The Dawkins Confusion

Naturalism ad absurdum.
by Alvin Plantinga

Richard Dawkins is not pleased with God:

The God of the Old Testament is arguably the most unpleasant character in all of fiction. Jealous and proud of it; a petty, unjust unforgiving control-freak; a vindictive, bloodthirsty ethnic-cleanser; a misogynistic homophobic racist, infanticidal, genocidal, filicidal, pestilential, megalomaniacal....

Well, no need to finish the quotation; you get the idea. Dawkins seems to have chosen God as his sworn enemy. (Let's hope for Dawkins' sake God doesn't return the compliment.)

The God Delusion is an extended diatribe against religion in general and belief in God in particular; Dawkins and Daniel Dennett (whose recent Breaking the Spell is his contribution to this genre) are the touchdown twins of current academic atheism.1 Dawkins has written his book, he says, partly to encourage timorous atheists to come out of the closet. He and Dennett both appear to think it requires considerable courage to attack religion these days; says Dennett, "I risk a fist to the face or worse. Yet I persist." Apparently atheism has its own heroes of the faith—at any rate its own self-styled heroes. Here it's not easy to take them seriously; religion-bashing in the current Western academy is about as dangerous as endorsing the party's candidate at a Republican rally.

Dawkins is perhaps the world's most popular science writer; he is also an extremely gifted science writer. (For example, his account of bats and their ways in his earlier book The Blind Watchmaker is a brilliant and fascinating tour de force.) The God Delusion, however, contains little science; it is mainly philosophy and theology (perhaps "atheology" would be a better term) and evolutionary psychology, along with a substantial dash of social commentary decrying religion and its allegedly baneful effects. As the above quotation suggests, one shouldn't look to this book for evenhanded and thoughtful commentary. In fact the proportion of insult, ridicule, mockery, spleen, and vitriol is astounding. (Could it be that his mother, while carrying him, was frightened by an Anglican clergyman on the rampage?) If Dawkins ever gets tired of his day job, a promising future awaits him as a writer of political attack ads.

Now despite the fact that this book is mainly philosophy, Dawkins is not a philosopher (he's a biologist). Even taking this into account, however, much of the philosophy he purveys is at best jejune. You might say that some of his forays into philosophy are at best sophomoric, but that would be unfair to sophomores; the fact is (grade inflation aside), many of his arguments would receive a failing grade in a sophomore philosophy class. This, combined with the arrogant, smarter-than-thou tone of the book, can be annoying. I shall put irritation aside, however and do my best to take Dawkins' main argument seriously.
Chapter 3, "Why There Almost Certainly is No God," is the heart of the book. Well, why does Dawkins think there almost certainly isn't any such person as God? It's because, he says, the existence of God is monumentally improbable. How improbable? The astronomer Fred Hoyle famously claimed that the probability of life arising on earth (by purely natural means, without special divine aid) is less than the probability that a flight-worthy Boeing 747 should be assembled by a hurricane roaring through a junkyard. Dawkins appears to think the probability of the existence of God is in that same neighborhood—so small as to be negligible for all practical (and most impractical) purposes. Why does he think so?

Here Dawkins doesn't appeal to the usual anti-theistic arguments—the argument from evil, for example, or the claim that it's impossible that there be a being with the attributes believers ascribe to God. So why does he think theism is enormously improbable? The answer: if there were such a person as God, he would have to be enormously complex, and the more complex something is, the less probable it is: "However statistically improbable the entity you seek to explain by invoking a designer, the designer himself has got to be at least as improbable. God is the Ultimate Boeing 747." The basic idea is that anything that knows and can do what God knows and can do would have to be incredibly complex. In particular, anything that can create or design something must be at least as complex as the thing it can design or create. Putting it another way, Dawkins says a designer must contain at least as much information as what it creates or designs, and information is inversely related to probability. Therefore, he thinks, God would have to be monumentally complex, hence astronomically improbable; thus it is almost certain that God does not exist.

But why does Dawkins think God is complex? And why does he think that the more complex something is, the less probable it is? Before looking more closely into his reasoning, I'd like to digress for a moment; this claim of improbability can help us understand something otherwise very perplexing about Dawkins' argument in his earlier and influential book, The Blind Watchmaker. There he argues that the scientific theory of evolution shows that our world has not been designed—by God or anyone else. This thought is trumpeted by the subtitle of the book: Why the Evidence of Evolution Reveals a Universe without Design.

