

# *Homo Religiosus: Linnaeus and Beyond*

with Peter Harrison, "Linnaeus as a Second Adam? Taxonomy and the Religious Vocation"; Mikael Stenmark, "Three Theories of Human Nature"; John F. Haught, "Theology, Evolution, and the Human Mind: How Much Can Biology Explain?" and Celia Deane-Drummond, "Are Animals Moral? A Theological Appraisal of the Evolution of Vice and Virtue"

## THEOLOGY, EVOLUTION, AND THE HUMAN MIND: HOW MUCH CAN BIOLOGY EXPLAIN?

by John F. Haught

*Abstract.* Evolutionary biology contributes much to our present understanding of life, and it promises also to deepen our understanding of human intelligence, ethics, and even religion. For some scientific thinkers, however, Darwin's science seems so impressive that it now supplants theology altogether by providing the *ultimate* explanation of all manifestations of life, not only biologically but also metaphysically. By focusing on human intelligence as an emergent aspect of nature this essay examines the question of whether theology can still have an explanatory role to play alongside biology in attempts to understand mind.

*Keywords:* cognitive confidence; cognitive imperatives; cognitive performance; critical intelligence; evolutionary naturalism; generalized empirical method; Bernard Lonergan

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Prominent biologists and Darwinian philosophers recently have drawn upon gene-centered accounts of evolution in order to demonstrate that Charles Darwin's science has in effect delivered the death blow to religion in general and theism in particular. Darwin has even been called upon to provide the ultimate intellectual foundation of the "new atheism" of Richard Dawkins (2006) and Daniel Dennett (2006) (see also Haught 2008). The growing intellectual appeal of this *evolutionary naturalism* (defined below) is one of the most significant challenges to theology in the last two centuries.

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In this essay I assume that contemporary Darwinian biology, although revisable in principle, is a fruitful scientific synthesis of a wide range of experimental data. I also note that in public presentations of evolutionary biology some scientists and philosophers have conflated Darwin's ideas uncritically with a materialist (or, if you prefer, physicalist) worldview. When this fusion occurs, what emerges is not pure science but a belief system, one that I refer to here as evolutionary naturalism. Its defenders claim that their amalgam of science and materialist metaphysics provides the ultimate explanation of all organic features, habits, and instincts of everything living, including human beings. I argue that whenever evolution is taken as the ultimate metaphysical explanation of our human intellectual capacities it becomes self-subversive. Consequently, evolutionary naturalism (as distinct from evolutionary science) logically negates any claims it may have to intellectual coherence or reasonableness.

#### HOW MUCH CAN BIOLOGY EXPLAIN?

Darwin's famous advocate Thomas H. Huxley (1825–1895) coined the expression *scientific naturalism* to emphasize the methodological principle that science must proceed without ever invoking supernatural explanations (Numbers 2003, 266). These days, the same expression often is taken to mean that nature is all there is and that science alone can make sense of it. Contemporary scientific naturalism holds that outside of nature, which includes humans and their cultural creations, there is nothing. Nature, therefore, is self-originating. There is no God, no soul, no cosmic purpose, and hence no reasonable prospect of conscious human survival beyond death (Hardwick 1996).

Evolutionary naturalism, my topic here, is a subspecies of scientific naturalism. It claims that the emergence of life and mind in evolution is the product of blind deterministic natural "laws" (especially natural selection) combined with a great many accidents in natural history and genetic processes in the context of an enormous amount of time (almost four billion years of life on earth).

Dawkins (1986; 1995) and the recently deceased paleontologist Stephen Jay Gould (1977), though often rivals, both are representatives of evolutionary naturalism. They are good scientists, but they also assume the role of amateur philosophers in their public declarations about the ultimate explanation of living phenomena. Dawkins argues that natural selection, along with an unfathomable depth of time, can account for all the various kinds of life as well as for the behavioral tendencies of all organisms, including human persons. Not only our mental powers but also our ethical and religious instincts have an ultimately evolutionary explanation. Invoking the idea of God, therefore, to account for such phenomena is unnecessary. For Dawkins a simpler explanation exists, namely the "Darwinian

recipe” that consists of three main ingredients: genetic accidents plus natural selection plus an immensity of time. This mix is enough to explain in a foundational manner all instances of living design, organic variety, instincts, and other propensities of life (Dawkins (1996). Dawkins’s evolutionary naturalism is captured nicely in the words of materialist neurosurgeon Perowne in Ian McEwan’s novel *Saturday* (2005). Referring to evolution, the protagonist asks:

