

Frankie Myers  
HI482H Final Paper  
Dr. Kimler  
NC State University

## **America's Moral Battle**

*The struggle between creationism and evolution since Scopes*

The debate between evolutionists and creationists has been one of the longest and most intense in American history. Although Darwin first proposed his theory of evolution in 1849, it did not become so controversial until the Christian Fundamentalism movement in the 1920s. Without a doubt, the spark that started the fire that continues to burn today was the Scopes “Monkey” Trial of Dayton, Tennessee in 1925. Even though the trial was set up by the ACLU to challenge the constitutionality and raise awareness of Tennessee’s Butler Act, which forbade the teaching of evolution in public school, it nevertheless led to a very real and serious debate over the ensuing decades. The debate has centered on how to teach the origins of life in the biology classroom, and both sides consider the issue to be rooted in deep moral and philosophical principles. As Larson writes, “The issues raised by the Scopes trial and legend endure precisely because they embody the characteristically American struggle between individual liberty and majoritarian democracy, and cast it in the timeless debate over science and religion. For twentieth century Americans, the Scopes trial has become both the yardstick by which the former battle is measured and the glass through which the latter debate is seen.”<sup>10</sup>

This paper will examine the progression of the creationist argument since that landmark trial, the major legal battles that have transpired, the development of popular American opinion and media portrayal of creationism and evolution, and finally the views of scientists and creationists on resolving and harmonizing the two sides. First, however, we will take a brief look at what evolutionists and creationists actually believe and what philosophical and moral principles these beliefs are based on.

Evolution through natural selection is the basic premise outlined in Charles Darwin’s *On the Origin of Species*. Darwin described evolution as “descent with modification,” whereby desired traits were selected because they provided an advantage

to the organism, and in this way, life evolved towards more highly complex and highly adapted forms. Neo-Darwinism, a movement started in the 1940s and 50s, couples natural selection with genetic mutation theory. The general consensus among scientists is that this combination explains most of biological evolution.<sup>1</sup> As a scientific theory, evolution has an overwhelming amount of evidence in its favor. Despite this, creationists continue to raise objections to the methods and motivations of the theory.

Evolutionists believe that education should strive to be secular and objective, presenting students with the most successful scientific theories available, and never pushing a particular religious agenda. They argue that restricting education based on religious ideology oppresses basic civil liberties. They also believe that, for something to be called science, it should be founded on falsifiable, empirical evidence, and that any injection of religious doctrine into a scientific theory distorts the purpose of science and is ultimately detrimental to the student, both in terms of scientific and religious understanding.<sup>6</sup>

Creationism, in its broadest and most inclusive usage, is the belief that a supernatural entity created the universe and all living things. Most creationists today do not see creationism and evolution as wholly antagonistic, and in fact believe that the two views can be harmonized (known as “theological evolution”). However, a substantial Fundamentalist minority raises strong moral and philosophical objections to the claims of evolution.

While Fundamentalism is not limited to Christianity, Christian Fundamentalists are by far the most visible conservative religious group in America. For these Biblical-literalists, the Bible is the Revealed Word of God, on which the moral stability of civilization rests. Since evolution does not concur with the literal interpretation of Genesis, if students are taught evolution, Fundamentalists fear they will begin to doubt the Word of the Bible, and ultimately give up their faith, leading to moral decline. They also object to the notion that all life can be broken down into mechanical processes, because this eliminates the possibility of free will, moral responsibility, and a higher purpose. Humans are thus reduced to a cog in the self-perpetuating machinery of the world. As biologist Douglas Futuyma states, Darwin studied organisms “as you would study rocks or minerals or tides.”<sup>5</sup> Fundamentalists associate this view with absolute materialism and a disregard for humanity.

