

# We're Not in Kansas Anymore

can't admit that Darwinism might be wrong.

by Nancy Pearcey

illustration by Paul Turnbaugh

**A** NNA HARVEY, a bright, straight-A sophomore in Lawrence, Kansas, raised her hand in biology class one day in early 1999. "Mr. Roth, when are we going to learn about creationism?"

Stan Roth exploded. "When are you going to stop believing that crap your parents teach you?" Anna was stunned, and within five months Roth was removed from the classroom. Some say the irascible high-school teacher was about to be fired anyway; others wonder if it was mere coincidence that, three months after he was forced to retire, the Kansas Board of Education voted 6-4 to de-emphasize the speculative aspects of evolution—a move that sparked a national debate.

Other states reacted swiftly. In Kentucky, education officials replaced the word *evolution*, which had been added to the guidelines for the first time last spring, with an earlier locution: *change over time*. The New Mexico Board of Education went the other way, revoking 1996 standards requiring teachers to "present the evidence for and against" evolution, and reverting to a one-sided presentation. Oklahoma's State Textbook Committee inserted a disclaimer into science books stating that evolution is controversial (identical to a disclaimer in Alabama textbooks)—a decision later struck down by the attorney general. Kanawha County, West Virginia, voted down a resolution

permitting teachers to present “theories for and against the theories of evolution.” Similar brushfires continue burning in other states. Small wonder that the Associated Press voted the Kansas controversy the top story of 1999.

Oddly, similar controversies had erupted in several other places not long before—California, Colorado, Idaho, Illinois, Iowa, Nebraska, Oregon, and Washington. Yet these rarely appeared in the national media. Why was Kansas different? Why did scathing editorials appear in big-city newspapers across the country, and even overseas? Why did national organizations like the American Association for the Advancement of Science (AAAS) target Kansas?

The answer is that the debate has escalated to new levels on both sides, and Kansas was a microcosm of those counterforces at work. A closer examination of the Kansas controversy gives a good picture of the debate as it stands today.

#### HUBBUB IN THE HEARTLAND

Consider, for example, the way events began. Overheated headlines suggest it all started when Bible-thumping creationists tried to “foist [their] own religious beliefs on the secular educational system of an entire state” (to quote syndicated columnist Lars-Erik Nelson). But in fact, the initiative came from the other side.

Events began in 1995, when the National Academy of Sciences (NAS) issued national standards calling for “dramatic changes” in the way public schools teach science. The Kansas Commissioner of Education and the Board of Education appointed a committee to bring state guidelines into conformity with the standards, as many other states had already done. The new guidelines greatly increased classroom coverage of evolution, even elevating it from a theory to a “Unifying Concept” of science (along with such things as “measurement” and “evidence”).

That was too much for some members of the state board of education. They were willing to increase the teaching of microevolution—testable, observable variations caused by adaptation, natural

selection, and genetic drift. But macroevolution—the “particles-to-people” variety—they regarded as speculative. The board voted to remove macroevolution from state tests, giving local school districts the freedom to set their own standards for teaching the subject.

In short, the board did not forbid the teaching of anything. On the contrary, it actually increased coverage of topics relat-

ed to evolution, though it did not go as far as the scientific establishment wished. For that minor act of intellectual independence, board members were castigated mercilessly. A *Washington Post* article called them “pinheads,” certain to be “eliminated through natural selection.” In the *London Evening Standard*, A. N. Wilson fumed about the “stupidity and insularity” of America’s heartland. *Science* published a letter proposing that universities refuse to accept credits from Kansas high school biology courses. John Rennie, editor in chief of *Scientific American*, urged college admissions officials to “make it clear that . . . the qualifications of any students applying from that state in the future will have to be considered very carefully.” In other words, punish parents by excluding their children.

