

SEARCH

 [TimesSelect](#)

Tip for TimesSelect subscribers: Want to easily save this page? Use Times File by simply clicking on the Save Article icon in the Article Tools box below.

SCIENCE DESK

Advertisement

ESSAY; Agreeing Only to Disagree on God's Place in Science

By **GEORGE JOHNSON (NYT)**
1705 words

Published: September 27, 2005

[E-Mail This](#)
[Printer-Friendly](#)
[Permissions](#)
[Save Article](#)

It was on the second day at Cambridge that enlightenment dawned in the form of a testy exchange between a zoologist and a paleontologist, Richard Dawkins and Simon Conway Morris. Their bone of contention was one that scholars have been gnawing on since the days of Aquinas: whether an understanding of the universe and its glories requires the hypothesis of a God.

The speakers had been invited, along with a dozen other scientists and theologians, to address the 10 recipients of the first Templeton-Cambridge Journalism Fellowships in Science and Religion. Each morning for two weeks in June, we walked across the Mathematical Bridge, spanning the River Cam, and through the medieval courtyards of Queens College to the seminar room.

We were there courtesy of the John Templeton Foundation, whose mission is "to pursue new

insights at the boundary between theology and science," overcoming what it calls "the flatness of a purely naturalistic, secularized view of reality."

On matters scientific, Dr. Dawkins, who came from Oxford, and Dr. Conway Morris, a Cambridge man, agreed: The richness of the biosphere, humanity included, could be explained through natural selection.

They also agreed, contrary to the writings of Stephen Jay Gould, that evolution is not a crapshoot. If earth's history could be replayed like a video cassette, the outcome would be somewhat different, but certain physical constraints would favor the eventual appearance of warm-blooded creatures something like us, with eyes, ears, noses and brains.

Then, just millimeters from complete accord, they forked in orthogonal directions. For Dr. Dawkins, an atheist, the creative power of evolution reinforced his conviction that we live in a purely material world. For Dr. Conway Morris, a Christian, nature's "uncanny ability" to converge on moral, loving creatures like ourselves testified that evolution itself was the handiwork of God.

Dr. Dawkins seemed as puzzled by this leap as he was exasperated. "We agree on almost everything," he said. Why insist on adding in a deity? When it came to science, Dr. Dawkins exclaimed, Dr. Conway Morris's God was "gratuitous."

Momentarily flummoxed, the paleontologist muttered to himself, and some of the fellows murmured their disapproval. But however abrupt Dr. Dawkins may have sounded, he had scored a crucial point.

Science is the name we give to the practice of

finding physical explanations about the universe. Anything spiritual you bring to the table is extraneous, a matter of personal belief.

Scientists can study religion as a neurological or anthropological phenomenon, and religious leaders are free to offer opinions on the moral implications of new technologies. But the Templeton people are after something far more ambitious and volatile: "to join science with faith," as the philosopher Boethius put it. Fifteen centuries later, amid the gothic spires of Cambridge, the debate was smoldering on.

A Foundation With a Mission

There is a journalistic tradition of biting the hand that feeds you. A few days earlier, in the van from Heathrow Airport to Cambridge, several jet-lagged reporters spoke skeptically about our host and its well-publicized agenda. The creation of Sir John Marks Templeton, a 92-year-old Presbyterian investor and billionaire who lives in the Bahamas, the Templeton Foundation is said to earn so much from its endowment that it struggles to give it all away.

By financing programs like "Science, Theology and the Ontological Quest" and "The Origin of the Laws of Nature and the Existence of God," Templeton almost single-handedly sustains the modern movement to reconcile science and religion -- or, as some see it, he is keeping it alive on its death bed with extraordinary means of support.

This is not about intelligent design. While the foundation assumes the existence of a deity, it rejects biblical literalism as much as it does New Age fuzziness; no "crystals and faeries," it admonishes grant seekers.

While the winner of the annual Templeton Prize "for progress in religion" has almost always been a Christian, the award has occasionally gone to a Muslim, a Buddhist, a Hindu or a Jew. The name of the honor, currently worth \$1.5 million, was recently broadened to recognize research on "spiritual realities," a term that many scientists, Dr. Dawkins surely among them, would consider an oxymoron.

In its guidelines, the foundation says it is unlikely to sponsor projects that would bring together science and religion by letting one subsume the other. Nor is it interested in "approaches that erect walls between religion and science and begin with the assumption that they should never have anything to do with each other."

