



Evolution vs. Religion

Endless debate—or opportunity for mutual enrichment?

BY AMY UELMEN

ARE SCIENTIFIC AND RELIGIOUS PERSPECTIVES impossible to reconcile? Recent debates in current U.S. culture have highlighted some of the most difficult tensions. Perhaps one of the most powerful symbols of how difficult it is to bring them together is the debate over Charles Darwin's theory of evolution. Shortly after the British scientist first outlined his theory in *On the Origin of the Species* (1859), books with titles such as *History of the Conflict Between Religion and Science* (1874) and *A History of the Warfare of Science with Theology* (1896) painted the portrait of the seemingly irreconcilable tension.

This year marks the eightieth anniversary of one of the most famous evolution-creationism debates in the United States. In 1925, a young science teacher, John Scopes, had violated the Tennessee "monkey law" which

made it unlawful "to teach any theory that denies the story of Divine Creation of man as taught in the Bible, and to teach instead that man has descended from a lower order of animals." In a duel that became a cultural icon, thanks to the film *Inherit the Wind*, two famous lawyers of the day, William Jennings Bryan and Clarence Darrow, locked horns over what seemed to be an irresolvable conflict between sci-

ence and faith. The court upheld the law and fined Scopes \$100, but the conviction was later annulled on a technicality. In hindsight, both sides claimed victory and saw the trial as a powerful vehicle for widespread publicity of their own perspectives.

In the decades that followed, the tension between evolution and creationism resurfaced periodically and the controversies wound their way through the courts. In 1968 the U.S. Supreme Court struck down an Arkansas statute that forbade the teaching of evolution in public schools as a violation of the First Amendment's prohibition against the establishment of religion. Two decades later, in a slightly different twist, the U.S. Supreme Court considered the Louisiana "Balanced

Treatment for Creation-Science and Evolution Science" Act. While no school was required to teach either evolution or creation science, the law forbade the teaching of evolution unless accompanied by instruction in creation science. The Court found this too was an unconstitutional establishment of religion.

The debate continues to rage. In recent months, public

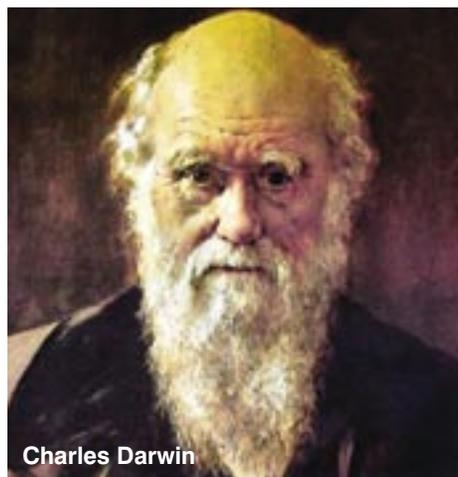


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Left: Lawyers Clarence Darrow and William Jennings Bryan during the Scopes' trial in 1925

school board hearings in several states have served as a platform for debates on whether science teachers who teach the theory of evolution must also give equal time to alternative theories of the origins of life, including evidence that the universe is not the product of blind and mindless random selection, but rather the fruit of “intelligent design.” This past July, when Cardinal Schönborn of Vienna published an editorial on the controversy in the *New York Times*, even more fuel was added to the fire.

Does a discussion of the origins of life necessarily entail a duel between science and faith?



Charles Darwin

At the extremes of the debate, a large part of the problem is that both “creationists” and some scientists seem to be asking too much of their principle texts.

In a 1994 Vatican document, *The Interpretation of the Bible in the Church*, the Pontifical Biblical Commission pointed out several problems with a “fundamentalist” interpretation of biblical texts. When the inerrancy of certain details in the biblical texts is over-emphasized, or when the bible is read only as a book of historical facts, one may miss the intended symbolic or figurative meaning. Similarly, biblical texts were never intended to serve as a science textbook. To force them into this function is not only to confuse the scientific

accounts, but also to risk losing their deeper meaning.

But scientists can also slip into their own kind of fundamentalism. As Catholic theologian John Haught, director of Georgetown’s Center for the Study of Science and Religion, noted in his recent book, *Deeper than Darwin*, “The leap from ‘Darwin got it right’ to ‘Darwin tells the whole story’ has proven increasingly irresistible.”

Some “scientific materialists” draw sweeping philosophical conclusions from their scientific data. In his 1995 book, *River Out of Eden*, British scientist Richard Dawkins claimed that religion has nothing to add to our understanding of life because it fails to meet the “objective” tests of science: “Scientific beliefs are supported by evidence, and they get results. Myths and faiths are not and do not.” Because he sees no scientific explanation for life’s deepest questions, he assumes there are no answers at all: “The universe we observe has precisely the properties we should expect if there is, at bottom, no design, no purpose, no evil and no good, nothing but blind, pitiless indifference.

So long as creationists and scientific materialists insist that their texts “tell the whole story,” they will continue to be at loggerheads.

