# Introduction

In 1715 Isaac Watts wrote a Christian hymn beginning with this stanza:

I sing the mighty power of God That made the mountains rise That spread the flowing seas abroad And built the lofty skies. I sing the wisdom that ordained The sun to rule the day; The moon shines full at his command And all the stars obey.

In 1975 Kenneth Boulding offered a new version:

What though the mountains are pushed up By plate-tectonic lift, And oceans lie within the cup Made by the landmass drift. The skies are but earth's airy skin Rotation makes the day; Sun, moon, and planets are akin And Kepler's Laws obey.<sup>1</sup>

Boulding does not say whether the sentiments expressed in his update are really his own, but his rendition expresses succinctly the

Kenneth Boulding, "Toward an Evolutionary Theology," in *The Spirit of the Earth: a Teilhard Centennial Celebration*, edited by Jerome Perlinski (New York: The Seabury Press, 1981), pp. 112–13.

worldview known as "scientific naturalism." This is the belief that nature is all there is and that science alone can make sense of it. Some scientific naturalists are willing to keep singing the old hymns. Even though the lyrics no longer ring true, they still warm the heart. Others, however, insist that it is time to stop singing them altogether. There can be no harmonizing of Watts' stanza with Boulding's. Nature is enough.

Is it time then to resign ourselves to this claim? In the following pages I intend to argue that there is no good reason to do so and that in fact the belief that nature is all there is cannot be justified experientially, logically or scientifically. In developing my response I shall be addressing fundamental issues in the dialogue of science with religion. Although this conversation has many facets, two large questions stand out: is nature all there is? And is there any point to the universe? I have addressed the second question often in previous writings, but until now I have not focused a book-length treatment on the first.

The belief that nature is all there is, and that no overall purpose exists in the universe, is known broadly as *naturalism*. Naturalism, at least as I shall be using the term, denies the existence of any realities distinct from the natural world, an unimaginably immense and resourceful realm of being that includes humans and their cultural creations. Naturalism either suspends or rejects belief in God and most other religious teachings. Hence it should be a topic of great concern to anyone who cherishes religions and the "wisdom of the ages." Since the rise of science has had so much to do with naturalism's intellectual acceptance today, the focus of these pages will be on *scientific* naturalism and the way in which some of its most ardent defenders are now seeking to put a distance between contemporary thought and humanity's religious traditions.

There are several ways of thinking that "nature is all there is," including classic forms of pantheism, but our focus here will be on science-inspired naturalism. Because of the growing academic sponsorship of this belief system, it is important that reasonable, Cambridge University Press 0521609933 - Is Nature Enough? Meaning and Truth in the Age of Science John F. Haught Excerpt <u>More information</u>

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scientifically informed, alternatives to naturalism and its burgeoning influence now become more visible. This book attempts to provide such an alternative. However, my approach will not be to mount an attack on science itself. Numerous books and articles expressing opposition to naturalism end up rejecting good science in the process. Some authors, for example, try to rout naturalism by throwing away conventionally accepted biological and paleontological information in their zeal to repudiate evolutionary materialism. Even a religious scholar as accomplished as Huston Smith weakens his case against naturalism when his anti-Darwinist polemic needlessly discards carefully gathered biological information.<sup>2</sup> Understandably, good scientists and other informed readers dismiss such criticism as not deserving a second look.

I believe there is an urgent need today for sensible alternatives to naturalistic belief, but they will never be effective as long as they edit defensively whatever seems *prima facie* religiously or theologically offensive in the accumulating mound of scientific information. In this book I shall lay out what I consider to be a reasonable, scientifically informed alternative to naturalism. It may seem that the two stanzas quoted above are contradictory, but I will try to show how they can be smoothly mapped onto each other without straining either science or religion. My approach will be to embrace the results of scientific research while simultaneously raising questions about scientific naturalism. I do so with the deepest respect for the body of established scientific knowledge as well as religious affirmations of ultimate meaning.

Huston Smith, Why Religion Matters: the Fate of Human Spirit in an Age of Disbelief (New York: HarperCollins, 2001), pp. 75–78, 103–12, 178–82.

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## I Is nature enough?

