

Intelligent debate

A review of
Darwin Strikes Back: Defending the Science of Intelligent Design
by Thomas Woodward
Baker Books, Grand Rapids, MI, 2006

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Intelligent Design has been at centre stage in the press for some time now, particularly in the United States; a shocking sign to some, a hopeful one to others. In 2003, Thomas Woodward released a timely history of the Intelligent Design (ID) movement, titled *Doubts About Darwin*.¹ Woodward approached the subject with insights from his specialty field, rhetoric of science.² *Doubts About Darwin* took the story of ID up through the 1990s, focusing primarily on Phillip Johnson and Michael Behe. Now, *Darwin Strikes Back* picks up the story where the other left off.

A significant difference in approach for Woodward's new book is indicated by the subtitle, *Defending the Science of Intelligent Design*. Woodward's first book was adapted from his doctoral dissertation, and so Woodward's ID sympathies were kept muted. Now, writing for the general public, Woodward clearly adopts the role of a historian-participant in the controversy. The result is a work which outlines the historical development of the ID controversy and analyzes the arguments of both sides from an ID perspective.

Battle begins

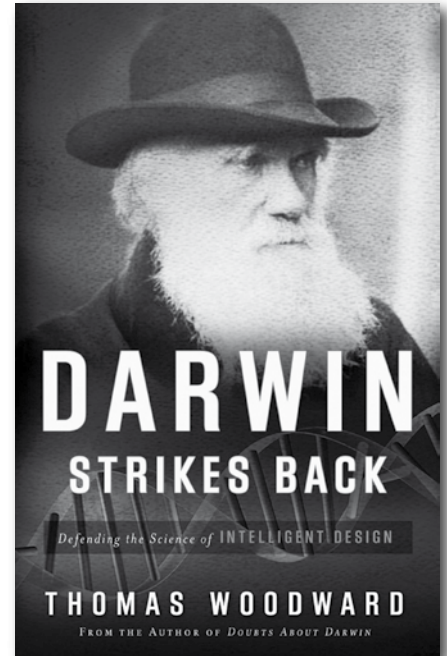
Woodward reviews some of the early history of ID, covered in detail in *Doubts About Darwin*. Two critiques of evolutionary theory, released in the 1980s, caught the attention of many of the early ID proponents, including Phillip Johnson, who published *Darwin on Trial* in 1991. This popular book started the debate in academia,

which then increased by orders of magnitude when Michael Behe published *Darwin's Black Box* in 1996. Behe's book was followed by a new string of symposiums at universities, and committed Darwinians realized that the issue was not going away. Here, Woodward picks up where *Doubts* left off, as the evolutionists began to fire back in book form in 1999: Kenneth Miller's *Finding Darwin's God*, and Robert Pennock's *Tower of Babel*.³ For the first time, evolutionists tried to identify and answer all the major ID arguments (p. 44). In 2000, Niles Eldredge revised an old book critiquing creationism, *The Triumph of Evolution and the Failure of Creationism*, to cover ID,⁴ and Pennock produced another controversial work on ID in 2001. A compilation purportedly giving both sides, it actually gave Darwinists two thirds of the space, gave evolutionists the final word in 8 out of 9 cases and 'became notorious' for 'use of some published ID articles without asking permission of the author' (p. 45).

Meanwhile, from ID came a flurry of activity: three books by William Dembski, published in 1998–99,⁵ Jonathan Wells' *Icons of Evolution* in 2000⁶ and a string of major conferences. Woodward notes that the Yale Design Conference was symbolically important: the conference

'... was seen by many as another turning point for not only public exposure but scholarly credibility of ID as a young but legitimate program in science Yet ... to ID critics this gathering was viewed as yet another sign of a steadily deteriorating situation' (p. 49).

Evolutionary agitation reached a new high in 2004, as Darwinists spun four major critiques of ID off the presses, designed as 'bunker-buster' weapons against ID (pp. 53–61, 174). (Woodward employs a war metaphor throughout the book, sure to irritate Darwinists who want to downplay the ID conflict.) A highly emotional image, called in rhetoric a 'fantasy



theme', appeared in these books: ID as a rejection of science and the harbinger of a new 'dark ages' (never mind that this period was actually notable for innovations in art, architecture, philosophy, and water and wind power). Meanwhile, 17 major books were released supporting or favourable to ID in the five years from 2000 to 2005, and three documentaries contributed greatly in bringing the controversy to the public (pp. 61–63).

