

## Does the Universe have a Purpose? Perhaps.

Paul Davies

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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