

Snake Oil and Holy Water

by Richard Dawkins

Are science and religion converging? No. There are modern scientists whose words sound religious but whose beliefs, on close examination, turn out to be identical to those of other scientists who call themselves atheists. Ursula Goodenough's lyrical book, *The Sacred Depths of Nature*, is sold as a religious book, is endorsed by theologians on the back cover, and its chapters are liberally laced with prayers and devotional meditations.

Yet, by the book's own account, Goodenough does not believe in any sort of supreme being, does not believe in any sort of life after death. By any normal understanding of the English language, she is no more religious than I am. She shares with other atheistic scientists a feeling of awe at the majesty of the universe and the intricate complexity of life. Indeed, the jacket copy for her book—the message that science does not “point to an existence that is bleak, devoid of meaning, pointless,” but on the contrary “can be a wellspring of solace and hope”—would have been equally suitable for my book, *Unweaving the Rainbow*, or Carl Sagan's *Pale Blue Dot*. If that is religion, then I am a deeply religious man. But it isn't. And I'm not. As far as I can tell, my “atheistic” views are identical to Ursula's “religious” ones. One of us is misusing the English language, and I don't think it's me.

Goodenough happens to be a biologist, but this kind of neo-Deistic pseudoreligion is more often associated with physicists. In Stephen Hawking's case, I hasten to insist, the accusation is unjust. His much-quoted phrase, “the mind of God,” no more indicates belief in God than my saying, “God knows!” as a way of indicating that I don't. I suspect the same of Einstein invoking “dear Lord” to personify the laws of physics. Paul Davies, however, adopted Hawking's phrase as the title of a book that went on to earn the Templeton Prize for Progress in Religion, the most lucrative prize in the world today, prestigious enough to be presented in Westminster Abbey. The philosopher Daniel Dennett once remarked to me in Faustian vein: “Richard, if ever you fall on hard times . . .”

If you count Einstein and Hawking as religious, if you allow the cosmic awe of Goodenough, Davies, Sagan, and me as true religion, then religion and science have indeed merged, especially when you factor in such atheistic priests as Don Cupitt and many university chaplains. But if the term religion is allowed such a flabbily elastic definition, what word is left for conventional religion, religion as the ordinary person in the pew or on the prayer mat understands it today—indeed, as any intellectual would have understood it in previous centuries, when intellectuals were religious like everybody else?

If God is a synonym for the deepest principles of physics, what word is left for a hypothetical being who answers prayers, intervenes to save cancer patients or helps evolution over difficult jumps, forgives sins or dies for them? If we are allowed to relabel scientific awe as a religious impulse, the case goes through on the nod. You have redefined science as religion, so it's hardly surprising if they turn out to “converge.”

Another kind of marriage has been alleged between modern physics and Eastern mysticism. The argument goes as follows: Quantum mechanics, that brilliantly successful flagship theory of modern science, is deeply mysterious and hard to understand. Eastern mystics have always been deeply mysterious and hard to understand. Therefore, Eastern mystics must have been talking about quantum theory all along.

Similar mileage is made of Heisenberg's uncertainty principle (“Aren't we all, in a very real sense, uncertain?”), fuzzy logic (“Yes, it's okay for you to be fuzzy, too”), chaos

and complexity theory (the butterfly effect, the Platonic, hidden beauty of the Mandelbrot Set—you name it, somebody has mysticized it and turned it into dollars). You can buy any number of books on “quantum healing,” not to mention quantum psychology, quantum responsibility, quantum morality, quantum immortality, and quantum theology. I haven’t found a book on quantum feminism, quantum financial management, or Afro-quantum theory, but give it time.

The whole dippy business is ably exposed by the physicist Victor Stenger in his book, *The Unconscious Quantum*, from which the following gem is taken. In a lecture on “Afrocentric healing,” the psychiatrist Patricia Newton said that traditional healers “are able to tap that other realm of negative entropy—that superquantum velocity and frequency of electromagnetic energy—and bring them as conduits down to our level. It’s not magic. It’s not mumbo jumbo. You will see the dawn of the 21st century, the new medical quantum physics really distributing these energies and what they are doing.”

Sorry, but mumbo jumbo is precisely what it is. Not African mumbo jumbo but pseudoscientific mumbo jumbo, down to the trademark misuse of the word energy. It is also religion, masquerading as science in a cloying love feast of bogus convergence.

In 1996 the Vatican, fresh from its magnanimous reconciliation with Galileo, a mere 350 years after his death, publicly announced that evolution had been promoted from tentative hypothesis to accepted theory of science. This is less dramatic than many American Protestants think it is, for the Roman Catholic Church has never been noted for biblical literalism—on the contrary, it has treated the Bible with suspicion, as something close to a subversive document, needing to be carefully filtered through priests rather than given raw to congregations. The pope’s recent message on evolution has, nevertheless, been hailed as another example of late-20th-century convergence between science and religion.