How so? Suppose the evidence of evolution suggests that all living creatures have evolved from some elementary form of life: how does that show that the universe is without design? Well, if the universe has not been designed, then the process of evolution is unguided, unorchestrated by any intelligent being; it is, as Dawkins suggests, blind. So his claim is that the evidence of evolution reveals that evolution is unplanned, unguided, unorchestrated by any intelligent being.

But how could the evidence of evolution reveal a thing like that? After all, couldn't it be that God has directed and overseen the process of evolution? What makes Dawkins think evolution is unguided? What he does in The Blind Watchmaker, fundamentally, is three things. First, he recounts in vivid and arresting detail some of the fascinating anatomical details of certain living creatures and their incredibly complex and ingenious ways of making a living; this is the sort of thing Dawkins does best. Second, he tries to refute arguments for the conclusion that blind, unguided evolution could not have produced certain of these wonders of the living world—the mammalian eye, for example, or the wing. Third, he makes suggestions as to how these and other organic systems could have developed by unguided evolution.

Suppose he's successful with these three things: how would that show that the universe is without design? How does the main argument go from there? His detailed arguments are all for the conclusion that it is biologically possible that these various organs and systems should have come to be by unguided Darwinian mechanisms (and some of what he says here is of considerable interest). What is truly remarkable, however, is the form of what seems to be the main argument. The premise he argues for is something like this:

1. We know of no irrefutable objections to its being biologically possible that all of life has come to be by way of unguided Darwinian processes;
and Dawkins supports that premise by trying to refute objections to its being biologically possible that life has come to be that way. His conclusion, however, is

2. All of life has come to be by way of unguided Darwinian processes.

It's worth meditating, if only for a moment, on the striking distance, here, between premise and conclusion. The premise tells us, substantially, that there are no irrefutable objections to its being possible that unguided evolution has produced all of the wonders of the living world; the conclusion is that it is true that unguided evolution has indeed produced all of those wonders. The argument form seems to be something like

\[
\begin{align*}
\text{We know of no irrefutable objections to its being possible that } p; \\
\text{Therefore} \\
\text{p is true.}
\end{align*}
\]

Philosophers sometimes propound invalid arguments (I've propounded a few myself); few of those arguments display the truly colossal distance between premise and conclusion sported by this one. I come into the departmental office and announce to the chairman that the dean has just authorized a $50,000 raise for me; naturally he wants to know why I think so. I tell him that we know of no irrefutable objections to its being possible that the dean has done that. My guess is he'd gently suggest that it is high time for me to retire.

Here is where that alleged massive improbability of theism is relevant. If theism is false, then (apart from certain weird suggestions we can safely ignore) evolution is unguided. But it is extremely likely, Dawkins thinks, that theism is false. Hence it is extremely likely that evolution is unguided—in which case to establish it as true, he seems to think, all that is needed is to refute those claims that it is impossible. So perhaps we can think about his Blind Watchmaker argument as follows: he is really employing as an additional if unexpressed premise his idea that the existence of God is enormously unlikely. If so, then the argument doesn't seem quite so magnificently invalid. (It is still invalid, however, even if not quite so magnificently—you can't establish something as a fact by showing that objections to its possibility fail, and adding that it is very probable.)

Now suppose we return to Dawkins' argument for the claim that theism is monumentally improbable. As you recall, the reason Dawkins gives is that God would have to be enormously complex, and hence enormously improbable ("God, or any intelligent, decision-making calculating agent, is complex, which is another way of saying improbable"). What can be said for this argument?

Not much. First, is God complex? According to much classical theology (Thomas Aquinas, for example) God is simple, and simple in a very strong sense, so that in him there is no distinction of thing and property, actuality and potentiality, essence and existence, and the like. Some of the discussions of divine simplicity get pretty complicated, not to say arcane.3 (It isn't only Catholic theology that declares God simple; according to the Belgic Confession, a splendid expression of Reformed Christianity, God is "a single and simple spiritual being.") So first, according to classical theology, God is simple, not complex.4 More remarkable, perhaps, is that according to Dawkins' own definition of complexity, God is not complex. According to his definition (set out in The Blind Watchmaker), something is complex if it has parts that are "arranged in a way that is unlikely to have arisen by chance alone." But of course God is a spirit, not a material object at all, and hence has no parts.5 A fortiori (as philosophers like to say) God doesn't have parts arranged in ways unlikely to have arisen by chance. Therefore, given the definition of complexity Dawkins himself proposes, God is not complex.

