Monkey See, Monkey Do

A TEACHER IN KANSAS, WHERE WAR OVER DARWIN IN THE schools is still raging, calls the theory of intelligent design "creationism in a cheap tuxedo." Great line, but unfair to the elegant tailoring of the Discovery Institute, the Seattle-based think tank that has almost singlehandedly put intelligent design on the map. Eighty years after the Scopes "monkey trial," the threat to science and reason comes less from fundamentalists who believe the earth was created in six days than from sophisticated branding experts and polemical Ph.D.s who are clever enough to refrain from referring to God or even the Creator, and have now found a willing tool in the president of the United States.

Lest you think this is merely of academic interest, consider the stakes: the Pentagon last week revealed that it is spending money to train certain scientists how to write screenplays for thrillers related to their specialties. Why? Because the status of science has sunk so low that the government needs these disciplines to become sexy again among students or the brain drain will threaten national security. One of the reasons we have fewer science majors is the pernicious right-wing notion that conventional biology is vaguely atheistic.

Now President Bush has given that view a boost. When Bush was asked about intelligent design last week, he answered, "Both sides ought to be properly taught ... so people can understand what the debate is about." This sounds reasonable until you realize that, as the president's own science adviser, John H. Marburger III, admits, there is no real debate. "Intelligent design is not a scientific concept," Marburger told The New York Times, committing a bit of candor that will presumably earn him a trip to the White House woodshed.

Stephen Meyer of the Discovery Institute claims ID uses a scientifically valid "inference to the best explanation" to back up its theories. That might be good enough for a graduate course in the philosophy of science (and the ACLU should not prevent it from being discussed in high-school humanities and philosophy classes), but the idea of its being offered as an alternative to evolution in ninth-grade biology is a cruel joke. Its basic claim—that the human cell is too complex to be explained by natural selection—is unproven and probably unprovable. ID walks like science and talks like science but, so far, performs in the lab worse than medieval alchemy.

It's not God who's the problem but ID's assault on Darwin. Brown University biologist Kenneth Miller (who attends mass every week) says the "unspoken message" peddled by the Discovery Institute is that evolution is the single shakiest theory in science. In fact, despite its flaws, it remains among the most durable theories in all of science.

Even as the president helps pit faith against science in the classroom, popes and other clerics have long known that religion and evolution are not truly at odds. Evolution does not, for instance, challenge the idea that the universe began with a spark of divinity. Darwin himself wrote movingly of God. Only the scientific process—not the scientist—must be agnostic. Long before Darwin, enlightened Christians understood that religion and science are best kept in separate realms. In the fifth century, for instance, Saint Augustine criticized other Christians who "talk nonsense" about the laws of nature.

The most clever thing about intelligent design is that it doesn't sound like nonsense. It conjures up Cambridge, not Kansas. The name evokes Apple software, the MoMA gift shop or a Frank Gehry chair. The scholarly articles are often well written and provocative. But the science within these papers has been demolished over and over by other scientists. As Miller explains, science is perhaps the last true marketplace of ideas. After a decade in circulation, intelligent design has failed the market test. So now it's backers are seeking the equivalent of a government bailout, by going around their scientific peers to Red State politicians trying to slip religious dogma into the classroom.

While the Discovery Institute calls God the "designer," to appear less creationist, some of its biggest funders are serious fun-
A Debate That Does Not End

JOHN SCOPES ATTENDED HIGH SCHOOL IN Salem, Ill., where his commencement speaker was the town’s most famous native son, William Jennings Bryan. Their paths would cross again.

Eighty years ago Scopes, 24, a high-school football coach and general-science teacher, attended a meeting in Robinson’s drugstore in Dayton, Tenn. There, to the satisfaction of community leaders who thought that what was to come would be good for business, Scopes agreed to become the defendant in a trial testing Tennessee’s law against teaching “any theory that denies the story of the divine creation of man as taught in the Bible, and to teach instead that man has descended from a lower order of animals.”

So began “the most widely publicized misdemeanor case in American history.” That is Edward J. Larson’s description of the “monkey trial” in his 1997 Pulitzer Prize-winning “Summer for the Gods: The Scopes Trial and America’s Continuing Debate Over Science and Religion.” With that debate again at a rolling boil, that book by Larson, professor of history and law at the University of Georgia, demonstrates that the trial pitted a modernism with unpleasant dimensions against a religious fundamentalism that believed, not without reason, that it was faithful to progressive values.

By 1925, many Christian geologists were comfortable with the fact that Earth has a long geologic history. They saw God immanent in the dynamic of appearance and disappearance of life forms. What most distressed some Christians was not the fact of evolution but the postulated mechanism—a nature-red-in-tooth-and-claw randomness that erased God’s purposefulness and benevolence.

Since the publication of Charles Darwin’s “Origin of Species” in 1859, religiously motivated critics of the theory of evolution by natural selection had stressed the supposed failure of paleontology to supply the “missing link” that would establish continuity in the descent of man.

