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The Big Questions
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IN PLACE OF GOD

Can secular science ever oust religious belief – and should it even try?
IT HAD all the fervour of a revivalist meeting. True, there were no hallelujahs, gospel songs or swooning, but there was plenty of preaching, mostly to the converted, and much spontaneous applause for exhortations to follow the path of righteousness. And right there at the forefront of everyone's thoughts was God.

Yet this was no religious gathering — quite the opposite. Some of the leading practitioners of modern science, many of them vocal atheists, were gathered last week in La Jolla, California, for a symposium entitled “Beyond belief: Science, religion, reason and survival” hosted by the Science Network, a science-promoting coalition of scientists and media professionals convening at the Salk Institute for Biological Studies. They were there to address three questions. Should science do away with religion? What would science put in religion's place? And can we be good without God?

First up to address the initial question was cosmologist Steven Weinberg of the University of Texas, Austin. His answer was unequivocal yes. “The world needs to wake up from the long nightmare of religion,” Weinberg told the congregation. “Anything we scientists can do to weaken the hold of religion should be done, and may in fact be our greatest contribution to civilisation.”

Those uncompromising words won Weinberg a rapturous response. Yet not long afterwards he was being exorcised for not being tough enough on religion, and admitting he would miss it once it was gone. Religion was, Weinberg had said, like “a crazy old aunt” who tells lies and stirs up mischief. “She was beautiful once,” he suggested. “She’s been with us a long time. When she’s gone we may miss her.” Science, he admitted, could not offer the “big truths” that religion claims to provide; all it can manage is a set of little truths about the universe.

Richard Dawkins of the University of Oxford would have none of it. Weinberg, he said, was being inexplicably conciliatory, “scraping the barrel” to have something nice to say about religion. “I am utterly fed up with the respect we have been brainwashed into bestowing upon religion,” Dawkins told the assembly.

He was soon joined by Carolyn Porco of the Space Science Institute in Boulder, Colorado, who had been charged with providing an answer for the second question: If not God, then what? Science, she said, could do at least as well as religion. “If anyone has a replacement for God, then scientists do,” Porco said. “At the heart of scientific inquiry is a spiritual quest, to come
This week **Beyond belief**

to know the natural world by
understanding it... Being a scientist and
staring immensity and eternity in the
face every day is about as meaningful
and awe-inspiring as it gets."

Astronomers in particular, she
suggested, regularly confront the big
questions of wonder. “The answers to
these questions have produced the
greatest story ever told and there isn’t a
religion that can offer anything better.”
Religious people, she claimed, use God
to feel connected to something grander
than they are, and find meaning and
purpose through that connection. So
why not show them their place in
the universe and give them a sense of
connectedness to the cosmos? The
answers to why we are here, if they
exist at all, will be found in astronomy
and evolution, she said.

**A secular icon**

Science provides an aesthetic view of
the cosmos that could replace that
provided by religion – a view that could
even be celebrated by its own
iconography, Porco added. Images of
the natural world and cosmos, such as
the Cassini photograph of Earth taken
from beyond Saturn, Apollo 8’s historic
Earthrise or the Hubble Deep Field
image could offer a similar solace to
religious artwork or icons.

The big challenge, according to
Porco, will be dealing with awareness of
our own mortality. The God-concept
brings a sense of immortality,
something science can’t offer. Instead,
she suggested highlighting the fact
that our atoms came from stardust and
would return to the cosmos – as mass or
energy – after we die. “We should teach
people to find comfort in that thought.
We can find comfort in knowing that
everyone who has ever lived on the
Earth will some day adorn the heavens.”

Like many of the others at
the meeting, Porco was preaching to the
choir, and there was no more animated
or passionate preacher than Neil
deGrasse Tyson, director of the Hayden
Planetaryarium in New York. Tyson spoke
with an evangelist’s zeal, and he had
the heretics in his sights. Referring to a
recent poll of US National Academy of
Sciences members which showed 85
per cent do not believe in a personal
God, he suggested that the remaining
15 per cent were a problem that needs
to be addressed. “How come the

**Should science do away with religion?**

“It is just as futile to get someone to give up using
their ears, or love other children as much as their own...
Religion fills very basic human needs.”