Bickering over Behe

Michael Behe introduced the term 'irreducible complexity' for those biological structures that require all their parts to be present in order to function. Woodward notes that the term itself is brilliantly memorable yet sophisticated, projecting just the right image. This quickly became a centrepiece in the ID repertoire, and drew the attention of the first anti-ID books to roll off the presses. Woodward suggests that the amount of ire that Behe drew is indicative of the power of this concept as an argument for design.

Woodward surveys the Darwinist's responses, which have variously criticized Behe's analogies, suggested evolutionary pathways to form the systems Behe claimed were irreducibly complex, and even impugned Behe's character as a scientist. (In an

unconvincing and abusive *ad hominem* attack, they have suggested that Behe was ‘lazy’ for invoking a designer instead of searching for a Darwinian solution to the origin of ‘irreducibly complex’ systems.) Woodward surveys the responses of ID scholars on a range of issues, from the mousetrap analogy to the origins of the blood-clotting cascade. The Darwinian spokesmen (most notably Ken Miller) have a tendency to declare the case closed and ID defeated at every turn, only to have responses and counterarguments forthcoming from ID.

Embarrassed Darwinists

The next for consideration is Jonathan Wells and his *Icons of Evolution*. A stinging critique of ten familiar textbook evidences for evolution, Wells’ book provoked shrill cries of dismay from Darwinists, including Jerry Coyne and Eugenie Scott. Wells’ reply is highlighted as a rhetorically powerful rebuttal in which he catches his critics in scientific carelessness and in the debate tactic of ‘shifting the goalposts’. An example is the issue of embryonic homology—the Darwinian claim that embryos in various vertebrates look alike at various stages of development, and that this indicates common ancestry. Wells pointed out the extensive dissimilarities between embryos, blowing the traditional textbook image out of the water. Coyne argued that if only Wells understood their evolutionary history, then he would see the differences as evidence for evolution. This is shifting the goalposts, and as Wells remarked,

‘So let me get this straight. Some of the strongest evidence for Darwin’s theory is that vertebrate embryos are most similar in their early stages—except that they’re not. But if we just interpret the embryos’ dissimilarities in the light of Darwin’s theory, they then have “evidential value”. ... Darwin’s theory wins no matter what the evidence shows’ (quoted p. 94).

Woodward reviews in detail the arguments of Wells, Stephen Meyers and others based on the fossil record. The debate focuses on the Cambrian explosion and the lack of evolutionary

ancestors, and Woodward notes that this is just the very visible tip of a very large iceberg of recalcitrant fossil issues for the evolutionists. A delicious irony Woodward points out is that though the Darwinists have always said that the fossil record problems would decrease as more fossils are uncovered, the situation on the Cambrian is worse now that it was just a few years ago for the evolutionists. Jun-Yuan Chen of the Nanking Institute of Geology began an excavation of Cambrian deposits in southern China, which as they have progressed over twenty years now, produced the ‘the greatest Cambrian fossil bonanza of all time’ (p. 107). The paucity of evolutionary ancestors for these new creatures is more glaring than ever.

Life’s origin

With the evolution of all life from simpler life attacked, Woodward proceeds back to the origin of life itself. The ID assault on this evolutionary key point has been relentless, going back to a 1984 book, *The Mystery of Life’s Origin*, which helped launch the ID movement, and continued unabated from there. In the past 15 years, the evolutionists have responded with a host of new theories of life’s origin: RNA first, ‘clay-crystal’ life, or even extra-terrestrial chemical evolution. But each of these scenarios leaves unanswered questions, most significantly the origin of the information content required for life, one of ID’s strongest arguments (p. 121).

Woodward distinguishes three perspectives on origins-of-life (pp. 130–133): First, the ‘deadlock dodgers’ suggest that the origin-of-life question does not concern evolution by natural

selection; this is usually viewed as a cheap way out, and is by far a minority position. G.A. Kerkut included the origin of life in his definition of the ‘general theory of evolution’, and *Scientific American* included a detailed article on origin of life (aka chemical evolution) in their September 1978 special edition on evolution. Following suit, most of today’s public voices for evolution—ranging from standard biology textbooks to popular authors like Richard Dawkins—freely include origin-of-life scenarios in their evolutionary presentations.

Second, the ‘doggedly determined’ researchers committed to naturalism are convinced that ‘a solution can ultimately be found,’ despite the inability to figure out *how* at the moment. Finally, there are the ‘design detectives’ who are convinced that the naturalistic paradigm is scientifically incapable of handling the problem. What’s more, they are convinced that the evidence points to a solution by Intelligent Design.

