

IS NATURE ENOUGH? NO

by *John F. Haught*

Abstract. This essay is based on a lecture delivered at the 2002 IRAS Star Island conference, the theme of which was "Is Nature Enough? The Thirst for Transcendence." I had been asked to represent the position of those who would answer No to the question. I thought it would stimulate discussion if I presented my side of the debate in a somewhat provocative manner rather than use a more ponderous approach that would argue each point in a meticulous and protracted fashion. Here I lay out a theological position that finds naturalism wanting in three ways: in terms of human spiritual needs, in terms of the mind's need for deep explanation, and in terms of the perennial human search for truth. Again, the style of presentation, like that of the original lecture, prohibits the kind of philosophical development that an adequate answer to each of the issues requires. The purpose is that of evoking discussion on a most important question.

Keywords: evolutionary naturalism; explanatory pluralism; intelligent subjectivity; layered explanation; metaphysical naturalism; methodological naturalism; religious naturalism.

Anyone who has been impressed by the explanatory power of science may have been tempted, at one time or another, to espouse the belief that nature is all there is. It is possible to focus so intently on the apparently impersonal but effective routines in the natural world that one begins to wonder whether there is any need to appeal to a transcendent explanation for it all. Even when we look at the world of life from the point of view of science, isn't it true, after all, that nature is enough? Blind physical laws, plus random events, plus the impersonal workings of natural selection,

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plus the enormous depth of time—aren't these sufficient to account for the diversity and complexity of life?

In *Climbing Mount Improbable*, Richard Dawkins (1996, 73–107) asks us to picture a mountain, one side of which is a precipitous drop to the plain below and the other a gently rising slope. If life had only a biblical six thousand or so years in which to vault straight up the mountain's vertical span, going from primitive to complex organisms, we might be forgiven for bringing in the notion of the supernatural to provide the requisite miraculous boost. Nature would not be enough. If, however, we look at things from the other side of the mountain and picture the story of life's complexification as a path meandering lazily back and forth over a period of roughly four billion years up the gentler slope, the supernatural or miraculous becomes unnecessary. The combination of minute gradual changes, natural selection, and deep time would make the spontaneous emergence of complex forms of life much more probable. Nature, in that case, would be enough.

The belief that nature is enough is generally known as *naturalism*. As I use the term here, naturalism is the belief that nature, including human beings and their creations, is all there is (Hardwick 1996, 5–6). I accept the common distinction, however, between methodological and metaphysical naturalism. Methodological naturalism maintains that *as far as scientific knowing is concerned*, nature is all there is. Metaphysical naturalism, on the other hand, goes much farther, insisting that nature is literally all there is. It is with metaphysical naturalism that I am concerned here.

I should note, however, that under the heading of metaphysical naturalism one can make a distinction between “hard” naturalism and “soft” naturalism (Rolston 1987, 247–58). The former is associated with scientism and reductionist materialism, whereas the latter allows that physical reality is much subtler than mechanistic models in general tolerate and that, in the world's unfolding through time, organic or systemic wholes emerge that cannot be reduced without remainder to their physical antecedents or atomic components. Finally, among soft naturalists we find some who now call themselves *religious* naturalists. Religious naturalists do not accept the belief that there is anything other than nature (again taken as inclusive of human beings and their creations), but they do at times endorse the use of notions such as mystery, depth, and even “the sacred” to express their intuition that nature is in some sense an ineffable ultimate. A good example is Ursula Goodenough's book *The Sacred Depths of Nature* (1998).

In all instances naturalism minimally entails the following: If the world of nature is exhaustive of being, it follows that nature is self-originating. Nature is not rooted in any intelligent agency beyond itself. Moreover, since there is no end or goal beyond nature, there can be no overarching purpose to the universe. Given that there is no divine cause, all causes

must be purely natural, so every natural event is itself a product of other natural events (Hardwick 1996, 6). Evolutionary naturalists, for example, now try to explain everything in the life-world as much as possible in Darwinian or neo-Darwinian terms. Finally, the naturalist cannot accept the possibility of conscious human survival or resurrection beyond death.