The two major catalysts for anti-evolutionism after Scopes were Nazism during World War II and fears of Communism during the Cold War. As one of the most prominent creationists, Henry M. Morris wrote during the McCarthy era: “Evolution is at the foundation of communism, fascism, Freudianism, social Darwinism, behaviorism, Kinseyism, materialism, atheism, and in the religious world, modernism and neo-orthodoxy.”<sup>2</sup> Inspired by the fear of the spread of communism, Fundamentalists worked passionately to keep evolution out of the schools and keep as much Christianity in as possible.

Ironically, the Cold War era also helped to spur the pro-evolutionist cause. After the USSR launched Sputnik I in 1957, the National Defense Education Act was passed, pumping millions of dollars directly into science and math education. Among other things, this act precipitated the Biological Science Curriculum Study, a team of scientists and educators who wrote state-of-the-art textbooks on biology. Free from market pressures, the group included detailed coverage of evolution, treating it as a bedrock principle of biology, whereas publishers of prior textbooks had been wary of even mentioning the word. Thus the political and social climate of the 1950s and 1960s was ripe for controversy.<sup>6</sup>

Although Scopes was found guilty in 1925, and Bryan’s crusade won where it counted: in courts and in schools, popular opinion of the trial was mixed. At first there was a “nationwide flurry of anti-evolutionary activity and fundamentalism.”<sup>4</sup> Other states passed similar laws to Tennessee’s Butler Act. But as the decades wore on, dramatizations of the trial such as *Inherit the Wind* helped to erode the support for Bryan’s testimony. As senior legal scholar Alan Wright states, “Darrow made Bryan look so foolish, as we have seen in various dramatizations...that it made the whole creationist position look foolish and made it much harder for people to insist that only creationism be taught.”<sup>7</sup> Combined with the increasing scientific support for evolution (particularly from universities and colleges) and a general breakdown of traditional Protestant education in American society, this helped spell the end to laws like the Butler Act.<sup>6</sup> In the 1968 Supreme Court ruling of *Epperson v. Arkansas*, the law and others like it were declared unconstitutional based on the 14<sup>th</sup> amendment’s establishment clause.<sup>5</sup> Hyped as “Scopes II,” the trial resulted in a big loss for creationists—not only in its verdict, but in its popular opinion. *Life* reminded readers that the issue first “erupted in a

glorious explosion in the tiny burg of Dayton, Tennessee, where in 1925, as every student of American humor knows, Spencer Tracy gave Fredric March the verbal thrashing of his life.” Justice Hugo Black took the lead in applying the 14<sup>th</sup> amendment’s establishment clause to various other cases of religion in public education, barring compulsory prayer in schools, religious instruction, and Bible readings.<sup>6</sup>

In an increasingly secularized society, the creationists needed a new approach. Instead of fighting to keep evolution out of science curriculums, they would take a more positive approach: attempt to legitimize creationism as a viable scientific alternative and fight to have it taught in schools alongside evolution as an “alternate theory”. In 1974, Morris coined the term “Scientific Creationism” in his book by the same title. In it, he “Sought to peel off the biblical wrappings of creationism and repackage it as science.”<sup>12</sup> John N. Moore presents evolution and creation as two scientific “models.” “The two basic viewpoints of origins may be called the ‘evolution model’ and the ‘creation model.’ A choice between these two models may be made in terms of the effectiveness with which each may be used to correlate available data.”<sup>12</sup> This two-model approach became very popular in scientific creationist rhetoric, particularly Morris’s, who claimed evolution and creation were “two competing scientific hypotheses.”<sup>13</sup> Since evolution was a theory, it was argued, it was only fair to teach alternate theories such as this. This came to be known as “balanced treatment.”

The switch to scientific creationism was a “major tactical shift”, says Numbers, “Instead of denying evolution its scientific credentials, as biblical creationists had done for a century, the scientific creationists granted creation and evolution equal scientific standing.” They also downplayed the Genesis story and “repudiated the epithet ‘antievolutionist.’”<sup>12</sup>

Not all creationists were fond of the scientific creationist movement. For instance, John C. Whitcomb disgustedly observed, “one might just as well be a Jewish or even a Muslim creation scientist as far as this model is concerned...absolute certainty is lost and the spiritual impact that only the living and powerful Word of God can give is blunted.”<sup>14</sup>

The scientific creationists quickly turned up the heat on political legislation. Beginning in the late 1960s, they formed organized societies with names like the Creation Research Society, the Institute for Creation Research, the Bible-Science Association, the

American Scientific Affiliation, and the Deluge Geology Society. While most of these groups did little that could be called scientific research, by presenting themselves as scientific organizations, they became a formidable political and social force.

