

THE DESIGN REVOLUTION?

How William Dembski Is Dodging Questions About Intelligent Design

By Mark Perakh

Who is William A. Dembski? We are told that he has PhD degrees in mathematics and philosophy plus more degrees - in theology and what not – a long list of degrees indeed. [1] To acquire all those degrees certainly required an unconventional penchant for getting as many degrees as possible.

We all know that degrees alone do not make a person a scientist. Scientific degrees are not like ranks in the military where a general is always above a mere colonel. Degrees are only a formal indicator of a person's educational status. A scientist's reputation and authority are based on his degrees only to a negligible extent. What really attests to a person's status in science is publications in *professional* journals and anthologies and references to one's work by colleagues. This is the domain where Dembski has so far remained practically invisible. All his multiple publications have little or nothing to do with science. He is a mathematician who did not prove any theorem and derived not a single formula. When he writes about probability theory or information theory -- on which he is proclaimed to be an expert -- the real experts in these fields (using the words of the prominent mathematician David Wolpert) "squint, furrow one's brows, and then shrug." [2]

When encountering critique of his work, Dembski is selective in choosing when to reply to his critics and when to ignore their critique. His preferred targets for replies are those critics who do not boast comparable long lists of formal credentials – this enables him to contemptuously dismiss the critical comments by pointing to the alleged lack of qualification of his opponents while avoiding answering the essence of their critical remarks. (See, for example, Dembski's replies to some of his opponents [3]) This type of behavior provides certain hints at Dembski's overriding quest for winning debate at any cost rather than striving to arrive at the truth. For example, in his book *No Free Lunch* [4] Dembski devoted many pages to a misuse of Wolpert and Macready's No Free Lunch (NFL) theorems [5]. (Some early critique of Dembski's interpretation of the NFL theorems appeared already in [6 a, b]. A detailed analysis of Dembski's misuse of the NFL theorems is given, in particular, in [6 c].)

Dembski's faulty interpretation of the NFL theorems was strongly criticized by Richard Wein [7] and by David Wolpert, the originator of these theorems [2]. Dembski spared no effort in rebutting Wein's critique, devoting to it two lengthy essays. [3] However, he did not utter a single word in regard to Wolpert's critique. It is not hard to see why. Wein, as Dembski points out, has only a bachelor's degree in statistics – and Dembski uses this irrelevant factoid to deflect Wein's well substantiated criticism. He does not, though, really answer the essence of Wein's comments and resorts instead to ad hominem remarks and a contemptuous tone. He can't do the same with Wolpert who enjoys a sterling reputation as a brilliant mathematician and who is obviously much superior to Dembski in the understanding of the NFL theorems of which he is a co-author. Dembski pretends that Wolpert's critique does not exist.

Dembski has behaved similarly in a number of other situations. For example, the extensive index in his latest book *The Design Revolution: Answering the Toughest*

Questions About Intelligent Design [8] completely omits the names of most of the prominent critics of Dembski's ideas. We don't see in that index the following names: Rich Baldwin, Eli Chiprout, Taner Edis, Ellery Eels, Branden Fitelson, Philip Kitcher, Peter Milne, Massimo Pigliucci, Del Ratzsch, Jeff Shallit, Niall Shanks, Jordan H. Sobel, Jason Rosenhouse, Christopher Stephenson, Richard Wein, and Matt Young. All these writers have analyzed in detail Dembski's literary output and demonstrated multiple errors, fallacious concepts and inconsistencies which are a trademark of his prolific production. (I have not mentioned myself in this list although I have extensively criticized Dembski both in web postings [9] and in print [10]; he never uttered a single word in response to my critique, while it is known for fact that he is familiar with my critique; the above list shows that I am in good company.)

Thomas D. Schneider, another strong critic of Dembski's ideas, is mentioned in the index of [8] but the extent of the reference is as follows:

"Evolutionary biologists regularly claim to obtain specified complexity for free or from scratch. (Richard Dawkins and Thomas Schneider are some of the worst offenders in this regard.)"

