# WHY DOES THE WORLD EXIST?

An Existential Detective Story

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### Prologue

# A Quick Proof That There Must Be Something Rather Than Nothing, for Modern People Who Lead Busy Lives

Suppose there were nothing. Then there would be no laws; for laws, after all, are something. If there were no laws, then everything would be permitted. If everything were permitted, then nothing would be forbidden. So if there were nothing, nothing would be forbidden. Thus nothing is self-forbidding.

Therefore, there must be something. QED.

## CONFRONTING THE MYSTERY

And this grey spirit, yearning in desire
To follow knowledge like a sinking star
Beyond the utmost bound of human thought.

-Alfred, Lord Tennyson, "Ulysses"

I would earnestly warn you against trying to find out the reason for and explanation of everything. . . . To try and find out the reason for everything is very dangerous and leads to nothing but disappointment and dissatisfaction, unsettling your mind and in the end making you miserable.

—QUEEN VICTORIA, in a letter to her granddaughter Princess Victoria of Hesse, 22 August 1883

... well who was the first person in the universe before there was anybody that made it all who ah that they dont know neither do I ...

—MOLLY'S SOLILOQUY, *in James Joyce's* Ulysses

vividly remember when the mystery of existence first swam into my ken. It was in the early 1970s. I was a callow and would-be rebellious high-school student in rural Virginia. As callow and would-be rebellious high-school students sometimes do, I had begun to develop an interest in existentialism, a philosophy that seemed to hold out hope for resolving my adolescent insecurities, or at least elevating them to a grander plain. One day I went to the local college library and checked out some impressive-looking tomes: Sartre's *Being and Nothingness* and

Heidegger's *Introduction to Metaphysics*. It was in the opening pages of the latter book, with its promising title, that I was first confronted by the question *Why is there something rather than nothing at all?* I can still recall being bowled over by its starkness, its purity, its sheer power. Here was the super-ultimate *why* question, the one that loomed behind all the others that mankind had ever asked. Where, I wondered, had it been all my (admittedly brief) intellectual life?

It has been said that the question Why is there something rather than nothing? is so profound that it would occur only to a metaphysician, yet so simple that it would occur only to a child. I was too young then to be a metaphysician. But why had I missed the question as a child? In retrospect, the answer was obvious. My natural metaphysical curiosity had been stifled by my religious upbringing. From my earliest childhood I had been told—by my mother and father, by the nuns who taught me in elementary school, by the Franciscan monks at the monastery over the hill from where we lived-that God created the world, and that He created it out of nothing at all. That's why the world existed. That's why I existed. As to why God himself existed, this was left a little vague. Unlike the finite world that He freely created, God was eternal. He was also all-powerful and possessed of every other perfection to an infinite degree. So perhaps He didn't need an explanation for his own existence. Being omnipotent, He might have bootstrapped Himself into existence. He was, to use the Latin phrase, causa sui.

This was the story that was imparted to me as a child. It is a story still believed by the vast majority of Americans. For these believers, there is no such thing as the "mystery of existence." If you ask them why the universe exists, they'll say it exists because God made it. If you then ask them why God exists, the answer you get will depend on how theologically sophisticated they are. They might say that God is self-caused, that He is the ground of His own being, that His existence is contained in His very essence. Or they might tell you that people who ask such impious questions will burn in hell.

But suppose you ask nonbelievers to explain why there is a world rather than nothing at all. Chances are, they will not give you a very satisfying answer. In the current "God Wars," those who defend religious belief are wont to use the mystery of existence as a cudgel to beat their neo-atheist opponents with. Richard Dawkins, the evolutionary biologist and professional atheist, is weary of hearing about this supposed mystery. "Time and again," Dawkins says, "my theologian friends return to the point that there had to be a reason why there is something rather than nothing." Christopher Hitchens, another tireless proselytizer for atheism, is often confronted by his opponents with the same question. "If you don't accept that there's a God, how can you explain why the world exists at all?" one slightly thuggish right-wing TV host asked Hitchens, with a note of triumph in his voice. Another such host, this one of the leggy blonde variety, echoed the same religious talking point. "Where did the universe come from?" she demanded of Hitchens. "The idea that this all came out of nothing—that seems to defy logic and reason. What came before the Big Bang?" To which Hitchens replied, "I'd love to know what came before the Big Bang."

What options do you have for resolving the mystery of existence once you let go of the God hypothesis? Well, you might expect that science will someday explain not only how the world is, but *why* is it. This, at least, is the hope of Dawkins, who looks to theoretical physics for an answer. "Maybe the 'inflation' that physicists postulate as occupying some fraction of the first yoctosecond of the universe's existence will turn out, when it is better understood, to be a cosmological crane to stand alongside Darwin's biological one," Dawkins has written.