So first, it is far from obvious that God is complex. But second, suppose we concede, at least for purposes of argument, that God is complex. Perhaps we think the more a being knows, the more complex it is; God, being omniscient, would then be highly complex. Perhaps so; still, why does Dawkins think it follows that God would be improbable? Given materialism and the
idea that the ultimate objects in our universe are the elementary particles of physics, perhaps a being that knew a great deal would be improbable—how could those particles get arranged in such a way as to constitute a being with all that knowledge? Of course we aren't given materialism. Dawkins is arguing that theism is improbable; it would be dialectically deficient in excelsis to argue this by appealing to materialism as a premise. Of course it is unlikely that there is such a person as God if materialism is true; in fact materialism logically entails that there is no such person as God; but it would be obviously question-begging to argue that theism is improbable because materialism is true.

So why think God must be improbable? According to classical theism, God is a necessary being; it is not so much as possible that there should be no such person as God; he exists in all possible worlds. But if God is a necessary being, if he exists in all possible worlds, then the probability that he exists, of course, is 1, and the probability that he does not exist is 0. Far from its being improbable that he exists, his existence is maximally probable. So if Dawkins proposes that God's existence is improbable, he owes us an argument for the conclusion that there is no necessary being with the attributes of God—an argument that doesn't just start from the premise that materialism is true. Neither he nor anyone else has provided even a decent argument along these lines; Dawkins doesn't even seem to be aware that he needs an argument of that sort.

A second example of Dawkinsian-style argument. Recently a number of thinkers have proposed a new version of the argument from design, the so-called "Fine-Tuning Argument." Starting in the late Sixties and early Seventies, astrophysicists and others noted that several of the basic physical constants must fall within very narrow limits if there is to be the development of intelligent life—at any rate in a way anything like the way in which we think it actually happened. For example, if the force of gravity were even slightly stronger, all stars would be blue giants; if even slightly weaker, all would be red dwarfs; in neither case could life have developed. The same goes for the weak and strong nuclear forces; if either had been even slightly different, life, at any rate life of the sort we have, could probably not have developed. Equally interesting in this connection is the so-called flatness problem: the existence of life also seems to depend very delicately upon the rate at which the universe is expanding. Thus Stephen Hawking:

reduction of the rate of expansion by one part in 10^12 at the time when the temperature of the Universe was 1010 K would have resulted in the Universe's starting to recollapse when its radius was only 1/3000 of the present value and the temperature was still 10,000 K.6

That would be much too warm for comfort. Hawking concludes that life is possible only because the universe is expanding at just the rate required to avoid recollapse. At an earlier time, he observes, the fine-tuning had to be even more remarkable:

we know that there has to have been a very close balance between the competing effect of explosive expansion and gravitational contraction which, at the very earliest epoch about which we can even pretend to speak (called the Planck time, 10^-43 sec. after the big bang), would have corresponded to the incredible degree of accuracy represented by a deviation in their ratio from unity by only one part in 10 to the sixtieth.7

One reaction to these apparent enormous coincidences is to see them as substantiating the theistic claim that the universe has been created by a personal God and as offering the material for a properly restrained theistic argument—hence the fine-tuning argument.8 It's as if there are a large number of dials that have to be tuned to within extremely narrow limits for life to be possible in our universe. It is extremely unlikely that this should happen by chance, but much more likely that this should happen if there is such a person as God.

Now in response to this kind of theistic argument, Dawkins, along with others, proposes that
possibly there are very many (perhaps even infinitely many) universes, with very many
different distributions of values over the physical constants. Given that there are so many, it is
likely that some of them would display values that are life-friendly. So if there are an
enormous number of universes displaying different sets of values of the fundamental
constants, it's not at all improbable that some of them should be "fine-tuned." We might
wonder how likely it is that there are all these other universes, and whether there is any real
reason (apart from wanting to blunt the fine-tuning arguments) for supposing there are any
such things. But concede for the moment that indeed there are many universes and that it is
likely that some are fine-tuned and life-friendly. That still leaves Dawkins with the following
problem: even if it's likely that some universes should be fine-tuned, it is still improbable that
this universe should be fine-tuned. Name our universe alpha: the odds that alpha should be
fine-tuned are exceedingly, astronomically low, even if it's likely that some universe or other is
fine-tuned.

