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From Darwin to Dover: *An Overview of Important Cases in the Evolution Debate*

Almost 150 years after Charles Darwin published his groundbreaking theory on the origins of life, Americans are still fighting over evolution. If anything, the controversy is growing in both size and intensity. In the last two years alone, challenges to the teaching of evolution in one form or another have been mounted in school boards, town councils and legislatures in more than half the states, including Wisconsin, Kansas, Pennsylvania and Washington.

Through much of the 20th century evolution opponents have either tried to strike the teaching of Darwin's theory from school science curricula or urged schools to also teach the Creation story found in the Old Testament book of Genesis. The famous 1925 Scopes "monkey" trial, for instance, involved a Tennessee law prohibiting the teaching of evolution in the state's schools.

But beginning in the 1960s the Supreme Court issued a number of important decisions that imposed severe restrictions on evolution opponents. As a result, school boards, legislatures and government bodies are now barred from prohibiting the teaching of evolution. They also may not require the teaching of creationism, either alongside evolutionary theory or in place of it.

Recently, and partly in response to these court decisions, opposition to evolution has itself evolved, with opponents changing their goals and tactics. In the last decade, some local and state school boards in Kansas, Pennsylvania and elsewhere have considered teaching what they contend are scientific alternatives to evolution — notably the theory of intelligent design, which posits that life is too complex to have developed without the intervention of an outside force. Other education officials have tried to require students to hear or read evolution disclaimers, such as one recently proposed in Cobb County, Ga., that reads, in part, that evolution is "a theory, not a fact [and]... should be approached with an open mind, studied carefully and critically considered."

LEGAL BACKGROUND

Recent polls indicate that challenges to Darwinian evolution have substantial support among the American people. According to a July 2005 survey sponsored by the Pew Forum on Religion & Public Life and the Pew Research Center for the People & the Press, 60 percent believe that humans and other animals have either always existed in their present form or have evolved over time under the guidance of a Supreme Being. Only 26 percent agree with Darwin that life evolved through natural selection. Finally, the poll found that 64 percent of Americans support teaching creationism alongside evolution in the classroom.

This view is not shared by the nation's scientists, most of whom reject challenges to evolution. They often describe the most recent challenger — intelligent design — as little more than creationism dressed up in scientific jargon. Many scientists don't even want to debate intelligent design proponents, arguing that doing so would give the movement a legitimacy it does not deserve.

Still, a small but highly visible cadre of researchers and thinkers contend that intelligent design is fast becoming a legitimate scientific theory. There are significant gaps in Darwin's theory, they say — gaps that are best filled by recognizing the role of an intelligent agent in life's origins and development.

Although the intelligent design movement is barely 10 years old, it has already become the main vehicle for challenging Darwin in the classroom. But will efforts to introduce students to intelligent design and other challenges to evolution pass constitutional muster? As already noted, courts in recent decades have not been kind to evolution opponents, with judges striking down a variety of state and local efforts to either limit the teaching of Darwin's theory or mandate the presentation of alternative viewpoints.

High Court Rulings: Epperson and Edwards

During the 1920s, legislatures or school boards in a number of states, including Texas, North Carolina, Tennessee, Florida and California, passed laws or rules requiring the teaching of the biblical story of Creation, either along with or in place of evolution. The famous 1925 Scopes trial may have held up Christian fundamentalists to ridicule in parts of the country, but it did not lead to the repeal of anti-evolution measures.

Indeed, the first major challenge to anti-evolution laws did not come until the late 1960s. In 1968, in *Epperson v. Arkansas*, the Supreme Court took up a constitutional challenge to a 1928 Arkansas law that made it a crime to teach evolution in a public school or state university. The law did not require the teaching of creationism or any other theory on life's origins, but simply barred Darwinian evolution from the state's public educational system.

