

Does the universe have a purpose?

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JOHN TEMPLETON FOUNDATION

SUPPORTING SCIENCE ~ INVESTING IN THE BIG QUESTIONS

INTRODUCTION

The John Templeton Foundation serves as a philanthropic catalyst for research on what scientists and philosophers call the Big Questions. We support work at the world's top universities in such fields as theoretical physics, cosmology, evolutionary biology, cognitive science, and social science relating to love, forgiveness, creativity, purpose, and the nature and origin of religious belief. We encourage informed, open-minded dialogue between scientists and theologians as they apply themselves to the most profound issues in their particular disciplines. And, in a more practical vein, we seek to stimulate new thinking about wealth creation in the developing world, character education in schools and universities, and programs for cultivating the talents of gifted children.

This booklet neatly embodies our approach to the Big Questions: the contributors are scholars and thinkers of the first rank, they address a perennial and much-disputed subject, and they bring to bear—in civil, elegant prose—a range of different perspectives. By assembling this “conversation,” we intend to promote a dialogue that transcends familiar rhetoric and stock answers. We aim to turn discourse on the Big Questions in a more thoughtful, considered direction. It is our hope that this booklet will be a lasting resource for students, teachers, parents, scientists, clergy, and anyone else engaged with the great issues of human nature and purpose.

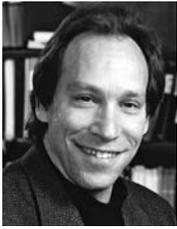
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Unlikely.

Perhaps you hoped for a stronger statement, one way or the other. But as a scientist I don't believe I can make one. While nothing in biology, chemistry, physics, geology, astronomy, or cosmology has ever provided direct evidence of purpose in nature, science can never unambiguously prove that there is no such purpose. As Carl Sagan said, in another context: Absence of evidence is not evidence of absence.

Of course, nothing would stop science from uncovering positive evidence of divine guidance and purpose if it were attainable. For example, tomorrow night if we look up at the stars and they have been rearranged into a pattern that reads, "I am here," I think even the most hard-nosed scientific skeptic would suspect something was up.

But no such unambiguous signs have been uncovered among the millions and millions of pieces of data we have gleaned about the natural world over centuries of exploration. And this is precisely why a scientist can conclude that it is very unlikely that there is any divine purpose. If a creator had such a purpose, she could choose to demonstrate it a little more clearly to the inhabitants of her creation.

One is always free, as some people do, to interpret the laws of nature as signs of purpose, as for example Pope Pius did when Belgian physicist-priest George Lemaitre demonstrated that Einstein's general theory of relativity implied the universe had a beginning. The Pope interpreted this as scientific proof of Genesis, but Lemaitre asked him to stop saying this. The big bang, as it has become known, can be interpreted in terms of a divine beginning, but it can equally be interpreted as removing God from the equation entirely. The conclusion is in the mind of the beholder, and it is outside of the realm of scientific theory and prediction.

Finally, even if the universe has a hidden purpose, everything we know about the cosmos suggests that we do not play a central role in it. We are, as a planet, cosmically insignificant. Life on Earth will end, as it has probably done on countless planets in the past, and will do in the future. And all the stars and all the galaxies we see could disappear in an instant and the universe would go on behaving more or less as it is doing right now. Nature seems as uncaring as it is unyielding.

Thus, organized religions, which put humanity at the center of some divine plan, seem to assault our dignity and intelligence. A universe without purpose should neither depress us nor suggest that our lives are purposeless. Through an awe-inspiring cosmic history we find ourselves on this remote planet in a remote corner of the universe, endowed with intelligence and self-awareness. We should not despair, but should humbly rejoice in making the most of these gifts, and celebrate our brief moment in the sun.



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Yes.

Consider this question: Do the Earth and mankind have a purpose? If so, then the universe does too, ipso facto. If not, the universe might still have (some other) purpose; but I don't have to face that contingency, because I believe we do have one. . .

