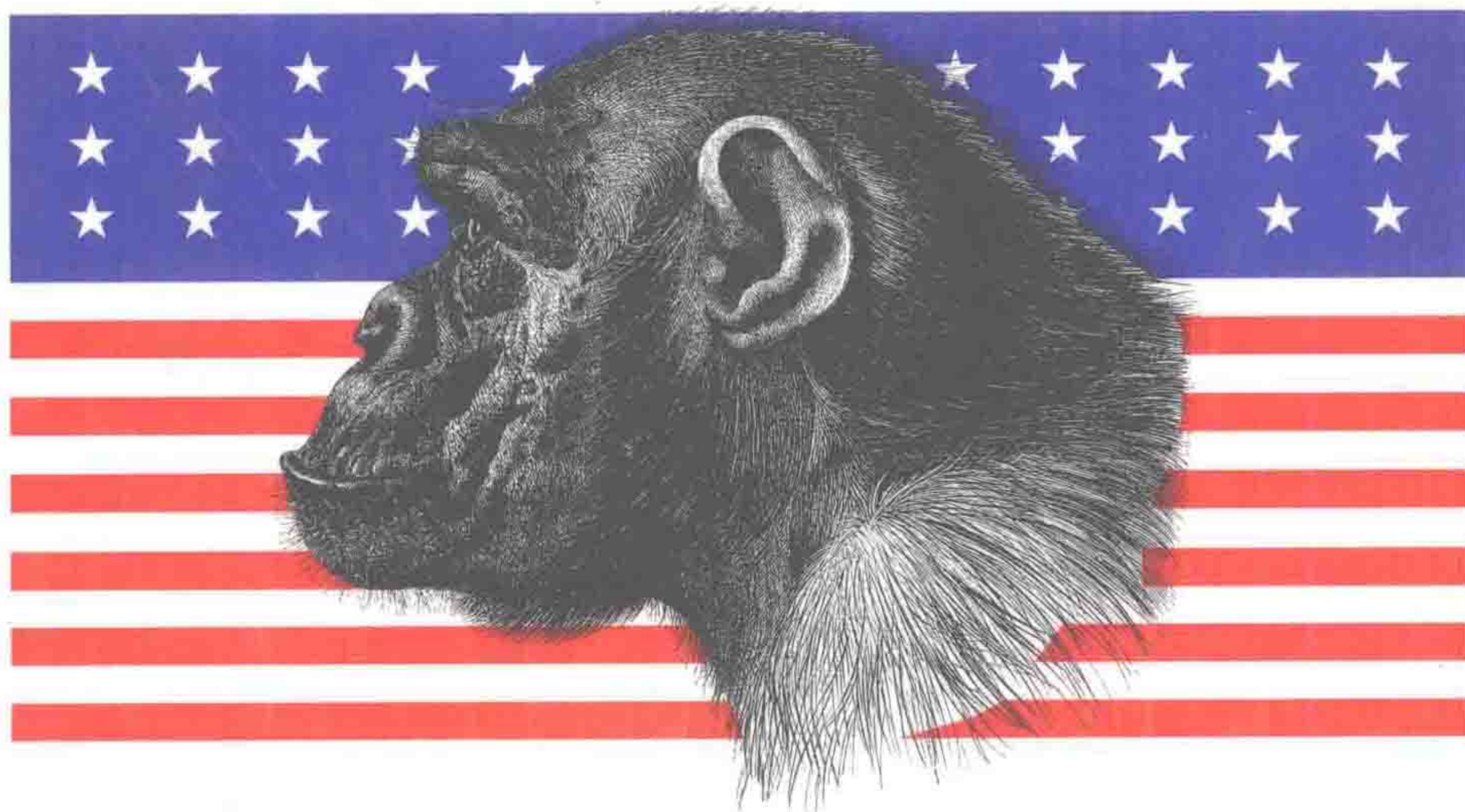


DARWINISM

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COMES TO

AMERICA



RONALD L. NUMBERS

DARWINISM COMES TO AMERICA

RONALD L. NUMBERS

HARVARD UNIVERSITY PRESS

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INTRODUCTION: DARWINISM, CREATIONISM, AND INTELLIGENT DESIGN

The publication in 1859 of Charles Darwin's epoch-making book *On the Origin of Species by Means of Natural Selection* touched off a national debate that continues to divide American society. Scarcely a week passes without some evolution-related story appearing in the news: religious leaders declaring the scientific legitimacy of biological evolution, politicians expressing their belief in divine creation, local school boards wrangling over the teaching of origins, professors being ordered to refrain from questioning evolution in the classroom, state legislatures debating whether to fire teachers who present evolution as a fact, biology textbooks carrying disclaimers denying the factual basis of evolution, scientists claiming that they have discovered evidence of intelligent design in the natural world, and public opinion polls showing that nearly half of all Americans believe in the recent special creation of the first humans.