Contrary to the subtitle of Dembski's book [8], this reference can hardly be construed as an answer to Schneider's questions.

Essentially, all the listed writers have asked Dembski a number of questions regarding his concepts. The absence of any replies to the listed authors makes the title of Dembski's new book [8], *The Design Revolution: Answering the Toughest Questions About Intelligent Design* sound like a parody. It should have properly been titled *The Design Revolution? Dodging Questions About Intelligent Design*.

Of course we already know that Dembski is a stubborn purveyor of half-baked ideas [10]. Is he also of the opinion that selectivity in choosing when to respond to opponents and when to pretend they do not exist is compatible with intellectual honesty?

One of beloved themes of Dembski's diatribes is his claims that "Darwinism" (the creationists' term for evolutionary biology) is either dying or is already dead – see, for example [8]. In that, Dembski joins a long list of "Darwinism's" deniers who started making such claims almost immediately after Darwin published his magnificent *On the Origins of Species*. [11] Predictions that "Darwinism" (read: evolutionary biology) will very soon be completely abandoned by the majority of scientists, claims that it has already died, assertions that it cannot withstand new discoveries in science – all this stuff has been a regular staple of the anti-Darwinian crowd for 145 years. [12]. Despite all these claims, evolutionary biology is alive and well and the evidence in favor of most of the Darwinian ideas is constantly growing.

When Dembski asserts time and time again that evidence favoring "Darwinism" was always weak and that new discoveries make it less and less plausible, so more and more biologists abandon Darwinian ideas, he in fact claims something he desperately wants to be true but that in fact is utterly false. It is hard to believe Dembski himself does not know that his claims are false. More plausible is the suspicion that he is insincere (and/or possibly panders to the anti-scientific crowd). Indeed, Dembski is well aware of *Project Steve*, [13] which has been conducted by the National Center of Science Education (NCSE). This endeavor by NCSE has unequivocally demonstrated that the overwhelming majority of scientists, and more specifically of biologists, firmly support evolutionary biology based largely on Darwinian principles. According to these data, the

ratio of scientists who are firm supporters of the neo-Darwinian synthesis to those who doubt the main tenets of modern evolutionary biology is estimated, as of March 10, 2004 to be about 142 to 1. Dembski knows about this ratio and even tried to dismiss its significance [14] by asserting that *Project Steve* was “an exercise in irrelevance” because the support of evolution by the majority of scientists is “obvious” anyway and was not disputed. That such a statement plainly contradicts Dembski’s incessant claims in his other opuses about scientists allegedly abandoning “Darwinism” in droves apparently does not make him uncomfortable. Of course self-contradictory claims in Dembski’s output are too common to be surprising. What is surprising is the extent of his thick-skinned insensitivity to his own inconsistencies and mutually incongruent notions.

Dembski is a relatively young man and will most probably continue emanating repetitious philippics against “materialistic science” for many years to come. Science is not, though, impressed (and hardly will be) by chants of a religious zealot not supported by evidence but only by casuistry in a pseudo-mathematical guise. (The purely religious motivation underlying Dembski’s relentless attacks on evolutionary biology – in which he has no training or relevant experience - and on “materialistic science” in general is obvious from his numerous statements to non-scientific audiences– see, for example [15].)

In his latest book [8, page 19] Dembski says:

“...I take all declarations about the next big revolution in science with a stiff shot of skepticism. Despite that, I grow progressively more convinced that intelligent design will revolutionize science and our conception of the world.”

This quotation vividly displays the combination of an inflated ego with the unbridled contempt of opponents which seems to be an endemic feature of Dembski’s mind.

Is the *Design Revolution*, so boldly forecast by Dembski, indeed imminent? I suspect that Dembski is in for a deep disappointment. He may continue generating noise within the shadow region underneath science, but at some point in the future all this brouhaha with intelligent design allegedly replacing materialistic science most probably will result in adding one more item to the amusing collection of absurdities which already contains cold fusion [16]; Barrow and Tipler’s *Final Anthropic Principle* with its prediction of a never-dying intelligence and Tipler’s further prediction of the imminent resurrection of the dead as computer-reincarnated entities [17]; homeopathic quasi-medicine, and other fads and fallacies which so easily earn cheap popularity among the benighted crowds - in the same country where efforts by the avant-garde of honest scientists and inventors lead the world in the progress of technology and genuine science.

