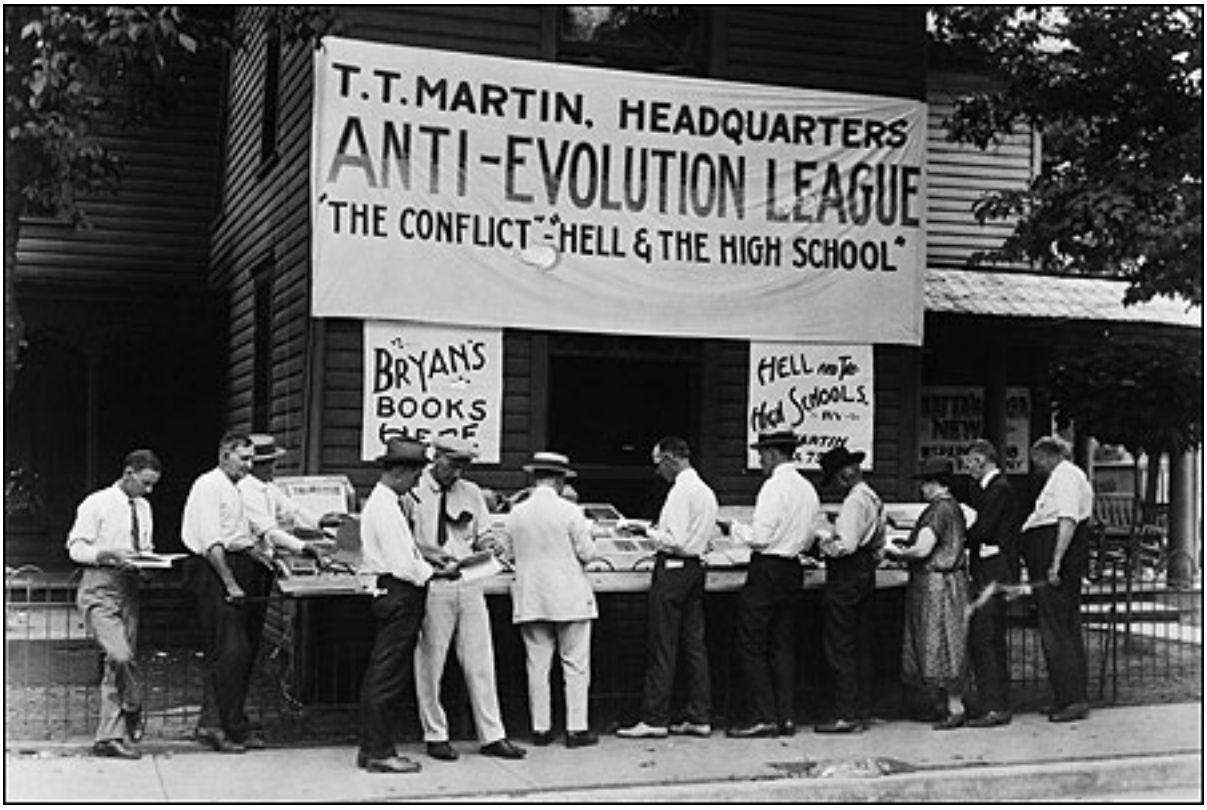


**HEARTS AND MINDS.** Evolution is so embattled, Michael Ruse argues, because Darwinians have historically tried to compete with religion. Above: The Anti-Evolution League holds a book sale in Dayton, Tenn., during the Scopes "Monkey" Trial, in July 1925. (Photo / Bettmann / Corbis)

# Evolutionary war

The Boston Globe

## In the ongoing struggle between evolution and creationism, says philosopher of science Michael Ruse, Darwinians may be their own worst enemy

**By Peter Dizikes | May 1, 2005**

CREATIONISM IS ON the march in America. In states from Alabama to Pennsylvania, supporters are attempting to restrict the teaching of evolution - and introduce their current favorite theory, Intelligent Design, into the classroom. Darwinian evolution, they say, cannot account for the complexity of life, which can only be explained with reference to some kind of creator. And such efforts may be having an effect. According to a Gallup survey released last November, only about a third of Americans believe that Darwin's theory is well supported by the scientific evidence, while nearly half believe that humans were created in more or less their present form 10,000 years ago.

What accounts for this revival? Some observers point to the increasing political influence of the religious right. Others point to decades of well-funded creationist efforts to chip away at evolution's stature, reducing it to just one in a range of competing theories. But Michael Ruse has a different explanation: He lays much of the blame at the feet of evolution's most famous advocates.

