

# Intelligent Design: The New Creationism Threatens All of Science and Society

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By Marshall Berman

“Intelligent Design? Creationism? Look, I’m very busy right now. I don’t have time for that nonsense. I’ve got work to do in the lab and on the computer. I have a career. Besides, it will all go away soon.”

## What Americans Believe

Sound familiar? For most of my life, I thought everyone knew that “Creation Science” was “dark ages” stuff. Until a physicist began to argue with me that evolution was a bunch of “just-so” stories, with no supporting evidence. Since then, I’ve seen, read, and heard hundreds of other creationists and “Intelligent Design” advocates argue that there is no fossil evidence to support evolution, that the only



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reason evolution has endured for almost a century and a half is because modern scientists are part of a conspiracy to cover up the real truth, that there are major questions concerning the reliability of radioactivity dating methods, and that many scientists “worship at the altar of Darwinism.” These people are scientists, lawyers, philosophers, theologians, and politicians. Indeed, I learned that creationists, like biological species, come in many varieties: young earth, old earth, and a reincarnated species, intelligent design creationists.

Gallup polls taken during the past 20 years consistently show a plurality (45 percent in February 2001) of Americans agreeing with the statement: “God created human beings pretty much in their present form at one time within the last 10,000 years or so” (Brooks, 2001).

Two-thirds of those surveyed favored teaching creationism along with evolution in public schools, while 29 percent are opposed (Gallup News Service, 2000).

Other surveys have shown that perhaps half of adults do not believe that humans evolved from earlier species, instead believing the Biblical account in Genesis.

## What Scientists Believe

There is a stark difference between the views of scientists and those of the general public. 5% of scientists hold creationist views, compared to 44% of the public. 95% of scientists hold naturalistic or theistic views that evolution is valid (Gallup poll, 1997).

According to Newsweek, “By one count there are some 700 scientists with respectable academic credentials (out of a total of 480,000 U.S. earth and life scientists) who give credence to creation-science...” That would put the support for creation science among those branches of science that deal with the earth and its life forms at about 0.14% (Newsweek magazine, 1987).

## Science Illiteracy

Our nation is paying a heavy price for having failed to teach students critical thinking skills, reasoning, and

good science for several generations. The consequences are an appalling science illiteracy among most Americans. In a recent survey (NSF, 2000), about half the respondents did not know:

- The earliest humans did not live at the same time as dinosaurs.
- It takes Earth one year to go around the Sun.
- Electrons are smaller than atoms.
- Antibiotics do not kill viruses.

Dr. Jon Miller, Northwestern University Medical School in Chicago, studies American views on and knowledge of science. His data reveal some major gaps in basic knowledge. American adults in general do not understand what molecules are. Fewer than a third can identify DNA as a key to heredity. Only about 10 percent know what radiation is. One adult American in five thinks the Sun revolves around the Earth (Dean, C., 2005).

### **International Competitiveness in Science, Math, Technology and Innovation**

The US is falling rapidly and drastically behind in science and math education (e.g., see Getty, S. and Berman, M., 2005), compared to other industrial countries, especially in East Asia. Those countries hold scientists, engineers, and teachers in high regard, and provide respect and rewards. In this country, politicians talk about education, but little will be accomplished until the culture itself changes. On the business side, outsourcing has gone far beyond low-wage manufacturing. Hi-tech companies are now outsourcing research and innovation to India and China, because that's where some of the most competent scientists and engineers are! US competitiveness is almost certainly destined to be second-class, unless we can turn this around (e.g., see Friedman, T. L., 2005).

### **Intelligent Design, The Discovery Institute, and The Threat to Society**

As disheartening as these surveys are, they only tell a small part of the story. In the 1980s, federal courts and the Supreme Court ruled that the First Amendment prohibited the teaching of Bible-based creationism and so-called "Creation Science." Shortly thereafter, an "evolved" version of creationism appeared called "Intelligent Design" (ID). ID is actually a re-incarnation of a discredited 200-year-old argument that goes back to William Paley, who said that the complexity of living things required direct, divine intervention by a creator (Berman, M. 2003).

Although the current version of ID professes to be scientific, it is religious. Phillip Johnson, a retired lawyer, is considered to be its guru; its center is the Discovery Institute (DI) in Seattle, Washington [<http://www.discovery.org/>], which includes the Center for Science and Culture (CSC) [<http://www.discovery.org/csc/>]. Financial support for the DI, millions of dollars, comes from 22 foundations, at least two-thirds of them with explicitly religious missions.