Early Reactions

At first Americans reacted coolly to Darwinism (a term commonly used as a synonym for organic evolution). As we will see in Chapter 1, American naturalists embraced biological evolution gingerly, and those who did accept it tended to downplay the importance of Darwin's preferred mechanism of natural selection operating on random variations. As long as the scientific community remained skeptical about the merits of Darwinism, theologians could remain on the sidelines, confident that speculations about monkeys becoming men would never be taken seriously as science. By the mid-1870s, however, most American naturalists who expressed

themselves on the subject were speaking out positively, and by the close of the decade only a handful of prominent scientists continued to regard Darwinism as a false theory.

Darwin's success in convincing fellow naturalists of the truth of evolution prompted more and more religious leaders, such as James McCosh, the president of Princeton College, to take a public stand. Theological liberals in the Protestant camp fairly quickly adapted their reading of Scripture and their doctrinal beliefs to accommodate biological evolution, but most theological conservatives, representing the majority of Americans, viewed Darwinism, especially when applied to humans, as erroneous, if not downright dangerous. They feared that the notion of "might makes right" would undermine Christian morality and that tracing human genealogy back to apes would invalidate the concept of humans being created in the image of God. With few exceptions, however, even the most literalistic Bible believers accepted the antiquity of life on Earth as revealed in the paleontological record. They typically did so either by interpreting the days of Genesis 1 as vast geological ages (the day-age theory) or by inserting a series of catastrophes and re-creations or ruins and restorations into an imagined gap between the first two verses of the Bible (the gap theory). By the close of the nineteenth century virtually the only Christians writing in defense of the recent appearance of life on Earth and attributing the fossil record to the action of Noah's flood were Seventh-day Adventists, a Fundamentalist group numbering fewer than 100,000 members. Until the 1970s this uncompromisingly literal reading of Genesis, developed and popularized by the Adventist "geologist" George McCready Price, generally went by the name of flood geology.¹

Like Protestants, Catholics split along the progressive-conservative divide, with most prelates and priests remaining on the latter side. In the 1890s Father John Zahm, a priest-scientist at the University of Notre Dame, took the lead in trying to harmonize Catholicism with a theistic version of Darwinism, but the Vatican effectively silenced him in 1897. The next year his book *Evolution and Dogma* appeared on the Index of forbidden books; this proscription cast a theological shadow over evolution among American Catholics for years to come. American Jews overwhelmingly rejected evolution till the mid-1870s, when some Reform rabbis began to urge its acceptance. By the early 1890s evolution had established itself in the Reform community, though traditional Jews often expressed skepticism.²

Evolution and Antievolution before Sputnik

Little organized opposition to evolution appeared before the early 1920s, when Fundamentalist Christians, led by the Presbyterian layman and three-time Democratic presidential candidate William Jennings Bryan, launched a state-by-state crusade to outlaw the teaching of human evolution in public schools. By the end of the decade they had succeeded in only three states—Tennessee, Mississippi, and Arkansas—but the ruckus they raised retarded the dissemination of evolutionary ideas in American classrooms for over three decades. The antievolution campaign of the 1920s attracted enthusiasts around the country, in the North as well as in the South, in urban as well as in rural areas, but it garnered little support among America's scientific elite. Its leading scientific authorities were Arthur I. Brown, an obscure Canadian surgeon whose handbills touted him as "one of the best informed scientists on the American continent"; S. James Bole, a science teacher at the Fundamentalist Wheaton College who had earned a master's degree in education with a thesis on penmanship in an Illinois school district; Harry Rimmer, a Presbyterian preacher and self-styled "research scientist" who had briefly attended a homeopathic medical school; and the self-trained George McCready Price, whom the journal *Science* identified as "the principal scientific authority of the Fundamentalists."³