Acknowledgments

I appreciate helpful comments to the initial draft of this essay by Matt Young, Alec Gindis, Wesley R. Elsberry, and Gary S. Hurd.

Notes

1. A list of William Dembski's degrees is found, for example, in the "Contributors" section of W. A. Dembski, ed. *Mere Creation*. DownersGrove, Ill.: InterVarsity Press, 1998: 461.
2. David H. Wolpert, "William Dembski's Treatment of No Free Lunch Theorems Is Written In Jello." Posted on December 13, 2002 in *Talk Reason*, at www.talkreason.org/articles/jello.cfm, last accessed on March 7, 2004. Also printed in *Mathematical Reviews*, February 2003.
3. (a) William A. Dembski, "Obsessively Criticized But Scarcely Refuted: A Response To Richard Wein." www.designinference.com/documents/05.02.resp_to_wein.htm; (b) Dembski, "The Fantasy Life of Richard Wein: A Response to Response." www.designinference.com/documents/2002.6WeinsFantasy.htm, Last accessed on March 8, 2004; (c) Dembski, "If Only Darwinists Scrutinized Their Own Work as Closely: A Response To Erik." www.designinference.com/documents/2002.08.Erik_Response.htm. Last accessed on March 8, 2004. (d) William Dembski. "Biology in the Subjunctive Mood: A Response to Nicholas Matzke." www.designinference.com/documents/2003.11.Matzke_Response.htm. Dated Nov. 11, 2003. Last accessed on March 8, 2004.
4. William A. Dembski. *No Free Lunch: Why Specified Complexity Cannot Be Purchased Without Intelligence*. Lanham, Maryland.: Rowman & Littlefield Publishers.
5. David H. Wolpert and William G. Macready. "The No Free Lunch Theorems For Optimization." *IEEE Trans. Evol. Comp.* v.1, no 1, 1987: 67–82.
6. (a) Wesley R. Elsberry. "Responses to Dembski's 'Explaining Specified Complexity.'" Posted on September 14, 1999 at http://www.antievolution.org/people/dembski_wa/19990913_csi_and_ec.html. Last accessed on March 8, 2004. (b) Elsberry (No title). Posted on June 7, 2001 at <http://www.antievolution.org/people/mgrey/IDC/200106080021.html>. Last accessed on March 8, 2004. (c) Mark Perakh. "There Is a Free Lunch After All: Dembski's Wrong Answers to Irrelevant Questions." In Matt Young and Taner Edis, eds, *Why Intelligent Design Fails: The Scientific Critique of the New Creationism*. Piscataway, N.J.: Rutgers University Press, 2004 (forthcoming).
7. (a) Richard Wein, "Not a Free Lunch but a Box of Chocolate." (www.talkreason.org/articles/chock_nfl.cfm, posted on May 6, 2002, last accessed on March 7, 2004. (b) Wein, "Response? What Response? How Dembski Avoided addressing my arguments.." www.talkreason.org/articles/response.cfm, posted on May 27, 2002, last accessed on March 7, 2004.
8. William A. Dembski. *The Design Revolution: Answering the Toughest Questions About Intelligent Design*. Downers Grove, Ill: InterVarsity Press, 2004.
9. (a) Mark Perakh, "A consistent Inconsistency." In *Talk Reason*, at www.talkreason.org/articles/dembski.cfm, posted July 10, 2001, last accessed on March 7, 2004; (b) Perakh, "A Free Lunch in a Mousetrap." In *Talk Reason*, at www.talkreason.org/articles/dem_nfl.cfm, posted March 22, 2002, last accessed March 7, 2004. (c) Perakh, "The No Free Lunch Theorems and Their Application to

