

# COSMOPSYCHISM



**The Mind of the Cosmos: Understanding the  
Theory of Cosmopsychism**



The universe is a vast and mysterious place, and humans have always been intrigued by its workings. Over the centuries, scientists and philosophers have developed various theories to explain the nature of the cosmos. One such theory that has gained attention in recent years is cosmopsychism. In this article, we will explore the concept of cosmopsychism, its implications, and the fascinating idea of the universe having a mind of its own.

## **What is Cosmopsychism?**

Cosmopsychism is a philosophical and metaphysical theory that suggests the universe itself possesses a form of consciousness. It proposes that the fundamental nature of reality is not solely material but also includes a mental aspect. According to cosmopsychism, the universe is not just a [collection](#) of lifeless matter, but a living and conscious entity.

## **The Implications of Cosmopsychism**

If we accept the idea of cosmopsychism, it opens up a whole new perspective on our understanding of the universe. It suggests that consciousness is not limited to human beings or other living organisms but is a fundamental aspect of the cosmos itself. This theory challenges the traditional view of consciousness as an emergent property of complex biological systems, proposing instead that consciousness is an inherent property of the universe.

Cosmopsychism also raises intriguing questions about the nature of reality and our place in the universe. If the universe is conscious, does it have intentions or desires? Does it have a purpose? Could it be that our own consciousness is interconnected with the cosmic mind? These questions push the boundaries of our current understanding and [invite](#) us to explore the mysteries of existence.

## **The Evidence for Cosmopsychism**

While cosmopsychism is a theory that cannot be proven or disproven definitively, there are certain pieces of evidence that proponents of this theory point to. One argument is the fine-tuning of the universe for the emergence of [life](#). Critics of cosmopsychism argue that this fine-tuning can be explained by the anthropic principle, which suggests that the universe appears fine-tuned because we exist within it. However, proponents argue that the precise balance and complexity required for life to exist may indicate a conscious intention behind the creation of the universe.

Another line of evidence comes from the field of quantum physics. Quantum mechanics has revealed strange phenomena such as entanglement and non-locality, where particles can instantaneously affect each other regardless of distance. Some proponents of cosmopsychism argue that these phenomena suggest a deeper interconnectedness and a fundamental level of consciousness that permeates the universe.

## **Frequently Asked Questions (FAQs)**

### **Q: Is cosmopsychism a scientific theory?**

A: Cosmopsychism is more of a philosophical and metaphysical theory rather than a strictly scientific one. It is not currently supported by empirical evidence, but it offers a different perspective on the nature of reality and consciousness.

### **Q: Does cosmopsychism challenge religious beliefs?**

A: Cosmopsychism does not necessarily challenge religious beliefs directly. It offers a different way of looking at the universe and consciousness, but individuals can interpret this theory within their own religious or spiritual frameworks.

### **Q: Can cosmopsychism be proven?**

A: Since cosmopsychism deals with metaphysical concepts, it cannot be proven or disproven definitively. It remains a philosophical theory that invites further exploration and discussion.

### **Q: What are the practical implications of cosmopsychism?**

A: The practical implications of cosmopsychism are still uncertain. However, this theory encourages a broader perspective on our place in the universe and the interconnectedness of all things, which may

influence our attitudes towards the environment, ethics, and our relationship with the cosmos.

**Q: Are there alternative theories to cosmopsychism?**

A: Yes, there are various alternative theories that attempt to explain the nature of consciousness and the universe. Some propose materialism, which states that consciousness arises solely from physical processes in the brain, while others suggest panpsychism, the idea that consciousness is a fundamental property of all matter.

**Conclusion**

Cosmopsychism presents an intriguing and thought-provoking perspective on the nature of the universe. While it remains a philosophical theory, it challenges our conventional understanding of consciousness and invites us to explore the mysteries of existence. Whether or not cosmopsychism is ultimately proven to be true, contemplating the idea of the universe having a mind of its own expands our horizons and deepens our appreciation for the wonders of the cosmos.

# What Is Cosmopsychism?

## Abstract

With the deepening crisis of physicalism and the decline in its status as a sustainable research program, philosophers of mind have begun to investigate the alternative idea—now commonly designated *panpsychism*—that consciousness is a fundamental feature of nature, and that the mental states, properties, and events exhibited by human beings are metaphysically grounded in the conscious actuality of reality's most basic entities. Cosmopsychism is the thesis that the cosmos as a whole displays psychological properties, cosmopsychological properties as we might call them, and that the mental states of human beings, and indeed human beings themselves as individual subjects of experience, are metaphysically grounded in the cosmopsychological properties of the cosmos. Richly sophisticated varieties of cosmopsychism can be found in the ancient Sanskrit classics, the Upaniṣads, and more particularly in those Vedānta philosophers who provide interpretations of these texts. The papers in this issue are explorations of the connections and explanatory potential between contemporary work on cosmopsychism and arguments from the Sanskrit tradition.