Namely, to defeat and rise above our animal natures; to create goodness, beauty, and holiness where only physics and animal life once existed; to create what might be (if we succeed) the only tiny pinprick of goodness in the universe—which is otherwise (so far as we know) morally null and void. If no other such project exists anywhere in the cosmos, our victory would change the nature of the universe. If there are similar projects elsewhere, more power to them; but our own task remains unchanged.

But why rise above and not blend into nature? Equivalently, from a Western viewpoint: why did the Judeo-Christian tradition replace the pagan idea of gods made in man's image with a revolutionary inversion, man made in God's? Why should we be goaded not to be ourselves but to be better than ourselves?

Why seek goodness?

Because most humans desire good-ness. For most (not all!) humans, this urge is easily ignored in the short term, but nearly impossible to uproot over the long haul.

Males (and females) desire sex, too; but if a male had somehow grown up without seeing a woman, this desire would (probably) remain vague and unformed. Humans desire goodness; but until the Judeo-Christian revelation this desire was, at least for Western humanity, vague and unformed. Humans desire goodness; but until the Judeo-Christian revelation this desire was, at least for Western humanity, vague and unformed. For Western man, Judeo-Christian ethics felt right; felt obligatory; made some internal tuning fork hum. (By Judeo-Christian ethics I mean, basically, the Ten Commandments and the Holiness Code of Leviticus 19. Recall that, when he's called upon to summarize his message, Jesus quotes two verses from the Hebrew Bible.)

All urges are not created equal. Most humans need sex, but in rare cases don't, and others choose to suppress the urge. The goodness-and-sanctity urge is (likewise) absent in some, suppressed in others; subliminally present in most.

When we seek goodness and sanctity, we defy nature. The basic rule of Judeo-Christian ethics is, the strong must support the weak. The basic rule of nature is, the strong live and the weak die.

But if you do achieve your ultimate human purpose—to become good, to transcend your animal nature; to imitate God and thereby help transform God from an internal subjective idea to an external, objective fact—what have you achieved? Is there any hope of ultimate success? Of gathering together enough pinpricks of goodness to create a swell that will sweep suffering away and leave sanctity and joy (like glittering sea foam on the beach) behind? Of realizing God on earth?

Not necessarily.

In Genesis, God warns us not to eat from the Tree of the Knowledge of Good and Evil. The Talmud reports a famous dispute between two leading rabbinical schools: would man have been better off had he never been created?

The decision: yes.

But as Job teaches us, we must play the hand we are dealt.



Paul Davies

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Perhaps.

Discussions of cosmic purpose are loaded with cultural baggage, so to answer the question of whether the universe as a whole has a purpose—and if it does, what is meant by that word—we first need to get at the heart of the scientific worldview. Scientists often wax lyrical about the scale, majesty, harmony, elegance, and ingenuity of the universe. Einstein professed a “cosmic religious feeling.”

Let me give the flavor of what this sentiment entails. As the cosmic drama unfolds, it looks as if there is a script—a coherent scheme of things—to which its evolution is conforming. Nature is not an arbitrary juxtaposition of events but the manifestation of ingeniously interweaving mathematical laws. That much is agreed. But what about a purpose to it all? If there is a script—a cosmic story to tell—isn't that already a sort of purpose? Many scientists are quick to pour scorn on the suggestion. Richard Feynman thought that “the great accumulation of understanding as to how the physical world behaves only convinces one that this behavior has a kind of meaninglessness about it.” It is a conclusion endorsed by Steven Weinberg in his famous comment: “The more the universe seems comprehensible the more it also seems pointless.”

A familiar criticism is that concepts such as “meaning” and “purpose” are categories derived from human discourse, and cannot be projected onto nature. But this is a criticism that can be directed at scientific concepts in general. All attempts to describe the universe draw on human categories: science proceeds precisely by taking concepts that humans have thought up, often inspired by everyday experience, and applying them to nature. Pierre Laplace treated the universe as a gigantic clockwork machine, and Richard Dawkins has described living organisms as gene machines. But machines are also human constructs, and mechanism is a human concept just as much as purpose. It is no less legitimate to seek evidence for something like purpose in the universe than to seek evidence that the universe is a mechanism, or a computer, or whatever other human-derived category resonates with what we observe.