Antievolutionists in the 1920s may have agreed on the evils of Darwinism, but they disagreed spiritedly over the correct interpretation of Genesis 1. As one frustrated creationist observed in the mid-1930s, Fundamentalists were "all mixed up between geological ages, Flood geology and ruin, believing all at once, endorsing all at once." As long as they remained split over the meaning of Genesis, he reasoned, they could scarcely expect to convert the world to their creationist way of thinking. The 1930s and 1940s witnessed multiple attempts to create a united Fundamentalist front against evolution, but each one failed because of the intransigence of the various partisans, especially the flood geologists, who refused to compromise on the recent appearance of life on Earth and the geological significance of Noah's flood. In 1941, at the invitation of the president of the Moody Bible Institute, a group of five evangelical Christian scientists met in Chicago to establish the American Scientific Affiliation (ASA), which initially opposed evolution but soon came to accept organic development over time, punctuated by divine interventions, especially for the creation

of matter, life, and humans. More liberal Christians increasingly identified evolution as simply God's method of creation and ignored the problem of reconciling science and Scripture.

Meanwhile, during the same years, biologists, after decades of disagreeing over the mechanism of evolution to the point of fostering reports of Darwinism lying on its "death-bed," began to forge a common explanation of evolution, which came to be known, perhaps misleadingly, as the modern or neo-Darwinian synthesis. Geneticists, taxonomists, and paleontologists, who had long worked virtually isolated from one another, finally began interacting—and agreeing on the centrality of natural selection in the evolutionary process. In doing so, they repudiated other evolutionary explanations, particularly ones that gave evolution the appearance of having a purpose. This created, in the words of the historian-biologist William B. Provine, an "evolutionary constriction" that squeezed any talk of supernatural design out of biological discourse. "The evolutionary constriction," he asserts, "ended all rational hope of purpose in evolution," thus making belief in Darwinism the functional equivalent of atheism. Many evolutionists remained devout Christians and Jews, but it became increasingly difficult to do so on the basis of the scientific evidence for evolution.⁴

The Creationist Revival

The evolutionary constriction scarcely influenced the content of high school biology textbooks until after 1957, when the Soviet Union successfully launched Sputnik into space, greatly embarrassing the American scientific establishment. Politicians and science-policy experts quickly pinpointed the inferior scientific education of Americans as the underlying cause of the country's slide to second place in the space race. To remedy the situation, the federal government began pouring large amounts of money into improving science textbooks for high school students. In biology, where leading practitioners were complaining that "one hundred years without Darwinism are enough," the funds went to the Biological Sciences Curriculum Study (BSCS), which produced a series of texts featuring evolution as the centerpiece of modern biology. When these unabashedly proevolution texts descended on American classrooms in the early 1960s, they produced howls of protest from conservative Christians, who regarded the BSCS books as an ungodly "attempt to ram evolution down the throats of our children."⁵

Just as the BSCS controversy was breaking, two Fundamentalists, John C. Whitcomb, Jr., an Old Testament scholar, and Henry M. Morris, a hydraulic engineer, brought out a book called *The Genesis Flood*, which presented Price's flood geology as the only acceptable interpretation of the first chapters of Genesis. Their insistence on beginning with a literal reading of the Bible and then trying to fit science into that context, rather than constantly accommodating the Bible to the findings of science, struck a responsive chord with many concerned Christians. In substantial, though undetermined, numbers they abandoned the once-favored day-age and gap theories, which allowed for the antiquity of life on Earth, accepting instead the strict creationism of flood geology, which limited the history of life to no more than 10,000 years and affirmed creation in six twenty-four-hour days.

Two years after the appearance of *The Genesis Flood* Morris and nine other like-minded creationists banded together to form the Creation Research Society (CRS). The members of the CRS, all possessing some scientific or technical training at the graduate level, attacked not only evolution, as their intellectual forebears had done in the 1920s, but any compromise with theories of ancient life. Many members, including Morris himself, insisted that God had created the entire universe, not just earthly life, within the past 6,000 years or so. In contrast to the antievolutionists of the 1920s, who could claim no well-trained scientists of their own, the ten founders of the CRS included five biologists with earned doctorates from major universities, a biochemist and an engineer with Ph.D. degrees, two biologists with master's degrees, and a tenth member who pretended to have an M.A. in geology.