## Is the Universe a conscious mind?

Cosmopsychism might seem crazy, but it provides a robust explanatory model for how the Universe became fine-tuned for life

In the past 40 or so years, a strange fact about our Universe gradually made itself known to scientists: the laws of physics, and the initial conditions of our Universe, are fine-tuned for the possibility of life. It turns out that, for life to be possible, the

numbers in basic physics – for example, the strength of gravity, or the mass of the electron – must have values falling in a certain range. And that range is an incredibly narrow slice of all the possible values those numbers can have. It is therefore incredibly unlikely that a universe like ours would have the kind of numbers compatible with the existence of life. But, against all the odds, our Universe does.

Here are a few examples of this fine-tuning for life:

- The strong nuclear force (the force that binds together the elements in the nucleus of an atom) has a value of 0.007. If that value had been 0.006 or less, the Universe would have contained nothing but hydrogen. If it had been 0.008 or higher, the hydrogen would have fused to make heavier elements. In either case, any kind of chemical complexity would have been physically impossible. And without chemical complexity, there can be no life.
- The physical possibility of chemical complexity is also dependent on the masses of the basic components of matter: electrons and quarks. If the mass of a down quark had been greater by a factor of 3, the Universe would have contained only hydrogen. If the mass of an electron had been greater by a factor of 2.5, the Universe would have contained only neutrons: no atoms at all, and certainly no chemical reactions.
- Gravity seems a momentous force but it is actually much weaker than the other forces that affect atoms, by about  $10^{36}$ . If gravity had been only slightly stronger, stars would have formed from smaller amounts of material, and consequently would have been smaller, with much shorter lives. A typical sun would have lasted around 10,000 years rather than 10 billion years, not allowing enough time for the evolutionary processes that produce complex life. Conversely, if gravity

had been only slightly weaker, stars would have been much colder and hence would not have exploded into supernovae. This also would have rendered life impossible, as supernovae are the main source of many of the heavy elements that form the ingredients of life.

Some take the fine-tuning to be simply a basic fact about our Universe: fortunate perhaps, but not something requiring explanation. But like many scientists and philosophers, I find this implausible. In *The Life of the Cosmos* (1999), the physicist Lee Smolin has estimated that, taking into account all of the fine-tuning examples considered, the chance of life existing in the Universe is 1 in  $10^{229}$ , from which he concludes:

In my opinion, a probability this tiny is not something we can let go unexplained. Luck will certainly not do here; we need some rational explanation of how something this unlikely turned out to be the case.

The two standard explanations of the fine-tuning are theism and the multiverse hypothesis. Theists postulate an all-powerful and perfectly good supernatural creator of the Universe and then explain the fine-tuning in terms of the good intentions of this creator. Life is something of great objective value; God in Her goodness wanted to bring about this great value, and hence created laws with constants compatible with its physical possibility. The multiverse hypothesis postulates an enormous, perhaps infinite, number of physical universes other than our own, in which many different values of the constants are realized. Given a sufficient number of universes realizing a sufficient range of the constants, it is not so improbable that there will be at least one universe with fine-tuned laws.

Both of these theories are able to explain the fine-tuning. The problem is that, on the face of it, they also make false predictions. For the theist, the false prediction arises from the *problem of evil*. If one were told that a given universe was created by an all-loving, all-knowing and all-powerful being, one would not expect that universe to contain enormous amounts of gratuitous suffering. One might not be surprised to find it contained intelligent life, but one would be surprised to learn that life had come about through the gruesome process of natural selection. Why would a loving God who could do absolutely anything choose to create life that way? *Prima facie* theism predicts a universe that is much better than our own and, because of this, the flaws of our Universe count strongly against the existence of God.