Mel Konner, ecologist, Emory University, Atlanta, Georgia

“Religion is leading us to the edge of something terrible...
Half of the American population is eagerly anticipating
the end of the world. This kind of thinking provides people
with no basis to make the hard decisions we have to make.”

Sam Harris, author of *The End of Faith*

“Religion allows billions of people to live a life that makes
sense – they can put up with the difficulties of life, hunger
and disease. I don’t want to take that away from them.”

Francisco Ayala, biologist and philosopher, University of California, Irvine

“No doubt there are many people who do need religion,
and far be it from me to pull the rug from under their feet.”

Richard Dawkins, biologist, University of Oxford

“Science can’t provide a sense of magic about the
world, or a community of fellow-believers. There’s
a religious mentality that yearns for that.”

Steven Weinberg, physicist, University of Texas, Austin

“Science’s success does not mean it encompasses the
entirety of human intellectual experience.”

Lawrence Krauss, physicist and astronomer, Case Western Reserve
University, Ohio

From the left: Weinberg,
Krauss, Shermer, Harris
and deGrasse Tyson

number isn’t zero?” he asked. “That
should be the subject of everybody’s
investigation. That’s something that we
can’t just sweep under the rug.”

This single statistic, he said, gave the
lie to claims that patiently creating a
scientifically literate public would get
rid of religion. “How can [the public] do
better than the scientists themselves?
That’s unrealistic.”

DeGrasse Tyson clearly found it
hard to swallow the idea that a scientist
could be satisfied by revelation rather
than investigation. “I don’t want the
religious person in the lab telling me
that God is responsible for what it is
they cannot discover,” he said. “It’s like
saying no one else will ever discover
how something works.”

For others, the idea that it is
somehow unacceptable for scientists to
maintain a religious belief was going
too far. “They’re doing science, they’re
not a problem,” said Lawrence Krauss,
a physicist based at Case Western Reserve
University in Cleveland, Ohio.

Scientists are not a special class of
humanity, he pointed out, so it is
hardly surprising that a small number
of academy members are also believers.
“It would be amazing if that figure were
zero,” he said. “Scientists are people,
and we all make up inventions so we
can rationalise about who we are.”

Krauss says he found the meeting at
La Jolla a peculiar experience. He is a
If not God then what?

"It is the job of science to present a fully positive account of how we can be happy in this world and reconciled to our circumstances."
Sam Harris, author of The End of Faith

"Let me offer the universe to people. We are in the universe and the universe is in us. I don’t know any deeper spiritual feeling that those thoughts."
Neil deGrasse Tyson, astrophysicist, Hayden Planetarium, New York

"Let’s teach our children about the story of the universe and its incredible richness and beauty. It is so much more glorious and awesome and even comforting than anything offered by any scripture or God-concept that I know of."
Carolyn Porco, planetary scientist, Space Science Institute, Boulder, Colorado

"I’m not one of those who would rhapsodically say all we need to do is understand the world, look at pictures of the Eagle nebula and it’ll fill us with such joy we won’t miss religion. We will miss religion."
Steven Weinberg, cosmologist, University of Texas, Austin

Can we be good without God?

"The axiom that values come from reason or religion is wrong... There are better ways of ensuring moral motivation than siring the Crack out of people."
Patricia Churchland, philosopher, University of California, San Diego

"What about the hundreds of millions of dollars raised just for Katrina by religions? Religions did way more than the government did, and there were no scientific groups rushing to help the victims of Katrina – that’s not what science does."
Michael Shermer, editor-in-chief, Skeptic magazine

"It doesn’t take away from love that we understand the biochemical basis of love."
Sam Harris, author of The End of Faith