With this outline of naturalism's main tenets in mind, I want to ask three questions about it. The first concerns its *spiritual amplitude*. Religious naturalists claim that naturalism is quite enough to fulfill our spiritual as well as our intellectual needs. This seems, for example, to be Goodenough's position. Increasingly, even the most entrenched naturalists are beginning to admit that we humans possess ineradicably religious instincts as part of our genetic endowment, so it is reasonable for us to ask whether naturalism, as a belief system, can satisfy our native religious craving for meaning, for something that can give coherence, joy, and satisfaction to our brief life spans. Can naturalism provide a sufficiently expansive climate for spiritual aspiration?

The second question is whether naturalism is *explanatorily adequate*. That is, can naturalism, at least in principle, account fully for every event and actuality, as it claims to do, without appealing to something beyond the natural? Are naturalistic explanations enough to explain *ultimately* such fascinating phenomena as life, mind, ethics, and religion? If no dimension of being transcended scientifically accessible nature, natural causes would have to be the ultimate and exhaustive explanation for everything. Scientific explanation, in other words, would be equivalent to ultimate explanation. In any case, there would be no room left for what we have traditionally understood to be religious or theological construals of reality. The latter would seem to be competing, rather than existing in a complementary relationship, with scientific explanation.

My third question is whether naturalism, as defined above, can plausibly claim to be *accurate as a worldview*. In other words, is naturalism true? One way for each of us to determine whether or not it is true is to ask persistently whether naturalism provides a logically coherent framework for the fact of our own intelligence. Is the actual performance of the human mind completely consistent with the belief system known as naturalism? If not, we are logically compelled to judge naturalism unreasonable and untrue.

Let us now look more closely into our three questions: first, about naturalism's *spiritual amplitude*; second, about its *explanatory adequacy*; and, third, about its *representational accuracy as a worldview*.

NATURALISM'S SPIRITUAL AMPLITUDE

Does the naturalist worldview possess sufficient breadth to satisfy our spiritual or religious longings? The answers that naturalists themselves give to

this question range from “sunny” or “bright” naturalism, on one hand, to “shady” or “sober” naturalism, on the other. Sunny naturalists would say something like this: “Yes, nature is enough to satisfy us spiritually and religiously. Nature’s depth, mystery, and beauty; human love and goodness; the joy of creativity; the scientific search for truth; the ecstasy of discovery; physical enjoyment—all of these are enough to fill a person’s life. We need nothing else. Meaning and morality, moreover, don’t require that we postulate, as Immanuel Kant did, the existence of God or immortality. Our religious and ethical instincts, which we accept as expressions of our genetic heritage, can be satisfied bountifully without reference to any distinctly supernatural reality. Nature is quite enough, not only intellectually, but also spiritually.”

Shady or sober naturalists, on the other hand, would not be so sanguine. “Spiritually, nature is *not* enough,” they would attest, “but it’s all we’ve got. Our religious appetites can never be fully satisfied, and the best we can salvage from this finally futile situation is cognitional integrity accompanied by a sense of tragic nobility.” One representative of this sober strain of naturalism is the French writer Albert Camus (1955). Camus admits that we humans do indeed have powerful religious desires and that we quite naturally seek the infinite. We long for ultimate meaning and eternal happiness. The bitter reality, however, is that the world can never satisfy this religious craving. If God does not exist—let’s be honest and logical about all of this, he says—reality is absurd. The absurd, Camus goes on to clarify, is that which is made up of the encounter of the ineradicable human desire for ultimate meaning and the world’s refusal to respond to this yearning (1955, 21). The realistic hero of the human condition is therefore Sisyphus, the mythic exemplar of all striving in the face of futility (pp. 88–91).

Camus asks whether, in the midst of nature’s bringing all of life into the finality of death, Sisyphus (that is, every fully conscious human being “cleansed of hope”) can be happy. His answer is yes, but the tragic hero’s happiness consists solely of the consciousness that in pushing his rock up the hill he is stronger than the fate-filled world that oppresses him. This awareness, similar to Nietzsche’s *amor fati* (love of one’s fate), may allow fleeting feelings of contentment, a kind of tragic salvation within the context of an unintelligible universe. This is a rather self-absorbed kind of redemption, however—a point that Camus himself seems almost to have acknowledged by the time he wrote his later novels, *The Plague* and *The Fall*.

