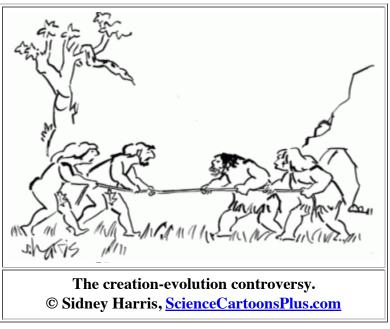
## Intelligent Design Creationism: Fraudulent Science, Bad Philosophy.

## Introduction.

There are various forms of fake science. science. bad and perverted science. History has seen many come, and decline, but none ever seem to die. The ideas of flat earth, hollow earth, astrology, alchemy and perpetual motion have supporters even today. These are interesting examples of the human ability to hold to an idea without even supportive evidence, and even in the face of contrary evidence. They, however, pose little threat to science, which simply ignores them and goes about its work.



A newer pseudoscience arose, first called "creationism" or "creation science", which tried to impose the literal interpretation of Biblical accounts into science, and into the schools. This movement had considerable public support amongst fundamentalist Christians. Scientists generally ignored it as irrelevant to their work. In recent years a movement called "intelligent design" (ID) has been promoted by a handful of people who write books aimed at non-scientists. These authors claim that intelligent design is not a religious idea, but the public speeches of some of them reveal that their goal is to get "God back into science and into school classrooms". Creationists, having largely failed in their efforts, lend their support to intelligent design, as perhaps the best they can get—for now.

Creationism and intelligent design are not the same. Creationism arose from clearly religious motivations. For political reasons, its advocates found they could "sell" it better to non-fundamentalists if they downplayed the religious content and renamed it

Intelligent design is nothing more than creationism in a cheap tuxedo. —Leonard Krishtalka.

"creation-science". But its essential content and goals were the same. Most creationists held that the earth was no more than about 10,000 years old, that the fossil record was laid down during the Genesis flood, and that natural laws were vastly different before mankind's "fall" in the Garden of Eden. To further their campaign to get some of this into schools, the Biblical content was stripped away even more, and what was left was primarily an attack on evolution. Evolution of all kinds, whether cosmic or biological, is anathema to creationists.

Intelligent design strips away even more of the religious context, concentrating on the notion of an "intelligent designer" who supposedly created the universe, and perhaps intervenes in natural processes from time to time to create new species of plants and animals. ID claims that the evidence for the existence of an intelligent designer is found in the universe itself, and specifically in instances where natural laws "could not possibly" have brought about certain

Intelligent design is not science, [but is] grounded in theology [and] cannot uncouple itself from its creationist, and thus religious, antecedents. —District Judge John E. Jones III in Kitzmiller v. Dover Area School District (2005).

biological modifications through natural processes alone. Unlike creationism, intelligent design does not insist on an absurdly short age of the earth.

Scientists recognize that the so-called ID "theory" is not a scientific theory at all, and that its claims of supportive evidence from nature are contrived and easily shown to be invalid. But scientists now also realize they must not ignore this threat to scientific integrity, for it is part of an organized campaign with social and political goals and widespread grass roots support.

More details can be found in the bibliography below. With so many good books and websites refuting creationism and ID, you may wonder why I take the time to write these web documents. I felt there was a need to reduce the intelligent design argument to its bare bones, to strip away irrelevant issues, and show that the whole idea is not science, but is a counterfeit of science—a pseudoscience. Too many critics of ID have fallen into the trap of addressing each and all of the claims that ID advocates use to support their arguments. Someone should do this, of course, but the downside is that it suggests to the general public that the ID claims are a serious challenge to science. They are not. Most of the "scientific" claims of ID are simply irrelevant, for the fatal flaws of ID are much more fundamental. The elaborate arguments of ID only serve to hide the fact that the intelligent design hypothesis is completely devoid of scientific content. Intelligent design is a philosophical assertion without the slightest logical or scientific support.