At the beginning of his popular *Cosmos* television series scientist and author Carl Sagan declared that "the universe is all that is, all there ever was and all there ever will be."<sup>1</sup> Sagan was a proponent of *naturalism*, the belief that nothing exists beyond the world available to our senses. There is no God, and hence no creative source of the world's existence other than nature itself. Nature, a term derived from the Latin word "to give birth," is self-generating. Nature is quite enough all by itself, and religions professing belief in God or gods are fictitious distractions at best.

To its adherents naturalism is not only intellectually satisfying but also emotionally liberating. It is a breath of fresh air in a world made stale by the obsessive recitations of religion. Naturalism boldly turns our attention toward the immensities of this world even as it embeds us within the cosmic processes that gave birth to life. It rescues adventurous souls from what they take to be the backwardness, irrelevance and oppressiveness of traditional forms of spirituality. Naturalism also has the advantage – or so it would seem – of being completely reconcilable with science.

Naturalism comes in many flavors, but the focus here will be on the specific variety known as scientific naturalism. Scientific naturalism assumes not only that nature is all there is but also that science is the only reliable way to understand it. This latter belief is commonly called "scientism." Scientism, the epistemic soul of scientific naturalism, claims that the experimental method that came to

Carl Sagan, *Cosmos* (New York: Ballantine Books, 1985), p. 1. An earlier version of my reflections on Sagan's claim appears in "Is Nature Enough? No," *Zygon: Journal of Science and Religion* 38 (December, 2003), 769–82.

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prominence in the modern period is sufficient to tell us everything factual about the universe. It is convinced that all religious visions of nature and humanity are now superseded by a superior way of understanding. Scientism does not always insist that science will answer every important question, but that it has a better chance of doing so than religion ever will. According to Richard Dawkins, one of the world's most noteworthy scientific naturalists, "it may be that humanity will never reach the quietus of complete understanding, but if we do, I venture the confident prediction that it will be science, not religion, that brings us there. And if that sounds like scientism, so much the better for scientism."<sup>2</sup>

The label "scientific naturalism" is apparently the invention of Charles Darwin's famous advocate Thomas H. Huxley (1825-95).<sup>3</sup> Although for Huxley scientific naturalism may have been more a method of inquiry than a worldview, this restraint is no longer always present. Today the term "naturalism" refers generally to a worldview that questions the existence of anything in principle inaccessible to ordinary experience or science. In fact, many scientific naturalists are now avowed atheists, although some, like Huxley, prefer to be called agnostics. Scientific naturalists, in any case, question whether complete understanding of the world requires reference to a creator or divine action. It seems more likely to them that nature is its own originator and that natural process is the sole author of life and mind as well. Life appeared by accident, as a purely physical occurrence, and then evolution took over. Random genetic changes, natural selection and an enormous amount of time have been enough to cook up all the diversity and complexity of life, including beings endowed

<sup>&</sup>lt;sup>2</sup> Richard Dawkins, "The Science of Religion and the Religion of Science," Tanner Lecture on Human Values at Harvard University (November 20, 2003). Cited on the Science and Theology website: http://www.stnews.org/archives/2004\_february/ web\_x\_richard.html.

<sup>&</sup>lt;sup>3</sup> Ronald Numbers, "Science without God: Natural Laws and Christian Belief," in When Science and Christianity Meet, edited by David C. Lindberg and Ronald Numbers (Chicago: University of Chicago Press, 2003), p. 266.

with minds. Why then would reasonable people want to look beyond nature, or resort to theology, in order to understand things and events?

Richard Dawkins, going far beyond Huxley in the defense of naturalism, argues that deep cosmic time and blind evolutionary mechanisms are enough to explain life in all its complexity. In Climbing Mount Improbable the renowned evolutionist cleverly pictures life on earth as having made its way up a figurative mountain of time. On one side the mountain rises straight up from the plain below, while on the other it slopes gently from bottom to top. It is up the sloped side that life has made its long evolutionary ascent. If life had available to it only a biblical time-slot of several thousand years to mount the vertical side, a miraculous boost would have been needed to produce anything as complex as the eye or human brain so quickly. Natural explanations therefore would not be enough. But if the story of life in fact takes place very gradually, on a path moving back and forth up the gentler slope incrementally over a period of four billion years, then no supernatural assistance is required. Minute changes, together with the relentless weeding out of nonadaptive variations by natural selection in the course of *deep time*, are enough to account for the extraordinary variety and complexity of life. Nature, it would appear, is quite enough.<sup>4</sup>