Another representative of sober naturalism is physicist Steven Weinberg. In *Dreams of a Final Theory* he writes:

About a century and a half ago Matthew Arnold found in the withdrawing tide a metaphor for the retreat of religious faith, and heard in the water’s sound “the note of sadness.” It would be wonderful to find in the laws of nature a plan prepared by

a concerned creator in which human beings played some special role. I find sadness in doubting that we will. There are some among my scientific colleagues who say that the contemplation of nature gives them all the spiritual satisfaction that others have found in a belief in an interested God. Some of them may even feel that way. I do not. (Weinberg 1992, 256)

Weinberg finds it curious that so many of his fellow scientists show so little interest in religious issues (p. 257). Like Camus, he admits that he is beset with theological preoccupations, so he feels a “sadness” that science has now demonstrated (at least to his intellectual satisfaction) that our religious longings will never be fulfilled. Science, he says, has given us no evidence that we live in a purposeful universe, so the most that we can salvage from our tragic predicament is a sense of “honor” in facing up to the abyss without escaping into an illusory religiosity (pp. 255, 260). Weinberg, therefore, has no palate for the sunny brand of naturalism and its compromises with what he takes to be the truth of our situation. If there is no interested God, the natural world alone can never provide sufficient grounds for religious satisfaction.

Given the assumptions of the naturalist worldview, at least according to Camus and Weinberg, the sober easily wins out over the sunny variety not only in terms of logical coherence but also in terms of moral integrity, especially since the sober naturalists are at least uncompromising about the *truth* entailed by the scientific understanding of the cosmos. It would be both dishonorable and dishonest to deny that a universe whose ultimate end is the pit of nothingness hardly justifies the spiritual optimism of naturalistic piety. As Bertrand Russell, another sober naturalist, put it, “Only on the firm foundation of unyielding despair can the soul’s habitation henceforth be safely built” (1918, 48).

In his book *The Fifth Dimension* philosopher of religion John Hick is even more explicit than Camus, Weinberg, and Russell about the religious implications of naturalism. Naturalism, he states crustily, is simply “bad news,” spiritually speaking (Hick 1999, 22). Its spiritual deficiency, of course, does not make it untrue. Perhaps, for all we know, naturalism is true (a point that I take up separately below). But if it is true, Hick reflects, *all* naturalists should be at least realistic enough to admit that naturalism “is very bad news for humanity as a whole.” No form of naturalism, whether sunny or shady, “can be other than bad news for humankind when we look beyond our own relatively fortunate circumstances” (p. 22). The physical pain, poverty, and suffering of most people prevents them from ever realizing their full potential within the limits of nature alone. “Even those who have lived the longest can seldom be said to have arrived, before they die, at a fulfillment of their potential” (p. 24). So, he concludes, naturalists can be regarded as realistic only if they acknowledge the fact that naturalism is not good news for much of humanity (p. 25).

The classic religious traditions, on the other hand, at least according to Hick, do respond to our deepest aspirations:

We human beings are for so much of the time selfish, narrow-minded, emotionally impoverished, unconcerned about others, often vicious and cruel, but according to the great religions there are wonderfully better possibilities concealed within us. . . . We see around us the different levels that the human spirit has reached, and we know . . . that the generality of us have a very long way to go before we can be said to have become fully human. But if the naturalistic picture is correct, this can never happen. For according to naturalism, the evil that has afflicted so much of human life is final and irrevocable as the victims have ceased to exist. (p. 24)

Moreover, because of the biological, historical, social, and other kinds of solidarity human beings have with one another, "the full humanity of each requires the full humanity of all," and because the majority of humans have not reached their potential, none of us can plausibly claim to have really reached our own potential either (p. 24). Hick concludes that, apart from such tough-minded atheists as Russell (we might add Camus and Weinberg), naturalists seem unaware that "they are announcing the worst possible news to humanity as a whole" (p. 24). Naturalists, therefore,

. . . ought frankly to acknowledge that if they are right the human situation is irredeemably bleak and painful for vast numbers of people. For—if they are right—in the case of that innumerable multitude whose quality of life has been rendered predominantly negative by pain, anxiety, extreme deprivation, oppression, or whose lives have been cut off in childhood or youth, there is no chance of ever participating in an eventual fulfillment of the human potential. There is no possibility of this vast century-upon-century tragedy being part of a much larger process which leads ultimately to limitless good. (pp. 24–25)