Where, then, is the evidence of “cosmic purpose”? Well, it is right under our noses in the very existence of science itself as a successful explanatory paradigm. Doing science means figuring out what is going on in the world—what the universe is “up to”, what it is “about”. If it isn't “about” anything, there would be no good reason to embark on the scientific quest in the first place, because we would have no justification for believing that we would thereby uncover additional coherent and meaningful facts about the world. Experience shows that as we dig deeper and deeper using scientific methods, we continue to find rational and meaningful order. The universe makes sense. We can comprehend it.

Science is a voyage of discovery, and as with all such voyages, you have to believe there is something meaningful out there to discover before you embark on it. And with every new scientific discovery made, that belief is confirmed. If the universe is pointless and reasonless, reality is ultimately absurd. We should then be obliged to conclude that the physical world of experience is a fiendishly clever piece of trickery: absurdity masquerading as rational order. Weinberg's aphorism can thus be inverted. If the universe is truly pointless, then it is also incomprehensible, and the rational basis of science collapses.



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College,
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No.

In the absence of evidence, the only reason to suppose that it does is sentimental wishful thinking and sentimental wishful thinking, which underlies all religion, is an unreliable tool for the discovery of truth of any kind.

The extension of analogies is another tool that accompanies wishful thinking in the toolboxes of the credulous. That an intricate mechanism, such as an engine or even a spoon, is commonly associated with a purpose cannot be taken to be evidence that the universe as a whole is associated with a purpose, any more than the existence of a cheetah implies that it has been designed with a purpose in mind. Cheetahs have evolved by the bloody, directionless, unguided processes of evolution: they have not been provided for the purpose of killing antelopes. Similarly, the universe has evolved over its 14 billion years of current existence by the directionless, unguided processes that are manifestations of the working out of physical laws: it has not been made for the purpose of providing platforms to enable cheetahs to stalk their prey or humans to generate great art or to entertain delusions. That we do not yet understand anything about the inception of the universe should not mean that we need to ascribe to its inception a supernatural cause, a creator, and therefore to associate with that creator's inscrutable mind a purpose, whether it be divine, malign, or even whimsically capricious.

Theologians typically focus on questions that they have invented for their own puzzlement. Some theologians are perplexed by the nature of life after death, a notion they have invented without a scrap of evidence.

Some are mystified by the existence of evil in a world created by an infinitely loving God, another notion that theologians have invented but which dissolves into nothing once it is realized that there is no God. The question of cosmic purpose is likewise an invented notion, wholly without evidential foundation, and equally dismissible as patently absurd. We should not regard as great the questions that have been invented solely for the sake of eliciting puzzlement.

I regard the existence of this extraordinary universe as having a wonderful, awesome grandeur. It hangs there in all its glory, wholly and completely useless. To project onto it our human-inspired notion of purpose would, to my mind, sully and diminish it.



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Indeed.

But it is not possible to know that by looking at the natural world alone. The question of purpose is closely related to the question of whether something like the God of Western monotheistic religions can be known to exist by studying the order, goodness, and grandeur of the universe. Already around 1750 David Hume pointed out that if one is looking at evidence of design, then all of the evidence must be taken into account: not only order and goodness but disorder and evil as well. He seems to think that some sort of creator is possible (in his *Dialogues Concerning Natural Religion*, published posthumously in 1779, it is not clear which character represents Hume's own views). But if so, we can know next to nothing about the creator's qualities: an intelligence, for all we know, as much like ours as our intelligence is like the rotting of a turnip—one deity or a team; alive or dead; a juvenile or superannuated deity. Nothing can be known of any plan for the future perfection of the world or the human condition.

If one cannot infer the purposes of a benevolent creator from evidence in the natural world, then how can I (and my co-religionists) claim to know the world's purpose? The

answer is too complicated to spell out here, but I take it to involve detailed comparisons of competing traditions on the basis of the support they draw from their own peculiar kinds of evidence (for Christians, historical events as in the life of Jesus and the early church, and carefully evaluated religious experiences). In addition, each tradition must be evaluated on the basis of the intellectual crises it faces. Two crises facing what I call the scientific naturalist tradition (originating in Hume's and others' writings) are the questions of whether it is possible adequately to explain the phenomenon of religion naturalistically, and whether the tradition can provide grounds for morality. Scientific research on the practices and beliefs of religious adherents is relevant to the first.