Responses to the pope’s message exhibited liberal intellectuals at their worst, falling over themselves in their eagerness to concede to religion its own magisterium, of equal importance to that of science, but not opposed to it. Such agnostic conciliation is, once again, easy to mistake for a genuine meeting of minds.

At its most naive, this appeasement policy partitions the intellectual territory into “how questions” (science) and “why questions” (religion). What are “why questions,” and why should we feel entitled to think they deserve an answer? There may be some deep questions about the cosmos that are forever beyond science. The mistake is to think that they are therefore not beyond religion, too.

I once asked a distinguished astronomer, a fellow of my college, to explain the big bang theory to me. He did so to the best of his (and my) ability, and I then asked what it was about the fundamental laws of physics that made the spontaneous origin of space and time possible. “Ah,” he smiled, “now we move beyond the realm of science. This is where I have to hand you over to our good friend, the chaplain.” But why the chaplain? Why not the gardener or the chef? Of course chaplains, unlike chefs and gardeners, claim to have some insight into ultimate questions. But what reason have we ever been given for taking their claims seriously? Once again, I suspect that my friend, the professor of astronomy, was using the Einstein/Hawking trick of letting “God” stand for “That which we don’t understand.” It would be a harmless trick if it were not continually misunderstood by those hungry to misunderstand it. In any case, optimists among scientists, of whom I am one, will insist, “That which we don’t understand” means only “That which we don’t yet understand.” Science is still working on the problem. We don’t know where, or even whether, we ultimately shall be brought up short.

Agnostic conciliation, which is the decent liberal bending over backward to concede as much as possible to anybody who shouts loud enough, reaches ludicrous lengths in the following common piece of sloppy thinking. It goes roughly like this: You can’t

prove a negative (so far so good). Science has no way to disprove the existence of a supreme being (this is strictly true). Therefore, belief or disbelief in a supreme being is a matter of pure, individual inclination, and both are therefore equally deserving of respectful attention! When you say it like that, the fallacy is almost self-evident; we hardly need spell out the *reductio ad absurdum*. As my colleague, the physical chemist Peter Atkins, puts it, we must be equally agnostic about the theory that there is a teapot in orbit around the planet Pluto. We can't disprove it. But that doesn't mean the theory that there is a teapot is on level terms with the theory that there isn't.

Now, if it be retorted that there actually are reasons X, Y, and Z for finding a supreme being more plausible than a teapot, then X, Y, and Z should be spelled out—because, if legitimate, they are proper scientific arguments that should be evaluated. Don't protect them from scrutiny behind a screen of agnostic tolerance. If religious arguments are actually better than Atkins' teapot theory, let us hear the case. Otherwise, let those who call themselves agnostic with respect to religion add that they are equally agnostic about orbiting teapots. At the same time, modern theists might acknowledge that, when it comes to Baal and the golden calf, Thor and Wotan, Poseidon and Apollo, Mithras and Ammon Ra, they are actually atheists. We are all atheists about most of the gods that humanity has ever believed in. Some of us just go one god further.

In any case, the belief that religion and science occupy separate magisteria is dishonest. It founders on the undeniable fact that religions still make claims about the world that on analysis turn out to be scientific claims. Moreover, religious apologists try to have it both ways. When talking to intellectuals, they carefully keep off science's turf, safe inside the separate and invulnerable religious magisterium. But when talking to a nonintellectual mass audience, they make wanton use of miracle stories—which are blatant intrusions into scientific territory.

The Virgin Birth, the Resurrection, the raising of Lazarus, even the Old Testament miracles, all are freely used for religious propaganda, and they are very effective with an audience of unsophisticates and children. Every one of these miracles amounts to a violation of the normal running of the natural world. Theologians should make a choice. You can claim your own magisterium, separate from science's but still deserving of respect. But in that case, you must renounce miracles. Or you can keep your Lourdes and your miracles and enjoy their huge recruiting potential among the uneducated. But then you must kiss goodbye to separate magisteria and your high-minded aspiration to converge with science.

The desire to have it both ways is not surprising in a good propagandist. What is surprising is the readiness of liberal agnostics to go along with it, and their readiness to write off, as simplistic, insensitive extremists, those of us with the temerity to blow the whistle. The whistle-blowers are accused of imagining an outdated caricature of religion in which God has a long white beard and lives in a physical place called heaven. Nowadays, we are told, religion has moved on. Heaven is not a physical place, and God does not have a physical body where a beard might sit. Well, yes, admirable: separate magisteria, real convergence. But the doctrine of the Assumption was defined as an Article of Faith by Pope Pius XII as recently as November 1, 1950, and is binding on all Catholics. It clearly states that the body of Mary was taken into heaven and reunited with her soul. What can that mean, if not that heaven is a physical place containing bodies? To repeat, this is not a quaint and obsolete tradition with just a purely symbolic significance. It has officially, and recently, been declared to be literally true.

Convergence? Only when it suits. To an honest judge, the alleged marriage between religion and science is a shallow, empty, spin-doctored sham.