In a 9-0 decision, the court ruled that the law violated the First Amendment's Establishment Clause because it ultimately had a religious purpose, in this case preventing students from learning a particular viewpoint antithetical to conservative Christians. "There can be no doubt that Arkansas has sought to prevent its teachers from discussing the theory of evolution because it is contrary to the belief of some that the Book of Genesis must be the exclusive source of doctrine as to the origin of man," Justice Abe Fortas wrote for the majority. Using state power to advance this end clearly amounted to an establishment of religion and hence was contrary to the First Amendment, Fortas concluded.

In the years following *Epperson*, evolution opponents began developing a new way of looking

at the biblical Creation story. Dubbed “creation science” or “scientific creationism,” this new theory purported to show that the weight of scientific evidence supported the creation of life as described in Genesis.

The constitutionality of creation science was first tested in 1982, when in *McClean v. Arkansas Board of Education* a federal district court struck down the “Balanced Treatment for Creation-Science and Evolution-Science Act,” an Arkansas law requiring creation science to be taught alongside evolution.

In its analysis of the statute, the district court relied on a 1971 Supreme Court decision, *Lemon v. Kurtzman*, which sets out a three-part test to determine whether a government action violates the Establishment Clause. Under the “*Lemon* test,” an action must (1) have a bona fide secular purpose; (2) not advance or inhibit religion; and (3) not excessively entangle the government with religion. If the challenged action fails any one of the three parts of the *Lemon* test, it is deemed to have violated the Establishment Clause.

In *McClean*, Federal District Court Judge William Overton ruled that the Arkansas law violated the Establishment Clause because it did not satisfy any of the *Lemon* test’s three prongs. Judge Overton noted that both the author of the act and those who lobbied for it publicly acknowledged its sectarian purpose, which, he said, is otherwise clear from an objective reading of it. Furthermore, Overton determined that creation science was not science, but based wholly on the biblical account of Creation. Therefore, the teaching of creation science clearly advances religion and entangles it with the government.

The Supreme Court entered the creation science debate five years later in *Edwards v. Aguillard*

(1987), a case that, like *McClean*, involved a challenge to a “balanced treatment” statute, this one enacted by the Louisiana state legislature. The act forbade the teaching of the theory of evolution in public schools unless it was accompanied by instruction in the theory of creation science.

In a 7-2 decision, the Supreme Court ruled that the act violated the Establishment Clause because it did not meet the first, or “secular purpose,” prong of the *Lemon* test. The court did not bother to consider parts two and three of the test, since failure to satisfy any of the three is sufficient to nullify a government action.

Writing for the majority, Justice William Brennan stated that “the preeminent purpose of the Louisiana legislature was clearly to advance the religious viewpoint that a supernatural being created humankind.” He dismissed the state’s defense: that the aim of the act was to protect academic freedom and make the teaching of science more comprehensive. Actually, Brennan argued, the Louisiana law severely limited both aims by prohibiting the teaching of evolution unless certain other conditions were met. Furthermore, the act’s legislative history clearly showed that the statute’s primary sponsor in the Louisiana state legislature hoped that passage would lead to the teaching of neither evolution nor creationism. If academic freedom and comprehensiveness were actually the purpose of the act, Brennan wrote, “it would have encouraged the teaching of all scientific theories about the origins of mankind.”

Finally, Brennan left open the door for schools to teach other scientifically based critiques of evolution. “Teaching a variety of scientific theories about the origins of humankind to schoolchildren might be validly done with the clear secular intent of enhancing the effectiveness of science instruction,” he wrote.

Justice Antonin Scalia, in a dissenting opinion joined by Chief Justice William Rehnquist, took the majority to task for presuming to divine the actual (as opposed to the stated) intentions of the Louisiana legislature. Scalia pointed out that the legislators had sworn an oath to uphold the Constitution, understood the potential Establishment Clause problems and had taken several months to craft a bill that tried to meet these concerns. Given these facts, he wrote, the majority was essentially saying “that the members of the Louisiana Legislature knowingly violated their oaths and then lied about it.”