Scientific research is also relevant to some of the crises facing theistic traditions, and so knowledge of nature is not irrelevant to the issue of purpose. For example, a longstanding challenge to Christianity is to explain why a good God permits so much suffering of humans and animals at the hand of nature.

Why are there tsunamis, hurricanes, droughts, and ghastly diseases? Before the development of modern science (and still in some Christian circles) these were all seen as caused by sin (the Fall) and as fitting punishment for sin.

Now we know that animals suffered for millions of years before humans evolved. We also know that all of these catastrophes are produced by the ordinary working of the processes of nature, such as plate tectonics. Yet one can then ask why God did not create a more benevolent natural order. If it is the strength of gravity that causes broken bones when children fall, why not a kinder, gentler gravitational force?

Here is one point where greater knowledge of the natural world bears on a theological problem. Since the writings of Brandon Carter in 1974 we have had increasingly detailed knowledge of the way in which fundamental constants and physical laws appear to be fine-tuned to produce a universe that supports life. Change any of the numbers slightly, and the development of the entire universe would have gone quite

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differently, making the evolution of life impossible. For example, the ratio of the strength of gravity to one of the other basic forces, the nuclear weak force, had to be adjusted as accurately as one part in 10 to the 100th power to avoid either a swift collapse of the universe or an explosion.

These scientific developments can be used to argue that, if there is a designer God whose purpose for the universe includes life, especially intelligent life, then the laws and constants had to be almost exactly what they are. Thus, if we are to be here, the natural world must contain almost exactly the amount of danger and destruction that it does.

So while the study of the natural world cannot show that it has a purpose—the fine-tuning is not an adequate argument for the existence of God—it is indeed indirectly relevant to the question of the universe's purpose.



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Yes.

Frankly, I am psychologically incapable of believing that the universe is meaningless. I believe the universe has a purpose, and our greatest intellectual challenge as human beings is to glimpse what this purpose might be.

My belief is not the result of a blinding flash of a road-to-Damascus revelation. Nor is it the imprint of a nurturing home environment. Kindergartners in their simplicity ask many profound questions, but the purpose of the universe is rarely among them. Maturing teenagers in their angst may ask, “What’s the meaning of it all?” The question is existential, but the answer is subtle. Understanding emerges not in thunder, earthquake and fire, but in the still small voice of the universe itself. Quite possibly, the purpose of the universe is to provide a congenial home for self-conscious creatures who can ask profound questions and who can probe the nature of the universe itself.

Only gradually did I come to appreciate how magnificently tuned the universe is for the emergence of intelligent life. Carbon atoms, with their self-bonding properties, provide the immense variety for the complex cellular machinery— no other atom offers a comparable range of possibilities. But carbon did not emerge from the big bang of creation. It was slowly produced, over billions of years, in the cores of evolving stars. Had some of the basic constants of nature been only slightly different, there would be no major abundance of carbon. And it is extremely difficult to imagine intelligent life without something like carbon.

One swallow does not a summer make. But in the fine-tuning of the universe, the abundance of carbon is only one of many such remarkable aspects. There are enough such “coincidences” to give thoughtful observers some pause. Scientists who are loath to accept a fine-tuned universe feel obliged to take notice. Of course, if the universe were any other way, we wouldn’t be here to observe it, but that is hardly a satisfying answer.

Suppose, however, that there are myriad universes, each with different properties. In that case we would naturally be found in the universe that, like the little bear’s porridge, is just right. Those other barren universes, many with no stars or planets, would exist in their own forever unobservable space. Somehow this is an unpersuasive counter-argument. Even one congenial universe out of many would be miracle enough.

In the deep mystery of God’s vast creative experiment there may be many facets that we, in human terms, would relate to as purposes of the universe. I believe that, incredibly, this includes the creator’s self-revelation through human intelligence and personalities. With God’s experiment comes the freedom of choice, and I choose to believe in a purposeful universe.