What is Dawkins' reply? He appeals to "the anthropic principle," the thought that the only sort
of universe in which we could be discussing this question is one which is fine-tuned for life:

the anthropic answer, in its most general form, is that we could only be discussing the question in the kind of universe that was capable of producing us. Our existence therefore determines that the fundamental constants of physics had to
be in their respective Goldilocks [life-friendly] zones.

Well, of course our universe would have to be fine-tuned, given that we live in it. But how does
that so much as begin to explain why it is that alpha is fine-tuned? One can't explain this by
pointing out that we are indeed here—anymore than I can "explain" the fact that God decided
to create me (instead of passing me over in favor of someone else) by pointing out that if God
had not thus decided, I wouldn't be here to raise that question. It still seems striking that
these constants should have just the values they do have; it is still monumentally improbable,
given chance, that they should have just those values; and it is still much less improbable that
they should have those values, if there is a God who wanted a life-friendly universe.

One more example of Dawkinsian thought. In The Blind Watchmaker, he considers the claim
that since the self-replicating machinery of life is required for natural selection to work, God
must have jumpstarted the whole evolutionary process by specially creating life in the first
place—by specially creating the original replicating machinery of DNA and protein that makes
natural selection possible. Dawkins retorts as follows:

This is a transparently feeble argument, indeed it is obviously self-defeating. Organized complexity is the thing that we are having difficulty in explaining. Once
we are allowed simply to postulate organized complexity, if only the organized
complexity of the DNA/protein replicating machine, it is relatively easy to invoke it
as a generator of yet more organized complexity... . But of course any God capable
of intelligently designing something as complex as the DNA/protein machine must
have been at least as complex and organized as that machine itself... . To explain
the origin of the DNA/protein machine by invoking a supernatural Designer is to
explain precisely nothing, for it leaves unexplained the origin of the Designer.

In Darwin's Dangerous Idea, Daniel Dennett approvingly quotes this passage from Dawkins
and declares it an "unrebuttable refutation, as devastating today as when Philo used it to
trounce Cleanthes in Hume's Dialogues two centuries earlier." Now here in The God Delusion
Dawkins approvingly quotes Dennett approvingly quoting Dawkins, and adds that Dennett
(i.e., Dawkins) is entirely correct.

Here there is much to say, but I'll say only a bit of it. First, suppose we land on an alien planet
orbiting a distant star and discover machine-like objects that look and work just like tractors;
our leader says "there must be intelligent beings on this planet who built those tractors." A
first-year philosophy student on our expedition objects: "Hey, hold on a minute! You have
explained nothing at all! Any intelligent life that designed those tractors would have to be at least as complex as they are." No doubt we’d tell him that a little learning is a dangerous thing and advise him to take the next rocket ship home and enroll in another philosophy course or two. For of course it is perfectly sensible, in that context, to explain the existence of those tractors in terms of intelligent life, even though (as we can concede for the moment) that intelligent life would have to be at least as complex as the tractors. The point is we aren't trying to give an ultimate explanation of organized complexity, and we aren't trying to explain organized complexity in general; we are only trying to explain one particular manifestation of it (those tractors). And (unless you are trying to give an ultimate explanation of organized complexity) it is perfectly proper to explain one manifestation of organized complexity in terms of another. Similarly, in invoking God as the original creator of life, we aren't trying to explain organized complexity in general, but only a particular kind of it, i.e., terrestrial life. So even if (contrary to fact, as I see it) God himself displays organized complexity, we would be perfectly sensible in explaining the existence of terrestrial life in terms of divine activity.

A second point: Dawkins (and again Dennett echoes him) argues that "the main thing we want to explain" is "organized complexity." He goes on to say that "The one thing that makes evolution such a neat theory is that it explains how organized complexity can arise out of primeval simplicity," and he faults theism for being unable to explain organized complexity. Now mind would be an outstanding example of organized complexity, according to Dawkins, and of course (unlike with organized complexity) it is uncontroversial that God is a being who thinks and knows; so suppose we take Dawkins to be complaining that theism doesn't offer an explanation of mind. It is obvious that theists won't be able to give an ultimate explanation of mind, because, naturally enough, there isn't any explanation of the existence of God. Still, how is that a point against theism? Explanations come to an end; for theism they come to an end in God. Of course the same goes for any other view; on any view explanations come to an end. The materialist or physicalist, for example, doesn't have an explanation for the existence of elementary particles: they just are. So to claim that what we want or what we need is an ultimate explanation of mind is, once more, just to beg the question against theism; the theist neither wants nor needs an ultimate explanation of personhood, or thinking, or mind.

