

Does the Universe have a Purpose?



Neil deGrasse Tyson

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.

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