My thoughtful atheistic friends who deny that the universe has any ultimate meaning are also men and women of faith. Perhaps intimidated by intimations of design, they seek to understand the universe in other ways. Ironically, they themselves may well be part of the purpose of the universe.



*Bruno
Guiderdoni*

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Observatory
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France.*

Very Likely.

Modern science has produced something quite unexpected. Even to a scientist such as myself. It turns out that the observed features of the natural world appear to be fine-tuned for biological complexity. In other words, everything from the mass ratios of atomic particles, the number of space dimensions, to the cosmological parameters that rule the expansion of the universe, and the formation of galaxies are all exactly what they need to be to create stars, planets, atoms, and molecules.

But where does this apparent fine-tuning come from?

Is it the manifestation of a plan for the universe? An arrangement by a superior will to prepare the way for complex creatures? Is it God's signature? People of faith believe it is so. They read purpose in the universe as a painter sees beauty in a view on the ocean.

However, for scientists, final causes don't explain enough. We must go one step further, and examine alternative explanations to the fine-tuning idea. One such idea is called the multiverse. It states that we don't live in a universe fine-tuned for life so much as we happen to live in a universe, one of many, that by a cosmic accident just happens to be the kind that supports biological life. In other words, we're not special, we're just lucky.

Recent discoveries in particle physics point to this. Remember, our observable universe is just a tiny region among a large variety of regions, each with different properties. And many of these regions in the universe are sterile and inhospitable and thus lifeless (which makes it especially difficult for them to be observed!).

Thus, say some scientists, there is no fine-tuning. And likewise, there is no purpose.

But I don't agree. The fundamental scientific theories that support the multiverse require complex mathematics. The fact that these fundamental theories are even accessible to our brains, which, in a purposeless universe would be nothing but a by-product of our ability to find prey (and avoid being prey), in the millennia of Homo sapiens' evolution is something I find quite . . . puzzling.

The reality is that we are able to contemplate such questions. And the bigger the questions our brains can ponder, the more unlikely that the cosmic drama we are all participating in is simply a cosmic lottery.

This is why, at the end of the day, I can't refrain from thinking that there actually is purpose in the universe.



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de Duve*

Biochemist.

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No.

I should mention first that this is a loaded question, with several hidden implications. A “purpose” presupposes a mind that conceived it, as well as the ability to implement it. In the present case, this means that the owner of the mind not only created the universe the way it is, but could have created another universe and decided to create the existing one for a specific reason. So the question really deals with the belief in a Creator who enjoys almost infinite power and freedom but, at the same time, goes through the very human process of pondering decisions and acting accordingly. In a way, this is a very anthropomorphic vision of God.

A second aspect of the question concerns the motivation behind the purpose. What did God have in mind in creating the universe the way it is? Being the ones who ask the question, it is obvious that we see ourselves as at least part of God’s goal. As pointed out by the defenders of the “anthropic principle,” what is peculiar about the universe is that it happens to have just the right physical properties to give rise to life and, through life, to human minds. Such an anthropocentric view of the creation is, however, not readily reconciled with what is known of the evolutionary origin of humankind.

Personally, I do not accept the implications of the term “purpose.” Sticking to the facts, I prefer the undisputable statement that the universe happens to be such that certain events, including the generation of life and mind, were possible, perhaps even probable, if not obligatory. Instead of searching the “mind of God” for the explanation of this fact, I see it as an expression of reality and as a significant clue to the nature of this reality.

Many scientists and philosophers have taken this attitude. The late French biologist Jacques Monod, for example, concluded in 1970, after reviewing the great discoveries of his days, that the universe is a meaningless entity in which life and mind arose by an extraordinary combination of improbable circumstances and could very well never have arisen at all. As he claimed, “the universe was not pregnant with life, nor the biosphere with man,” leading to the stoically despairing conclusion that “man knows at last that he is alone in the unfeeling immensity of the universe out of which he arose only by chance.” Many biologists of Monod’s generation have shared this opinion, spreading what I have called the “gospel of contingency.”