These young-Earth creationists, as they came to be called, proved highly effective in promoting Price's flood geology among conservative Christians. The San Diego-based Institute for Creation Research, which Morris had established in 1972, served as unofficial headquarters. About 1970, to help gain a platform for their views in public school classrooms—and to endow them with a measure of scientific respectability—the proponents of flood geology renamed Price's model of Earth history "scientific creationism" or "creation science." The sequence and timing of key events, such as a recent special creation and subsequent worldwide flood, remained the same, but all direct references to biblical characters and places, such as Adam and Eve, the Garden of Eden, and Noah and his ark, disappeared from the stripped-down narrative. Within a decade or two the tireless proselytizers for scientific creationism had virtually co-

opted the generic creationist label for their hyperliteralist views, which only a half-century earlier had languished on the margins of American Fundamentalism. People who called themselves creationists during the last quarter of the twentieth century typically assumed that most listeners would identify them as believers in a young Earth.

The explanation for this dramatic shift in creationist thinking is difficult to nail down. Developments such as the evolution offensive launched by the BSCS help to explain the robust revival of creationism in the post-Sputnik period, but they scarcely account for the dramatic shift among Bible-believing Christians from old-Earth to young-Earth interpretations of Genesis 1. Facile generalizations about educational deprivation and cultural alienation simply will not suffice. Highly educated citizens may have been more likely than their less well-trained neighbors to subscribe to evolution, but a quarter of those Americans who professed belief in the recent special creation of the first humans had graduated from college. Within the evangelical community of Christians, Fundamentalists have displayed greater enthusiasm for scientific creationism than their Pentecostal brethren and sisters; yet few students of American religion would argue that the former are more socially alienated or economically depressed than the latter.

Whatever the reasons for the efflorescence of antievolutionism in the late twentieth century, the prodigious popularity of scientific creationism among conservative Christians almost certainly related more to theological than social impulses. Many converts were attracted by the creation scientists' insistence on giving the Bible priority over science. As believers who took the Bible as literally as possible, they found the young-Earth creationists' nonfigurative reading of the days of creation, the genealogies of the Old Testament, and the universal deluge of Noah to be especially appealing. No longer did they have to *assume* (as day-age advocates did) that Moses meant "ages" when he wrote "days" in Genesis 1; nor did they have to *assume* (as gap theorists did) that Moses, without explanation or comment, skipped over the longest period of Earth's history—between the creation "in the beginning" and the far later Edenic creation—simply to accommodate Scripture to science.

The theological factors that encouraged adoption of creation science varied among and within denominations. Independent Baptists, Missouri Lutherans, and Seventh-day Adventists, to name three of the religious groups most receptive to creation science, each possessed distinctive motivations for embracing it. Premillennial Baptists and Adventists (but not

amillennial Lutherans), who interpreted the prophecies of Revelation, the last book of the Bible, as indicating an apocalyptic end of the world associated with the Second Coming of Christ, tended to see an intimate link between the beginning described in the first book of the Bible and end-time events. As the Baptist Henry Morris once observed, "If you take Genesis literally, you are more inclined to take Revelation literally." The Adventists (but not Baptists and Lutherans) possessed an extra-biblical endorsement of creation science in the divinely inspired writings of their prophetess, Ellen G. White. Though all three traditions read the Bible through literalistic lenses, the Missouri Lutherans (but not the Baptists or Adventists) well into the twentieth century went so far as to defend Ptolemaic astronomy, which placed Earth rather than the sun in the middle of the solar system.