The present book will be examining the claim that nature is all there is and that science is sufficient to understand it. It will be asking especially whether scientific naturalism is rationally coherent. I want to emphasize, however, that scientific naturalism is not by any means the same thing as science. Science is a fruitful but self-limiting way of learning some things about the world, whereas scientific naturalism is a worldview that goes far beyond verifiable knowledge by insisting on the explanatory adequacy of scientific method. Most reflective scientific naturalists will concede

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Richard Dawkins, *Climbing Mount Improbable* (New York: W. W. Norton & Co., 1996), pp. 3–37.

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that they are indeed advocating a certain kind of belief, but they would add that their understanding of the world is still much more reasonable and fertile than any others. Indeed, for many inquirers today, scientific naturalism is the undebatable starting point for all reliable knowledge of anything whatsoever.

But does scientific naturalism hold up under careful scrutiny? I shall not be challenging science itself as a *method* of investigating the universe. As far as science itself is concerned, nature is indeed all there is. I agree with scientific naturalists that one should never introduce ideas about God, "intelligent design" or divine action into scientific work itself. As a theologian, I am happy to accept methodological naturalism as the way science works. But suppose there are dimensions of reality that science cannot reach. If there are, then scientific naturalism – the belief that scientifically knowable nature alone is real – is unreasonable since it arbitrarily cuts off access to any such precincts. And if scientific naturalism turns out to be at bottom an irrational set of beliefs, then the universe available to science may not be "all that is, all there ever was, or all there ever will be."

In addition to science there are other reliable ways of putting our minds, and hearts too, in touch with the real world. There may even be deep layers of the real world that we can see or encounter only by cultivating modes of exploration and cognitional habits that are not opposed to science but that are not themselves part of science. Is it possible that religion, even with all its perplexity and failings, still provides at least a dimly lit passage into depths of reality unapproachable by science?

#### IS NATURALISM SPIRITUALLY ADEQUATE?

There are, as I have noted, different kinds of naturalism. For example, one may distinguish between hard naturalism and soft naturalism.<sup>5</sup> Hard naturalism is roughly equivalent to scientific materialism. It

Holmes Rolston, III, Science and Religion: a Critical Survey (New York: Random House), pp. 247–58.

rules out the existence of anything nonphysical. Soft naturalism, on the other hand, allows that there may be aspects of the real world that hard naturalism leaves out. It proposes that nature consists of complex systems and organic wholes that cannot be accounted for exclusively in terms of their physical antecedents or atomic components. It suggests that "emergent" rules come into play spontaneously as the universe evolves in complexity. Yet these new ordering principles are in no way mystical or in need of theological explanation. They are simply phases of natural process.

A few soft naturalists like to be called *religious* naturalists. Religious naturalists do not believe that anything exists beyond the world of nature, but they often use religious terminology – words such as mystery and sacred – to express their sense that nature by itself is deserving of a reverential surrender of the mind.<sup>6</sup> Still, even to religious naturalists nature is all that exists. In philosophical discourse today the term "naturalism" generally signifies a godless view of the universe. For example, when the philosopher Owen Flanagan states that the mission of contemporary philosophy is to make the world safe for "naturalism," he clearly means safe for atheism.<sup>7</sup> More often than not the term "naturalism" entails the explicit rejection of the personal God of Judaism, Christianity and Islam. It means the denial of any sacred principle of being that is distinct from nature itself.<sup>8</sup>

There are still other ways of understanding naturalism, but most of them adhere minimally to the following core teachings:<sup>9</sup>

<sup>&</sup>lt;sup>6</sup> Ursula Goodenough, The Sacred Depths of Nature (New York: Oxford University Press, 1998); Chet Raymo, Skeptics and True Believers: the Exhilarating Connection between Science and Religion (New York: Walker and Company, 1998). There are also soft forms of naturalism that seek an alliance with theistic religion. See, for example, David R. Griffin, Reenchantment without Supernaturalism: a Process Philosophy of Religion (Ithaca, N.Y.: Cornell University Press, 2001).