Since then, the message of science has changed. Most biologists, today, tend to see life and mind as cosmic imperatives, written into the very fabric of the universe, rather than as extraordinarily improbable products of chance. But the philosophical content of Monod’s view has survived in the so-called “multiverse” theory. According to this theory, advocated, among others, by the British astronomer Martin Rees and by the American physicist Steven Weinberg, and now much popularized by the media, our universe is but one among a multitude of others that do not share its properties, the only one that happens by chance to have physical constants such that it could naturally evolve to give rise to life, which, itself, naturally evolved to give rise to mind. Because of the need for a mind to be aware of such a universe, it is, by necessity, the only one in the multiverse capable of being known, at least by entities of its own making. Except for that,

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there is nothing special about it. We are back in Monod's "unfeeling immensity out of which we arose only by chance." The difference is that it is not we who arose by chance in the universe, but rather the universe (in which we were bound to arise) that arose by chance in the multiverse.

For reasons that I have explained elsewhere, I do not subscribe to this view. In my opinion, life and mind are such extraordinary manifestations of matter that they remain meaningful, however many universes unable to give rise to them exist or are possible. Diluting our universe with trillions of others in no way diminishes the significance of its unique properties, which I see as revealing clues to the "Ultimate Reality" that lies behind them.

Science has given us a glimpse of this reality, by revealing the strange objects and concepts, almost irreducible to our familiar world, that lie behind entities such as the cosmos, matter, life, and mind. Through music, art, and literature, we have been allowed to approach another facet of this reality, emotional and esthetic, rather than intelligible. With philosophy and religion, we have become aware of its ethical and mystical aspects. Encompassing all in a single manifestation, love has introduced us into its very heart.

It will be noted that there is no logical need for a creator in this view. By definition, a creator must himself be uncreated, unless he is part of an endless, Russian-doll succession of creators within creators. But then, why start the succession at all? Why not have the universe itself uncreated, an actual manifestation of Ultimate Reality, rather than the work of an uncreated creator? The question is worth asking.

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Yes.

The fact that we can ask such a question at all suggests an affirmative answer. The impassioned search for meaning, perhaps our species' most distinctive trait, is not a longing that lifts us out of the universe, or that takes place outside of nature. We are, after all, as much a part of nature as roaches and rivers. So too is our thirst for meaning.

If we accept evolution, as indeed we must, our longing for meaning is nature—in the same sense that birdsong and the howling of wolves are nature.

But if our minds are nothing more than the accidental outcome of a mindless evolutionary process, why should we trust them at all? A Darwinian account of the mind's critical capacities—explanatory though such a narrative might be—is not enough to justify the confidence we spontaneously place in our cognitional powers.

Darwin himself would agree. He agonized over whether the theory of natural selection, taken by itself, might not undermine the actual trust we have in our mind's capacity to understand and know reality. "With me the horrid doubt always arises," he admitted to a friend, "whether the convictions of man's mind, which has been developed from the mind of the lower animals, are of any value or at all trustworthy. Would any one trust in the

convictions of a monkey's mind, if there are any convictions in such a mind?"

Darwin had no good answer to this question, but that does not mean it is unanswerable. We can embrace evolutionary science without losing confidence in our minds. For it is not by looking back at what our minds evolved from, I suggest, but only by looking forward at what our minds are now anticipating that we can validate our cognitional confidence and vindicate our trust in cosmic purpose.

But just what are our minds anticipating? What are they reaching for? If, along with me, you are asking this question, you are already closing in on the answer. Your mind is engaged at this very moment in nothing less than the search for truth. And simply by reaching toward truth both you and your mind's natural root system—the universe—are ennobled. As they are being taken captive by the most undeniable of values, truth itself, they are already participating in its empowering though always elusive presence. It is because this transcendent value has already taken hold of you, and in you the whole universe, that you can have faith in your critical intelligence and also trust that the universe has a purpose.

Purpose, after all, means quite simply the bringing about of something undeniably and permanently good. Is that what is going on in the cosmos?