Ruse, a philosopher of science at Florida State University, occupies a distinct position in the heated

debates about evolution and creationism. He is both a staunch supporter of evolution and an ardent critic of scientists who he thinks have hurt the cause by habitually stepping outside the bounds of science into social theory. In his latest book, "The Evolution-Creation Struggle," published by Harvard University Press later this month, Ruse elaborates on a theme he has been developing in a career dating back to the 1960s: Evolution is controversial in large part, he theorizes, because its supporters have often presented it as the basis for self-sufficient philosophies of progress and materialism, which invariably wind up in competition with religion.

While scientists and creationists often square off over the scientific evidence for evolution, the source

of the ongoing dispute is deeper. "This is not just a fight about dinosaurs or gaps in the fossil record," says Ruse, speaking from his home in Florida. "This is a fight about different worldviews."

The tendency to apply ideas about organic evolution to society and philosophy, Ruse claims in his new book, dates to the Enlightenment, but it really took flight in the aftermath of Charles Darwin's 1859 publication of "The Origin of Species." While Darwin himself, in Ruse's view, largely abstained from gratuitous social theorizing, many of his fellow scientists, such as the English biologist T.H. Huxley, as well as nonscientists like Herbert Spencer, enthusiastically used the general notion of evolution to argue that society was moving forward through history. While their ideas varied, writes Ruse, "progress was the backbone of it all" - even though that value, he believes, cannot be wholly justified, or properly derived, from actual evolution by natural selection.

As Ruse sees it, this trend continued in the 20th century, when even important biologists like the Englishman R.A. Fisher held eugenicist views about human perfectibility. Julian Huxley, evolution's most famous British advocate in the 1950s and 1960s, emphasized his own secular vision of "evolutionary humanism" in his writings, while his American counterpart, George Gaylord Simpson, spoke of the impossibility of compromise between evolution and religion.

Virtually every prominent Darwinian in recent decades has eschewed social Darwinism, and most believe that evolution itself, while responsible for the increased complexity of organic forms over time, cannot be regarded as a linear process driving toward a particular endpoint. But Ruse asserts that popular contemporary biologists like Edward O. Wilson and Richard Dawkins have also exacerbated the divisions between evolutionists and creationists by directly challenging the validity of religious belief - Dawkins by repeatedly declaring his atheism ("faith," he once wrote, "is one of the world's great evils, comparable to the smallpox virus but harder to eradicate"), and Wilson by describing his "search for objective reality" as a replacement for religious seeking.

All told, Ruse claims, loading values onto the platform of evolutionary science constitutes "evolutionism," an outlook that goes far beyond the scientific acceptance of evolution as a means of explaining the origins and development of species. Provocatively, Ruse argues that evolutionism has often constituted a "religion" itself by offering "a world picture, a story of origins, and a special place for humans," while its proponents have been "trying deliberately to do better than Christianity."

To be sure, Ruse acknowledges, some biologists are religious, while a significant portion of religious believers are willing to accept the concept of evolution at least to some extent. But, he argues, the way evolutionists have often linked their science to progressive politics has, in recent decades, become

anathema to many believers, especially fundamentalist Christians whose biblical literalism leads them to believe that worldly change will only arrive with the Second Coming. The advocates of evolution, Ruse argues, have thus been "competing for space in the hearts and minds" of many religious believers without even realizing it - much to the detriment of their cause.

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Ruse, a native of England who emigrated first to Canada before coming to Florida State five years ago, is used to raising the ire of fellow Darwinians. Last year, when he co-edited a book, "Debating Design," with William A. Dembski, a leading advocate of Intelligent Design, leaving him open to charges that he was giving creationists credibility and a platform.

Ruse says he expects a similarly heated response to his latest book. "Some colleague or another is going to go through the roof on this," he says, with a hint of enthusiasm. He predicts "a range of reactions from the irritated to the livid. And if I don't get that I'm going to be a very sorry person."

If the book raises hackles, though, it also raises critical questions. Given the inherent conflict between evolution and a literal reading of Genesis, does it really matter what evolution's advocates say? Or are creationists bound to attack evolutionary science regardless? And to what extent does Ruse's own approach, as the in-house critic of evolution's advocates, help or hinder his cause?

