

Does science make belief in God obsolete?



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Not necessarily.

But you must find a science-friendly, science-compatible God. First, try the pantheon of available Creators. Inspect thoroughly. If none fits the bill, invent one.

The God of your choice must be a stickler for divine principles.

Science does not take kindly to

a deity who, if piqued or euphoric, sets aside seismological or cosmological principles and causes the moon to shiver, the earth to split asunder, or the universe to suddenly reverse its expansion. This God must, among other things, be stoically indifferent to supplications for changing local meteorological conditions, the task having already been assigned to the discipline of fluid dynamics. Therefore, indigenous peoples, even if they dance with great energy around totem poles, shall not cause even a drop of rain to fall on parched soil. Your rule-abiding and science-respecting God equally well dispenses with tearful Christians singing the Book of Job, pious Hindus feverishly reciting the *havan yajna*, or earnest Muslims performing the *salat-i-istisqa* as they face the Holy Ka'aba. The equations of fluid flow, not the number of earnest supplicants or quality of their prayers, determine weather outcomes. This is slightly unfortunate because one could imagine joining the faithful of all religions in a huge simultaneous global prayer that wipes away the pernicious effects of anthropogenic global climate change.

Your chosen God cannot entertain private petitions for good health and longevity, prevent an air crash, or send woe upon demand to the enemy. Mindful of microbiology and physiology, She cannot cure leprosy by dipping the afflicted in rivers or have humans remain in unscathed condition after being devoured by a huge fish. Faster-than-light travel is also out of the question, even for prophets and special messengers. Instead,

She must run the world lawfully and unto the letter, closely following the Book of Nature.

A scientific Creator should certainly know an awful lot of science. To differentiate between the countless universes offered by superstring theory is a headache. Fine-tuning chemistry to generate complex proteins, and then initiating a cascade of mutations that turn microbe to man, is also no trivial matter. But bear in mind that there are definite limits to divine knowledge: God can know only the knowable. Omniscience and science do not go well with each other.

The difficulty with omniscience—even with regard to a particle as humble as the electron—has been recognized as an issue since the 1920s. Subatomic particles show a vexing, subtle elusiveness that defeats even the most sophisticated effort to measure certain of their properties. Unpredictability is intrinsic to quantum mechanics, the branch of physics which all particles are empirically seen to obey. This discovery so disturbed Albert Einstein that he rejected quantum mechanics, pronouncing that God could not “play dice with the universe.” But it turned out that Einstein’s objections were flawed—uncertainty is deeply fundamental. Thus, any science-abiding deity we choose may be incompletely informed on at least some aspects of nature.

Is one being excessively audacious, perhaps impertinent, in setting down terms of reference for a Divine entity? Not really. Humans have always chosen their objects of worship. Smarter humans go for smarter Gods. Anthropomorphic representations—such as a God with octopus arms—are a bit out of fashion today but were enormously popular just a few centuries ago. As well, some people might object to binding God and human to the same rules of logic, or perhaps even sharing the same space-time manifold. But if we drop this essential demand then little shall remain. Reason and evidence would lose meaning and be replaced by tradition, authority, and revelation. It would then be wrong for us to

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have $2 + 2 = 5$, but okay for God. Centuries of human progress would come to naught.

Let's face it: the day of the Sky God is long gone. In the Age of Science, religion has been downsized, and the medieval God of classical religions has lost repute and territory. Today people pay lip service to trusting that God but they still swallow antibiotics when sick. Muslim-run airlines start a plane journey with prayers but ask passengers to buckle-up anyway, and most suspect that people who appear to rise miraculously from the dead were probably not quite dead to begin with. These days if you hear a voice telling you to sacrifice your only son, you would probably report it to the authorities instead of taking the poor lad up a mountain. The old trust is disappearing.

Nevertheless, there remains the tantalizing prospect of a divine power somewhere "out there" who runs a mysterious, but scrupulously miracle-free, universe. In this universe, God may choose to act in ingenious ways that seem miraculous. Yet these "miracles" need not violate physical laws. Extraordinary, but legitimate, interventions in the physical world permit quantum tunneling through cosmic worm holes or certain symmetries to snap spontaneously. It would be perfectly fair

for a science-savvy God to use nonlinear dynamics so that tiny fluctuations quickly build up to earth-shaking results—the famous "butterfly effect" of deterministic chaos theory.

Nietzsche and the theothanatologists were plain wrong—God is neither dead nor about to die. Even as the divine habitat shrinks before the aggressive encroachment of science, the quantum foam of space-time creates spare universes aplenty, offering space both for a science-friendly God as well as for self-described "deeply religious non-believers" like Einstein. Many eminent practitioners of science have successfully persuaded themselves that there is no logical contradiction between faith and belief by finding a suitable God, or by clothing a traditional God appropriately. Unsure of why they happen to exist, humans are likely to scour the heavens forever in search of meaning.

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