Detecting design

A favourite tool of these ‘design detectives’ has been William Dembski’s mathematical ‘explanatory filter’, which separates events into the causal categories of ‘law’, ‘chance’ and ‘design’.



Paleontology has been unearthing a dazzling array of Cambrian fossils for over a century without unearthing the corresponding legion of ancestral forms Darwinists would have predicted. Consequently, the Cambrian fossils have figured prominently in the Intelligent Design movement’s critiques of Darwinism.

Coupled with a concept Dembski and Stephen Meyers have developed, Complex Specified Information (CSI), the ‘filter’ analysis of biological information has been used as a powerful and rigorous argument for design, and has taken its place alongside Behe’s ‘irreducible complexity’ as a centrepiece in the ID arsenal.

Woodward analyzes several of the most common arguments posed against Dembski’s mathematical filter. He does an excellent job of covering the difficult subject matter in a condensed form. For example, Darwinists have charged that the filter gives ‘false positives’, and is unreliable for detecting design. Woodward lucidly explains the Dembski rebuttal to this accusation for a layman audience: actual false positives are never shown. On the contrary, the filter may attribute an event to chance which was actually the product of design, but this is a false negative, something to be expected from the filter. Using the classic Dembski poker example, it is improbable to receive three consecutive royal flushes in a game, and this may be an instance of cheating (which would be ‘design’). But this is still within the realm of events that the filter will attribute to chance. Thus, the filter may miss a designed event, but the filter has never attributed to design an event that was actually chance. So, Woodward concludes, the filter is cleared from presenting false positives of design (pp. 146–151).⁷

Friends and foes

Recent developments in the ID community have broadened the scope of argument, and brought new personalities into the debate. The argument for design has expanded beyond the biological sciences to include the entire cosmos. The ‘fine tuning’ of the universe for life on earth was brought into the forefront especially since the publication of *The Privileged Planet* by Guillermo Gonzalez and Jay Richards. Unexpected allies have also emerged, such as agnostic philosopher, mathematician, and molecular biologist David Berlinski.

Woodward even includes the ‘atheologians’ as allies of sorts. The

‘atheologians’ are the outspoken atheist end of the debate—Richard Dawkins is the most familiar member of this group.⁸ Woodward suggests that the rabid anti-religion sentiments and argumentative theatrics of many in this group are more likely to interest onlookers in ID than to convince them of its errors.

Evil overlooked?

Woodward is right that the atheist contingent is usually so polemical that it is difficult to take them seriously. But it is in this context that Woodward encounters two major arguments: poor design and evil in the world (pp. 167–171). Unfortunately, these are skimmed over much too quickly (which is not necessarily Woodward’s fault, but does indicate that ID simply has not talked about this problem very much).

The basic ID response is that a less-than-optimal design (on a car for instance) does not justify the inference that there was no designer.⁹ Woodward quotes Dembski, who notes that any expectation that the designer would design optimally is a theological claim. True enough. But the implication is that, because it is theological, it is more or less off the table—and this is the weak point of ID. ID provides an explanatory framework: a designer takes the place of blind, purely naturalistic forces. But that is as far as it can go, for the ID strategy is to dethrone Darwinism and replace it with Design, and then work out such issues as the identity and character of the designer later. But as long as ID refuses to deal with this issue, it cannot fill in the details of its explanatory framework without breaking from its ‘big tent’ approach. The questions move quickly from origins science to theology: Did this designer insert new information or create new life forms at various points along several billion years of history, or in a brief time period?

If the designer opted for the longer route, why did he/she/it not correct harmful mutations at the same time? Is the designer a *good* designer or a malevolent one?

The identity and character of ID’s anonymous designer is, it appears to me, essential to fill in the details of the ‘design paradigm’ to replace Darwinism. If this is a theological question, so be it. The reluctance of ID to deal with the theology means that the science is constricted in its scope. And to deal with theology means that ID will have to confront theodicy (the problem of evil). Creationists have welcomed many of the insights which ID has brought to the debate over evolution. But we do not join ID tactically, by adopting a ‘don’t know’ approach to the identity of the designer. Instead, by holding to a historical and theological account of origins revealed in Scripture, we have something that ID lacks, a means to fill in the details of origins.¹⁰

ID in perspective

Where is ID now and where is it heading? ID has been part of a vigorous debate for the better part of two decades. It is not a fringe movement, or a minor academic question, but a full-scale public debate in which both sides are actively engaged. Woodward suggests that this is the ‘paradigm crisis’ for Darwinism. The Darwinists cannot expect ID to go away. Compounding



In November 2000, Yale Law School was the sight of the Yale Design Conference, which Woodward points to as a symbolic milestone in history of the Intelligent Design movement.