NATURALISM'S EXPLANATORY ADEQUACY

This is a just a snapshot of the debate about naturalism's spiritual qualifications. Let us turn now, however, to a no-less-interesting question, one more closely related to fundamental issues in science and religion: Can naturalism ever fulfill its explanatory promise, that is, its claim that ultimate explanations must be sought only within the realm of a natural world severed from any ties with a transcendent dimension? Contemporary naturalists, fortified by the success of science, are confident that in nature alone resides the adequate and final accounting for everything and that scientific method is the only trustworthy way to arrive at it. Life can be adequately explained in chemical terms (Crick 1966, 10; Watson 1965, 67). Mind is ultimately the outcome of natural selection (Cziko 1995, 121). Language (Pinker 1994), ethics (Ruse 1986), and even religion (Boyer 2001) can be fully explained naturalistically. Given the fact that naturalists deny the existence of anything other than nature, they are compelled logically to hold that natural causes provide the final, and deepest, explanation of all phenomena, including our tendency to worship.

But how can we be certain that naturalistic explanation is indeed enough? Is the naturalist explanatory confidence justifiable? Today this confidence increasingly takes the form of "evolutionary naturalism," according to which

the neo-Darwinian recipe—consisting of random genetic events and natural selection stirred up in the stew of deep cosmic time—is enough to account for nearly everything in the realm of living phenomena. In the following, therefore, I focus primarily on the explanatory power of evolutionary naturalism, although I believe that what I have to say applies also to naturalistic explanation more generally speaking.

I want to preface my discussion of evolutionary naturalism's claim to explanatory adequacy, however, by emphasizing that I am quite happy, methodologically speaking, to push evolutionary understanding as far as it can legitimately take us. Evolutionary science has to be an aspect of any serious attempt to understand life. This said, however, it is not self-evident that the deepest explanations of living phenomena do not elude evolutionary naturalism (for a fuller discussion see my book *Deeper than Darwin* [2003]). Theological explanation, I maintain, is not incompatible with a methodological evolutionary naturalism. It does not have to compete with evolutionary science. However, in order to argue the point that scientific and theological explanations do not rule each other out in principle, I must first make a more general case for what I call *layered explanation* or *explanatory pluralism*. In these expressions I am pointing to the simple fact that almost everything in our experience admits of a plurality of levels of explanation.¹ The alternative to layered explanation or explanatory pluralism is *explanatory monism*, an approach that strongly appeals to evolutionary naturalists.

A very simple example of what I mean by layered explanation is one that I first came across somewhere in the writings of John Polkinghorne, although I take considerable liberties with it here. Imagine that you have a pot of water boiling on your stove and that somebody comes along and asks you to explain why the pot is boiling. One very good reply would be “because the molecules of water are stirring excitedly, thus causing some of them to escape the liquid state.” This is a very good explanation, but it does not rule out other levels of explanation. You could reply, for example, “because I turned the gas on beneath it,” or “because I want tea.”

From this very simple illustration we may note, first, that there can exist hierarchies of incommensurable explanations between which there is no necessary competition or conflict. Different strata of explanation can co-exist without conflict. Second, the explanations need not be mapped directly onto one another. Third, the deeper the explanation goes, the harder it will be to grasp in terms of those explanatory categories that exist closer to the surface. “I want tea,” for example, cannot be articulated in terms of the physics of water's molecular movement. As we move in this simple example from the first explanation to the third, the causes shift quietly from material to teleological without there being any conflict. My goal of having some tea to drink can be effective in an overarching way without either competing with or being expressed in terms of physical explanations.

There is, at least in principle, no inherent contradiction between material and final causal explanations. Analogously, God's will to create a universe, perhaps for some purpose obscure to us, would not show up at the level of a physical, chemical, or evolutionary analysis of nature; and if there is indeed such an overarching explanation for what is going on in the teapot of nature, it would not rule out scientific accounts.