Turning to the multiverse hypothesis, the false prediction arises from the so-called Boltzmann brain problem, named after the 19th-century Austrian physicist Ludwig Boltzmann who first formulated the paradox of the observed universe. Assuming there is a multiverse, you would expect our Universe to be a fairly typical member of the universe ensemble, or at least a fairly typical member of the universes containing observers (since we couldn't find ourselves in a universe in which observers are impossible). However, in *The Road to Reality* (2004), the physicist and mathematician Roger Penrose calculated that in the kind of multiverse most favored by contemporary physicists – based on inflationary cosmology and string theory – for every observer who observes a smooth, orderly universe as big as ours, there are 10 to the power of  $10^{123}$  who observe a smooth, orderly universe that is just 10 times smaller. And by far the most common kind of observer would be a 'Boltzmann's brain': a functioning brain that has by sheer fluke emerged from a disordered universe for a brief period of time. If Penrose is right, then the odds of an observer in the multiverse theory finding itself in a large, ordered universe are

astronomically small. And hence the fact that we are ourselves such observers is powerful evidence against the multiverse theory.

Neither of these are knock-down arguments. Theists can try to come up with reasons why God would allow the suffering we find in the Universe, and multiverse theorists can try to fine-tune their theory such that our Universe is less unlikely. However, both of these moves feel *ad hoc*, fiddling to try to save the theory rather than accepting that, on its most natural interpretation, the theory is falsified. I think we can do better.

**I**n the public mind, physics is on its way to giving us a complete account of the nature of space, time, and matter. We are not there yet of course; for one thing, our best theory of the very big – general relativity – is inconsistent with our best theory of the very small – quantum mechanics. But it is standardly assumed that one day these challenges will be overcome, and physicists will proudly present an eager public with the Grand Unified Theory of everything: a complete story of the fundamental nature of the Universe.

In fact, for all its virtues, physics tells us precisely nothing about the nature of the physical Universe. Consider Isaac Newton's theory of universal gravitation:

$$F = G \frac{m_1 m_2}{r^2}$$

The variables  $m_1$  and  $m_2$  stand for the masses of two objects that we want to work out the gravitational attraction between;  $F$  is the gravitational attraction between those two masses,  $G$  is the gravitational constant (a number we know from observation), and  $r$  is the distance between  $m_1$  and  $m_2$ . Notice that this equation doesn't provide us with definitions of what 'mass', 'force', and 'distance' are. And this is not something peculiar to Newton's law. The subject matter of physics is the basic properties of the physics world: mass, charge, spin, distance, and force. However, the equations of physics do not explain what these properties are. They simply name them in order to assert equations between them.

If physics is not telling us the nature of physical properties, what is it telling us? The truth is that physics is a tool for prediction. Even if we don't know what 'mass' and 'force' really are, we are able to recognize them in the world. They show up as readings on our instruments, or otherwise impact on our senses. And by using the equations of physics, such as Newton's law of gravity, we can predict what's going to happen with great precision. It is this predictive capacity that has enabled us to manipulate the natural world in extraordinary ways, leading to the technological revolution that has transformed our planet. We are now living through a period of history in which people are so blown away by the success of physical science, so moved by the wonders of technology, that they feel strongly inclined to think that the mathematical models of physics capture the whole of reality. But this is simply not the job of physics. Physics is in the business of predicting the behavior of matter, not revealing its intrinsic nature.

It's silly to say that atoms are entirely removed from mentality, and then wonder where mentality comes from

Given that physics tells us nothing of the nature of physical reality, is there anything we do know? Are there any clues as to what is going on 'under the bonnet' of the engine of the Universe? The English astronomer Arthur Eddington was the first scientist to confirm general relativity, and also to formulate the Boltzmann brain problem discussed above (albeit in a different context). Reflecting on the limitations of physics in *The Nature of the Physical World* (1928), Eddington argued that the only thing we really know about the nature of matter is that some of it has consciousness; we know this because we are directly aware of the consciousness of our own brains:

We are acquainted with an external world because its fibers run into our own consciousness; it is only our own ends of the fibers that we actually know; from those ends, we more or less successfully reconstruct the rest, as a paleontologist reconstructs an extinct monster from its footprint.

We have no direct access to the nature of matter outside of brains. But the most reasonable speculation, according to Eddington, is that the nature of matter outside of brains is continuous with the nature of matter inside of brains. Given that we have no direct insight into the nature of atoms, it is rather 'silly', argued Eddington, to declare that atoms have a nature entirely removed from mentality, and then to wonder where mentality comes from. In my book *Consciousness and Fundamental Reality* (2017), I developed these considerations into an

extensive argument for *panpsychism*: the view that all matter has a consciousness-involving nature.