Balanced Treatment

In the early 1980s state legislatures across the United States debated a creationist-inspired model bill that called for the balanced treatment of "evolution-science" and "creation-science" in public schools. Two states, Arkansas and Louisiana, enacted this proposed legislation into law, but the new statutes quickly encountered judicial opposition. In 1982, after a trial that brought more attention to the creation-evolution controversy than any event since Clarence Darrow confronted William Jennings Bryan in the Scopes trial of 1925, a federal judge in Little Rock declared the Arkansas law to be an unconstitutional breach of the wall separating church and state. Five years later the U.S. Supreme Court, after hearing a case from Louisiana, upheld a lower court decision that creation science served a religious, not scientific, purpose. However, one justice, writing for the majority, left the schoolhouse door open a crack for creationism to slip through. "Teaching a variety of scientific theories about the origins of humankind to schoolchildren," he wrote, "might be validly done with the clear secular intent of enhancing the effectiveness of science instruction."⁶

Since the 1920s the scientific establishment had paid little attention to the snipings of creationist critics, but the creationist successes (and near successes) of the early 1980s finally roused them from their apathy. Organizations from the National Academy of Sciences to little-known local science societies, fearing the loss of public patronage and cultural authority, denounced those who challenged their conclusions and sought to

adulterate science with religion. Just how much influence their fulminations had on the voting of state lawmakers is hard to assess. In at least one state, creationist educators rather than evolutionary biologists brought about the defeat of the model bill. A scientist at the University of Oklahoma told of witnessing how a legislative committee in that state reached its decision to oppose the balanced-treatment act. At a public hearing in early 1981 a joke-cracking, down-home school superintendent from a rural district begged the legislators to “leave us alone—we know what we’re doing. We’re not teaching evolution—we’re teaching biblical creation.” The bill under consideration required that creation and evolution be given equal time if either were taught; because most Oklahoma schools were teaching only creation, the bill, seen as another “example of big government telling the local school boards what to do,” would force them to expose students to evolution. Needless to say, the bill (and evolution) went down to defeat.⁷

Creationism in the 1990s

The Supreme Court’s decision effectively ended efforts to mandate the inclusion of creationism in public school curricula, but it did little to slow down creationist initiatives to undermine evolution. Instead of agitating for balanced-treatment acts at the state level, creationists refocused much of their energy on individual schools and school districts, where in many instances considerable support for creationism already existed. In the early 1990s the National Center for Science Education (NCSE), which monitored creationist endeavors throughout the country, warned that people unfamiliar with precollegiate education would “be surprised at the amount of official antievolutionism that is found there, especially among administrators.” In the fall of 1992 the Center drew attention to “a sharp surge upwards” in creationist attacks on evolution. These often took the form of calling for downgrading the status of evolution from “fact” to “theory” or for presenting students with “evidence against evolution,” a notion the director of the Center, Eugenie C. Scott, dismissed as “merely ‘scientific’ creationism in sheep’s clothing.”⁸

Some educators employed novel solutions to solve the recurring evolution problem. In response to complaints about the inclusion of evolutionary cosmology in elementary school textbooks, the superintendent of schools in Marshall County, Kentucky, ordered that the offending two pages be glued together. The Cobb County school district in suburban

Atlanta, Georgia, went directly to the publisher of a troublesome fourth-grade text and asked that a chapter entitled "The Birth of Earth" be deleted. Modern electronic publishing allowed Macmillan/McGraw Hill, the publisher, to excise seventeen pages, thereby producing a custom-made text exclusively for the students of Cobb County.⁹

In Alabama the state school board in 1995 voted six to one in favor of inserting the disclaimer shown in the box on page 10 in all biology textbooks used by the state. Biology textbooks in Alabama subsequently began arriving from the publishers with that message pasted into the front. The Republican governor, Fob James, who presided over the board, strongly backed the disclaimer, saying that he personally believed the biblical account of the origin of life to be true.¹⁰

In the mid-1990s controversies over creationism erupted not only in Georgia, Kentucky, and Alabama but in Virginia, Pennsylvania, New Hampshire, Ohio, Indiana, Michigan, Wisconsin, New Mexico, California, and Washington. Tennessee legislators defeated a bill, at first expected to "blast through the House Education Committee like a rocket," that would have allowed the firing of any teacher who presented evolution as fact rather than theory. Such activity prompted one frustrated anticreationist to exclaim that "creationism is like a vampire, and every time you think the thing is finally dead, someone pulls the damned stake out again."¹¹

As a Republican candidate for the presidency of the United States in 1980, Ronald Reagan had insisted that "if evolution is taught in public schools, creation also should be taught." In 1995 the Republican presidential candidate Pat Buchanan adamantly denied any kinship with simian ancestors: "I don't believe it is demonstrably true that we have descended from apes. I don't believe it. I do not believe all that." He *did* believe that parents had "a right to insist that Godless evolution not be taught to their children." During the 1990s various state Republican parties added creationist planks to their platforms. And in all regions of the country—North, South, East, and West—creationists stood for election to local school boards. They often won.¹²

Support for creationism ran deep in North American society. Despite the nearly unanimous endorsement of naturalistic evolution by leading biologists, a Gallup poll in 1993 showed that 47 percent of Americans continued to believe that "God created man pretty much in his present form at one time within the last 10,000 years," and an additional 35 percent thought that the process of evolution had been divinely guided.

