

## **IS THE UNIVERSE INTELLIGENTLY DESIGNED?**

A Workshop Talk for the UUCPA  
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The United States District Court for the Middle District of Pennsylvania decided late last year that in the Dover Area School District, Intelligent Design of the universe could not be mentioned in a high school biology class as an alternative explanation for the origin of life from Darwinian evolution.<sup>i</sup> The Associate Director of the nation's foremost think tank on Intelligent Design, the Discovery Institute, responded by exclaiming that "The Dover decision is an attempt by an activist federal judge to stop the spread of a scientific idea and even to prevent criticism of Darwinian evolution through government-imposed censorship rather than open debate, and it won't work."<sup>ii</sup> 80 percent of Americans believe that God created the universe?<sup>iii</sup> Probably less Unitarian Universalists, but still a fair number.

The Dover decision can be easily explained, on one level, as simply separation of church and state. Keep religion out of the public high school classroom. Teaching the theory of Intelligent Design along with evolution violates the First Amendment to the United States Constitution, which prohibits any governmental establishment of religion. Yet, proponents of Intelligent Design claim that it is purely science and not religion at all. The Discovery Institute does not deny that the earth and life on it are billions of years old and that life has evolved through adaptation, mutation and natural selection. It even accepts to some degree common ancestry among species. However, it highlights what it

calls certain explanatory gaps in evolutionary theory,<sup>iv</sup> especially regarding particular aspects of life which it calls irreducibly complex, like flagellar motors on bacteria, the eye, and the blood clotting system. Those aspects of life were specifically designed – full-blown in all of their complexity – it’s insisted, by an intelligent designer or God, rather than having evolved over time through the process of natural selection working incrementally by many small mutational changes.<sup>v</sup> Intelligent Design theory scientifically critiques the theory of Darwinian evolution, it’s alleged, and the Discovery Institute and its allies call upon educational institutions to “teach the controversy.”

Yet, Judge John E. Jones III, in a far-reaching 139 page opinion, does not deny that Intelligent Design should continue to be studied, debated and discussed.<sup>vi</sup> He even sees certain limits to science, which he says does not effectively consider issues of “meaning” and “purpose” in the universe, and therefore cannot provide “ultimate” explanations for the existence or characteristics of the natural world.<sup>vii</sup> And, he asserts that evolutionary theory in no way conflicts with, nor denies, the existence of a divine creator.<sup>viii</sup> Yet, evolutionary theory is science and Intelligent Design theory is not – it’s religion. Therefore, it has no place in a science classroom, although it might well be studied in a religious studies, culture studies or political science course. To teach Intelligent Design in a public school science classroom is to impose a religious view of biological origins on the science of a biology course, which amounts to state advancement of religion in violation of the First Amendment.<sup>ix</sup>

So, why is Intelligent Design not science, according to this court decision? Primarily because science is limited to the search for natural causes, not supernatural causes, to explain natural phenomena. Science is based on the testability of observable,

empirical evidence. As the National Academy of Sciences has made clear, “In science, explanations are restricted to those that can be inferred from the confirmable data – the results obtained through observations and experiments that can be substantiated by other scientists...Explanations that cannot be based upon empirical evidence are not part of science.”<sup>x</sup> In the Dover trial, all the Intelligence Design expert witnesses admitted that for Intelligent Design to be considered science, the established ground rules of science need to be changed to allow consideration of supernatural forces.<sup>xi</sup>

Another critical point made by Judge Jones is that negative arguments about explanatory gaps in current evolutionary theory do not constitute positive arguments for design. Just because scientists cannot fully explain today how certain biological systems have evolved does not mean that they cannot and will not be able to explain them tomorrow. Irreducible complexity, the centerpiece of Intelligent Design theory, is a negative argument against evolution; it points out that biologists cannot yet track the step-by-step development of certain complex life forms from simpler ones. However, irreducible complexity is not in itself proof of design, and science has continued to fill in gaps in knowledge with natural explanations of how evolution has operated in specific cases.<sup>xii</sup> And, as the gaps are filled in, the Intelligent Designer seems to be forced more and more into a corner, with less and less explanatory power.