Toward the end of the book, Dawkins endorses a certain limited skepticism. Since we have been cobbled together by (unguided) evolution, it is unlikely, he thinks, that our view of the world is overall accurate; natural selection is interested in adaptive behavior, not in true belief. But Dawkins fails to plumb the real depths of the skeptical implications of the view that we have come to be by way of unguided evolution. We can see this as follows. Like most naturalists, Dawkins is a materialist about human beings: human persons are material objects; they are not immaterial selves or souls or substances joined to a body, and they don't contain any immaterial substance as a part. From this point of view, our beliefs would be dependent on neurophysiology, and (no doubt) a belief would just be a neurological structure of some complex kind. Now the neurophysiology on which our beliefs depend will doubtless be adaptive; but why think for a moment that the beliefs dependent on or caused by that neurophysiology will be mostly true? Why think our cognitive faculties are reliable?

From a theistic point of view, we'd expect that our cognitive faculties would be (for the most part, and given certain qualifications and caveats) reliable. God has created us in his image, and an important part of our image bearing is our resembling him in being able to form true beliefs and achieve knowledge. But from a naturalist point of view the thought that our cognitive faculties are reliable (produce a preponderance of true beliefs) would be at best a naïve hope. The naturalist can be reasonably sure that the neurophysiology underlying belief formation is adaptive, but nothing follows about the truth of the beliefs depending on that neurophysiology. In fact he'd have to hold that it is unlikely, given unguided evolution, that our cognitive faculties are reliable. It's as likely, given unguided evolution, that we live in a sort of dream world as that we actually know something about ourselves and our world.

If this is so, the naturalist has a defeater for the natural assumption that his cognitive faculties are reliable—a reason for rejecting that belief, for no longer holding it. (Example of a defeater: suppose someone once told me that you were born in Michigan and I believed her; but now I
ask you, and you tell me you were born in Brazil. That gives me a defeater for my belief that you were born in Michigan.) And if he has a defeater for that belief, he also has a defeater for any belief that is a product of his cognitive faculties. But of course that would be all of his beliefs—including naturalism itself. So the naturalist has a defeater for naturalism; naturalism, therefore, is self-defeating and cannot be rationally believed.

The real problem here, obviously, is Dawkins' naturalism, his belief that there is no such person as God or anyone like God. That is because naturalism implies that evolution is unguided. So a broader conclusion is that one can't rationally accept both naturalism and evolution; naturalism, therefore, is in conflict with a premier doctrine of contemporary science. People like Dawkins hold that there is a conflict between science and religion because they think there is a conflict between evolution and theism; the truth of the matter, however, is that the conflict is between science and naturalism, not between science and belief in God.

The God Delusion is full of bluster and bombast, but it really doesn't give even the slightest reason for thinking belief in God mistaken, let alone a "delusion."

The naturalism that Dawkins embraces, furthermore, in addition to its intrinsic unloveliness and its dispiriting conclusions about human beings and their place in the universe, is in deep self-referential trouble. There is no reason to believe it; and there is excellent reason to reject it.

Alvin Plantinga is John A. O'Brien Professor of Philosophy at the University of Notre Dame.

1. A third book along these lines, The End of Faith, has recently been written by Sam Harris, and more recently still a sequel, Letter to a Christian Nation, so perhaps we should speak of the touchdown triplets—or, given that Harris is very much the junior partner in this enterprise (he's a grad student) maybe the "Three Bears of Atheism"?

2. Although Dawkins does bring up (p. 54), apparently approvingly, the argument that God can't be both omniscient and omnipotent: if he is omniscient, then he can't change his mind, in which case there is something he can't do, so that he isn't omnipotent(!).


4. The distinguished Oxford philosopher (Dawkins calls him a theologian) Richard Swinburne has proposed some sophisticated arguments for the claim that God is simple. Dawkins mentions Swinburne's argument, but doesn't deign to come to grips with it; instead he resorts to ridicule (pp. 110-111).

5. What about the Trinity? Just how we are to think of the Trinity is of course not wholly clear; it is clear, however, that it is false that in addition to each of the three persons of the Trinity, there is also another being of which each of those persons is a part.