So my primary purpose here is to show that the intelligent design idea is empty both philosophically and scientifically. That task would require but a few chapters. But I also felt another obligation. One reason that the intelligent design idea appeals to so many non-scientists is that they have little or no understanding of what science is all about, how scientific investigation is done, and how scientific results are tested. Even science students receive little or no exposure to systematic instruction in science

For it is the natural tendency of the ignorant to believe what is not true. In order to overcome that tendency it is not sufficient to exhibit the true; it is also necessary to expose and denounce the false. —H.L. Mencken (1880 -1956)

methodology. They learn science "by osmosis"—by doing science side by side with experienced scientists and exposing their work to peer criticism.

One thing I wanted to avoid was to get bogged down in technical details. I hoped to address the issues of creationism and intelligent design using only concepts and

examples that non-scientists might understand and appreciate. I wanted to minimize use of technical terms of science and philosophy. When this is done, the emptiness and scientific irrelevance of the ID argument is more clearly exposed for all to see.

I have resisted the temptation to refute all of the various "scientific" claims of creationists. Others, more qualified than I, have already done this quite thoroughly. Details may be found in the sources listed below. It would have been a thankless task anyway. Non-scientist readers' eyes glaze over and it's like talking to the wind. Scientist readers become impatient with what they consider "obvious".

I am not naive enough to expect that many creationists will actually read all of these chapters. My experience with them (from many emails) is that they have no interest in learning about science. Their only interests are in defending their own beliefs at all cost and heaping abuse on anything or anyone that challenges their beliefs. I am usually polite to such people so long as they are. But while they usually begin politely enough, sooner or later they become abusive and start quoting verses from the Bible, praying for me, or damning me to hell. Then I terminate the exchange, for it is clearly not productive. The psychology and personalities of these people is very much like that of pseudoscientists, zealots and cranks of all stripes: flat earthers, hollow earthers, perpetual motionists, and defenders of ether theories.

The contents page below lists these essays in a natural order, but they are essentially separate documents, and each can stand alone. They were written at different times, and not in this order. Because of this, they contain repetition and redundancy. But any attempt to remove that might do harm to the structure of each.

-Donald E. Simanek, February, 2006.

## **Contents.**

The Evolution Deniers. Intelligent Design: The Glass is Empty. Order from Disorder. Creation in Everyday Life. Order and Disorder in Nature. Is The Real World Really Real? Uses and Misuses of Logic. The Scientific Method. Proofs of Unknowables. The Proof is Pudding. Theory or Process? Is Intelligent Design an Interesting Philosophical Idea? Why not Angels? What's bugging the creationists? Summary and Conclusions.