The Creation Research Society (CRS), one of the most well known of these organizations, was founded in 1963 by Walter Lammerts. Lammerts was an ultraconservative Christian who subscribed to George Price's flood geology, which proposed that a single cataclysmic flood (Noah's flood) was responsible for all geological features of the earth. He also believed in the absolute fixity of species, even at a time when the strictest creationists were allowing microevolution and development of some species. All species developments were "designed changes" as he called them.<sup>11</sup>

In addition to Lammerts, several other high-profile creationists sat on the CRS's board of directors including William Tinkle, Henry Morris, Frank Marsh, and Duane Gish. All members held PhDs in biology, chemistry, zoology, or some other related field. Not all of the members shared Lammerts's views, and in fact there wasn't much the society as a whole could agree on. Tinkle believed in multiple significant cataclysms, and this was a point of tension between him and Lammerts. Morris argued with Lammerts about post-flood biological development and the age of the earth. Lammerts attributed development to divine genetic engineering (he was a geneticist), while Morris, inspired by the second law of thermodynamics, allowed for considerable biological development, and criticized Lammerts's view for violating the "economy of the miraculous in God's orderly world."<sup>11</sup>

The CRS is more focused on public science education than scientific research. To that end, the organization wrote a creation science high school textbook, *Biology: A Search for Order in Complexity*, which was widely used in Bible schools but did not succeed in public schools. When one county in Indiana decided to use the book, a state court declared the text was "obviously designed to present only the view of Biblical Creationism," and banned it.

Like the CRS, the Institute for Creation Research does very little actual scientific research. It was founded in 1970 by Morris, and continues to give seminars and publish books on various scientific creationism subjects. Its stated purpose, according to a bulletin on its website by Morris himself is education and graduate research.<sup>36</sup> However,

a committee of scientists visiting its graduate school concluded that “ICR cannot be considered to be a scientific research institution.”<sup>3</sup>

Scientific creationist organizations, of which there are over a dozen, run the full spectrum from the respectable to the absurd. Charles Johnson’s International Flat Earth Society in Lancaster, CA promotes the belief that the earth is flat, the space program is a conspiracy, and the heaven “dome” is 4,000 mi away.<sup>3</sup> The Creation Evidence Museum, a doublewide trailer in Glenrose, TX, conducts field excursions hoping to uncover dinosaur and human footprints side-by-side.<sup>5</sup>

Most creationist research was far from scientific. Larry G. Butler, a one-time member of the CRS, in his stinging “Critique of Creationist Research” circulated to CRS board members, reprimanded creationists for their critical perspective of evolution, their fanciful search for a dramatic upheaval of evolutionary theory, and their lack of emphasis on empirical evidence. In his opinion, creationist research was “like a dog walking on his hind legs: one is not surprised that it is done badly; the surprising thing is that it is done at all.”<sup>18</sup>

In fact, there were a few notable scientific studies made by scientific creationists that did not fit this image. Lammerts used the facilities of the Lawrence Radiation Laboratory to induce mutations in roses to try to disprove speciation through genetic mutation. He found that resulting mutations stayed within fixed bounds and rarely produced desirable traits, and claimed that this suggested that the mechanism may not be able to create new forms.<sup>16</sup>

Robert V. Gentry identified radioactive halos in primitive granite and attempted to show that these microscopic multicolored rings produced by radioactive decay polonium isotopes were in fact evidence of a dramatic and rapid creation. He called them “God’s fingerprints.” In his words, if “the Precambrian granites containing these special halos had crystallized gradually as hot magma slowly cooled over long ages,” as evolutionists maintained, then “the radioactivity which produce these special radiohalos had such a fleeting existence that it would have disappeared long before the hot magma had time to cool sufficiently to form a solid rock.”<sup>16</sup>