Intelligent Design proponents have not developed any scientific research or testing of their own. As a key witness for Intelligent Design, Professor Michael Behe, professor of biochemistry at Lehigh University, admitted on the witness stand: “There are no peer reviewed articles by anyone advocating for intelligent design supported by pertinent experiments or calculations which provide detailed rigorous accounts of how

intelligent design of any biological system occurred.”<sup>xiii</sup> The National Academy of Sciences has explained that Intelligent Design articles typically have been limited to special publications of its advocates: “These publications do not offer hypotheses subject to change in light of new data, new interpretations, or demonstration of error. This contrasts with science, where any hypothesis or theory always remains subject to the possibility of rejection or modification in the light of new knowledge.”<sup>xiv</sup>

It’s also telling that not a single expert witness over the course of the six week trial identified any major scientific association, society, or organization that endorsed Intelligent Design as science. Even its proponents conceded that it has received no acceptance in the scientific community as a whole.<sup>xv</sup> Ultimately, Judge Jones’ frustration with Intelligent Design’s scientific claims began to show through: “Intelligent Design’s backers have sought to avoid the scientific scrutiny which we have now determined that it cannot withstand by advocating that the controversy, but not Intelligent Design itself, should be taught in science class. This tactic is at best disingenuous, and at worst a canard.”<sup>xvi</sup>

But, let’s look at this from an explicitly religious perspective now. The new pope, Benedict XVI, signed into the debate last November, saying that “In the beginning, the creative word [of God]...created everything and created this intelligent project that is the cosmos.” Yet, within a week, the Vatican’s chief astronomer, Father George Coyne, weighed in to caution that “Intelligent design isn’t science, even though it pretends to be...If you want to teach it in the schools, intelligent design should be taught when religion or cultural history is taught, not science.”<sup>xvii</sup>

Intelligent Design has even failed to find much acceptance at evangelical Christian colleges across the nation. Although a number of conservative scholars and theologians were excited at first, they've found its arguments unconvincing after discussions with scientists in their own institutions who consider Intelligent Design insufficiently substantiated in comparison to evolution. And many are not happy that it is pretending not to be religion. For example, Derek Davis, director of the Institute of Church-State Studies at Baylor University in Texas, puts it this way: "I teach at the largest Baptist university in the world. I'm a religious person. And my basic perspective is that intelligent design doesn't belong in science class." He notes that the advocates of Intelligent Design continue to argue that they're not talking about God or religion. "But they are, and everyone knows they are," Davis says. "I just think we ought to quit playing games. It's a religious worldview that's being advanced."<sup>xviii</sup>

So, now, what is the religious pedigree of Intelligent Design theory? Judge Jones traces it back to the religious movement then known as Fundamentalism [which] began in nineteenth century America in response to Darwinism, along with other intellectual and social changes and new religious thought. In the early twentieth century, fundamentalists began lobbying state legislatures to adopt laws prohibiting public schools from teaching evolution. The 1925 Scopes "monkey trial" was the most famous prosecution under those laws. In 1968, after the Supreme Court found all such laws unconstitutional, fundamentalists and certain other conservative Christians began pushing to require schools to teach "creation science" or "scientific creationism" based on the Genesis account of creation as an alternative to evolution. In 1987 the Supreme Court found

“creation science” unambiguously to be religion, not science, and prohibited its teaching in public schools under the First Amendment.

Of course, we Unitarian Universalists don't share Intelligent Design's fundamentalist pedigree. But a favorite hymn in our hymnal,<sup>xix</sup> begins “Holy, holy, holy, author of creation!” (#26) We also sing “For the Beauty of the Earth,” and its first verse is as follows: “For the Beauty of the earth, for the splendor of the skies, for the love which from our birth over and around us lies: Source of all, to thee we raise this, our hymn of grateful praise.”<sup>xx</sup> In the famous Beethoven hymn “Joyful, Joyful, We Adore Thee,” one of its verses begins: “All Thy works with joy surround thee, earth and heav'n reflect thy rays.”<sup>xxi</sup> So aren't we together affirming an intelligent designer of the universe, at least from a religious perspective, if not a scientific one?

I have to say that personally I'm filled with awe at the natural order of the universe. The fact that there are natural laws at all, which are discoverable through the scientific method, and which are consistent and trustworthy and hold, fills me with feelings of amazement and gratitude and confidence. Those are religious or spiritual sentiments for me. The universe is not awry or askew or absurd. Nihilism is not the final answer. It could have been that gravity works on some days and not on others, that gene codes tell us nothing, and that 1 plus 1 is not always 2. But instead there's an observable and discoverable order in the universe. And science is not the enemy, but the companion and enabler, of my faith in that order. I can generate hypotheses, test them against empirical evidence, and if see if they hold across the board. If they don't, I throw out the hypothesis and start again, knowing that I haven't fully discovered or understood the natural laws involved. Newton's theory of gravitation seemed to work for all available

evidence for a long time, but then Einstein came along with some contrary evidence that could only be accounted for by his broader and more robust theory of relativity. All of this assumes that there really is something consistent and trustworthy – an ordered creation -- out there to discover in the first place. That's an article of faith; that's a religious sentiment from my perspective. We also couldn't do science without it.