A MESSAGE FROM THE ALABAMA STATE BOARD OF EDUCATION

This textbook discusses evolution, a controversial theory some scientists present as a scientific explanation for the origin of living things, such as plants, animals and humans.

No one was present when life first appeared on earth. Therefore, any statement about life's origins should be considered as theory, not fact.

The word "evolution" may refer to many types of change. Evolution describes changes that occur within a species. (White moths, for example, may "evolve" into gray moths.) This process is microevolution, which can be observed and described as fact. Evolution may also refer to the change of one living thing to another, such as reptiles into birds. This process, called macroevolution, has never been observed and should be considered a theory. Evolution also refers to the unproven belief that random, undirected forces produced a world of living things.

There are many unanswered questions about the origin of life which are not mentioned in your textbook, including:

- Why did the major groups of animals suddenly appear in the fossil record (known as the "Cambrian Explosion")?
- Why have no new major groups of living things appeared in the fossil record for a long time?
- Why do major groups of plants and animals have no transitional forms in the fossil record?
- How did you and all living things come to possess such a complete and complex set of "Instructions" for building a living body?

Study hard and keep an open mind. Someday, you may contribute to the theories of how living things appeared on earth.

Only 11 percent subscribed to purely naturalistic evolution. (Seven percent expressed no opinion.) Fifty-eight percent of the public favored teaching creationism in the schools. In Canada, which had experienced comparatively little controversy over origins, 53 percent of adults rejected evolution.¹³

In 1986, during a visit to New Zealand, the American paleontologist and anticreationist Stephen Jay Gould assured his hosts that scientific creationism was so “peculiarly American” that it stood little chance of “catching on overseas.” His colleague Richard C. Lewontin seemed to agree. “Creationism is an American institution,” he declared, “and it is not only American but specifically southern and southwestern.” So it may have seemed at the time, but scientific creationism was already traveling far beyond the borders of the United States, enjoying growing popularity in Europe, Asia, and the South Pacific. In 1980 Australian antievolutionists established the Creation Science Foundation (CSF) in Queensland, where for a period in the 1980s creation appeared in the state syllabus for secondary schools. Within a short time the CSF became the world’s second leading center for the propagation of scientific creationism (after Morris’s Institute for Creation Research). In the mid-1990s its star speaker, Kenneth A. Ham, opened an international creationist organization in Florence, Kentucky (near Cincinnati), as “an outreach of the CSF.” The Korea Association of Creation Research, also founded in 1980, expanded so rapidly that it, too, established branches in the United States.¹⁴

Even in Islamic cultures such as Turkey’s creationism made extensive inroads. In the 1980s the ministry of education translated several creation-science books into Turkish and distributed them to teachers throughout the country. In a report on evolution sent to Turkish educators, the minister of education dismissed Darwinism as a handmaiden of materialism based on “nothing but some interpretations and guesswork.” He recommended that biology textbooks “provide all of the evidence in favor of and against the theory of evolution,” so that Turkish youth could “gain the habit of objective and scientific thinking.”¹⁵