There are two ways of developing the basic panpsychist position. One is *micropsychism*, the view that the smallest parts of the physical world have consciousness. Micropsychism is not to be equated with the absurd view that quarks have emotions or that electrons feel existential angst. In human beings, consciousness is a sophisticated thing, involving subtle and complex emotions, thoughts, and sensory experiences. But there seems nothing incoherent with the idea that consciousness might exist in some extremely basic forms. We have good reason to think that the conscious experience of a horse is much less complex than that of a human being, and the experiences of a chicken are less complex than those of a horse. As organisms become simpler, perhaps at some point the light of consciousness suddenly switches off, with simpler organisms having no experience at all. But it is also possible that the light of consciousness never switches off entirely, but rather fades as organic complexity reduces, through flies, insects, plants, amoeba, and bacteria. For the micropsychist, this fading-while-never-turning-off continuum further extends into inorganic matter, with fundamental physical entities – perhaps electrons and quarks – possessing extremely rudimentary forms of consciousness, to reflect their extremely simple nature.

However, a number of scientists and philosophers of science have recently argued that this kind of ‘bottom-up’ picture of the Universe is outdated and that contemporary physics suggests that in fact we live in a ‘top-down’ – or ‘holist’ – Universe, in which complex wholes are more fundamental than their parts. According to holism, the table in front of you does not derive its existence from the sub-atomic particles that compose it; rather, those sub-atomic particles derive their existence from the table. Ultimately,

everything that exists derives its existence from the ultimate complex system: the Universe as a whole.

Holism has a somewhat mystical association, in its commitment to a single unified whole being the ultimate reality. But there are strong scientific arguments in its favor. The American philosopher Jonathan Schaffer argues that the phenomenon of quantum entanglement is good evidence for holism. Entangled particles behave as a whole, even if they are separated by such large distances that it is impossible for any kind of signal to travel between them. According to Schaffer, we can make sense of this only if, in general, we are in a Universe in which complex systems are more fundamental than their parts.

If we combine holism with panpsychism, we get *cosmopsychism*: the view that the Universe is conscious and that the consciousness of humans and animals is derived not from the consciousness of fundamental particles, but from the consciousness of the Universe itself. This is the view I ultimately defend in *Consciousness and Fundamental Reality*.

The cosmopsychist need not think of the conscious Universe as having human-like mental features, such as thought and rationality. Indeed, we think of the cosmic consciousness as a kind of ‘mess’ devoid of intellect or reason. However, it now seems to me that reflection on the fine-tuning might give us grounds for thinking that the mental life of the Universe is just a little closer than I had previously thought to the mental life of a human being.

**T**he Canadian philosopher John Leslie proposed an intriguing explanation of the fine-tuning, which in *Universes* (1989) he called ‘axiarchism’. What strikes us as so incredible about the fine-tuning

is that, of all the values the constants in our laws had, they ended up having exactly those values required for something of great value: life, and ultimately intelligent life. If the laws had not, against huge odds, been fine-tuned, the Universe would have had infinitely less value; some say it would have had no value at all. Leslie proposes that this proper understanding of the problem points us in the direction of the best solution: the laws are fine-tuned because their being so leads to something of great value. Leslie is not imagining a deity mediating between the facts of value and the cosmological facts; the facts of value, as it were, reach out and fix the values directly.

It can hardly be denied that axiarchism is a parsimonious explanation of fine-tuning, as it posits no entities whatsoever other than the observable Universe. But it is not clear that it is intelligible. Values don't seem to be the right kind of things to have a causal influence on the workings of the world, at least not independently of the motives of rational agents. It is rather like suggesting that the abstract number 9 caused a hurricane.

But the cosmopsychist has a way of rendering axiarchism intelligible, by proposing that the mental capacities of the Universe mediate between value facts and cosmological facts. On this view, which we can call 'agentive cosmopsychism', the Universe itself fine-tuned the laws in response to considerations of value. When was this done? In the first  $10^{-43}$  seconds, known as the Planck epoch, our current physical theories, in which the fine-tuned laws are embedded, break down. The cosmopsychist can propose that during this early stage of cosmological history, the Universe itself 'chose' the fine-tuned values in order to make possible a universe of value.

Making sense of this requires two modifications to basic cosmopsychism. Firstly, we need to suppose that the Universe acts

through a basic capacity to recognize and respond to considerations of value. This is very different from how we normally think about things, but it is consistent with everything we observe. The Scottish philosopher David Hume long ago noted that all we can really observe is how things behave – the underlying forces that give rise to those behaviors are invisible to us. We standardly assume that the Universe is powered by a number of non-rational causal capacities, but it is also possible that it is powered by the capacity of the Universe to respond to considerations of value.