Three national groups (the AAAS, the NAS, and the National Science Teachers Association) revoked permission to use copyright materials, forcing the board to tinker with the standards’ wording to avoid copyright infringements. On the cultural front, the Missouri Repertory Theater in Kansas City swiftly revised its schedule to run *Inherit the Wind*, the famous play that continues to shape the way most Americans view the creation-evolution controversy.

#### REVOLUTION BY DESIGN

But this time, reality did not follow the script. To be sure, initial resistance came

from young-earth creationists. (This movement has been much maligned, even by fellow Christians; yet it has helped preserve a large pocket of resistance to naturalistic evolution.) Followup, however, came largely from proponents of intelligent design (ID), a newer movement that is making surprisingly deep inroads into mainstream culture.

The unofficial spokesman for ID is

## The design movement shows factions, from young-earth creationists

Phillip E. Johnson, a Berkeley law professor who converted to Christianity in his late 30s, then turned his sharp lawyer’s eyes on the theory of evolution. Spotting what he saw as logical errors in the case for Darwinism, Johnson penned several influential books, including *Darwin on Trial* and *Reason in the Balance*. (His latest book, *The Wedge of Truth*, is due out in July.) Johnson’s penetrating critiques were the first to win a respectful hearing in academia, and he now advises a group of scientists who are developing the case for design, many of them at the Discovery Institute’s Center for the Renewal of Science and Culture (CRSC) in Seattle. After the Kansas decision, CRSC scholars appeared widely in mainstream media: Johnson in *The Wall Street Journal*; director Steve Meyer on NPR; program director Jay Richards in *The Washington Post*; and fellows Michael Behe in *The New York Times* and Jonathan Wells on PBS.

Indeed, the growing success of the intelligent-design movement is almost certainly what provoked the over-the-top reactions to Kansas in the first place. Top university presses are publishing books on ID, notably William Dembski’s *The Design Inference* by Cambridge University Press (1998) and Paul Nelson’s forthcoming *On Common Descent* through the University of Chicago Press. Baylor University’s Michael Polanyi Center, founded by Dembski, held a conference last month on naturalism in science that attracted nationally

Equally damaging for Darwinism are reversals in key evidence—like the case of the peppered moths in England. According to the standard textbook treatment, when tree trunks were darkened by soot during the Industrial Revolution, a light-colored variety of the moth became easier for birds to see and were eaten, while a darker variety flourished. This has long been touted as a showcase example

of intelligent causes,” and he reasoned that there should be a way to distinguish between the two—a way to identify empirically the effects of intelligence.

In *The Mystery of Life's Origin*, Thaxton identified the mark of intelligent design as “specified complexity”—a complex structure that fits a preconceived pattern. William Dembski’s *Intelligent Design* explains the concept in greater detail.

ly being the result of chance and natural selection. In the words of Francisco Ayala of the University of California, Darwin’s goal was to “exclude God as the explanation accounting for the obvious design of organisms.” Thus arch-Darwinian Richard Dawkins, in *The Blind Watchmaker*, defines biology itself as “the study of complicated things that give the appearance of having been designed for a purpose.” In short, design is “obvious”; the question is only whether it is real or apparent.

What makes the question so compelling today is that design is no longer found only in living things but also in the physical universe itself. In cosmology, the so-called anthropic principle tells us the universe itself is finely tuned to support life. “Imagine a universe-creating machine,” says Meyer, “with thousands of dials representing the gravitational constant, the charge on the electron, the mass of the proton, and so on. Each dial has many possible settings, and what you discover is that even the slightest change would make a universe where life was impossible.” Yet, strangely, each dial is set to the exact value needed to keep the universe running. Astronomer Fred Hoyle, though an atheist, states the implications bluntly: “A common-sense interpretation of the facts suggests that a superintellect has monkeyed with the physics.”



#### ID'S BIG TENT

Who is that “superintellect”? Is intelligence merely a code word for God? So critics charge. But Thaxton’s innovative insight was that “intelligent cause” is a generic category for talking about any intelligence, whether human or divine or some undefined mind in nature, thus providing a way to talk about design without making any theological presuppositions. “One can empirically detect the products of an intelligent agent without specifying who that agent is,” Thaxton explains.