Varieties of Evolutionism and Creationism

Although popular accounts of the creation-evolution controversies of the 1990s often characterized them as a bipolar debate between naturalistic evolutionists and supernaturalistic creationists, opinions on origins actually spanned a wide intellectual spectrum. On one end were the *naturalis-*

tic evolutionists, often atheists or agnostics (such as the Oxford biologist Richard Dawkins and the Tufts philosopher Daniel C. Dennett), who saw no evidence of, or need for, a Creator God. Nearer the center were the *theistic evolutionists*, often devout Christians (such as the physicist Howard J. Van Till, of Calvin College, and many members of the evangelical American Scientific Affiliation), who saw little or no evidence of God in nature but who, for theological reasons, believed that God had created the world by means of evolution. On the other side of the center were the *intelligent-design theorists* (such as the Australian biochemist-physician Michael Denton, the Berkeley law professor Phillip E. Johnson, the Lehigh biochemist Michael J. Behe, and the editors of the journal *Origins & Design*), who rejected naturalistic evolution and claimed to see evidence of an Intelligent Designer in the complexity of nature, but who often accepted the antiquity of life on Earth. At the opposite end of the spectrum from the naturalistic evolutionists, beyond a mixed group of *old-Earth creationists* (such as the California-based astronomer Hugh Ross), were the *scientific creationists*, typically Fundamentalist Christians (such as Henry M. Morris and most members of the Creation Research Society), who compressed the entire history of the universe into little more than 6,000 years and postulated a divine creation in six literal days.

The “point man” for naturalistic evolution in the 1990s was Dawkins, author of such books as *The Blind Watchmaker* (1986), described on the dust jacket as perhaps “the most important book on evolution since Darwin.” The title, a reference to the role of natural selection in creating organized complexity, left little doubt of Dawkins’s position:

Natural selection, the blind, unconscious, automatic process which Darwin discovered, and which we now know is the explanation for the existence and apparently purposeful form of all life, has no purpose in mind. It has no mind and no mind’s eye. It does not plan for the future. It has no vision, no foresight, no sight at all. If it can be said to play the role of watchmaker in nature, it is the blind watchmaker.

In an oft-quoted statement, Dawkins praised Darwin for making “it possible to be an intellectually fulfilled atheist,” and he repeatedly went out of his way to bait creationists, all of whom he believed to be “ignorant, stupid or insane.” He dismissed the first chapters of Genesis as just another creation myth “that happened to have been adopted by one particu-

lar tribe of Middle Eastern herders” and theistic evolution as a superfluous attempt to “smuggle God in by the back door.” No wonder one of Dawkins’s patrons, Charles Simonyi, a rich Microsoft executive who endowed a special professorship for Dawkins at Oxford, fondly called his beneficiary “Darwin’s Rottweiler,” a reference to the nineteenth-century evolutionist and agnostic Thomas H. Huxley, famous as “Darwin’s bulldog.”¹⁶

If Dawkins played the role of point man for late-twentieth-century naturalistic evolutionists, Daniel C. Dennett gladly served as their hatchet man. In a book called *Darwin’s Dangerous Idea* (1995), which Dawkins warmly endorsed, Dennett portrayed Darwinism as “a universal solvent, capable of cutting right to the heart of everything in sight”—and particularly effective in dissolving religious beliefs. The most ardent creationist could not have said it with more conviction, but Dennett’s agreement with them ended there. He despised creationists, arguing that “there are no forces on this planet more dangerous to us all than the fanaticisms of fundamentalism.” Displaying a degree of intolerance more characteristic of a fanatic Fundamentalist than an academic philosopher, he called for “caging” those who would deliberately misinform children about the natural world, just as one would cage a threatening wild animal. “The message is clear,” he wrote: “those who will not accommodate, who will not temper, who insist on keeping only the purest and wildest strain of their heritage alive, we will be obliged, reluctantly, to cage or disarm, and we will do our best to disable the memes [traditions] they fight for.” With the bravado of a man unmindful that only 11 percent of the public shared his enthusiasm for naturalistic evolution, he warned parents that if they insisted on teaching their children “falsehoods—that the Earth is flat, that ‘Man’ is not a product of evolution by natural selection—then you must expect, at the very least, that those of us who have freedom of speech will feel free to describe your teachings as the spreading of falsehoods, and will attempt to demonstrate this to your children at our earliest opportunity.” Those who resisted conversion to Dennett’s scientific fundamentalism would be subject to “quarantine.”¹⁷

Evolutionary ideologues such as Dawkins and Dennett made headlines for their hard-nosed views, but not all naturalistic evolutionists took such a draconian line. For example, Stephen Jay Gould, a self-described agnostic, expressed dismay at such tough rhetoric and welcomed any signs of rapprochement between naturalistic evolutionists and theists. He celebrated Pope John Paul II’s recognition in 1996 that the theory of evolution