterious sacred depths of reality previously unfathomed? And in these depths will we find only an abyss of absurdity, or perhaps instead the sustaining presence of a truly living and renewing God, one who can command the fullness of our worship and one to whom we might still pray with love and confidence?