Thus the ID movement has become a “big tent,” attracting people from a variety of religious backgrounds. CRSC fellow David Berlinski, who has published *Commentary* articles critical of Darwinism, is Jewish. In Kansas, board supporters included local Muslims and a group of Hare

## to tell a culture's creation story

of natural selection. But, as Wells demonstrated in *The Scientist* (May 24, 1999), the moths don’t actually perch on trunks (they fly about in the upper branches), and those widely published photographs of the moths were all staged. Biologist Theodore Sargent of the University of Massachusetts recently admitted that, for the filming of a NOVA documentary, he glued dead moths onto the trees.

Nor is this an isolated incident. “It’s typical of the way key evidence is distorted to make the case for Darwinism look stronger,” says Wells.

In *American Biology Teacher* (May 1999) Wells debunks the familiar drawing of embryos laid out side by side—fish, amphibian, bird, and mammal—allegedly supporting common ancestry. This drawing appears in many biology textbooks, yet it has been known for nearly a century that the figures were fudged—lengthened here, shortened there—to appear more similar than they really are.

#### DETECTING DESIGN

Yet exposing problems with Darwinism is not enough; one must also propose an alternative, which has proved much harder. A turning point came in the work of Charles Thaxton, who studied under Francis Schaeffer at L’Abri in Switzerland and then did postdoctoral work at Harvard in the 1970s. Studying scientists of earlier centuries, Thaxton noted that they spoke of “natural causes” and “intelli-

“My father was a teacher, and he used to tell a story to illustrate design,” Dembski says. “The best student and the worst student sit beside each other during a major exam, and when the teacher grades their papers, he finds that both gave exactly the same answers. Now, who thinks this happened by chance?” (The punch line: on the last question, the best student wrote, “I don’t understand this question” and the worst student wrote, “I don’t understand it either”—thus confirming the design hypothesis.)

Not only teachers, but also many other professionals have devised means for detecting design, Dembski points out. Scientists look for telltale signs that an experiment was rigged, that the data were “cooked.” Detectives are trained to distinguish between murder and death by natural causes. Insurance companies regularly distinguish between arson and accidental fires. The claim of ID theory is that design can be detected in nature as well.

In one sense, this is something everyone admits. Evidence for design shows up in laboratories all the time. “What we do in molecular biology is in effect reverse engineering,” explains ID proponent Scott Minnich of the University of Idaho. “We examine complex structures in the cell and try to figure out the blueprints.” Even Darwin did not deny the evidence for design; instead, he hoped to show that living things only appear designed, while real-

Krishnas, who showed up at a meeting wearing saffron robes.

Even agnostics who believe the universe is in some sense teleological have teamed up with the ID movement—figures like Michael Denton, author of the influential *Evolution: A Theory in Crisis*. His most recent book, *Nature's Destiny*, argues that purpose pervades the universe at all levels.

"The power of ID is precisely its minimalism," says Todd Moody, an agnostic and professor at St. Joseph's University in Philadelphia. "It travels light, with no theological baggage."

Among Christians, ID shows promise of uniting often hostile factions, from young-earth creationists to theistic evolutionists and everyone in between. Paul Ackerman of Wichita State University, who helped craft the Kansas standards, is a young-earth creationist who says ID has "helped create a broad umbrella."

Though Christians continue to debate among themselves on issues like the age of the earth, when facing the secular world "we're putting aside our differences," Ackerman says. "We realize that what unites us is greater than what divides us."

Even some theistic evolutionists, who have been among the ID movement's most vocal critics, are lining up behind its critique of naturalism. Denis Lamoureux of St. Joseph's College in Canada has taken aim at Johnson and other design theorists many times.