Thomas G. Barnes’s theory on the decay of the earth’s magnetic field was said to be “one of the most elegant ideas to come out of modern Creationism.” Barnes, a physicist, estimated that because the earth’s magnetic field was stronger in the past, it

would have shielded the earth from cosmic radiation and produced lower amounts of carbon 14, skewing the results of radiocarbon dating. “The life of the earth’s magnetic field should be reckoned in thousands, not millions or billions, of years.”<sup>17</sup> While the results of these studies may be disputed among the scientific community, it is nevertheless valid experimental scientific research and deserves credit as such. It is, however, a rarity.

As we have seen, scientific creationists mobilized into a well-organized movement. This organization paid off, and in the decade after the term “scientific creationism” was coined, so called “balanced treatment” bills were introduced in 26 state legislatures, and were passed into law in Arkansas, Louisiana, and Tennessee. Numerous local school boards were adopting this view as well. According to numerous polls in the 1980s, over 80% of Americans supported including creationist theories in science curriculums.<sup>6</sup> And only 25% of school board members surveyed supported teaching only evolution in schools.<sup>12</sup>

Since the Scopes defense was not widely viewed as having the moral upper hand, scientific creationists used it to their favor, often quoting a statement falsely attributed to Darrow at Dayton: “It is bigotry for public schools to teach only one theory of origins.”<sup>8</sup> Many textbook publishers also scaled back their evolution content due to the increased pressure.<sup>5</sup>

The 1981 Arkansas balanced treatment law, probably the most famous, defined six tenets of creation science: “1) sudden creation of the universe, energy, and life from nothing; 2) the insufficiency of mutation and natural selection in bringing about development of all living kinds from a single organism; 3) changes only within fixed limits of originally created kinds of plants and animals; 4) separate ancestry for man and apes; 5) explanation of the earth’s geology by catastrophism, including the occurrence of a worldwide flood; 6) a relatively recent inception of the earth and living kinds.”<sup>13</sup>

The ACLU challenged the law, and in the landmark case 1981 *McLean v. Arkansas*, Federal District Court Judge William R. Overton not only ruled against the teaching of creation science, but he ruled that creation science was in fact not science at all. According to Overton, the Arkansas law was a descendant of the Tennessee Butler Act and aimed to promote Biblical Creation. The debate over how to demarcate science from religion was a focal point of the trial, and Overton, under the tutelage of philosopher

of science Michael Ruse, established these five criteria, which he outlines in section IV of his verdict: “1) It is guided by natural law; 2) It is explanatory by reference to natural law; 3) It is testable against the empirical world; 4) Its conclusions are tentative, i.e., are not necessarily the final word; and 5) It is falsifiable.”<sup>34</sup> Scientific Creationism, he found, fit none of these criteria. In addition, he noted the diversity of the plaintiff. The ACLU had assembled Arkansas Bishops of the United Methodist, Episcopal, Roman Catholic and African Methodist Episcopal Churches, the principal official of the Presbyterian Churches in Arkansas, Southern Baptist and Presbyterian clergy, as well as several Jewish leaders, a scientific society, and the National Association of Biology Teachers.<sup>16</sup> By an ironic contrast, no religious groups appeared on the list of defendants.

In fact, most mainstream religious organizations were opposed to scientific creationism. In 1984, The Central Conference of American Rabbis declared that scientific creationism would give students “false ideas about scientific methods and criteria,” and “no group, no matter how large or small, may use the organs of government...to foist its religious beliefs on others.”<sup>35</sup> By the mid-80s, popular support for the scientific creationism movement had virtually died out.