A more venerable example of explanatory pluralism may be found in Plato's dialogue *Phaedo*, where Socrates and his disciples are trying to explain why Socrates is sitting there in his prison cell. Socrates responds by first giving a true but trivial explanation: he is sitting there because his body is composed of bones and sinew; the bones are rigid but separated at the joints, and this allows for a sitting posture. This is a good explanation, but it does not rule out a deeper one: Socrates is sitting in prison because the Athenians have condemned him and he has thought it "right and honorable" to accept their judgment. Moreover, even this deeper accounting does not yet give us the final reason for his sitting there. The ultimate explanation is the attractive power of what Plato calls "the Good." The goodness of transcendent reality has grasped hold of Socrates and will not let go, persuading (not forcing) him to accept the punishment of the Athenians (Tredennick 1969, 156–57).

Here all three explanations are illuminating, but they exist at different levels, some deeper than others. The examples of the boiling water and Socrates' situation can help us begin to understand, by way of analogy, how it is that theological explanations can logically exist without competition alongside (methodologically) naturalistic explanations. Divine action or divine creativity stands in relation to nature—to such occurrences as the emergence of life, mind, ethics, and religion—analogously to the way in which "I want tea" stands in relation to the molecular movement of the water molecules or analogously to the way in which the Platonic Good accounts for Socrates' sitting in his prison cell. Yet even the most meticulous examination of the molecular movement in the pot of water will not reveal, at the physical level of analysis, the ultimate reason for the water's boiling. Likewise, even the most thorough naturalistic examination of Socrates' bones and sinews will not reveal the power of the Platonic Good that ultimately explains why he is situated there in his prison cell.

The lesson we may take from these analogies is that even the most detailed scientific examination of natural processes may never be able to reveal the deepest, or ultimate, explanation of life, mind, language, ethics, or religion. There is logical room for ultimate theological explanations to exist without contradiction at levels compatible with, but much deeper than, scientific accounts.

Layered explanation is much more open-ended than doctrinaire explanatory monism, as even the hierarchy of explanations that exists within the domain of the natural sciences testifies. Take, for example, the question of

why life came about in this universe. Using layered explanation, we might say that the question can be answered quite nicely by several natural sciences. Physics explains the emergence of life in terms of thermodynamics, energetic factors, and, especially today, the self-organizing properties of matter itself (Kauffman 1993; Morowitz 2002). Chemistry explains life's origins in terms of the bonding properties of atoms. Biochemistry might explain it in terms of RNA cycles and protein replication. And astrophysics would take us all the way back to the initial conditions and fundamental constants, already fixed at the time of cosmic origins, that make life possible. Even within the sciences we find a hierarchy of explanations for every occurrence in nature, and we justifiably push each science as far as it can possibly go without fear that we are interfering with others.

Furthermore, there is no good reason to suppose (as the naturalist does) that when we have taken all of the levels of scientific explanation as far as we can in a horizontal direction we have yet arrived vertically at the deepest explanation of life. We may not be wrong to suspect, for example, that life came about ultimately because of the creative and attractive power of an infinite generosity. My assumption here—and I think it is much more expansive than explanatory monism—is that adequate explanation runs endlessly deep and that every particular explanation is therefore an abstraction. No one science, or set of sciences, can ever comprehend the rich totality of causal ingredients that enter into each actuality or event. That it cannot do so, however, is not a failing on the part of science itself. Every branch of science quite deliberately works on the tacit premise that it does not have to look at, or account fully for, everything at once. Science deliberately allows us to leave this or that out.

Yet sometimes, after we have left nearly everything out, we forget that we have done so, and then we make the logical mistake of assuming that our simple, abstract explanation is a fundamental or even an ultimate one. Is it possible, perhaps, that the naturalist worldview has embraced this tacit substitution of partial for complete explanation, a move parallel to what Alfred North Whitehead calls the “fallacy of misplaced concreteness,” by which he means the illogical identifying of abstractions with concrete reality (Whitehead 1967, 51, 58)? Whitehead points out that the deepest and richest explanations—precisely because they leave less out—will inevitably be the least clear and distinct. His point is that clarity and distinctness in our thought is not a sign that we have arrived at fundamental explanation (Whitehead 1978, 173). In fact, we reach clarity about anything only by leaving out most of its concrete causal depth. Clarity is not the same as depth, and the deepest explanations are never the clearest.

