

Gravity or God?

by S. C. Lazar

EXPLAINING DESIGN AWAY

In 2010, Stephen Hawking, the famed Cambridge physicist and cultural icon, published a book (co-authored with Leonard Mlodinow) entitled *The Grand Design*, in which he purported to explain the origin of the universe without reference to God. He claims, in short, that the universe created itself. In reply, John C. Lennox, professor of Mathematics at Oxford, and lecturer at the Oxford Center for Christian Apologetics, has written *God and Stephen Hawking: Whose Design Is It Anyway?* With doctoral degrees from Cambridge, Oxford, and Wales, Lennox has proven to be an able apologist against the so-called “New Atheists,” and this book is no exception.

EXPERTS DON'T ALWAYS KNOW WHAT THEY'RE TALKING ABOUT

In *God and Stephen Hawking*, Lennox begins by warning his readers to always distinguish between a scientist's professional findings, and the amateurish philosophical pronouncements they sometimes make under the guise of scientific authority (Hawking's book being a vivid example of the latter). And so, Lennox does not take issue with Hawking's science *per se*, so much as the philosophical conclusions he erroneously deduces from it. A prime example of this is Hawking's astounding claim that philosophy is “dead.” This is what Hawking wrote:

Traditionally these are questions for philosophy, but philosophy is dead. It has not kept up with modern developments in science, particularly in physics. As a result scientists have become the bearers of the torch of discovery in our quest for knowledge (p. 18).

This pronouncement of philosophy's demise is astounding if only because Hawking seems blissfully unaware that he is thereby *making a philosophical claim!* It is, as Lennox writes, “a classic example of logical incoherence” (p. 18).

For any scientist, let alone a science superstar, to disparage philosophy on the one hand, and then at once to adopt a self-contradictory philosophical stance on the other, is not the wisest thing to do—especially at the beginning of a book that is designed to be convincing (p. 19).

And so on it goes through the rest of Lennox's critique. He repeatedly takes Hawking to task for making philosophically dubious claims. Of particular interest are the criticisms Lennox presents in the second and third chapters, which address the explanatory limits of physical laws, and the existence of a ‘multiverse’.

GRAVITY DOESN'T CREATE ANYTHING

In chapter 2, Lennox exposes the logical errors that underlie, and ultimately undercut, Hawking's atheistic conclusion.

The major thrust of Hawking's argument is this: "Because there is a law of gravity, the universe can and will create itself out of nothing" (p. 29). Gravity makes it unnecessary to postulate God's existence as the ultimate cause of the universe.

But Lennox points out that this conclusion involves several logical problems. Contrary to his claim to explain the existence of the universe "out of nothing", Hawking seems to assume the existence of a great many things, including (i) the law of gravity, (ii) gravity itself, and (iii) the universe (!), thereby invoking as explanatory causes *the very things that demand explanation*. As Lennox summarizes the problems:

He [Hawking] says the universe comes from a nothing that turns out to be a something (self-contradiction number one), and then he says the universe creates itself (self-contradiction number two). But that is not all. His notion that a law of nature (gravity) explains the existence of the universe is also self-contradictory, since a law of nature, by definition, surely depends for its own existence on the prior existence of the nature it purports to describe (p. 31).

LAWS ARE NOT AGENTS

The mistake of appealing to *laws* to explain the existence of *things* is further compounded by Hawking's ensuing claim that theoretical physics, and M-theory in particular, actually predicts that laws will bring things into existence out of nothing:

M-theory predicts that a great many universes were created out of nothing. Their creation does not require the intervention of some supernatural being or god. Rather, these multiple universes arise naturally from physical law (p. 36).

But as Lennox replies, Hawking's appeal to the causal power of laws involves the category mistake of confusing two different kinds of entities: laws and personal agents. While laws may *describe* natural phenomena, *they do not bring them into existence*. Laws as such are without causal powers (p. 41).

For example, physical laws may explain how a jet engine *functions*, but they cannot *create* a jet engine. That requires personal agency, a *someone* to bring the *something* into existence. Understanding physical laws may illuminate how the universe functions, but they do not explain where it came from.

UNIVERSALLY DESPERATE

In chapter 3, Lennox continues the discussion by addressing Hawking's appeal to 'multiverse' theory. In recent years, physicists have increasingly come to marvel at how the life-sustaining nature of our universe depends on certain physical constants which, if only slightly altered, would make life impossible. The precision with which the constants are set have led Christians to point to such "fine-tuning" as evidence of design, implying the existence of a Designer. In reply, atheists have sought to explain away such fine-tuning by invoking the existence of a 'multiverse'.

The basic idea is this: while one finely-tuned universe is extremely unlikely, it is not as unlikely given an infinite number of alternative universes.

Consider an analogy. If you flipped a coin only once, it would be highly unlikely for it to land on its edge, rather than on either face. But if you flipped it a trillion times, chances are it would land on its edge at least once. Similarly, however

unlikely a single life-bearing universe may be, if there are an infinite number of universes, it is not unlikely at all. In fact, given an infinite number of universes, one would *expect* one or more to be life-sustaining. Hence, a multiverse explains fine-tuning without the need for a Creator. Or does it?

In reply, Lennox suggests the multiverse hypothesis is not only dubious science, but more importantly, it only succeeds at pushing the question of origins back by one step. Rather than ask where this universe came from, proponents of the multiverse must now endeavor to explain where the multiverse came from. After all, physical laws are no more capable of creating a multiverse than they are a universe.

SUMMARY

Lennox addresses a number of other issues, ranging from the inadequacy of Hawking's concept of God, to the perils of anti-realism in science, and includes defenses of the existence of miracles and the resurrection of Jesus Christ. The book is easily read in one sitting, and despite its brevity, does a fine job of answering Hawking's claims. *God and Stephen Hawking* can be recommended to anyone interested in the scientific evidence for the existence of God, the rationality of Christian belief, and the ongoing apologetic dialogue with the 'New Atheists.'

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