Darwinism did not ignite a culture war until the 1920s, when high-school education became common in the rural South, where Christian fundamentalism was strong. When school seemed to threaten children’s souls, fundamentalists sought and found a champion in Bryan, a three-time Democratic presidential nominee and star of the prosecution team in Scopes’s trial.

Scopes’s defense, led by Clarence Darrow, stressed individual rights—academic freedom. The prosecution stressed the community’s right to control the curriculum of public schools. As a young man, Bryan had been a force for progressivism understood as, Larson says, a “sunny faith in the curative power of majoritarian reforms,” such as popular election of U.S. senators.

“The most widely publicized misdemeanor case in American history” went to trial 80 years ago this month in Dayton, Tenn.

Bryan died five days after the trial. Scopes left to study geology—how fitting—at the University of Chicago and became a petroleum engineer. The argument about science, religion, the rights of communities’ majorities and academic freedom rolled on, but not everywhere. When an anti-evolution bill was introduced in the Rhode Island Legislature, it was referred to the Committee on Fish and Game.
Charles Krauthammer

Let's Have No More Monkey Trials

To teach faith as science is to undermine both

The half-century campaign to eradicate any vestige of religion from public life has run its course. The backlash from a nation fed up with the A.C.L.U. kicking crèches out of municipal Christmas displays has created a new balance. State-supported universities may subsidize the activities of student religious groups. Monuments inscribed with the Ten Commandments are permitted on government grounds. The Federal Government is engaged in a major anti-poor initiative that gives money to churches. Religion is back out of the closet.

But nothing could do more to undermine this most salutary restoration than the new and gratuitous attempts to invade science, and most particularly evolution, with religion. Have we learned nothing? In Kansas, conservative school-board members are attempting to rewrite statewide standards for teaching evolution to make sure that creationism’s modern stepchild—intelligent design—infiltrates the curriculum. Similar anti-Darwinian mandates are already in place in Ohio and are being fought over in 20 states. And then, as if to second the evangelical push for this tarted-up version of creationism, out of the blue appears a declaration from Christoph Cardinal Schönborn of Vienna, a man very close to the Pope, asserting that the supposed acceptance of evolution by John Paul II is mistaken. In fact, he says, the Roman Catholic Church rejects “neo-Darwinism” with the declaration that an “unguided evolutionary process—one that falls outside the bounds of divine providence—simply cannot exist.”

CANNOT? On what scientific evidence? Evolution is one of the most powerful and elegant theories in all of human science and the bedrock of all modern biology. Schönborn’s proclamation that it cannot exist unguided—that it is driven by an intelligent designer pushing and pulling and planning and shaping the process along the way—is a perfectly legitimate statement of faith. If he and the Evangelicals just stopped there and asked that intelligent design be included in a religion curriculum, I would support them. The scandal is to teach this as science—to pretend, as does Schönborn, that his statement of faith is a defense of science. “The Catholic Church,” he says, “will again defend human reason” against “scientific theories that try to explain away the appearance of design as the result of ‘chance and necessity,’” which “are not scientific at all.” Well, if you believe that science is reason and that reason begins with recognizing the existence of an immanent providence, then this is science. But, of course, it is not. This is faith disguised as science. Science begins not with first principles but with observation and experimentation.

In this slippery slide from “reason” to science, Schönborn is a direct descendant of the early 17th century Dutch clergyman and astronomer David Fabricius, who could not accept Johannes Kepler’s discovery of elliptical planetary orbits. Why? Because the circle is so pure and perfect that reason must reject anything less. “With your ellipse,” Fabricius wrote Kepler, “you abolish the circularity and uniformity of the motions, which appears to me increasingly absurd the more profoundly I think about it.” No matter that, using Tycho Brahe’s most exhaustive astronomical observations in history, Kepler had empirically demonstrated that the planets orbit elliptically.

This conflict between faith and science had mercifully abated over the past four centuries as each grew to permit the other its own independent sphere. What we are witnessing now is a frontier violation by the forces of religion. This new attack claims that because there are gaps in evolution, they therefore must be filled by a divine intelligent designer.

How many times do we have to rerun the Scopes “monkey trial”? There are gaps in science everywhere. Are we to fill them all with divinity? There were gaps in Newton’s universe. They were ultimately filled by Einstein’s revisions. There are gaps in Einstein’s universe, great chasms between it and quantum theory. Perhaps they are filled by God. Perhaps not. But it is certainly not science to merely declare it so.

To teach faith as science is to undermine the very idea of science, which is the acquisition of new knowledge through hypothesis, experimentation and evidence. To teach it as science is to encourage the supercilious caricature of America as a nation in the thrall of religious authority. To teach it as science is to discredit the welcome recent advances in permitting the public expression of religion. Faith can and should be proclaimed from every mountaintop and city square. But it has no place in science class. To impose it on the teaching of evolution is not just to invite ridicule but to earn it.