Yet he told CHRISTIANITY TODAY, "I'm a flaming design theorist." Like the Romantic biologists of the 18th century, Lamoureux draws an analogy between the evolution of species and the development of an embryo, regarding both as teleological processes—the unfolding of an inbuilt potential.

Similarly, Howard Van Till, professor emeritus at Calvin College, has often debated ID proponents publicly. Yet his own view is that the universe is "intentionally gifted" by God with the capacity for bringing about new forms from simpler units, so that design is frontloaded into the initial conditions. All Lamoureux and Van Till need to do is give empirical content to the notion of frontloaded

design, and they would fall into the design camp. As it is, on empirical questions their position remains identical to naturalistic evolution, while conceptually it bears no relation to the materialistic version of evolution held by the scientific establishment. ID is incompatible only with forms of theistic evolution that adopt methodological naturalism, the principle that in science one may invoke only undirected, unguided natural causes.

#### THE GOD QUESTION

Clearly, while ID does not require any theological presuppositions, it has theological implications: It is resolutely opposed to the atheistic, purposeless, chance view of evo-

lution taught in the power centers of science. This suggests a final theme emerging from the Kansas controversy—the refusal by so many to acknowledge that religion is genuinely at stake in this issue. Pervasive through the editorials and columns was the argument that the folks in Kansas were mistaken to see mainstream evolutionism as posing any contradiction to religion. The underlying assumption is that science is a matter of facts and reason, while religion is a matter of faith—and never the twain shall meet. This commonly held idea was summarized in a 1981 NAS resolution: "Religion and science are separate and mutually exclusive realms of human thought whose presentation in the same context leads to misunderstandings of both scientific theory and religious belief."

Yet this pose of neutrality is transparently false, intended only for public relations against theists making statements about science. It is never invoked against evolutionary naturalists making statements about religion. For example, Gould recently wrote in *Time* that "No scientific theory, including evolution, can pose any threat to religion" because they belong to

separate, nonoverlapping spheres. Yet the only way he can separate the two so neatly is to deny that religion has any cognitive status. Science deals with "the factual state" of the world, he writes, whereas religion deals with "spiritual meaning and ethical values." Hence, when it comes to what he considers the *real* world, Gould allows science to "overlap" religion all the time. "Before Darwin, we thought that a benevolent God had created us," he writes in *Ever Since Darwin*. "Biology took away our status as paragons created in the image of God."

John Haught, a theistic evolutionist and theologian at Georgetown University [see "Your Darwin Is Too Small," p. 52], suggests that Gould is being duplicitous: If the "philosophical message" of evolution really is that matter is all there is, as Gould insists, and that there is no purpose to the universe, "then no conceivable theology, by anyone's definition, could ever live comfortably with evolution."

Precisely. That's why, for every scientist who soothingly intones that evolution can coexist peacefully with religion, there is another who openly proclaims its antitheistic implications. In *Darwin's Dangerous Idea*, for example, Tufts University professor Daniel Dennett praises Darwinism as a "universal acid" that destroys "just about every traditional concept" of religion and morality.

Steven Weinberg told the Freedom From Religion Foundation after the Kansas decision: "I personally feel that the teaching of modern science is corrosive to religious belief, and I'm all for that." If science helps bring about the end of religion, Weinberg concluded, "it would be the most important contribution science could make."

## **I**n a reader survey by Seven said they wanted creation taught alo

of NAS members reject belief in a person-  
 ' God—and, furthermore, they think science itself compels that conclusion [see "Inherit the Monkey Trial," p. 50]. There is a glaring incongruity when those same scientists reassure the public that science is neutral on the God question. "This has been figured out, I can assure you, by the people in Kansas," Johnson says. "They consider that the scientific elite is simply lying through its teeth about this issue."

The people of Kansas and elsewhere know very well that their children are being taught that they are products of an undirected, material mechanism—and

arise and diversify on earth?" This mistaken asymmetry has been used to justify a form of "viewpoint discrimination," Meyer argues, something the Supreme Court has ruled unconstitutional.



