

The big picture: really?

The Big Picture: On the origins of life, meaning, and the universe itself

Sean Carroll

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John G. Hartnett

Sean M. Carroll is a theoretical physicist at the California Institute of Technology, and an outspoken atheist (not to be confused with Sean B. Carroll, an evolutionary biologist). The book was the winner of the 2013 Royal Society Winton Prize for Science Books.

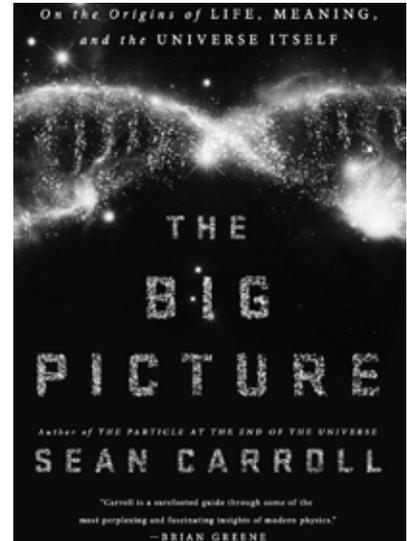
Overview

On the inside book cover these questions are written:

“Where are we? Who are we? Do our beliefs, hopes and dreams mean anything out there in the void? Can human purpose and meaning ever fit into a scientific worldview?”

Carroll’s message in this book is that there is no ultimate purpose, we are only the product of matter and material forces, there is no meaning to life, there is no afterlife and meaning and purpose do not fit into any scientific worldview. But the author tries to dress it up, saying that it’s what you put into your life that counts. Beauty is found in the observer. But he cannot escape his own bondage because his worldview ultimately does not allow for intrinsic meaning or purpose. He is just dead in the end.

There is nothing new in this book but a lot of atheistic philosophy stemming from Enlightenment philosopher David Hume. The author uses circular reasoning and begging the question. By



assuming there is no Creator because He is not needed in the universe, to cause it or operate within it, and by assuming everything in the past evolution of the universe, and life in it, is explained by man’s current knowledge (Darwinian evolution by mutation and natural selection), then everything can be explained as to how it came to be. The universe needs no reason to exist. It simply is. Life needs no reason, it simply is.

There was nothing before time began in the big bang so no question can be asked about what was before. There is no First Cause because either the universe came into the existence with the beginning of time itself, or, time is fundamental and always existed, so that from it and the laws of physics the universe spontaneously arose from some quantum fluctuation. *Now that we are smarter we have come to understand this true fact.*

He talks of *methodological empiricism* as the correct way to learn the truth about the universe but he offers no direct empirical evidence for the origin of the universe in a big bang, or for the initial alleged low-entropy state

it started in, or for the spontaneous origin of life by random chance, or for the alleged Darwinian evolution of living organisms by natural selection over eons of history. We are essentially asked to just believe these as given facts as much as the author seems to. Only he offers up stories to justify his beliefs. As a book alleged to give the big picture of the universe and all life in it, it fails on the very premise the author sets out to use—*direct observation of the world to discover the truth*. Also, right at the foundation, his claim is self-refuting: what empirical evidence showed that empiricism is the correct way to learn the truth?

To the best of my knowledge, and I read every word of the book, nowhere in this book is Jesus Christ mentioned. God is mentioned but never the name of Jesus. In terms of being an influential thinker, Jesus Christ is probably the single most influential. Considering that, then in a book ostensibly on the meaning of life and the universe, you would think He would merit a mention.

Goals of the book

In the prologue the author writes: “We have two goals ahead of us. One is to explain the story of our universe and why we think it’s true, the big picture as we currently understand it. It’s a fantastic conception. We humans are blobs of organised mud, which through the impersonal workings of nature’s patterns have developed the capacity to contemplate and cherish and engage with the intimidating complexity of the world around us. To understand ourselves, we have to understand the stuff out of which we are made, which means we have to dig deeply into the realm of particles and forces and quantum phenomena, not to mention the spectacular variety of ways that

those microscopic pieces can come together to form organized systems capable of feeling and thought.

“The other goal is to offer a bit of existential therapy. ... By the old way of thinking, human life couldn’t possibly be meaningful if we are ‘just’ collections of atoms moving around in accordance with the laws of physics. That’s exactly what we are, but it’s not the *only* way of thinking about what we are. We are collections of atoms, operating independently of any immaterial spirits or influences, *and* we are thinking and feeling people who bring meaning into existence by the way we live our lives” (p. 3).

The latter he has to say because later he talks about the material world as all there is. There is no such thing as a spirit or a soul that is not part of our material body. When we die that is it, there is nothing beyond life.