ID refuses to "publicly" describe the "designer," or say anything about methods or timing of the implementation of design into life on earth, demonstrate any scientific predictability, show any empirical support, or even conceive of how the "notion" could be tested or falsified. [Leading ID supporter, Michael Behe, has said: "...while I argue for design, the question of the identity of the designer is left open. Possible candidates for the role of designer include: the God of Christianity; an angel--fallen or not; Plato's demi-urge; some mystical new age force; space aliens from Alpha Centauri; time travelers; or some utterly unknown intelligent being" (Behe, M. 2001)]. ID cloaks itself in scientific vocabulary and pseudo-scientific concepts such as "irreducible complexity" and "specified complexity." It attacks a few details about the evolutionary process, all of which have been extensively and fairly analyzed by the science community and found wanting, false or just typical ongoing research questions. DI hired a well-known public relations firm, Creative Response Concepts [<http://www.crc4pr.com/firm/clients.asp>], and has influenced a large group of local, state and federal politicians, including US Congressmen and Senators, and even the President. It recently helped produce a media statement by German Cardinal Christoph Schoenborn, a close friend of the current Pope (Schoenborn, 2005). The Discovery Institute does everything a political advocacy group would do, except

perform any scientific research or produce any new scientific knowledge.

Nevertheless, they claim to be a growing movement, and that it is “only fair” to “teach the (non-existent scientific) controversy.” Their most important immediate goal is to insert their unscientific ideas into public school science classrooms, and they care little about gaining acceptance in the science community. Unfortunately, many conscientious religious people, including politicians and school board members, have come to believe that there really is a *scientific* controversy.

Many readers of APS News may not understand the broad goals of the Discovery Institute and the Intelligent Design advocates. The Institute developed a plan called the “Wedge,” which was anonymously leaked (Wedge Strategy, 1999; and Forrest and Gross, 2003).

Evolution is only the initial target of the Wedge’s edge, to be followed by an attack on all of science, and ultimately by profound changes in our society, culture, and government. They wish to change much more than the content of science; they want to change the process of doing science, and with it the entire character of American society. Here are their own words, excerpted from their plan and goals, the “Wedge Strategy”:

*"Discovery Institute's Center for the Renewal of Science and Culture seeks nothing less than the overthrow of materialism and its cultural legacies. Bringing together leading scholars from the natural sciences and those from the humanities and social sciences, the Center explores how new developments in biology, physics and cognitive science raise serious doubts about scientific materialism and have re-opened the case for a broadly theistic understanding of nature.*

#### **“Five Year Strategic Plan Summary**

*“The social consequences of materialism have been devastating. As symptoms, those consequences are certainly worth treating. However, we are convinced that in order to defeat materialism, we must cut it off at its source. That source is scientific materialism. This is precisely our strategy. If we view the predominant materialistic science as a giant tree, our strategy is intended to function as a “wedge” that, while relatively small, can split the trunk when applied at its weakest points. The very beginning of this strategy, the “thin edge of the wedge,” was Phillip Johnson’s critique of Darwinism begun in 1991 in Darwinism on Trial, and continued in Reason in the Balance and Defeating Darwinism by Opening Minds. Michael Behe’s highly successful Darwin’s Black Box followed Johnson’s work. We are building on this momentum, broadening the wedge with a positive scientific alternative to materialistic scientific theories, which has come to be called the theory of intelligent design (ID). Design theory promises to reverse the stifling dominance of the materialist worldview, and to replace it with a science consonant with Christian and theistic convictions.*

#### **“Governing Goals**

- *To defeat scientific materialism and its destructive moral, cultural and political legacies. To replace materialistic explanations with the theistic understanding that nature and human beings are created by God.*

#### **“Twenty Year Goals**

- *To see intelligent design theory as the dominant perspective in science.*
- *To see design theory application in specific fields, including molecular biology, biochemistry, paleontology, physics and cosmology in the natural sciences, psychology, ethics, politics, theology and philosophy in the humanities; to see its influence in the fine arts.*
- *To see design theory permeate our religious, cultural, moral and political life”*

The above quotes demonstrate that Intelligent Design’s claim to be non-religious is false. It is also obvious that the ID movement has aims far beyond attacking evolution in its attempt to return society to the fantasized “idyllic” and “moral” culture that prevailed in Europe prior to the Enlightenment. Most importantly, the preservation of many freedoms, including the freedom to choose any religion, or none, is not consistent with ID philosophy and goals. The writings of the leading CSC senior fellows make this

nostalgia for the Dark Ages frighteningly clear:

*"From the sixth century up to the Enlightenment it is safe to say that the West was thoroughly imbued with Christian ideals and that Western intellectual elites were overwhelmingly Christian. False ideas that undermined the very foundations of the Christian faith (e.g., denying the resurrection or the Trinity) were swiftly challenged and uprooted. Since the enlightenment, however, we have not so much lacked the means to combat false ideas as the will and clarity." (Dembski and Richards, 2001.)*

*"The scientific picture of the world championed since the Enlightenment is not just wrong but massively wrong. Indeed entire fields of inquiry, especially in the human sciences, will need to be rethought from the ground up in terms of intelligent design." (Dembski, W. A., 1999).*

John Mark Reynolds is a CSC fellow on the faculty at Biola University (listed by Access Research Network as an ID college, [www.arn.org/college.htm](http://www.arn.org/college.htm)). He writes, *"Torrey Honors Institute (at Biola) is at war with the modern culture. Torrey does not want to 'get along' with materialism, secularism, naturalism, post-modernism, radical feminism, or spiritualism. We want to win over every facet of the culture, from the arts to the sciences, for the Kingdom of Christ."* (Reynolds, J. M., undated)

The real goals of the modern ID movement are evident. Their target is all of science and society; evolution is just the beginning, the edge of the "Wedge."

### **Scientists and Politics**

There are only two Ph.D. physicists in Congress: Rep. Vern Ehlers (R-Michigan) and Rep. Rush Holt (D-New Jersey). (see Holt, R. 2005). Both have been leaders in working for improving science and math education. But they are small voices among 533 other Congressmen and Senators.

Scientists are mostly invisible in the realm of politics for good reasons: long hours of research, dedication, raising research funds, teaching, distaste for politics, and family needs, among other demands on their time. But individual scientists and even science organizations can be politically powerless, regardless of whether they are Nobel prize winners or members of the National Academy of Sciences, or their organizations represent tens of thousands of people. Unfortunately, politicians generally regard scientists as a small voting bloc with little political clout [although the number of employed US scientists and engineers is about eleven million (NSF, 1999)]. Personal experience has shown that scientists and their advice often get little respect from politicians. However, in New Mexico, many of us have embraced the realm of politics and have had a significant impact on public education.

In New Mexico in 1996, the State Board of Education decided to remove all references to evolution and the age of the earth from the state science content standards. The majority of Board members had little knowledge of science and were misled by a physicist member who was a creationist. His arrogance was astounding as he complimented himself on reviewing the National Science Education Standards, finding faults, and accusing the developers of the standards of being "completely clueless as to the canonical characteristics of good standards, whether they hail from the National Academy of Sciences or not." (Lenard, R., 1996). But in this country, the opinions of a few activist minority scientists are often given equal weight to an overwhelming majority of mainstream scientists. The media frequently promote this disproportionate representation by attempting to be "fair" to both sides.

New Mexico scientists, teachers, parents, and state and national organizations organized to oppose this attack on the science standards. We tried discussions, lobbying, letters, and even introducing a bill in the state legislature. It all failed. We were outsiders. Ultimately, we decided that we had to become insiders to effect change, and I ran for the State Board in the next election.

Despite our trepidation on entering the unknown realm of campaign politics, it actually became a valuable lesson in democracy. Many people volunteered, including scientists, teachers, parents, concerned citizens, clergy. We made signs and posted them. We searched the voter rolls for groups who voted often. I spoke at every gathering we could arrange. We had teams go door-to-door to talk to voters, most of whom were

quite receptive and very interested in education. We actually raised more money (entirely from small contributions) than any other candidate had in this kind of election. We built a website. We distributed flyers. And we ultimately defeated a 20-year incumbent.

Despite having a full-time job, and an assignment 1500 miles away in Washington, DC, I was able to make every State Board meeting. After a learning period, I eventually gained the confidence of most of the other fourteen Board members. They came to rely on me for issues related to gathering and analyzing data, statistics, and many education issues, especially related to science and math. It was a very worthwhile experience. And we were able to return evolution and the age of the earth to the New Mexico science standards in 1999 and again in 2003. Ultimately, New Mexico approved some of the best science and math standards in the US (<http://www.nmlites.org/standards/science/index.html>).

But the political controversy continues. Despite having lost their attempt to greatly modify the 2003 standards, they proclaimed victory the day after the Board's unanimous vote. And right now, they are attempting to promote new policies in local districts that would disingenuously support their ID concept of "teaching the controversy." A recent ID Op Ed said *"For the record, our science standards were given national recognition as some of the best standards in the nation."* But essentially all the recognition came from scientists and science organizations (including the AIP) that are adamantly opposed to ID proposals and arguments. And that recognition was a result of not accepting many of the changes that the NM Intelligent Design Network initially proposed.