- Evolutionary Algorithms.” In *Talk Reason*, at www.talkreason.org/articles/orr.cfm , posted February 16, 2003, last accessed March 7, 2004.
10. (a) Mark Perakh, *Unintelligent Design*, Amherst, NY: Prometheus Books, 2004 (actually released November 26, 2003). (b) Perakh. “A Presentation Without Arguments: Dembski Disappoints.” *Skeptical Inquirer*, 26, No 6, Nov-Dec. 2002: 31-34; also posted July 3, 2002 to *Talk Reason* at www.talkreason.org/articles/presentation.cfm , last accessed on March 7, 2004.
 11. Charles Darwin. *On the Origin of Species by Means of Natural Selection*. Norwalk, Connecticut: The Heritage Press, 1963. (First published on November 24, 1859 in Great Britain).
 12. A list of quotations from a long list of creationists confidently forecasting the “imminent collapse of evolutionary theory” which started appearing even before the publication of Darwin’s *The Origin of Species* and are still being reiterated with an amusing regularity, has been compiled, for example, by G. R. Morton in “The Imminent Demise of Evolution: The Longest Running Falsehood in Creationism” at <http://home.entouch.net/dmd/moreandmore.htm> , last accessed on March 10, 2004.
 13. “NCSE Project Steve.” In *National Center of Science Education*, at http://www.ncseweb.org/resources/articles/3541_project_steve_2_16_2003.asp Last accessed on March 8, 2004. This endeavor is a tongue-in-cheek collection of signatures of scientists favoring evolutionary biology, undertaken in response to creationists regular collection of signatures against evolutionary biology. Although Project Steve has a distinctively humorous aspect (only scientist whose first name is Steve or its analogs were invited to sign), in fact it also provided a factual evidence for the overwhelming support of evolutionary biology from scientists, serving the same purpose as a poll.
 14. William A. Dembski. “Project Steve – Establishing the Obvious: A Response to NCSE.” In *Christian Apologetics*, at <http://www.apologetics.org/projectsteve.html> Not dated. Last accessed on March 8, 2004.
 15. The actual religion-based motivation of Dembski’s activity is seen, for example, from one of his statements made in the Fellowship Baptist Church (in Waco, TX). Dembski delivered a series of Sunday lectures in that church, which were taped. The last such lecture took place on Sunday, March 7, 2004. In the Q&A section, answering to a question about his motivation, Dembski said, in particular, “I think at a fundamental level, in terms of what drives me in this is that I think God’s glory is being robbed by these naturalistic approaches to biological evolution, creation, the origin of the world, the origin of biological complexity and diversity. When you are attributing the wonders of nature to these mindless material mechanisms, God’s glory is getting robbed.” He continued, “And so there is a cultural war here. Ultimately I want to see God get the credit for what he’s done - and he’s not getting it.”
 16. The story of an alleged discovery by Stanley Pons and Martin Fleishmann of a cold fusion – a process wherein nuclear fusion accompanied by a large release of energy was reportedly observed in a primitive electrochemical contraption at room temperature – is, for example, discussed in Alan Cromer, *Uncommon Sense: The Heretical Nature of Science*, New York: Oxford University Press, 1993: 160-168.

17. The Final Anthropic Principle, according to which an “Intelligent information-processing unit must come into existence in the universe, and, once it comes into existence, it will never die out,” was suggested by John D. Barrow and Frank J. Tipler, in *The Cosmological Anthropic Principles*, Oxford: Oxford University Press, 1996 [1986]. Martin Gardner in a review of this book in the *New York Review of Books* (May 8, 1986) suggested for Barrow and Tipler’s idea the derogatory term CRAP – Completely Ridiculous Anthropic Principle. In a subsequent book named *The Physics of Immortality: Modern Cosmology, God and the Resurrection of the Dead*, (New York: Doubleday, 1994) Tipler went even further, suggesting that in a distant future all people who have ever lived would be resurrected as computer-generated entities. This example shows how sometimes even qualified scientists may be not immune to the temptation of suggesting plainly absurd ideas, thus joining the roster of cranks.