As long as you are drawn toward truth, so also is the natural world that gave birth to your mind. The two, after all, are inseparable. As long as the search for truth persists, not only can you trust your mind, you can also trust the universe that has germinated such an exquisite means of opening itself to what is timelessly worth treasuring.



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Not Sure.

Anyone who expresses a more definitive response to the question is claiming access to knowledge not based on empirical foundations. This remarkably persistent way of thinking, common to most religions and some branches of philosophy, has failed badly in past efforts to understand, and thereby predict the operations of the universe and our place within it.

To assert that the universe has a purpose implies the universe has intent. And intent implies a desired outcome. But who would do the desiring? And what would a desired outcome be? That carbon-based life is inevitable? Or that sentient primates are life's neurological pinnacle? Are answers to these questions even possible without expressing a profound bias of human sentiment? Of course humans were not around to ask these questions for 99.9999% of cosmic history. So if the purpose of the universe was to create humans then the cosmos was embarrassingly inefficient about it.

And if a further purpose of the universe was to create a fertile cradle for life, then our cosmic environment has got an odd way of showing it. Life on Earth, during more than 3.5 billion years of existence, has been persistently assaulted by natural sources of mayhem, death, and destruction. Ecological devastation exacted by volcanoes, climate change, earthquakes, tsunamis, storms, pestilence, and especially killer asteroids have left extinct 99.9% of all species that have ever lived here.

How about human life itself? If you are religious, you might declare that the purpose of life is to serve God. But if you're one of the 100 billion bacteria living and working in a single centimeter of our lower intestine (rivaling, by the way, the total number of humans who have ever been born) you would give an entirely different answer. You might instead say that the purpose of human life is to provide you with a dark, but idyllic, anaerobic habitat of fecal matter.

So in the absence of human hubris, and after we filter out the delusional assessments it promotes within us, the universe looks more and more random. Whenever events that are purported to occur in our best interest are as numerous as other events that would just as soon kill us, then intent is hard, if not impossible, to assert. So while I cannot claim to know for sure whether or not the universe has a purpose, the case against it is strong, and visible to anyone who sees the universe as it is rather than as they wish it to be.



Jane Goodall

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Goodall
Institute.*

*UN Messenger
of Peace.*

Certainly.

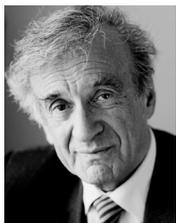
But first let me explain. A common scientific view is that evolution occurs simply because matter obeys some unseen law whereby a simple organism will, if it evolves at all, become a more complex one. Evolution is thus a blind process without purpose and science will one day uncover the simple mechanical rules underlying every seeming mystery. Our own lives, therefore, are equally without purpose. There is no place here for the spirit, the immortal soul.

Many people find this hard or impossible to accept. Even that great scientist Albert Einstein sustained a mystical outlook on life that was, he said, constantly renewed from the wonder and humility that filled him when he gazed at the stars. I wonder, can our finite minds ever truly understand such things as eternity and infinity? My own thinking requires a beginning and an ending, an alpha and omega. “In the beginning was the Word,” says the Bible. Yes, of course—the big bang. But it is impossible to imagine “nothingness” before that cosmic eruption.

We are intellectual and conscious beings and it seems we have a deep-seated need to understand the world around us and our place in it. And why things happen as they do. From prehistoric times human cultures, seeking to explain the inexplicable, have believed in, worshiped, made sacrifices to, and feared their gods—known by many names, including God, Allah, Jehovah, Tao, Brahman, and the Creator. And all the gods, goddesses, spirits and demons of classical mythologies of the animist religions. People have believed in divine retribution, the forces of good and evil, and often, continuation of spirit after death.

Of course science typically scoffs at any belief in a god, tells us that we have a “God gene” and that the tendency towards religious belief is simply part of our biological make up, as inevitable as the universal human smile. Yet even if this were so, we would still need to ask why? Why should we be programmed to believe in a god? Why are laws of physics designed to make life ever more complex? And where did they come from?