Naturalism (and especially evolutionary naturalism), however, assumes that ultimate explanation must be clear and distinct. In striving for clarity, naturalists sometimes appeal to the idea of Ockham's razor, which asserts that “things [explanations] should not be multiplied without necessity (*sine*

necessitate)” (Maurer 1999, 121). Accordingly, since Darwin’s recipe is “simple and elegant,” one need not appeal at all to the (seemingly unnecessary) idea of God in explaining the fact and features of life—at any level. The prospect of explaining all of the “mysteries” of life in terms of the elementary notion of reproductive success seems nearly irresistible. It has led to the fascinating new creed of “universal Darwinism” according to which nothing in the life-world can escape the pruning economy of the idea of natural selection as the ultimate explanation of life, mind, behavior, language, ethics, and religion.

However, it must be said that Ockham’s razor, important as its use may be at each particular level of the many possible layers of explanation, cannot justifiably be invoked to suppress layered explanation as such, even though this is exactly how the explanatory monist typically tends to wield it. If life’s diversity and attributes were indeed so simple a matter as evolutionary naturalists propose, Darwinian explanation would be enough. In such a case the impetus to look for deeper and “fuzzier” explanations, such as those proposed by theology, would be superfluous. But explanatory monism can find no justification in science itself for its decision to suppress richly layered explanation. This decision is rooted in a historically and culturally contingent set of beliefs, those we associate with naturalism. Such a belief system, again one unwarranted by scientific method itself, runs the risk of leaving out most of the explanatory depth and complexity inherent in the real world, a depth whose richness may be more radically (though less clearly) retrievable through symbolic expression, as Whitehead’s writings have emphasized, than by way of abstractive mathematical models or simple scientific formulas.

IS NATURALISM ACCURATE?

Finally, let me offer some brief reflections regarding the question of naturalism’s intellectual coherence or truth status. I approach this most important of our three questions by considering one more example of what I have been calling layered explanation. Suppose that I am asked to explain why my mind is now in the process of thinking. One very good sort of answer would be that my brain’s neurons are firing, my synapses are connecting, my temporal and parietal lobes are being activated, and so on—all of the interesting explanations that neuroscientists would offer. However, I can also reasonably answer the question by saying that I am in the act of thinking because of my desire to understand. Of course, the naturalist, especially the hard naturalist, will try to reduce the second explanation to the first, but there can be no smooth logical transition from the objectifying discourse of reductive science to the subjective experience of thinking.

Furthermore, neither the first nor the second explanation for why I am thinking rules out an even deeper one: I am thinking *because reality is intelligible*. My thinking is possible at all only because there is an intelligible world to think about (Lonergan 1970). Just as the existence of light had something to do with the evolutionary emergence of eyes or vision, so also the universe's inherent intelligibility must have been an explanatory factor at some level in the emergence of mind. This deep level of explanation does not rule out, in principle, that at another level of explanation Darwinians can account for the existence of minds capable of thought quite accurately in terms of natural selection. In contrast to evolutionary naturalism, however, I want to make room for a rich and indefinitely deep plurality of levels of explanation.

If this explanatory pluralism is permitted, however, a question pertaining to naturalism's claim to truth also arises: Why is it that nature is intelligible? If, as naturalism maintains, all explanations have to be natural explanations, what is the natural explanation for the intelligibility of the universe? Can pure naturalism adequately account for this remarkable fact? Or isn't naturalism at this point required to confess, given that there is nothing beyond or deeper than the natural world, that the intelligibility of the universe is just a brute fact? To naturalism it just "so happens" that the universe is intelligible. If this is the best answer that naturalism can devise, however, doesn't this make the naturalist's universe at bottom *unintelligible*? And if the universe in its ultimate depths is unintelligible, does that not make naturalism a rather shaky foundation for science, which—as Einstein himself emphasized—cannot get off the ground without a firm trust that the real world is *completely* intelligible (even though, of course, most of this intelligibility lies beyond our human intellectual capacity to grasp at any one moment)?

According to Whitehead (1967, 18), it is no accident that modern science sprouted in the theological West. Contrary to the implicit irrationalism that underlies naturalism, Western religious consciousness had been soaked for centuries in the conviction that the universe is intelligible "all the way down" because at bottom it is rooted in an infinite intelligence. But if naturalism is true, the naturalist should be candid enough to admit that the fact of the world's intelligibility itself remains without explanation; and, given that naturalism claims that all explanation has to be naturalist explanation, naturalism is a philosophy that subverts itself. Logically, therefore, it cannot be true.