What better creation myth? An unimaginable sweep of time, numberless generations spawning by infinitesimal steps complex living beauty out of inert matter, driven on by the blind furies of random mutation, natural selection and environmental change, with the tragedy of forms continually dying, and lately the wonder of minds emerging and with them morality, love, art, cities—and the unprecedented bonus of this story happening to be demonstrably true. (2005, 56)

Prior to Darwin, Dawkins allows, it may have been forgivable to invoke religious creation myths and theologies to account for such outcomes as life, adaptive complexity, mind, ethical aspiration, and religious longing. After Darwin, intelligent people no longer have any excuse to invoke theological explanations in order to get to the bottom of these seemingly remarkable evolutionary inventions. Darwin’s ideas, brought up to date by the more recent science of genetics, can provide a purely physicalist account of everything in the biosphere. The universe, Dawkins adds, is governed not by divine providence but by pitiless indifference (1995, 133).

Dawkins insists that one cannot be a serious evolutionist without also being a materialist (and of course that means an atheist). He has much company today. Gould tries to soften the evolutionary blow for theists, but philosophically he sympathizes with Dawkins’s materialism. “Darwin,” Gould states approvingly, “applied a consistent philosophy of materialism to his interpretation of nature. Matter is the ground of all existence; mind, spirit and God as well, are just words that express the wondrous results of neuronal complexity” (1977, 12–13).

Many evolutionists today agree with Dawkins and Gould. They generally assume that a materialist reading of evolution is enough to make all evolutionary outcomes fully intelligible and that therefore Darwin’s science is irreconcilable with belief in God. Michael R. Rose (1998), Michael Ruse (2000), William Provine (1989), E. O. Wilson (1999), and Philip Kitcher (2007), to name only a handful, simply take for granted that Darwinian biology makes complete sense only in a materialist setting. Ruse, a highly respected philosopher of science, even claims that Darwinism is the “apotheosis of a materialistic theory” (2000, 77).

This explicitly materialist philosophical interpretation of biological information leads many in our religious communities to be even more wary of Darwin than they might otherwise be. Evolutionary science is frightening enough all by itself for many theists, but when it becomes tightly wound around a core of philosophical materialism it presents itself as all the more

repugnant. The contemporary conflation of evolution with philosophical materialism only adds to the reasons creationists and advocates of intelligent design give for rejecting evolutionary ideas *in toto*.

#### IS EVOLUTIONARY NATURALISM REASONABLE?

The main point I want to make here is that evolutionary naturalism is not only scientifically and theologically problematic but also logically self-contradictory. I am an enthusiastic defender of evolutionary biology, but evolutionary naturalism is something else entirely. It defies the basic standards of human rationality. Whenever evolutionary naturalists profess that Darwinian science provides an *ultimate* metaphysical explanation of the human mind they logically call into question the truth-status of any such claim. After all, according to most Darwinians the process that produced minds is essentially mindless. Evolution, they insist, bears not a trace of intentionality, even though it has lately produced intention-driven human subjects. As philosopher Owen Flanagan puts it, intelligence is not necessary to produce intelligence. "Evolution *demonstrates* how intelligence arose from totally insensate origins" (2002, 11; emphasis added). Many similar claims are made today by scholars who embrace sociobiology or its offshoot known as evolutionary psychology (for example, Pinker 2002).

In order to display the incoherence of an exclusively evolutionist account of intelligence, let me assume for the sake of discussion that you, the reader, are an evolutionary naturalist, and allow me to speak directly to you. I invite you to decide for yourself whether your (hypothetical) evolutionary naturalism is compatible with the instinctive trust you need to place in your own mind in order to make the simplest of truth-claims.

I start this experiment off by asking you to become explicitly aware of what your mind is doing at this very moment. As you have been reading this essay, have you noticed that your mind has been following an invariant sequence of cognitional acts? First, you have *attended* to and experienced the words and sentences I am writing. Second, you have tried to *understand* what I am saying by seeking some meaning or intelligibility in it. Third, if you have understood anything I have said so far, you are probably asking whether my understanding is correct. Your criticism may have led you to the *judgment* that I am wrong, or perhaps right. Fourth, because you are capable not only of insight and critical reflection but also of acting in the world, you are called upon at times to decide what course of action to follow. So *decision* is a fourth cognitional act in addition to experience, understanding and judgment (Lonergan 1967, 221–39).