Carroll is a student of many philosophers, mostly atheists, or who are at least those who challenge a conservative worldview of life. For example he mentions, Descartes, Nietzsche, Laplace, Hume, Leibniz, Spinoza, Lewis (not C.S. Lewis), Russell, Wittgenstein, Kierkegaard and others. But it would seem that the author relies more strongly on the so-called ‘enlightenment’ philosophy of the Scotsman David Hume (figure 1).

His claim is that the ‘core theory’—the standard quantum field theory of particle physics—is the correct theory to describe everything in the realm of human existence.

“... we have extremely good reason to think that the Core Theory is the correct description of nature in its domain of applicability. That domain is wide enough to immediately exclude a number of provocative phenomena: from telekinesis and astrology to survival of the soul after death” (p. 4).

The existence of the soul is lumped in with pseudo-sciences such as astrology and telekinesis. That seems to show his ignorance of what real biblical Christians actually believe. It is disingenuous, in my view, to lump the survival of the soul after death in with various parapsychological beliefs, which would be condemned by God.

He is a believer in materialism at its very core, and as such promotes naturalism, in a form he calls *poetic naturalism*, which he says is from David Hume. In that, apparently, we can find a meaning for life.

“Purpose and meaning of life arise through fundamentally human acts of creation, rather than being derived from anything outside ourselves” (p. 11).

He states his religion clearly, which he attempts to justify in the book: “In the right circumstances, matter self-organizes into configurations, capable of capturing and using information from their environments. The culmination of this process is life itself” (pp. 4–5). “At a fundamental level, there aren’t separate ‘living things’ and ‘nonliving things’, ‘things here on Earth’ and ‘things up in the sky’, ‘matter’ and ‘spirit’. There is just the basic stuff of reality, appearing to us in many different forms” (p. 12).

The overall thread of his book describes how mankind has become more and more knowledgeable of how nature operates and, as such, we no longer need to think in terms of anything other than a material world. There is nothing else—nothing else is needed to explain everything we know. There are no gods, no creator, no spirits, and no soul. All is matter and the way the laws of physics operate on that matter.

The book is divided into six sections: they are titled Cosmos, Understanding, Essence, Complexity, Thinking, and the last section is Caring:

“Finally, in ‘Caring’ we confront the hardest problem of all, that of how to construct meaning and values in a cosmos without transcendent purpose. ... Poetic naturalism [the form he subscribes to] strikes a middle ground, accepting that values are human constructs, but denying that they are therefore illusory or meaningless. ... The meaning we find in life is not transcendent, but it’s no less meaningful for that” (p. 5).

He tries to hold the view that there can be found excitement and meaning in life whilst knowing on the other hand that there is no ultimate purpose: “As we understand the world better, the idea that it has a transcendent purpose seems increasingly untenable” (p. 9). And he says the problem occurs because we have not fully accepted this view of life:

“Over the course of the last two centuries, Darwin has upended our view of life” (p. 10).

“It’s a bit of a leap, in the face of all of our commonsense experience, to think that life can simply start up out of non-life, or that our experience of consciousness needs no more ingredients than atoms obeying the laws of physics. Of equal importance, appeals to transcendent purpose or higher power seem to provide answers to questions to some of the pressing ‘Why?’ questions we humans like to ask: Why this universe? Why am I here? Why anything at all? Naturalism, by contrast, simply says: those aren’t the right questions to ask” (p. 13).

And he admits that “It’s a lot to swallow, and not a view that anyone should accept unquestioningly”, and “We don’t know how the universe began, or if it’s the only universe. ... We don’t know how life began, or how consciousness arose.”

If you don’t know how, then probably you don’t know why. So how can he answer the ‘big picture’ questions when within the first

13 pages he has admitted that the naturalists have no idea and instead says that such ‘why?’ questions are invalid?

Naturalism

He defines naturalism, saying it comes down to three things (p. 20) and that “*the only reliable way of learning about the world is by observing it*”. But how can he know that if he is not God? Suppose for a minute that there really is a Creator God and He gave us a revelation in His written Word. But because man cannot, by definition, observe God, since He is a spirit and outside the realm of detectability by science, how can he know that what God has written is not a reliable way of learning about the world? And this is another self-refuting claim: what observation did he make, or even could he make, that reliably showed that observation is the only reliable way of learning?

His form of naturalism—poetic naturalism (after David Hume)—is just normal atheistic naturalism, but he adds that man has responsibility and freedom (p. 21): “The world exists; beauty and goodness are things that we bring to it.” He means there is nothing intrinsically good or beautiful. He writes that there are “No causes,



Figure 1. David Hume (Allan Ramsay, 1766)

whether material, formal, efficient, or final” (p. 29).

In the chapter titled “Time’s Arrow” he states that the arrow of time seen in human ageing and in the evolution of the big bang universe are ‘intimately related’:

“The reason why we are all born young and die older; the reason why we can make choices about what to do next but not about things we’ve already done; the reason why we remember the past and not the future—all of these can ultimately be traced to the evolution of the wider universe, and in particular to conditions near its very beginning, 14 billion years ago at the Big Bang” (p. 54).