That, at least tacitly, is how many scientists approach the divide -- by compartmentalizing, treating science and religion as what Dr. Gould called nonoverlapping magisteria ("noma" for short). Michael Faraday, a Christian and one of the premier scientists of the 19th century, put it like this: "I do not think it at all necessary to tie the study of the natural sciences and religion together, and in my intercourse with my fellow creatures that which is religious and that which is philosophical have ever been two distinct things."

Even Isaac Newton, whose obsession with alchemy and biblical prophecy bordered on fanaticism, called for a strict distinction between religion and "philosophy," as science was called in his day: "We are not to introduce divine revelations into philosophy, nor philosophical opinions into religion."

For the reconcilers, noma is considered a nonstarter. Accepting it would mean that the centuries-old divergence between these two domains would continue unopposed. It would also

mean the end of the Templeton grants.

God, the Fine-Tuner

Modern science is sometimes said to have grown from the Christian belief in a single supreme being who created and sustains an orderly cosmos. Since he could have written the laws any way he wanted, it follows that they can only be discovered empirically, not deduced from first principles as Aristotle tried to do. The Book of Nature must be studied as assiduously as the Book of God.

Historians go on to describe how science shed its theological chrysalis and went its separate way. The result is what the Templeton people call "flat science." Early in the seminars, Denis Alexander, a Cambridge immunologist and Christian, made the radical suggestion that science reclaim its theistic roots, taking as its deepest premise the existence of God.

Another speaker, John Polkinghorne, a Cambridge physicist turned Anglican priest, saw profound significance in the fact that humans -- rational, conscious creatures endowed with intentionality and free will -- find themselves in a universe with laws they can understand. In "The Faith of a Physicist," he gives his take on the big bang theory with God stepping in to ensure a chemistry "fine tuned" to generate life.

Listening to the reconcilers and reading their books, even an agnostic could appreciate how the beauty of the cosmos might compel one to believe in something transcendent. But what writers like Dr. Alexander and Dr. Polkinghorne are talking about is not just the awe one feels hiking above the timberline or inhaling the ocean air. They are looking to science for something far more specific -- the constant, hovering presence

of the kind of God described in Sunday school, who watches over us and responds to our prayers.

This is not the God of deism, who cranked up the universe and let it run. In drafting the principles of physics he left trapdoors -- what Dr. Polkinghorne calls "causal joints" -- through which to intervene, placing the earth in a hospitable orbit or unleashing the cascade of mutations needed for a microbe to evolve into a man. The trick is to do this without appearing to violate his own laws.

Some theologians speculate that this happens on the subatomic level, when a particle appears to dart probabilistically, with a roll of the quantum dice. Maybe it is God doing the shuffling, and what appears to mortals as quantum indeterminacy is divine intervention in disguise.

Others propose that God acts through nonlinear dynamics, in which microscopic fluctuations give rise to potentially earthshaking results -- chaos theory's "butterfly effect." Here too the influence would be undetectable. With or without the guiding hand of the creator, reality would appear the same.

An Elusive Common Ground

Dr. Dawkins has written that "a universe with a supernatural presence would be a fundamentally and qualitatively different kind of universe from one without." If the God hypothesis is meaningful, it should be subject to a test. But the theistic gloss Dr. Polkinghorne and others give to science is immune to this kind of scrutiny. It has, by design, no observable consequences.

The reconcilers insist that the same is true for the belief that there is nothing but matter and energy, that you can be either a materialist or a theist and

still do good research. But for many scientists, entertaining supernatural explanations is a violation of the craft. A study reported in *Nature* in 1998 found that only 7 percent of the members of the elite National Academy of Sciences believed in God. For biologists the figure was just 5.5 percent.

"You clearly can be a scientist and have religious beliefs," Peter Atkins, an Oxford University chemist, has said. "But I don't think you can be a real scientist in the deepest sense of the word because they are such alien categories of knowledge."

Cloistered inside the walls of Cambridge, we listened as a theologian wondered whether Christ's powers of healing might be quantum mechanical, and a physicist considered whether Jesus would appear on other planets in extraterrestrial form. Trying their best to collide, Dr. Gould's nonoverlapping magisteria seemed farther apart than ever, two great ships passing in the night, pointed in opposite directions.

Drawing (Drawing by William Duke)

[Copyright 2006 The New York Times Company](#) | [Privacy Policy](#) | [Home](#) | [Search](#) | [Corrections](#) | [Help](#) | [Back to Top](#)