Decision is essential to what we call morality and ethics, and so another good question for you to ask is whether evolutionary naturalism can provide an adequate account of your moral aspirations and actions. However, in what follows, for the sake of simplicity I leave ethics aside and focus on

the first three cognitional acts. In asking you to pay attention to your own cognitional performance and not just to the world “out there,” I am using and adapting what Bernard Lonergan calls “generalized empirical method” (1970, 72, 243).

Maybe you have never noticed it before, but your mind *cannot help* engaging in the three distinct but complementary acts of experience, understanding, and judgment. This is because there are three corresponding imperatives that activate your conscious life. These imperatives, along with their associated cognitional acts, are:

- (1) Be attentive! —> experience
- (2) Be intelligent! —> understanding
- (3) Be critical! —> judgment

A fourth set (which I do not consider here) is:

- (4) Be responsible! —> decision

Underlying these imperatives and cognitional acts is an unrestricted desire to know (Lonergan 1970). I label this complex—consisting of the desire to know, the mind’s imperatives, and the corresponding cognitional acts—*critical intelligence*.

A clear illustration of the imperatives to be attentive, intelligent, and critical is scientific method. Science begins with *experience*, propelled by the imperative to be open or attentive. This is the empirical imperative. It turns the mind toward data within which good scientists will seek intelligibility. When scientists attain an insight into, or an *understanding* of, the data, they express it in propositions known as hypotheses and theories. But genuine scientists will not stop here, because they know that not every bright or beautiful insight necessarily corresponds to reality. So a third imperative—Be critical!—prods scientists to consider whether their hypotheses or theories are accurate. Honest and mature scientists are more than willing to subject their understanding to critical verification, or falsification. Only after allowing their ideas to undergo a rigorous process of reflective examination, at times including evaluation by other scientists and submission of papers to peer-reviewed journals, will they be in a position to render a (tentative) *judgment* as to whether their scientific propositions are approximately true.

The same threefold cognitional pattern consisting of experience, understanding, and judgment is also playing itself out in your mind right now as you are reading this page. Perhaps you have never attended to your mental operations in this immediate way before. You may never have adverted explicitly to the fact that your mind is continually prodded by hidden imperatives. Yet, even if you have never taken notice of them in the past, you may observe that you cannot escape them now. You may at times have failed to heed the imperatives to be attentive, intelligent, and critical, but these injunctions have been operative even when their gentle urging has

been suppressed. If you are now doubting what I have just said, is it not because you are being attentive, intelligent, and critical—in response to your own mind's imperatives?

What you are doing now is practicing Lonergan's "generalized empirical method." You are looking not only at the objectifiable world "out there" but also at the cognitional activity taking place "in here," in your own exploratory subjectivity. Your critical intelligence is just as much a part of the natural world as rocks and rivers are. Not to take this aspect of nature into account is to evade the empirical imperative to be attentive. To leave out your own critical intelligence as though it were not part of the natural world's landscape is to be arbitrarily unempirical.

You may now observe, therefore, that no matter how many doubts and uncertainties you have about everything else, you cannot suppress or deny the threefold cognitional structure of your own critical intelligence without employing it even in the act of doing so.

#### TRUST

The next point I want to make, then, is that you cannot help *trusting* in the imperatives of your mind. Apart from having made a tacit act of faith in your own critical intelligence you would not have bothered to follow me up to this point. You would not have asked what I am talking about, or whether I may be writing nonsense. Your whole cognitional performance leans on the deeply personal *confidence* you have in your own intelligence and critical capacities. Unless you had already placed some degree of trust or faith in your cognitional ability you would hardly have bothered to raise questions for understanding and reflection at all. I suppose that evolutionary naturalists, after attending to what I am saying in this essay, may attempt to refute the claims I am making. But any such refutation could occur only if my critics have put a great deal of trust in their own minds' imperatives to be attentive, intelligent, and critical.

However, the important question is how to *justify* this trust. Assuming that you too espouse evolutionary naturalism, can this belief system provide sufficient justification for the cognitional confidence that underlies your own judgment about whether what I am writing here is right or wrong? If you embrace evolutionary naturalism, have you ever asked whether it supports or subverts the cognitional confidence needed for you to be an intelligent and critical knower?