<sup>&</sup>lt;sup>7</sup> Owen Flanagan, The Problem of the Soul: Two Visions of Mind and How to Reconcile Them (New York: Basic Books, 2002), pp. 167–68.

<sup>&</sup>lt;sup>8</sup> This is the sense in which C. S. Lewis, for instance, understands naturalism in his passionate critique of it in *Miracles* (San Francisco: HarperSanFrancisco, 2001).

<sup>&</sup>lt;sup>9</sup> This is an adaptation and expansion of Charley Hardwick's understanding of naturalism in *Events of Grace: Naturalism, Existentialism, and Theology* (Cambridge: Cambridge University Press, 1996).

- 1. Outside nature, which includes humans and their cultural creations, there is nothing.
- 2. It follows from #1 that nature is self-originating.
- 3. Since there is nothing beyond nature, there can be no overarching purpose or transcendent goal that would give any lasting meaning to the universe.
- 4. There is no such thing as the "soul," and no reasonable prospect of conscious human survival beyond death.
- 5. The emergence of life and mind in evolution was accidental and unintended.

What I am calling "scientific naturalism" accepts these five tenets, but adds two more:

- 6. Every natural event is itself the product of other natural events. Since there is no divine cause, all causes must be purely natural causes, in principle accessible to scientific comprehension.
- 7. All the various features of living beings, including humans, can be explained ultimately in evolutionary, specifically Darwinian, terms. I shall often refer to this belief as "evolutionary naturalism."

From now on I shall use the labels "naturalism" and "scientific naturalism" interchangeably unless otherwise indicated.

As I said earlier, I want to ask whether naturalism is a reasonable set of beliefs. Before beginning my reply to this question, however, I need to raise another. It concerns naturalism's *spiritual* adequacy. Can naturalism respond fully, in other words, to the human quest for meaning? Not all naturalists would consider this to be a relevant question, but it needs to be asked since they themselves sometimes claim that nature is quite enough to give our lives meaning as well as intellectual satisfaction.<sup>10</sup> Consort with nature, they insist, is *spiritually* adequate for humans. Some of the most

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See, for example, Flanagan, The Problem of the Soul and Goodenough, The Sacred Depths of Nature.

entrenched naturalists now admit that we humans possess ineradicably spiritual instincts as part of our genetic endowment. That is, we are meaning-seeking beings designed by evolution to seek communion with what is larger than ourselves. Our spiritual instincts need to be satisfied, and that is why our species has been so stubbornly religious, perhaps from the very beginning of the human journey on earth. So why cannot naturalism, a full-fledged belief system of its own, satisfy our native religious cravings for fulfillment? Is not nature itself resourceful enough to bring meaning, happiness and personal satisfaction to our brief life spans? Many naturalists, I have observed, are passionately religious, and their disillusionment with traditional creeds is often the expression of an abundance, not an absence, of spiritual longing.

Within the assembly of naturalists, however, some are sunny and optimistic - these are the religious naturalists - while others are more sober and pessimistic. Sunny naturalists hold that nature's overwhelming beauty, the excitement of human creativity, the struggle to achieve ethical goodness, the prospect of loving and being loved, the exhilaration of scientific discovery – these are enough to fill a person's life. There is simply no good reason to look beyond nature for spiritual contentment. Sober naturalists, on the other hand, are not so sanguine. They agree that nature is all there is, but for them nature is *not* resourceful enough to satisfy the voracious human hunger for meaning and happiness. In fact, they say, our species' religious appetites can never be satisfied since the finite universe is devoid of any discernible meaning, as cosmology and Darwinian science both now seem to confirm. If the universe is all there is, and if it is therefore devoid of purpose, then one must conclude that nature is not enough to fill our restless human hearts with the meaning we long for.

A literate representative of sober naturalism is the French writer Albert Camus. This famous novelist and philosopher freely acknowledges that humans have an insatiable appetite for ultimate meaning and eternal happiness. It would be dishonest, he says, to