“The reason why there’s a noticeable distinction between past and future isn’t because of the nature of time; it’s because we live in the aftermath of an extremely influential event: the Big Bang” (p. 55).

The notion of purpose is discarded in favour of just everything that happens, including ageing and our memories, are the result of the big bang. It reads like worship of the big bang. It is the reason for our existence and must be given due credit, even for time itself.

He discusses the special condition that the universe allegedly started in, that is in a low state of entropy from which entropy (or disorder) increased as a function of time. He states that this gave rise to the well-known ‘thermodynamic’ arrow of time. Later he credits this initial low-entropy state and subsequent progression of expansion and increasing entropy as the cause for growth in complexity and even life.

He describes how life may have begun and offers the usual experiments and speculations, including the Miller–Urey experiment. He describes scenarios for the origin of the first living things in terms of a cell membrane, metabolism, and reproduction, which requires an

information storage system. He offers up the usual *RNA World* scenarios.

But because he has nothing to offer as real direct observational evidence of novel structures spontaneously forming in an organism he has to write this:

“We’ve *speculated* that DNA came from RNA, which in turn *may have* self-catalyzed its own production under the right circumstances. *It’s possible* that the creation of the first RNA molecule involved random fluctuations at critical points along the way. Boltzmann taught us that entropy *usually increases, but there is always some probability* that it will occasionally move downward [emphases added]” (p. 275).

It comes down to speculation and storytelling, not science.

Eventually his thesis gets into complexity of the brain and consciousness, but admits that modern science has not a lot to say yet about understanding the origin of consciousness. Philosophically and scientifically he is convinced that the soul does not exist apart from matter. And as a result, consciousness is merely a product of the brain, which ceases to exist when the body dies.

He advocates living your life believing that there is nothing beyond the grave. And because he says there is no creator, he offers his own 10 considerations (in contrast to God’s 10 Commandments):

1. Life isn’t forever.
2. Desire is built into life.
3. What matters is what matters to people.
4. We can always do better.
5. It pays to listen.
6. There is no natural way to be.
7. It takes all kinds.
8. The universe is in our hands.
9. We can do better than happiness.
10. Reality guides us.

He comes out with typical man-can-solve-his-own-problems statements: “It’s up to us to make wise choices and shape the world to be a better place”

(p. 426). But we should come to the realisation that there is nothing else: “Illusions can be pleasant, but the rewards of truth are enormously greater” (p. 427). This is a reference to those who think that there is more to life than matter—there isn’t and once you wake up to the truth you can make your life better.

Life is just a product of this universe, and its special, low-entropy initial state. Everything flows from that and our current scientific knowledge indicates that there is nothing more than the material existence. There is no God, no soul, no life after death, and ultimately there is no purpose. The only purpose is what you make of your own life.

Relevance

In the last chapter, the author describes his own Christian experience of attending an Episcopal church—a “brand of Episcopalianism ... as mellow as churchgoing gets”. There he describes his transformation from being a ‘casual believer’ to naturalism.

He writes of two incidents that converted him. One was his realisation that the liturgy of his church was not decided by God when it was rearranged so that there was less standing and kneeling. Yet he says at that point he was still a believer. Then he attended a Catholic University as an undergraduate astronomy major. From that education he understood how the universe worked, presumably being taught from a big bang, evolution worldview and not from a biblical creation perspective. Such Catholic education is atheistic at its core. The only difference is they teach Roman Catholic theology and ethics.

But from his own writings, it is clear that Carroll never knew Jesus Christ as his Lord and Saviour. He never understood what Christ had done on the cross nor its links to the events of the historical creation

account in the Garden of Eden. He was a professing believer *in name only* who gave up that label after he heard a song with an atheist message: “Don’t need the word/Now that you’ve heard/Don’t be afraid/Man is man-made.” From that time on, he claims that he realised it was okay to be a non-believer.

The irony is two-fold. One, he never believed as a real Christian—a transformed life in Christ. Maybe he believed on the level of believing some story as history. (I even know, first hand, an atheist who calls himself a Christian—culturally he sees himself that way.) Secondly, Carroll now thinks he is a non-believer, but actually he just shifted his faith, such as it was, over to another belief system. And that belief system is squarely where Satan would have the whole world. If he can get you to believe that the universe created itself, then he can get you to deny Christ and the One who died for the sins of the world.

But this story highlights the importance of teaching our children and students the whole truth about big bang cosmic evolution, abiogenesis (naturalistic origin of life from chemicals) and Darwinian evolution, the goo-to-you type that allegedly built microbiologists out of microbes over 4 billion years.

References

1. An exhaustive detailed review by Dr Hartnett of the book may be read in 11 parts on BibleScienceForum.com or downloaded as a single PDF document (tiny.cc/minany).