## It is parsimonious to suppose that the Universe has a consciousness-involving nature

How are we to think about the laws of physics in this view? I suggest that we think of them as constraints on the agency of the Universe. Unlike the God of theism, this is an agent of limited power, which explains the manifest imperfections of the Universe. The Universe acts to maximize value but is able to do so only within the constraints of the laws of physics. The beneficence of the Universe does not much reveal itself these days; the agentic cosmopsychist might explain this by holding that the Universe is now more constrained than it was in the unique circumstances of the first split second after the Big Bang, when currently known laws of physics did not apply.

Ockham's razor is the principle that all things being equal, more parsimonious theories – that is to say, theories with relatively few postulations – are to be preferred. Is it not a great cost in terms of parsimony to ascribe fundamental consciousness to the Universe? Not at all. The physical world must have *some* nature, and physics

leaves us completely in the dark as to what it is. It is no less parsimonious to suppose that the Universe has a consciousness-involving nature than that it has some non-consciousness-involving nature. If anything, the former proposal is more parsimonious insofar as it is continuous with the only thing we really know about the nature of matter: that brains have consciousness.

Having said that, the second and final modification we must make to cosmopsychism in order to explain fine-tuning does come at some cost. If the Universe, way back in the Planck epoch, fine-tuned the laws to bring about life billions of years in its future, then the Universe must in some sense be aware of the consequences of its actions. This is the second modification: I suggest that the agentic cosmopsychist postulate a basic disposition of the Universe to represent the complete potential consequences of each of its possible actions. In a sense, this is a simple postulation, but it cannot be denied that the complexity involved in these mental representations detracts from the parsimony of the view. However, this commitment is arguably less profligate than the postulations of the theist or the multiverse theorist. The theist postulates a supernatural agent while the agentic cosmopsychist postulates a natural agent. The multiverse theorist postulates an enormous number of distinct, unobservable entities: the many universes. The agentic cosmopsychist merely adds to an entity that we already believe in: the physical Universe. And most importantly, agentic cosmopsychism avoids the false predictions of its two rivals.

The idea that the Universe is a conscious mind that responds to value strikes us as a ludicrously extravagant cartoon. But we must judge the view not on its cultural associations but on its explanatory power. Agentic cosmopsychism explains the fine-tuning without making false predictions, and it does so with a

simplicity and elegance unmatched by its rivals. It is a view we should take seriously.

Cosmopsychism posits that consciousness is a universal and interconnected essence woven into the fabric of the universe. This perspective envisions the cosmos as a conscious entity, where each moment, entity, or event uniquely expresses a grand cosmic awareness. Notable figures like Aldous Huxley and Erwin Schrödinger have explored this idea, contemplating the inseparability of our individual minds from the universal mind pervading the cosmos.

In this conceptual framework, consciousness becomes the grand Author, meticulously inking every page of the cosmic library. Analogous to an author crafting stories with language, consciousness acts as the universal essence weaving through every facet of the vast universe. Like the invisible ties of language binding the pages of a book, the grand Author consciously intertwines with the cosmic narrative, creating a seamless and interconnected tapestry of awareness.

Visualize the universe as an expansive library, where each moment, event, or entity resembles a book. According to cosmopsychism, consciousness, personified as the grand Author, is present in every book, skillfully orchestrating the narrative of existence.

While traditional perspectives might liken consciousness to a single book, emerging from specific arrangements of words and pages, cosmopsychism expands this outlook. It posits that each book in the cosmic library not only contains its unique story but also shares a common underlying awareness, akin to the interconnected pages of a cosmic book.

In the analogy of the cosmic library of the universe, cosmopsychism observes consciousness as the fundamental essence threading through each of our stories. It transcends the confinement to individual books and serves as the binding ink, crafting a rich and interconnected tapestry

of awareness throughout the library of events that fill our lives. As we read into this cosmic narrative, we find ourselves immersed in the enigma that we are characters and co-authors in this amazing story in the chapter we call Right Now.

Cosmopsychism is a holistic alternative to atomistic panpsychism and has a general perspective on the metaphysics of consciousness. The starting point of the theory is the assumption that an all-pervading cosmic consciousness is the single ontological ultimate. From this assumption, a panpsychist ontology of mind with distinct holistic overtones is developed. In particular, I argue that such universal consciousness serves as the ground for the emergence of individual conscious creatures. The result is a theory with significant conceptual resources that presents novel means for confronting some of the most recalcitrant problems facing contemporary panpsychism: in particular, the subject combination problem, and the problem of entailment associated with it. In so doing, cosmopsychism places itself as a viable alternative to atomistic varieties of panpsychism as well as to orthodox physicalist accounts of consciousness.