Might the theory of “intelligent design” offer some hope for reconciling faith and science?

On one hand, it seems to pose an attractive response to the harder edges of scientific materialism. It seems to capture the response not just of scientific experts, but also of many ordinary people in front of the wondrous complexity and beauty of nature: how could this possibly be the product of mindless chance? How can we not see in creation the hand of God?

Some, however, are concerned that the “intelligent design” inference is too rigid and simplistic. As Professor Haught notes, “there is wonderfully intricate patterning in nature, of course, but there is much disorder and suffering as well.” Others are concerned that to posit the direct

interference of a “designer” in the midst of otherwise natural processes inserts non-scientific elements into the analysis, and thus threatens the legitimate autonomy of the scientific endeavor.

As human beings, scientists are certainly right to reflect on the broader meaning of their research. But to the extent that they move beyond discussion of the natural order into the realm of philosophical and theological reflection about the origins of life, they should expect to be engaged not just on the level of scientific “evidence and results,” but also philosophical and theological explanations.

How might these worlds be brought together?

A first step would be to clarify that science and religion need not directly clash. As Professor Haught explains, the universe can be compared to a book that can be read on many different levels. Just as one can parse the grammatical structure of a sentence, or engage in broader and more thematic reflection, science and religion work on different “reading levels” and provide different kinds of insight about the universe.

But this is only the first step. Would it be possible to imagine a dialogue in which science and religion speak to one another,



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“Both religion and science must preserve their autonomy and their distinctiveness. Religion is not founded on science nor is science an extension of religion.”

learn from one another, and even challenge each other's assumptions?

In a 1988 message, Pope John Paul II described this kind of exchange as crucial to the growth and development of human culture, for it challenges us to move beyond our "separate compartments." "A divided community fosters a fragmented vision of the world," he wrote. "[A] community of interchange encourages its members to expand their partial perspectives and form a new unified vision" (see box). But he also insisted that the dialogue must proceed with respect for the autonomy and identity of each discipline. The Pope explained: "The Church does not pro-

pose that science should become religion or religion science. On the contrary, unity always presupposes the diversity and the

integrity of its elements."

In the dialogue between science and religion, as in all areas of culture, to build relationships of unity in diversity is quite a challenge. It requires a readiness to admit that one's own discipline or perspective does not "tell the whole story," and to listen and learn from another's perspective. But if we embark on this path, we will surely be enriched by a "common interactive relationship," in the words of John Paul II, "in which each discipline retains its integrity and yet is radically open to the discoveries and insights of the other."



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Dialogue between science and religion is crucial to the growth and development of human culture.

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Unity, not Identity

In 1988, Pope John Paul II sent a message to Rev. George V. Coyne, S.J., Director of the Vatican Observatory, on the occasion of a Vatican-sponsored symposium to commemorate the 300th anniversary of the publication of Sir Isaac Newton's *Philosophiae Naturalis Principia Mathematica*. It provides a wonderful description of the deepest challenges for the dialogue between religion and science. A brief excerpt follows.

TURNING TO THE RELATIONSHIP BETWEEN religion and science, there has been a definite, though still fragile and provisional, movement towards a new and more nuanced interchange. ... In the process [of dialogue] we must overcome every regressive tendency to a unilateral reductionism, to fear and to self-imposed isolation. What is critically important is that each discipline should continue to enrich, nourish and challenge the other to be more fully what it can be and to

contribute to our vision of who we are and who we are becoming....

We might ask whether or not we are ready for this crucial endeavor ... Do we dare to risk the honesty and the courage that this task demands? We must ask ourselves whether both science and religion will contribute to the integration of human culture or to its fragmentation ... If they are to grow and mature, peoples cannot continue to live in separate compartments, pursuing totally divergent interests from which they evaluate and judge their world. A divided community fosters a fragmented vision of the world; a community of interchange encourages its members to expand their partial perspectives and form a new unified vision.

Yet the unity that we seek ... is not identity. The Church does not propose that science should become religion or religion science. On the contrary, unity always presupposes the diversity and the integrity of its elements. Each of these members should become not less itself but more itself in a dynamic interchange, for a unity in which one of the elements is reduced to the other is destructive, false in its promises of harmony, and ruinous of

the integrity of its components. We are asked to become one. We are not asked to become each other.

To be more specific, both religion and science must preserve their autonomy and their distinctiveness. Religion is not founded on science nor is science an extension of religion. Each should possess its own principles, its pattern of procedures, its diversities of interpretation and its own conclusions.

Christianity possesses the source of its justification within itself and does not expect science to constitute its primary apologetic. Science must bear witness to its own worth. While each can and should support the other as distinct dimensions of a common human culture, neither ought to assume that it forms a necessary premise for the other. The unprecedented opportunity we have today is for a common interactive relationship in which each discipline retains its integrity and yet is radically open to the discoveries and insights of the other.

The full text of the message is available at Interdisciplinary Documentation on Religion & Science, www.disf.org/en/documentation/12-880601_LettVatObs.asp