Next chapter. >>>>

## Additional reading.

- Dawkins, Richard. *The Blind Watchmaker*. Norton, 1986. Anyone who really cares to learn how the processes of evolution work would do well to read this book. "A lovely book. Original and lively, it expounds the ins and outs of evolution with enthusiastic clarity, answering, at every point, the cavemen of creationism." —Isaac Asmiov.
- Perakh, Mark. *Unintelligent Design*. Prometheus Books, 2004. A thorough dissection and refutation of creationist and ID claims of William Dembski, Michael Behe, and Phillip Johnson. Also addresses claims of those who try to reconcile science and religion. Exhaustive and somewhat exhausting, but highly recommended.
- Young, Matt and Taner Edis. *Why Intelligent Design Fails, A Scientific Critique of the New Creationism*. Rutgers University Press, 2004. A very thorough refutation of ID claims.
- Pennock, Robert T., ed. Intelligent Design Creationism and Its Critics. *Philosophical Theological, and Scientific Perspectives.* MIT Press, 2001. This book is thorough, perhaps overkill, with contributions from most of the major players in this controversy.
- Shermer, Michael. *How We Believe, Science, Skepticism, and the Search for God.*" 2nd ed. Freeman, 2000. Chapter 5 has detailed refutations of the ten classic "proofs of God".
- Smith, George H. *Atheism, the Case Against God.* Prometheus, 1979. This is the one book I recommend to those who ask why some of us consider the case for religions (all of them) unpersuasive. Smith considers every argument made for any supernatural being, and all arguments for religion(s), and demolishes them all, thoroughly.
- Suskind, Leonard. *The Cosmic Landscape, String Theory and the Illusion of Intelligent Design*. Little, Brown and Company, 2006. The cosmic dimension of the issue. A bit heavy going for non-scientists.
- Dembski, William A. and Michael Ruse, eds. *Debating Design, from Darwin to DNA*. Cambridge University Press, 2004. As close as you will get to a balanced presentation of two sides of the ID controversy. However, whenever "balance" is taken to mean "presenting two opposing points of view", that's all you get, when a full discussion needs to consider many perspectives, not merely two of the extremes.
- Stenger, Victor J. *Has Science Found God?* The Latest Results in the Search for Purpose in the Universe. Prometheus, 2003. An antidote to the current popular hype falsely suggesting that science has found reasons justifying belief in God.
- Scott, Eugenie C. *Evolution vs. Creationism, an Introduction*. Greenwood Press, 2004. A collection of resources, including primary source documents, addressing cosmology, law, education and religious issues from many sides of the debate.
- Kitcher, Philip. *Abusing Science, the Case Against Creationism*. MIT Press, 1982. An older book, but the content of the arguments for ID are essentially the same as those used for creationism.
- Davis, Percival and Dean. H. Kenyon. *Of Pandas and People, the Central Question of Biological Origins*. Haughton, 1989, 1993. This is the "textbook" many creationists are promoting for use in the public schools. Necessary reading for those concerned about this issue.
- The Skeptic's Dictionary. Intelligent Design. By Robert Todd Carroll. This is an

excellent starting point for understanding the larger picture, with many links to authoritative resources on the web.

- Scientific American's <u>15 Answers to Creationist Nonsense</u> by John Rennie. <u>pdf</u> <u>version</u>.
- Mark I. Vuletic's <u>Defender's Guide to Science and Creationism</u> Detailed answers and authoritative references to questions creationists use to challenge evolution.
- <u>The Talk.Origins archive</u>. Up-to-date scientific answers to creationist misrepresentations.
- <u>Index to Creationist Claims</u>. Comprehensive list of creationist claims, short refutations, and links and references to source materials.
- <u>Creation-evolution controversy</u> from *TheFreeDictionary*. A good history of creationism, with many links.
- <u>The Kitzmiller vs. Dover area School District</u> 2006 decision by Judge John Jones III. Covers legal aspects of the question of teaching intelligent design in schools. Long (37 pages), but very revealing.
- Intelligent Design: Chimera by John S. Denker. A harder-hitting demolition of the chimera of Intelligent Design.
- Evolution of the Eye. Zoologist Dan-Erik Nilsson demonstrates how the complex human eye could have evolved through natural selection acting on small variations. <u>Video</u> from PBS documentary "Darwin's Dangerous Idea". © 2001 WGBH Educational Foundation and Clear Blue Sky Productions, Inc. All rights reserved.
- Coyne, Jerry A. *Why Evolution is True*. Viking, 2009. Every year abundant evidence comes from laboratory and field work that supports evolution. Are the deniers simply unware of this, do they disbelieve it, or do they blind themselves to it? Dr. Coyne collects together the evidence into a very readable account which is powerfully persuasive, for anyone who will bother to read it thoughtfully.
- Lebo, Lauri. *The Devil in Dover*. The New Press, 2008. The full story of the "intelligent design" case in Dover, PA, written by a journalist who covered the entire trial, and who relates the events from the perspective of one who knows the culture and the people of this small town.

These documents may be revised as new ideas and insights come along. Serious and constructive input and suggestions are

and DSIMANEK@LOCKHAVEN.EDU

welcome at the address shown at the right. Crank mail will be ignored. Any email that quotes Bible verses will be trashed, unread. Notice of typos, grammatical goofs, and factual errors are especially appreciated. [However in some religions, it is thought that one should never produce anything that is perfect, for that would offend the gods.] When commenting on a specific document here, please reference it by name or content.

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