What's not religious, or what belittles the creation and its order, for me, is the claim that every so often a Supreme Being breaks in and violates the natural order of the universe for this reason or that: say, suspending gravity or reversing it so that someone who's jumped out a skyscraper window flies back in, or reversing time so that an accident that's already occurred never happened. What's awe-inspiring to me is the regularity and trustworthiness of the natural order, not periodic claims that it's been interrupted and altered for my benefit or yours, for this compelling reason or that. That's why I find the claims of the Intelligent Design movement actually sacrilegious or irreverent or demeaning of creation: Evolution moves along generally by natural laws of adaptation, mutation and natural selection – with life forms changing naturally over time – and then supposedly every so often the Intelligent Designer steps in to interrupt the process and design some kind of irreducibly complex life form or process? God's creative activity is to be found not in the glory of the universe and the life process as a whole, but just here and there in the gaps of evolutionary theory? And God then is increasingly pushed into a corner as science is able to explain more and more? What kind of demeaning and belittling idea of God is that? I prefer the poet William Wordsworth's "Sense sublime of something far more deeply interfused, whose dwelling is the light of setting suns, and the round ocean, and the living air, and the blue sky, and

in the mind of man: a motion and a spirit that impels all thinking things, all objects of all thought, and rolls through all things.”<sup>xxii</sup>

## NOTES

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<sup>i</sup> *Kitzmiller v. Dover Area School District*, Case No. 04-cv-2688, United States District Court for the Middle District of Pennsylvania (December 20, 2005), 139 pages as reproduced at [www.mercurynews.com](http://www.mercurynews.com)

<sup>ii</sup> John West, as quoted in “Dover Intelligent Design Decision Criticized as a Futile Attempt to Censor Science Education,” *Discovery Institute News* (December 20, 2005), [www.discovery.org](http://www.discovery.org)

<sup>iii</sup> Jerry Adler, “Charles Darwin: Evolution of a Scientist,” *Newsweek* (November 28, 2005), p. 57.

<sup>iv</sup> Robert Robb, “Origins by Court Order,” *Discovery Institute News* (Reprint of article from the *Arizona Republic*, January 4, 2006), [www.discovery.org](http://www.discovery.org)

<sup>v</sup> Stephen C. Meyer, “What is Intelligent Design?” *Discovery Institute News* (Reprint of article from the *National Post of Canada*, December 1, 2005), [www.discovery.org](http://www.discovery.org)

<sup>vi</sup> *Kitzmiller v. Dover*, p. 137.

<sup>vii</sup> *Ibid.*, p. 65.

<sup>viii</sup> *Ibid.*, p. 136.

<sup>ix</sup> *Ibid.*, p. 134.

<sup>x</sup> *Ibid.*, p. 65.

<sup>xi</sup> *Ibid.*, pp. 67-68.

<sup>xii</sup> *Ibid.*, p. 72.

<sup>xiii</sup> *Ibid.*, p. 88.

<sup>xiv</sup> *Ibid.*, p. 69.

<sup>xv</sup> *Ibid.*

<sup>xvi</sup> *Ibid.*, p. 89.

<sup>xvii</sup> “In Brief,” *San Jose Mercury News* (November 19, 2005), p. 9A.

<sup>xviii</sup> Laurie Goodstein, “Intelligent Design Might Be Meeting Its Maker,” *New York Times* (December 4, 2005), p. 4:1.

<sup>xix</sup> Samuel Longfellow, “God of the Earth, the Sky, the Sea,” in *Singing the Living Tradition* (Boston: Beacon Press, 1993), #26.

<sup>xx</sup> Folliott Sandford Pierpoint, “For the Beauty of the Earth,” in *Singing the Living Tradition* (Boston: Beacon Press, 1993), #21.

<sup>xxi</sup> “Joyful, Joyful, We Adore Thee,” in *Singing the Living Tradition* (Boston: Beacon Press, 1993), #29.

<sup>xxii</sup> William Wordsworth, “Lines Composed a Few Miles Above Tintern Abbey (1798),” *The College Survey of English Literature* (New York: Harcourt, Brace & World, 1942), Vol. 2, p. 53.