If naturalism can give no ultimate reason for the fact of nature's intelligibility, it cannot coherently claim that ultimate explanations belong to naturalism alone. I realize, however, that these brief observations will not be enough to discourage the naturalist from responding that today the naturalist worldview has been completely and decisively vindicated by

Darwinian science. Without Darwin, many naturalists now agree, naturalism might still appear to be just one more unfounded belief system (Dawkins 1996; Cziko 1995; Rose 1998). After Darwin, however, everything looks different. Because of the explanatory power of Darwin's recipe—consisting of random variations, natural selection, and a vast expanse of cosmic time—nothing escapes an ultimately naturalistic (Darwinian) explanation, including mind, language, ethics, and religion.

I would agree that evolutionary explanation, even as it pertains to these most precious features of human existence, is illuminating—and, once again, I believe that we should push it as far as it can legitimately go at a certain level among what may be a plurality of levels of explanation. However, let us reflect for an instant on whether evolutionary naturalism alone is sufficient to explain the fact of mind.

Suppose that you are an evolutionary naturalist and obliged to explain all living phenomena including your own mind as much as possible in purely physicalist terms. If you are an evolutionary naturalist, the ultimate explanation of your various organs, your eyes, your ears—everything that is functional about you—is Darwinism (Cziko 1995, 121). To be consistent, you are compelled to admit that your own mind (which is a function of your physical brain) can be explained ultimately only as an adaptive organ also. But how do I know that your explanation of mind in Darwinian terms is not just one more adaptive fiction? How do I know, if I follow your own premises, that your mind is giving me the truth rather than just engaging in one more adaptive (and possibly fictitious) exercise? Yet, you have clearly proposed to me that your Darwinism is the rock-solid truth to which any reasonable person must assent. I want to know through what apertures your capacity for truth telling slipped into your naturalist universe. Your Darwinian naturalism, at least by itself, cannot tell me how this happened.

My point (a variation of what has been called the “liar’s fallacy”) is that your own evolutionary naturalism cannot logically account, at least ultimately, for the trust you have in your own mind to lead you (and me) to the truth. In fact, evolutionary biologists claim that it is often by cunning or a capacity to deceive that the more complex forms of life and mind evolved at all (see Rue 1994, 82–127, for a convenient summary). If adaptive evolution is the ultimate explanation of your own brain and mind, do you not have to be suspicious now—even in view of what culture and education have added to the shaping of your mind—of its capacity for truth telling (that is, if you still believe that Darwinism is the ultimate explanation of your mind)? Why, then, should either you or I take seriously any judgment your mind makes?

Nature, at least as understood by evolutionary naturalism, is not big enough for your own intelligent subjectivity, and if it's not big enough for your own intelligent subjectivity, naturalism must be incoherent, given

that you have already told me that your mind is the product of natural (Darwinian) causes alone. Rationally speaking, therefore, naturalism by itself cannot justify the spontaneous trust you have in your own mind to arrive at truth. To justify this trust you need to look for a wider and deeper understanding of reality than naturalism alone can provide.

The point, once again, is that your evolutionary naturalism logically sabotages itself. Another kind of worldview is necessary as the context for your own intelligent subjectivity. Such a worldview, I want to emphasize, must include evolutionary explanations as one of many levels, but it cannot be one in which evolutionary explanation is the ultimate explanation. Just as explaining the pot of boiling water at the molecular level does not exclude deeper levels of explanation than those that emerge in a physical analysis of water and steam, so looking at life from the perspective of evolution would not necessarily rule out deeper levels of explanation alongside the Darwinian.²

NOTES

1. I prefer, at least in the conversation with naturalism, to employ the idea of explanatory pluralism or layered explanation rather than the more familiar terminology of necessary and sufficient conditions. The same argument could be made in terms of the latter, however, though perhaps not as directly and economically.

2. In my books *God after Darwin* (2001) and *Deeper than Darwin* (2003) I have tried to show in much more detail how it is that Darwinian and theological accounts can easily exist side by side in a layered explanation of life.

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