Stephen Hawking, who is actually a practicing cosmologist, takes a different approach. Hawking came up with a theoretical model in which the universe, though finite in time, is completely self-contained, without beginning or end. In this "no-boundary" model, he argued, there is no need for a creator, divine or otherwise. Yet even Hawking doubts that his set of equations can yield a complete resolution to the mystery of existence. "What is it that breathes fire into the equations and makes a universe for them to describe?" he plaintively asks. "Why does the universe go through all the bother of existing?"

The problem with the science option would seem to be this. The universe

comprises everything that physically exists. A scientific explanation must involve some sort of physical cause. But any physical cause is by definition part of the universe to be explained. Thus any purely scientific explanation of the existence of the universe is doomed to be circular. Even if it starts from something very minimal—a cosmic egg, a tiny bit of quantum vacuum, a singularity—it still starts with *something*, not *nothing*. Science may be able to trace how the current universe evolved from an earlier state of physical reality, even following the process back as far as the Big Bang. But ultimately science hits a wall. It can't account for the origin of the primal physical state out of nothing. That, at least, is what diehard defenders of the God hypothesis insist.

Historically, when science has seemed incapable of explaining some natural phenomenon, religious believers have been quick to invoke a Divine Artificer to fill the gap—only to be embarrassed when science finally succeeds in filling it after all. Newton, for example, thought that God was needed to make little adjustments from time to time in the orbits of the planets to keep them from colliding. But a century later, Laplace proved that physics was quite capable of accounting for the stability of the solar system. (When Napoléon asked Laplace where God was in his celestial scheme, Laplace famously replied, "Je n'avais pas besoin de cette hypothèse.") More recently, religious believers have maintained that blind natural selection alone cannot explain the emergence of complex organisms, so God must be "guiding" the evolutionary process—a contention decisively (and gleefully) refuted by Dawkins and other Darwinians.

Such "God of the gaps" arguments, when they concern the minutiae of biology or astrophysics, tend to blow up in the faces of the religious believers who deploy them. But those believers feel themselves to be on safer ground with the question *Why is there something rather than nothing?* "No scientific theory, it seems, can bridge the gulf between absolute nothingness and a full-fledged universe," the scientifically inclined religious apologist Roy Abraham Varghese has written. "This ultimate origin question is a metascientific question—one which science can ask but not answer." The distinguished Harvard University astronomer (and devout Mennonite) Owen Gingerich agrees. In a lecture titled "God's Universe," delivered at

Harvard's Memorial Church in 2005, Gingerich pronounced the ultimate *why* question to be a "teleological" one—"not for science to grapple with."

Faced with this line of argument, the atheist typically shrugs his shoulders and says the world "just is." Perhaps it exists because it's always existed. Or perhaps it popped into being with no cause at all. In either case, its existence is just a "brute fact."

The brute-fact view denies that the universe as a whole requires any explanation for its existence. It thus avoids the need to posit some sort of transcendental reality, like God, to answer the question Why is there something rather than nothing? Yet, intellectually, this feels like throwing in the towel. It's one thing to reconcile yourself to a universe with no purpose and no meaning—we've all done that on a dark night of the soul. But a universe without an explanation? That seems an absurdity too far, at least to a reason-seeking species like ourselves. Whether we realize it or not, we instinctively hew to what the seventeenth-century philosopher Leibniz called the Principle of Sufficient Reason. This principle says, in effect, that explanation goes all the way up and all the way down. For every truth, there must be a reason why it is so and not otherwise; and for every thing, there must be a reason for that thing's existence. Leibniz's principle has been mocked by some as a mere "metaphysician's demand." But it is a bedrock principle of science, where it has been notably successful—so successful, indeed, that one might say it is true on pragmatic grounds: it works. The principle seems to inhere in reason itself, since any attempt to argue for or against it already presupposes its validity. And if the Principle of Sufficient Reason is valid, there must be an explanation for the existence of the world, whether we can find it or not.

A world that existed for no reason at all—an irrational, accidental, "just there" world—would be an unnerving one to live in. So, at least, claimed the American philosopher Arthur Lovejoy. In one of his 1933 lectures at Harvard on the "Great Chain of Being," Lovejoy declared that such a world "would have no stability or trustworthiness; uncertainty would infect the whole; anything (except, perhaps, the self-contradictory) might exist and anything might happen, and no one thing would be in itself even more probable than any other."