On the first count, some historians of science agree the social theorizing of evolutionists has helped motivate creationists. "If you go back to the 1950s and '60s, you can find people reacting to Julian Huxley's grand statements about the meaning of evolution," says Edward J. Larson, a historian at the University of Georgia and author of the Pulitzer Prize-winning "Summer for the Gods" (1997), about Tennessee's famous 1925 Scopes Trial, in which a schoolteacher was accused of violating state law against the teaching of evolution. More recently, University of California law professor Phillip E. Johnson, a champion of Intelligent Design, has claimed to be responding to Dawkins's declarations of atheism.

Ruse, a self-identified agnostic, acknowledges the "thrilling quality" of Dawkins's writing but says he objects to adamantly anti-religion statements coming from a scientist. "I don't have any more belief than Dawkins," he says. "But I do think it matters that he is making it very difficult for those of us who care about evolution to put forward a reasonable face to the reasonable portion [of the public] in the middle."

By focusing on scientific superstars, though, Ruse may be downplaying the social and institutional factors which have fueled the emergence of organized opposition to evolution. While Darwinian evolution has faced fierce critics ever since 1859, American resistance to it has often become most concerted in response to broad societal developments. The Scopes Trial itself occurred not long after a significant increase in high school attendance, which made the question of what students were learning there more pressing. And the widespread adoption in the 1960s of a textbook on evolution produced by the Biological Science Curriculum Study group, a Colorado-based educational publishing company, spurred the organization of well-funded anti-evolution groups that remain active today, such as the California-based Institute for Creation Research.

"Certainly the presence of the BSCS textbooks in the 1960s became the rallying point for the creationists," notes Larson. And the recent growth, he adds, in the number of theologically conservative

evangelical Christians, at the expense of mainline Protestant denominations that have traditionally been more receptive to evolution, has only given the anti-evolution movement more momentum.

Ruse acknowledges this dynamic. But he says that precisely because scientists ''are plunged into a situation not of their own making,'' they should change tactics, and seek out religious moderates who might be willing to accept evolution if it were presented in a more diplomatic manner.

Other science supporters agree there is a middle ground where minds, if not hearts, can be won. ''There are many people in religious communities, who if they were given information on evolution in an objective, careful way, would not have a problem believing in evolution,'' says Albert H. Teich, director of science and policy programs for the American Association for the Advancement of Science. The AAAS will release a new guide to evolution this summer, which it hopes will have broad appeal.

While Ruse claims the writings of evolutionists have had unintended consequences, his own work has not been immune from that problem. Some creationists who cite his work to support their position have ignored his distinction between ''evolutionism'' and evolution. In 2000, for instance, Tom Willis, president of the Creation Science Association for Mid-America, claimed that ''Michael Ruse ... recently stated that evolution is a religion and always has been.''

Ruse accepts such incidents as an occupational hazard. ''What am I supposed to do?'' he asks in response. ''I'm an academic. I believe in freedom. I believe the most important thing you can do is criticize your own ideas.''

Colleagues do not entirely agree. ''If you deal in this area, you have to word things carefully,'' says Eugenie C. Scott, an anthropologist who is executive director of the National Center for Science Education, an evolution advocacy group in Oakland. ''And sometimes it may be necessary to forego the snappy line, just so it's not easy [for a creationist] to take your thoughts out of context.''

Adds Scott: ''I'm a hell of a lot more careful than Michael. I personally prefer not to provide ammunition for the opposition.''

Scott believes that in previous books Ruse has done ''a nice job'' debunking Intelligent Design. As for those who criticize him for collaborating with Intelligent Design advocates like Dembski, Ruse says, ''If you sup with the devil, it's legitimate for people to take shots at that.'' He did it because ''I think it's a bad mistake to ignore the other side.''

Ultimately, Ruse says, ''Evolution is true. Evolution works.'' But as he sees it, the traditional ways of presenting evolution have hurt as much as helped.

''If everything were going well, you could sit back and say, ‘Ruse, don't rock the boat,'' he says. ''But it's awful. If Bush gets one or two more Supreme Court Justices, we'll have Intelligent Design in the classroom.'' (In 1981, Ruse testified in a case in which an Arkansas judge ruled that creation science - which the state had tried to introduce in schools - was not valid science but an unconstitutional attempt to teach religion in the classroom. The Supreme Court upheld the decision in 1987.)

That's why he will continue to insist that many religious believers who currently reject or remain

indifferent to Darwin can come to accept it - as long as they are presented strictly with scientific facts, and given less reason to think evolution could be a threat to their social and spiritual values.

"Am I going to convert Phillip Johnson?" asks Ruse, referring to the anti-Darwinian Berkeley professor. "Absolutely not. Are we going to find a way to reach people in the center on these things? Sure."

*Peter Dizikes is a journalist living in Arlington.* ■