The Louisiana law went to the Supreme Court in 1987, where it and others like it were declared unconstitutional. The ruling concluded: “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.” According to Eugenie C. Scott, president of the National Center for Science Education, “There aren't any alternative scientific theories to evolution.”<sup>29</sup> But, creationists continue to cling to this ruling as a hope that they may one day be able to persuade the courts that there is sufficient scientific support behind creationism to present it in schools.

This Supreme Court ruling implied that there was definite line separating religion and science. There is still a great deal of controversy over just how we make that distinction. Certainly, science is not without its dogma, and as Larry Laudan points out, anti-creationists help themselves little “by pretending that science is characterized by an uncompromising open-mindedness.” According to Numbers, this struggle “illustrates the historically contingent nature of “science” and the futility of assigning the term an invariant meaning.

In the 1990s, creationism got yet another revamping, this time billed as “Intelligent Design” (ID). With this new movement, the definition of creationist has broadened considerably. Phillip Johnson, writing in support of intelligent design, writes that a creationist is “simply a person who believes in the existence of a Creator who brought about the existence of the world and its living inhabitants in furtherance of a purpose”<sup>23</sup> and that creationists allow “a preexisting supernatural intelligence to guide evolution.”<sup>25</sup> Critics of ID say it is just another spin of creationism. Wired Magazine’s October 2004 cover story calls it “Creationism 2.0: The plot to kill evolution.” But take a closer look and compare this with the six tenets listed above for scientific creationism and you will see it is quite a bit more inclusive.

Promoted primarily by university-based antievolutionists & Progressive Creationists who believe in a larger time scale, ID even allows for a great deal of microevolution and adaptations. ID is a direct descendant of William Paley’s watchmaker argument, and holds that life is too complex to have happened by chance, so it must have been designed. Michael Behe’s *Darwin’s Black Box* is considered the most scholarly and scientific book on ID. In it, Behe, a biochemist, describes how certain “irreducibly complex” processes and structures in biochemistry could not have evolved by incremental activity because they cannot be broken down into component parts. He gives the blood-clotting cascade and the rotor motor of a microorganism’s flagellum as examples. He accepts natural selection and man-chimp common ancestry, but holds that the development of life had to have some initial intelligent catalyst.<sup>3</sup>

Since the late 1980s, when the “balanced treatment” laws were declared unconstitutional, creationists have turned to pushing schools in nearly 20 states to require disclaimer stickers on textbooks and open the curriculum to include the possibility of discussing intelligent design with students.<sup>29</sup> In Twin Falls, Idaho in 1989, a high school student’s parents found out that her science teacher, Phil Gerrish, was promoting intelligent design ideas and wrote a letter to the school board. The public supported the teacher, and the school board, convinced that he was doing nothing wrong as long as he did not pose creation as an alternate theory to evolution, allowed him to continue.<sup>5</sup>

In 1995, Tennessee tried to pass a law that would allow teachers to be fired for teaching evolution as fact and not theory. Due to overwhelming media pressure, the bill failed in the state senate. At the same time, however, Georgia passed a measure

supporting instruction in creationism. And Alabama ordered that new biology textbooks bear a sticker stating that evolution is “a controversial theory...not fact.” In 2002, Ohio’s state school board debated including evolution in the state’s science standards. Although it was eventually included, “the door was left open for teachers to permit classroom discussions that treat intelligent design as an alternative to evolution.”<sup>9</sup>

In the Twin Falls case, the girl’s evolutionist parents suggest that “people don’t want to raise a fuss, they’d prefer that the issue just be ignored...But, we’re not that much of a minority.”<sup>5</sup> Phillip Johnson’s essay “What is Darwinism” paints a different picture, in which creationists are the minority with an oppressive evolutionist majority. So, just who is the majority here? What does America think today?

The country is deeply divided on the subject of human evolution. Numerous polls suggest the majority of Americans are creationists in one form or another. A 2004 poll from the American Institute of Physics found that 55% of Americans believe God created humans in their present form.<sup>26</sup> Yet, another survey from the Nation Science Foundation indicates that American opinion may be changing. Conducted in 2001, it shows that 53% of Americans believe in human evolution. This is the highest number ever recorded by this survey in 20 years.<sup>29</sup> This number is still substantially lower than other industrialized nations, however it does indicate that support is growing.