#### TEACH THE CONTROVERSY

Whether or not the verbal attack on Anna Harvey had anything to do with the Kansas decision, it remains a vivid example of the hostility Christian students often face in public schools. The board's decision may not have been ideal—even sympathizers say schools ought to teach *more* about macroevolution, not less; they ought to acquaint students with the

That's why it was crucial for him—and remains crucial for his successors—to entrench naturalistic evolution as scientific orthodoxy. The result is that while 19th-century science has been superseded in other fields, biology remains locked in an outdated mechanistic paradigm.

In *The Boston Review*, James A. Shapiro of the University of Chicago says molecular biology reveals a complexity in living things "more consistent with computer technology than with the mechanical viewpoint which dominated when the neo-Darwinian modern synthesis was formulated."

Living things are packed with complex information analogous to the software in a computer—programs or algorithms that direct the whole complicated mechanism. Where does that information come from? Information exhibits specified complexity, which is produced neither by law nor chance, but only by design.

The slogan of the ID movement is "teach the controversy." A June 1999 Gallup Poll found that Americans favor teaching creation along with evolution by a margin of 68–29 percent. Similarly, in February, John Zogby's American Values Poll revealed that 64 percent of adults believe creationism should be part of the public-school curriculum.

And many students agree: In a reader survey by *Seventeen* magazine, half said they wanted creation taught alongside evolution. New resources for teaching design are rapidly becoming available; among the most popular is the supplemental text *Of Pandas and People*, published by the Foundation for Thought and Ethics. A just-released cartoon book from InterVarsity Press, titled *What's Darwin Got to Do With It?*, uses humor to clarify the issues.

Clearly, Anna Harvey is not alone in wanting to expand the science curriculum. The question is when the scientific establishment is going to allow students to learn the latest data, wherever they may lead. How ironic that current events are taught in every class—except biology. ❁

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## teen magazine, half the respondents ngside evolution.

that this has enormous religious implications. A biology textbook used at the University of Kansas states baldly that "biological phenomena, including those seemingly designed, can be explained by purely material causes, rather than by divine creation."

A widely used high-school textbook from Prentice Hall describes evolution as "random and undirected," working "without either plan or purpose." A textbook from Addison-Wesley claims that "Darwin gave biology a sound scientific basis by attributing the diversity of life to natural causes rather than supernatural creation." Public schools are supposed to be neutral regarding religion, but these statements are clearly antagonistic to all theistic religions.

Untangling these religious implications is the key to teaching origins in public schools. The common assumption is that the *denial* of design is science, but that the *affirmation* of design is religious, and therefore cannot be taught in public schools. "But how can this be?" asks Meyer. "Darwinism and design theory do not address two different subjects. They represent two competing answers to the same question: How did life

unsolved problems and contrary evidence facing the theory. Indeed, board members agree. But given the threat of expensive lawsuits, they took the only course that seemed open to them at the time.

The political question is *Who decides?* Linda Holloway, chairwoman of the Kansas board, says what bothered her was the attitude the state science committee seemed to exhibit: "Give us your kids and get out of the way." The Gallup Poll has consistently shown (most recently in August 1999) that only about 10 percent of Americans believe life evolved strictly by chance and natural forces. Roughly 90 percent of Americans believe that God created life either directly or by guiding a gradual process. This large majority is beginning to suspect that Darwinism is less about objective science than about maintaining cultural power.

Any group with authority to tell a culture's dominant creation story functions as a kind of priesthood, defining what shall be deemed ultimate truth. In the late 19th-century conflict over Darwinism, T.H. Huxley pursued a deliberate strategy of overthrowing the clergy and ordaining scientists as society's new priesthood.