When I was a child, born into a Christian family, I accepted the reality of an unseen God without question. And now that I have lived almost three quarters of a century I still believe in a great spiritual power. I have described elsewhere the experience I had when I first visited Notre Dame Cathedral in Paris. When, as I gazed at the great rose window, glowing in the morning sun, the air was suddenly filled with the glorious sound of an organ playing Bach’s Toccata and Fugue in D Minor. It filled me with joy, brought tears to my eyes. How could I believe that blind chance had led to that moment in time—the cathedral, the collective faith of those who had prayed and worshiped within, the genius of Bach, the emergence of a conscious mind that could, as mine did then, question the purpose of life on Earth. Was all the wonder and beauty simply the result of purposeless gyrations of bits of cosmic dust at the beginning of time? If not, then there must be some extra-cosmic power, the creator of the big bang. A purpose in the universe. Perhaps, one day, that purpose will be revealed.



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I Hope So.

And if it doesn't, it's up to us to give it one. But first, let us consider these questions:

Why the world? Why people? Why did God consider it useful or even good to introduce them into his universal plan?

If we are to believe an old Talmudic legend, these questions are as old as Creation, and perhaps even older. The angels did in fact try to dissuade him. "What good will they be?" asked the Angel of Truth. "People will be unable to keep from lying." The Angel of Peace added, "People will never be able to live in peace without quarreling amongst each other." And so why not simply give up?

Was God wrong not to listen to his celestial counselors' wise warnings? History's answer seems depressing. It didn't take long for Adam and Eve, in paradise, to disobey divine will. These pitiful parents left their two sons to argue; one became the assassin, the second the victim of the other. Death thereby made its debut into human memory in the form of murder.

Incapable of living in society, people irritated God so much that he ended up lamenting the confidence he had placed in them. Hence the devastating flood. Was it his mistake to start over again?

Confronted by their creator, are people condemned to remain God's adversary, or even his enemy? Perhaps his prisoner? His orphan? The Jewish tradition in which I base my thoughts defines it unambiguously—we are his partner. To put it plainly: Though God created the world, it is up to people to preserve, respect, enrich, embellish, and populate it, without bringing violence to it.

Because the world is fragile and vulnerable, it has always been in danger. And this danger comes from man himself. Is it fear of solitude or death that makes it so desirable to conquer and dominate another person's thoughts, dreams, and hopes? Does the torturer torment his prisoner or hostage to soothe his own anguish from awakening in a universe that will outlive him?

Will man one day understand that God alone is alone? That a living person is not alone and can depend only on him or herself to not be alone? And that each of us is responsible for another's solitude? And for the world that another carries inside?

Where is this world going today? Hard to know, but we do know that it's going there fast—in a train that seems to race toward disaster. How can we stop it if not by pulling the alarm? Aware of the perils that threaten the planet, perils coming from its own inhabitants, it is at times easy to lose hope. So many wars, massacres, and hatreds sweep over Creation that one wonders if God will lose patience.

Did he lose it before, when evil and misfortune seemed to reign over a Europe occupied by Hitler's army? Each time that a child died of hunger, fear, sorrow; each time a child expired in flames lit by men, it was right to wonder: Where was God in all of this? What could his goal possibly have been when, over there, the Kingdom of Night had replaced his own?

(CONTINUED)

I admit that all these questions remain open for me. If an answer exists, I challenge it. The brutal and cruel death of one and a half million children neither could nor should have an answer.

But I know this: the questions that confront us today do have a response; and this response engages us. If the present world has a purpose or fate, it must be the same for all. And each human being, with his own background and culture, owes it to him or herself to affirm his or her own humanity with respect to that of his or her peer. The purpose of the world cannot be to propose or impose a choice between joy for some and distress for others. This is a false and unjust choice. If, in order to be happy, it is necessary for the other not to be, the world in which we live would look more like a prison than an orchard.

Transforming the whole world into a massive enclosure is indeed the goal of a fanatic suffering from ugly and unappeased hatred, not of a sincere and warm-hearted believer. The former—the jailer—aspires to stifle out all those who are not like him. The truth is that he manages to put God himself in prison.

Man's task is thus to liberate God, while freeing the forces of generosity in a world teetering more and more between curse and promise.