The country also has strong opinions about the roles of religion and science in society. In 2000, 63% of respondents said “the decline of Religion” was a “Critical” or “Very Important” factor in the cause of crime in the US.<sup>31</sup> In 2001, 55% of respondents agreed to the statement “we depend too much on science and not enough on faith.”<sup>30</sup> This suggests that most Americans today are wary of a decline of religion in favor of materialism and scientific understanding.

Morris points out that we are a highly religious society and we are “disfranchising the greatest part of our population by not teaching their view.” Along these lines, a study by the University of Texas at Arlington found that 30% of biology teachers nationally expressed a preference for teaching creationism vs. evolution.

What polls on the subject of evolution also indicate is that many Americans today do not understand the implication of a scientific “theory” and do not realize the overwhelming support for evolution. A Poll in 1999 by The People for the American Way, a pro-science group, found that 74% of Americans agreed that “evolution is

commonly referred to as the theory of evolution because it has not yet been proven scientifically.”<sup>28</sup> If people were aware of the amount of experimental validation the theory has received, there would certainly be a higher number of people who accept it.

Modern-day creationists are mixed on their attitudes towards the current debate. Phillip Johnson is definitely not satisfied with the situation that creationism currently finds itself in. He claims that the Darwinists have monopolized American intellectual thought, promoting a religion of “naturalistic philosophy,” and they will do anything to maintain their current position as the authorities of truth—even support flawed theories. Evolution through natural selection, he claims, is thoroughly flawed with very little scientific merit. As he puts it, it is primarily based on speculation, and “there is no requirement that any of this speculation be confirmed by either experimental or fossil evidence. For Darwinists, just being able to imagine the process is sufficient to confirm that something like that must have happened.”

He presents scientists as the insecure ones who cling to their doctrine: “Suppose a skeptic argues that evidence for biological creation by natural selection is obviously lacking and...the development of life required some input from a preexisting, purposeful Creator.” This is unacceptable to scientists, he argues, because “it suggests the possibility that this Creator may have communicated in some way with humans. In that case there could be real prophets...such persons could conceivably be dangerous rivals to the scientists as cultural authorities.” Clearly, Johnson is attacking Ad Hominem rather than directly addressing the scientific argument of evolution.<sup>24</sup>

But Johnson does agree that creation could coexist with evolution if it includes some element of intelligent purpose. Darwinists, he claims won’t allow this because they insist that “the cosmos is a closed system of material causes and effects which can never be influenced by anything outside of material nature—by God, for example,” and can accommodate “no intelligent purpose-guided evolution.”<sup>23</sup>

Other modern-day creationists try to refute evolution on scientific terms. Dr. Mike Gray of Bob Jones University writes, “Evolution is a supposed historical process, which by any model would operate too slowly to be observed...all we can observe scientifically is present-day variation, and that is within very tight limits. What we are looking at is not evolution, and therefore evolution is not a fact.”<sup>33</sup>

Since the Scopes trial, fundamentalists have moved more and more to creation-affirming church, home schooling, or private schooling. Not only that, but the number of Christian colleges and universities has grown rapidly. As Henry Morris described, “the widespread movement in recent years toward the establishment of new private Christian schools” is attributed to the perception among fundamentalist pastors and parents that “a monotheistic religion of secular evolutionary humanism has become, for all practical purposes, the official state religion promoted in the public schools”<sup>9</sup>

In 1981, the National Academy of Sciences prescribed that “religion and science are mutually exclusive realms of human thought whose presentation in the same context leads to misunderstanding of both scientific theory and religious belief.”<sup>15</sup> Minister Tom Tucker agrees that the two should be kept separate because they ask fundamentally different questions: “science tries to ask questions of how things are done...while religion asks why.”<sup>5</sup> Everyone agrees that the debate is detrimental to both sides. The matter is grossly oversimplified in the popular media. Debates are portrayed as “Scopes II,” and media focuses on the lore and legend more than the facts. Furthermore, it has damaged the reputation of both scientists and theologians.

