

scientists say it is, however, Scot does not help us grasp why creationism has continued to thrive. For that you'd need **THE EVOLUTION-CREATION STRUGGLE** (Harvard University, \$25.95), by the philosopher of science Michael Ruse. Ruse is "an ardent Darwinian" who has testified against the inclusion of creationism in

public school science curriculums. Nonetheless, he says here, we must be careful about how we use the word "evolution," because it actually conveys two meanings, the science of evolution and something he calls "evolutionism." Evolutionism is the part of evolutionary thought that reaches beyond testable science. Evolutionism addresses questions of origins, the meaning of life, morality, the future and our role in it. In other words, it does all the work of a religion, but from a secular perspective. What gets billed as a war between hard science and mushy theology should rather be understood, says Ruse, as "a clash between two rival metaphysical world pictures."

Ruse sweeps readers through three millennia of evolutionism and proto-evolutionism, starting with the Old Testament, which introduced the idea of historical change into a world where time had been changeless. He passes through Plato, Aristotle, Aquinas and the Reformation before stopping for a long visit with Charles Darwin. Darwin believed in a Designer until he discovered natural selection, the continual culling of less fit forms of life that drives evolution forward. Even then, he didn't reject God altogether. He became a deist, arguing that a God who operates through impersonal laws has more grandeur than one who constantly meddles. But evidence of divine indifference (and, some say, the death of his 10-year-old daughter) eventually drove him to agnosticism.

And there matters are often said to have stood ever since. "Social discourse on the cosmic origins of human beings has been stuck in a rut since the publication of . . . 'On the Origin of Species,'" writes the paleontologist Niles Eldredge in his foreword to Scott's book. The enlightened half of American society grasps Darwin's point and is not troubled by it; the other half intransigently refuses to.

But the debate has not stood still, and Darwinism has not always been synonymous with enlightenment. As Ruse points out, Darwinism didn't mean then what it means today, because science looked nothing like it does now. It was a hobby for amateurs, with few standards and no sense of its own limitations. Darwin, uninterested in promoting evolution, left the job to his more charismatic friend Thomas Henry Huxley. A doctor and morphologist, Huxley professionalized the new biology, using it to train medical students who till then had spent more time on Plato than anatomy. He also gave public lectures that retold the story of creation as a tale about the blind workings of nature's laws. His epic had a cosmic sweep to it, and no room for God.

To Darwin's dismay, it didn't have room for the fine details of evolutionary processes either. What Huxley wanted to talk about was the march of progress — how evolution drives species upward, culminating in the development of man. Darwin had realized that if he

ence, he'd have to avoid ascribing a higher merit to those who won out in the battle for life. But Huxley's evolutionism overshadowed Darwin's less judgment-laden science for at least

half a century. Herbert Spencer, the dominant pop philosopher of the latter half of the 19th century, coined the phrase "survival of the fittest," and promoted Social Darwinism, a laissez-faire evolutionism that put English-speaking Europeans at the top of the heap. Eugenics became respectable. Ruse notes that the high school biology textbook defended in the 1925 Scopes Monkey trial included, along with a brief mention of evolution, a call for improving human stock through selective breeding.

Fundamentalists, already horrified by evolution's challenge to the creation story, concluded that it also led to dangerous schemes for reshaping humankind. They turned away from science and returned to the Bible for information about how the world was made. Their Bible also told them how it would end — with Christ fending off the Antichrist — and they wanted to find themselves on the right side of that battle.

The most surprising twist in Ruse's drama is the starring role he grants to the apocalyptic eschatology known as millennialism, which comes in two basic variants. Millennialists in general hold that before the Last Judgment, Christian martyrs will rise from the dead to rule for a thousand years of peace. Premillennialists argue that Jesus will personally usher in that millennium. Postmillennialists reply that Christ will come after the millennium, which they interpret as the heaven on earth that good people fashion through good works. Over the centuries, some premillennialists evolved into American fundamentalists. Some postmillennialists evolved into social reformers. An only partly secularized postmillennialist optimism fueled many American do-good causes, such as abolitionism. Ruse adds evolutionism to the list.

Ruse's assertion that evolutionism amounts to a latter-day postmillennialism feels more like a clever metaphor than a genuine link between ideas. Calling those who preach redemption through evolution "post-millennialists," however, is a good way of showing them how they look to America's many premillennialists. Spencerian pronouncements have certainly become less acceptable, but the notion that evolution equals progress still runs through many evolutionary theorists' works and public statements, giving them, at times, a curiously spiritual feel.

Some say that human intelligence results from natural selection's preference for complex systems, which is not that different from saying that humans have ascended to the top of the chain of being. Some say that only by attending to the lessons of evolution and preserving biodiversity will we spare the planet an ecological catastrophe, a point that seems indisputable but nonetheless turns evolution into an urgent moral imperative. Others offer an evolutionary account of human nature that is all too often construed by the popular press as exhorting us to give in to urges that served us better on the Pleistocene savanna than in the modern world.

In other words, evolutionism — the conviction that evolution explains life's meaning and tells us how to deal with the future — remains as powerful a cultural force as ever. But what should we do about it? Ruse calls for "a more informed and self-aware approach to the issues," a suggestion that's commendable but won't do much to tone down those people convinced that evolution has large social and theological (or anti-theological) implications. Besides, those people may well be right. I'd suggest something else: Teach evolution in biology class and evolutionism in religion class along with creationism, deism and all the other cosmologies that float unexamined through our lives. Religion class is just the place for fight about religion.

Judith Shulevitz has written about religion for Slate and The New York Times.

NYT 10 Sunday, January 22, 2006