**B**EFORE LAST YEAR'S controversial decision in Kansas, the most famous symbol of the struggle between religion and science was the 1925 John Scopes "Monkey Trial" in Dayton, Tennessee. Heralded as the original "trial of the century," the case pitted conservative Christianity (in the person of William Jennings Bryan) against Darwinian evolution (represented by Clarence Darrow). For decades, the most compelling account of the event was Jerome Lawrence and Robert E. Lee's 1955 play, *Inherit the Wind*. The play "all but replaced the actual trial in the nation's memory," says Edward J. Larson, a historian of science and professor of law at the University of Georgia.

In his Pulitzer Prize-winning book, *Summer for the Gods: The Scopes Trial and America's Continuing Debate Over Science and Religion* (1997), Larson cogently exposed the myths surrounding the trial and shed fresh light on long-observed details about the case. Karl Giberson and Donald Yerxa recently spoke with Larson about Kansas, Scopes, and the perennial tension between science and faith in America.

books were written, fundamentalism and anti-evolutionism were virtually invisible in America. *Inherit the Wind* and also *Six Days or Forever?*—Ray Ginger's scholarly book of the same period—were written in the shadow of McCarthyism and the threat to popular and individual liberty. They were consciously and explicitly written with McCarthy-era witch-hunts of communists and socialists in mind, and were looking back at the Scopes trial as an earlier episode of that.

Today we have a new perspective on fundamentalism and anti-evolutionism. They are still alive in America; they weren't slain in Dayton. And that was always part of the premise of *Inherit the Wind* and *Six Days or Forever?*: that the exposing of Bryan killed these movements. And it didn't.

# Inherit the Monkey

*Scopes-trial historian Ed Larson explains why Christians should be taught*

**What do you think of the Kansas decision to remove evolution and the Big Bang from the subjects on which students will be tested?**

I think that students should learn about evolution, and they should learn about the Big Bang. I think that's part of a basic education. I understand it was a political compromise in that state. And I hope that most individual school districts will still be teaching those subjects, because I think students should learn them.

**How would you advise a school board on how to handle this issue so that there wouldn't be the need for so much political turmoil?**

I would look at the local school district and the local situation, and I would try to educate the teachers and the parents about the importance of having a comprehensive education. If there were considerable local opposition to evolution, I would try to do as much as I could to present it in a sensitive way that taught as much as one could teach within the parameters that you have there, but look for ways to work the subject in without clos-

ing minds. These are important ideas that every educated person in America should understand. They should be taught in a way that encourages inquisitiveness and helps people understand the scientific method and what science is claiming to know and claiming to teach. The starting point is a level of respect for human beings, respect for ideas, respect for the scientific process, and respect for religion.

**Why did you write a book on the Scopes trial?**

I knew the trial wasn't very well understood. During my dissertation research, I had looked into the event. And in my earlier book, *Trial and Error*, there are a couple of pages on the Scopes trial. In researching just that little snippet, I had discovered that there was a rich body of archival literature that no historian had ever used.

**We now know that *Inherit the Wind* isn't the most historically accurate portrayal of the event.**

There is now a better historical perspective in the sense that, when the earlier

**You and Larry Witham revived James Leuba's 1914 and 1933 surveys of scientists to get a sense of how today's scientific community views belief in God. What are your findings?**

Well, it was a curious task to have to repeat Leuba's question, because he had a very particular definition of God that may exclude many people. He was asking about belief in a traditional theistic God that would resonate with traditional Jews, Muslims, or Christians. There was a lot of talk back at the turn of the century that positivism and science were routing belief in God, and so he did a survey of both the rank-and-file scientists and the scientific elite—surveys that we were able to reproduce. Leuba found about 40 percent belief among the rank and file and much lower belief among elites, and that's exactly what we found.

As a historian, I was interested in Leuba's survey because it had been so important in the Scopes trial. William Jennings Bryan had made Leuba's findings the centerpiece of his anti-evolution crusade. Bryan's prime evidence against evolution was the high level of disbelief