As a result of this debate, there is a popular perception that a scientific theory is nothing more than an unsubstantiated guess. Scientists are portrayed as materialists out to disprove the existence of God and turn the universe into a purely deterministic machine. This results in greater apprehension and mistrust when it comes to other scientific issues such as stem cell research. Furthermore, too few young people are attracted to science as a profession, and hearing this debate played out at home and at school may have, over the years, turned countless children away from the excitement and wonder of science.<sup>5</sup>

Theologians, too, have suffered from the overgeneralizations made of them in this debate. Johnson claims that Darwinists portray all creationists as Biblical-literalists who take the creation account in the book of genesis to be literal fact and reject all scientific evidence, no matter how substantial, that is in conflict with it. “It is a major theme of Darwinist propaganda that the only persons who have any doubts about Darwinism are young-earth creationists of this sort, who are always portrayed as rejecting the clear and convincing evidence of science to preserve a religious prejudice. The implication is that citizens of modern society are faced with a choice that is really no choice at all. Either

they reject science altogether and retreat to a pre-modern worldview, or they believe everything that Darwinists tell them.”<sup>23</sup>

The popular perception is that intellectuals aren't religious and religious people aren't intellectuals. In fact, there are many intelligent theologians who are also competent scientists and who either accept evolutionary theory or have careful, worthwhile scientific evidence to support their argument against it. While you may not agree with their conclusions, no matter what your stance, when you understand the depth of their knowledge and thought, it gives you a new appreciation for their work.

Those theologians who object to evolution represent a small minority of the whole religious community today. Most Catholics, mainline Protestants, and Jews have accommodated evolution into their theologies.<sup>1</sup> Perhaps the greatest symbol creationist and evolutionary harmony is Darwin himself, who, now buried in Westminster Abbey, looked on his theory as a testament to God's work.<sup>5</sup>

Bernard Ramm stresses the need for harmony between science and religion in *The Christian View of Science and Scripture*. Billy Graham, perhaps the most influential evangelist in America, endorsed Ramm's argument for theistic evolution. Ramm calls for Fundamentalists to adopt “a new calm, a new reserve, and a new reverence for *all* truth so that they may sympathetically, intelligently, and honestly reconsider the relationships between orthodoxy and biological science.” Biologists, too, he writes, are under an equal responsibility to recognize the limitations and boundaries of the science “and keep their generalizations within these bounds.” He devotes an entire chapter to “The Imperative Necessity of a Harmony of Christianity and Science.” He also notes that “many theories of science, once declared antichristian, are now held by millions of Christians with no evil effects on Christianity.”<sup>20</sup> Perhaps evolution, then, is just another theory that will gradually work its way into popular belief.

Until the 1920s and the rise of Fundamentalism, there was very little public conflict between creation and evolution. Most theologians accepted St. George Mivart's philosophy of biology which stated that there was a first cause—a God who provides a purpose to life, and that evolution evolves towards the goals that He set forth. For Mivart, it was plain “that Christian thinkers are perfectly free to accept the general evolution theory.”<sup>21</sup>

Opposition to evolution continues today both in the classroom and in court, with lawsuits pending even as we speak. When my high school biology teacher came to the chapter in our textbook on evolution, he stood in front of the class and declared “I don’t believe this stuff, but I’m required to teach it to you. It’s just a theory anyway. If you don’t want to listen to it then just don’t pay attention today.” This kind of disregard for well-supported science is far more damaging than simply not covering the chapter at all. Portraying a scientific theory as nothing more than a guess gives the student a distorted picture of what science is about. The issues underlying this debate are not simple—they involve matters of deep moral and philosophical importance. By studying the history of the debate, one can get a sense of how to evaluate arguments on either side. As many scientists and theologians have shown, reconciliation is possible. It is time for the rest of society to follow their lead.

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