Let me put my question another way. Is the essentially mindless, impersonal, and purposeless universe entailed by evolutionary naturalism resourceful enough to explain and ground, in an ultimate sense, the trust you are in fact placing in your own critical intelligence at this moment? I shall try to convince you that it is not and that intellectual honesty should lead you to conclude that your evolutionary naturalism is an unreasonable creed. The

logical structure of your formal understanding of the world—your metaphysics, if you will—must not be such that it undermines the confidence required to activate the thought processes that give rise to that understanding of reality.

Shouldn't your evolutionary naturalism lead you to distrust your mental activity? Darwin seemed to think so: "With me the horrid doubt always arises whether the convictions of man's mind, which has been developed from the mind of the lower animals, are of any value or at all trustworthy. Would any one trust in the convictions of a monkey's mind, if there are any convictions in such a mind?" (1959, 285)

The claim that natural selection is the ultimate explanation of your mind's insatiable longing for truth, or of its spontaneous trust in its capacity to find truth, is questionable. As regards the mind's attraction to truth, the philosopher Richard Rorty, no friend of theology, has rightly remarked: "The idea that one species of organism is, unlike all the others, oriented not just toward its own increased prosperity [that is, toward "fitness"] but toward Truth, is as un-Darwinian as the idea that every human being has a built-in moral compass—a conscience that swings free of both social history and individual luck" (1995, 36).<sup>1</sup>

Neither Rorty nor Darwin, however, seems to have grasped the gravity of his suspicions. Both the scientist and the philosopher claim to be lovers of truth, and clearly they spontaneously trust their minds as they make the claims I have just quoted. Moreover, they would both agree that their minds did not float in from some supernatural sphere but are fully embedded in the natural world and the evolutionary process from which they have blossomed. However, can a purely Darwinian account of life, accurate as it may be scientifically, fully justify the cognitional trust underlying their claims? More strongly stated, doesn't a serious acceptance of evolutionary *naturalism* (as distinct from evolutionary *biology*) logically sabotage the trust that underlies the evolutionary naturalist's own attempts to understand and know the world?

#### THE NEED FOR AN ALTERNATIVE WORLDVIEW

Only a metaphysics or worldview that can justify the confidence needed to energize your critical intelligence—consisting of the unrestricted desire to know, the imperatives to be attentive, intelligent, and critical, and the cognitional acts of experience, understanding, and judging—can be considered reasonable. To pass the test of coherence your belief system or worldview must be congruent with your actual cognitional performance, as Lonergan has argued more explicitly perhaps than any other recent philosopher of knowledge. If a specific set of beliefs logically undermines the trust needed to activate your own critical intelligence, it is out of joint with the deployment of that same critical intelligence. What you take to be the ultimate explanation of your critical intelligence must not function in such a way as

to contravene the restless longing for truth and the cognitional confidence that expresses itself here and now, for example, in the questions you are probably raising about this essay.

Before going any further, I want to make it perfectly clear once again that nothing I have written here is intended to disparage evolutionary and other scientific accounts of mind. I fully accept evolutionary *science*. In terms of natural history it is now well established that your critical intelligence emerged by natural selection from a universe that was at one time devoid of living cells and conscious beings. But in order to account for the trust that you are now placing in your critical intelligence it is not enough to recite the story of your mind's emergence from a lifeless and mindless past. If the ultimate metaphysical ground of your mental abilities were *ultimately* utter mindlessness, you would still need to look for adequate reasons to trust your mind here and now, as both Darwin and Rorty seem to agree. Fully justifying the obvious acts of faith that you place in your critical intelligence requires that you situate your cognitional life, and along with it the whole universe from which it has emerged, in a more spacious intellectual environment than that provided by evolutionary naturalism. I believe it is reasonable to call upon theology to accomplish this expansion.

Evolutionary naturalists, of course, by definition will not consent to such a proposal. They will not give up their belief that the ultimate cause of intelligence is completely unintelligent, as the earlier citation of Flanagan exemplifies. Or, as Dawkins (2004) has reaffirmed, "Darwinian evolution provides an explanation, the only workable explanation so far suggested, for the existence of intelligence. Creative intelligence comes into the world late, as the derived product of a long process of gradual change. . . . After Darwin we at last have a universe in which creative intelligence is explained as emerging after millions of years of evolution."