## Conclusions

The current Intelligent Design movement poses a threat to all of science and perhaps to secular democracy itself. The movement is highly political, very astute, extremely well-marketed, disingenuous, and grossly misunderstood by most Americans. The so-called "controversy" has been couched in slogans that focus on "fairness," "just the facts, ma'am," "Darwinism is a religion," "what are scientists afraid of," "evolution equals atheism," and other loaded phrases that mask their real initial target: open up public school science classrooms to address possible supernatural phenomena. The ID movement has strongly influenced many politicians with little or no scientific backgrounds. Of course, the struggle is primarily political, religious and philosophical. And we must therefore fight in the political arena as well as the science community. Scientists must become more politically involved, if this assault is to be stopped. Replacing sound science and engineering with pseudo-science, polemics, blind faith, and wishful thinking won't save you when the curtain of "Dark Ages II" begins to fall!

## References

- Behe, M. 2001. *"The Modern Intelligent Design Hypothesis,"* Philosophia Christi, Series 2, Vol. 3, No. 1 (2001), pg. 165. More at <http://www.ideacenter.org/contentmgr/showdetails.php/id/1341>.
- Berman, M. 2003. *"Intelligent Design Creationism: A Threat to Society – Not Just Biology,"* [http://www.cesame-nm.org/Viewpoint/contributions/ABT\\_editorial\\_0311.pdf](http://www.cesame-nm.org/Viewpoint/contributions/ABT_editorial_0311.pdf).
- Brooks, D.J. 2001. *"Substantial Numbers of Americans Continue to Doubt Evolution as Explanation for Origin of Humans."* Gallup News Service. Poll analyses. March 5. Available at <http://www.gallup.com/poll/releases/pr010305.asp>.
- Dean, Cornelia, 2005. *"Scientific Savvy? In the U.S., Not Much,"* New York Times, August 30, 2005.
- Dembski, W. A., 1999. *Intelligent Design: The Bridge Between Science and Theology,* Intervarsity Press, 1999, p. 224.
- Dembski, W. A. and Richards, J. W., 2001. *Unapologetic Apologetics,* Intervarsity Press, 2001, p. 20.
- Friedman, T. L., 2005. *"The World is Flat, A Brief History of the Twenty-First Century,"* Farrar, Straus and Giroux, April 2005.
- Forrest, B. and Gross, P. R., 2003. *"Creationism's Trojan Horse: The Wedge of Intelligent Design;"* Oxford

University Press, Nov. 2003.

Gallup poll, 1997. [http://www.religioustolerance.org/ev\\_public.htm](http://www.religioustolerance.org/ev_public.htm).

Gallup News Service, 2000. "Kansas Voters Fail to Re-Nominate Anti-Evolution School Board Members." Gallup News Service. Poll analyses. August 2. Available at <http://www.gallup.com/poll/releases/pr000802b.asp>.

Getty, S. and Berman, M., 2005. "International Competitiveness: Where Do We Stand?" The Natural Selection, BSCS, Winter 2005.

Holt, R. 2005. "Intelligent Design: It's Not Even Wrong," Sep. 8, 2005, <http://www.tpmcafe.com/story/2005/9/8/183216/1039>.

Lenard, R., 1996. "Standard Fosters Scientific Rigor," Albuquerque Journal, Sep. 21, 1996.

Newsweek magazine, 1987. June 29, 1987, page 23; and [http://www.religioustolerance.org/ev\\_public.htm](http://www.religioustolerance.org/ev_public.htm).

NSF, 1999. *Characteristics of Scientists and Engineers in the United States: 1999*; <http://srsstats.sbe.nsf.gov/preformatted-tables/1999/tables/TableC1.pdf>.

NSF, 2000. *Ch. 8: Science and Technology: Public Understanding and Public Attitudes*; <http://www.nsf.gov/statistics/seind00/c8/c8h.htm>.

PollingReport.com, 2005. <http://www.pollingreport.com/>.

Reynolds, J. M. "Origin of Torrey," Torrey Honors Institute, Biola University, (removed from original site; now at <http://web.archive.org/web/20000124070727/http://www.biola.edu/academics/torrey/origin.cfm>).

Schoenborn, C. 2005. *Finding Design in Nature*, Op Ed by Cardinal Christoph Schoenborn, New York Times, July 7, 2005; <http://www.nytimes.com/2005/07/07/opinion/07schoenborn.html>.

Wedge Strategy, 1999. Center for the Renewal of Science and Culture; <http://www.antievolution.org/features/wedge.html>.

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