Scalia also criticized the majority for presuming to determine whether creation science was actually science and worth teaching in schools. Such a determination is the responsibility of the Louisiana legislature, he said. Even if the legislators are wrong, Scalia argued, their error should not be deemed unconstitutional, so long as they sincerely believed that creation science is actually science.

New Challenges to Evolution: Disclaimers and Intelligent Design

Neither *Edwards* nor *Epperson* prohibits the teaching of creationism in other contexts, say as part of a literature or world religions class. The Supreme Court has made clear in a number of cases involving the role of religion in schools that “the Bible may constitutionally be used in an appropriate study of history, civilization, ethics, comparative religion or the like” (*Stone v. Graham*, 1980).

Nevertheless, *Edwards* essentially ended state efforts to bring creationism into science classes. As already noted, recent anti-evolution efforts have focused on other strategies such as disclaimers and, in the last decade, intelligent design.

Efforts to require either oral or written evolution disclaimers have not met with success in federal courts. In a 1999 decision, *Freiler v. Tangipahoa Parish [La.] Board of Education*, the Fifth Circuit Court of Appeals invalidated a disclaimer that teachers were required to read to students before beginning instruction in evolution. The statement in question urged students learning about evolution “to exercise critical thinking and gather all information possible and closely examine each alternative toward forming an opinion.” It also stated that teaching evolution was “not intended to influence or dissuade the biblical version of Creation or any other concept.”

Writing for a unanimous three-judge panel, Judge Fortunato “Pete” Benavides argued that the disclaimer violated the second prong of the *Lemon* test (prohibiting actions that advance or inhibit religion), concluding that “the primary effect of the disclaimer is to protect and maintain a particular religious viewpoint, namely belief in the biblical version of Creation.” In particular, Benavides noted that while the disclaimer urged students to think about alternative theories of life’s origins, it only referenced “the biblical version of Creation” as a possible alternative.

The most recent disclaimer case, *Selman v. Cobb County School District* (2005), also fell afoul of the *Lemon* test’s second prong. Unlike the disclaimer in *Freiler*, the statement approved by the school board in Cobb County, Ga., was to be printed on a sticker and affixed to textbooks. Moreover, it did not mention the Bible, Creation or even religion. The sticker read: “This textbook contains material on evolution. Evolution is a theory, not a fact, regarding the origin of living things. This material should be approached with an open mind, studied carefully and critically considered.”

In *Selman*, Federal District Court Judge Clarence Cooper ruled that while the disclaimer had a legitimate secular purpose (in this case, “fostering critical thinking”) it had the effect of advancing religion, due to the historical context in which most people in the area would view it. Indeed, Cooper wrote, because of longstanding opposition to teaching Darwin’s theory by conservative Christians and others in Cobb County, “the Sticker sends a message to those who oppose evolution for religious reasons that they are favored members of the political community, while the Sticker sends a message to those who believe in evolution that they are political outsiders.” The defendants in *Selman* have appealed the ruling.

Courts have yet to consider the constitutionality of teaching intelligent design, in part because, until recently, the concept had not been brought into the classroom. That all changed in October 2004, when the school board in Dover, Pa.,

voted to include brief instruction on intelligent design in the town’s high school science curriculum. By the end of the year, 11 parents of local school children had filed suit in federal district court, arguing that the policy violates the Establishment Clause because it fails all three parts of the *Lemon* test. The case, *Kitzmiller v. Dover Area School District*, is slated to go to trial on Sept. 26, 2005.

Kitzmiller and similar future cases may well turn on how courts ultimately categorize intelligent design. If intelligent design is judged to be a legitimate scientific theory, it could well pass constitutional muster. As already noted, the Supreme Court in *Edwards* made clear that teaching legitimate scientific alternatives to evolution could be valid. However, if intelligent design is put in the same category as “creation science,” the court will likely deem it, in one way or another, to be an advancement of religion and hence a violation of the Establishment Clause.

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