Evolutionary naturalists such as Flanagan and Dawkins are compelled to explain their own capacity for critical intelligence as the product of a series of blind and unintelligent causes. And no matter how temporally prolonged and gradual in cumulative effect, one must ask whether this evolutionary narrative alone can ever provide a sufficient reason for putting the kind of confidence in their own intellectual functioning as they in fact do when they fall back on such an account. They tell a story about how unconscious physical stuff and mindless evolutionary algorithms finally produced their own critical intelligence over a long period of time. This, of course, is a good and interesting story as far as it goes, and it may be illuminating and interesting. But where in that story do the evolutionary naturalists, whose ultimate appeal is to the three-part Darwinian recipe, find a sufficient basis for trusting their own cognitional life here and now in the exceptionally self-satisfied way they do?

Calling mind a fluke of nature, as some evolutionary naturalists do, hardly suffices to support such assuredness, either. As long as they ground

their own critical intelligence *ultimately* in blind natural selection or in a series of accidents, or both, what reason do evolutionary naturalists have for trusting their own critical intelligence or for assuming that their readers should take them seriously? In the fundamentally unconscious universe that they take to be the ultimate source of their own and everyone else's minds, or for that matter in the historically conditioned cultures that evolve from mindless nature, what basis is there for their inordinately high degree of cognitional confidence? Simply calling upon the idea of deep time to "explain" this emergence, let alone justify their cognitional confidence, hardly dispels the aura of miracle that a consistent naturalism is supposed to disavow.

My proposal, one that Lonergan would also endorse, is as follows. Given the evolutionary character of your mind's emergence, your critical intelligence and your cognitional trust can be explained and justified adequately if their ultimate environment—along with the universe out of which your mind has emerged—is infinite being, intelligibility, truth, and goodness, in other words what theistic faiths call God. According to the theological metaphysics I am following here it is the ever-approachable but also always receding horizon of being, intelligibility, truth, and goodness that justifies the spontaneous confidence you place in your critical intelligence. Your mind cannot grasp this horizon, but it can be grasped by it, and in doing so it is ennobled by it. It is this ennoblement, not the evolutionary story alone, that justifies your cognitional trust.

Your critical intelligence, therefore, is both a product of physical and historical (evolutionary) causes specifiable by the natural sciences *and* of its being drawn toward an infinite and never fully exhausted horizon of being, meaning, truth, and goodness.<sup>2</sup> The responsiveness of your mind to this horizon is also present all along in a more general sense in the whole cosmic process, though it becomes explicit only with the recent emergence of critical intelligence in natural history.

Consequently, there is no inherent contradiction between a scientific narrative of the mind's gradual emergence and a theological explanation of the mind's responsiveness to its (and the universe's) transcendental horizon. Contrary to evolutionary naturalism's totalistic claim to explanatory adequacy, I am proposing that science and theology occupy logically distinct explanatory layers that do not compete with each other but that can jointly account for critical intelligence in a more empirically and logically satisfying way than either can accomplish by itself.

#### CONCLUSION

Theology, therefore, can provide an ultimate explanation for the existence of the mind's imperatives and at the same time justify our spontaneous trust in these imperatives without in any way coming into conflict with

evolutionary accounts of the gradual emergence of mind. How so? (1) *Ultimately* the mind's inclination to be open or attentive to the world—to have a sense of wonder—is awakened by the infinite horizon of being-itself in which all finite beings participate. (2) *Ultimately* the mind's instinctual need to seek understanding of that to which it has attended is aroused by the limitless intelligibility that pervades the real world and that makes human inquiry (including science) possible in the first place. (3) *Ultimately* the mind's imperative to be critical is stirred to life by the infinite and never fully exhausted truthfulness of being that makes critical intelligence ever more restless for deeper communion with *what is*. And (4) *ultimately* the imperative to be responsible is lured into the state of moral aspiration by the infinite goodness in which all finite beings participate. Without in any way contradicting evolutionary science and its narratives of the mind's gradual emergence, it is reasonable to conclude that the existence of an open and infinite transcendental horizon—as the mind's ultimate goal and environment—can explain why we are critically intelligent beings and why we are fully justified in trusting our minds.<sup>3</sup>

#### NOTES

1. I owe this reference to Alvin Plantinga (1996).
2. One might also add beauty, but for simplicity's sake I leave that "transcendental" aside in this discussion.
3. For an extended discussion of this essay's main argument see Haught 2006.

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