Photo: Pradipta Mitra, released under GFDL. <en.wikipedia/wiki/Image:Yale_law_school.jpg>



Woodward notes that while the Intelligent Design movement began with a concentration on biological issues, in recent years it has expanded in scope as leaders within the movement have applied the design paradigm to astronomy.

the crisis is the fact that some of the criticisms raised by ID are being echoed now by leading thinkers in the field of evolutionary development ('evo devo'). Woodward predicts that the hold of Darwinian orthodoxy will be broken in the next thirty years, and two (or possibly more) competing paradigms will take their places as legitimate frameworks for science—a 'design' framework, and a revised naturalistic framework (perhaps arising from evo devo).

Conclusion

Darwin Strikes Back is a well-written defence of ID presented in the format of history, precisely as its subtitle indicates. It does not contain new scientific arguments, but this was not within its scope. By laying out the arguments of all the key players, it should serve as an excellent introduction to the Intelligent Design movement. Its historical presentation should be interesting to those already familiar with the movement. My main disappointment was that, as a follow-up to *Doubts About Darwin*, it did not have more history. For instance, the Dover, Pennsylvania court case, which made international headlines in late 2005, is mentioned several times merely in passing, not in historical context.¹¹ But omissions such as this are where the trade-off comes between making a history of a movement and making a defence of a movement.

Nevertheless, this combination of history and argument has a method

of persuasion that is unique in the ID literature. By presenting the arguments of others rather than the author, the reader gets a better sense of the variety and vitality of the arguments, especially since the group of scholars that comprise the ID movement is so diverse. Despite what I perceive as

theological problems and limitations of ID, their work is an advance against Darwinism and naturalism that cannot be ignored. This book is a good, and predictably optimistic, summary of the state of the movement.

References

1. See review: Bliervnicht, E., The rhetoric of design, *Journal of Creation* **18**(3):46–47, 2004.
2. See also Larson, E.J., The art of debating Darwin: A review of *Doubts About Darwin* by Thomas Woodward, *Christianity Today* **48**:89–91, Sep. 2004.
3. See critiques: Woodmorappe, J. and Sarfati, J., Mutilating Miller, *Journal of Creation* **15**(3):29–35, 2001; and Steel, A., The tower with many flaws, *Journal of Creation* **14**(2):41–46, 2000.
4. See critique: Woodmorappe, J., Eviscerating Eldredge: A review of *The Triumph of Evolution and the Failure of Creationism* by Niles Eldredge, *Journal of Creation* **15**(2):13–16, 2001.
5. See reviews by Truman, R., Divining design: A review of *The Design Inference: Eliminating chance through small probabilities*, *Journal of Creation* **13**(2):34–39, 1999; Designer science: A review of Intelligent Design: The Bridge between Science and Theology, *Journal of Creation* **14**(1):28–34, 2000.
6. See review, Truman, R., What biology textbooks never told you about evolution, *Journal of Creation* **15**(2):17–24, 2001.
7. E.g. one atheistic critic pointed to an almost perfect silica sphere, which has low information (every point on the surface is the same distance from the centre), but so would not fit the 'design' criterion. But it is almost impossible to form this naturally, so the shape was carved by design. But this critic is one who can't tell a false positive from a false negative.
8. See Bell, P, Atheist with a mission: review of *The God Delusion* by Richard Dawkins, *Journal of Creation* **21**(2):28–34, 2007.
9. There is also the approach of taking each objection individually (such as, 'the eye is suboptimally designed') and answering it ('in light of x evidence, the eye is what you would expect a good designer to produce for our needs'—e.g. Gurney, P.W.V., Is our 'inverted' retina really 'bad design'? *Journal of Creation* **13**(1):37–44, 1999; <www.creationontheweb.com/retina>). The defence of design in this kind of argument may show either that the design is in fact optimal, or that it *could have been*, but has suffered degeneration since it was created. Another point is that an individual feature considered by itself may be not *appear* optimal, but the organism or ecosystem as a whole *is* optimal (for example, in isolation, thicker armour on a tank is stronger and hence more 'optimal'; but an optimal tank would not have 'optimally' thick armour because the tank *as a whole* would be too heavy to move). This is an approach which necessarily makes assumptions about the character of the designer (such as, 'the designer is going to design optimally,' and, to account for genetic degeneration, 'there was a fall from the good, original creation').
10. See also Wieland, C., CMI's views on the Intelligent Design Movement, 30 August 2002<www.creationontheweb.com/idm>, 20 December 2006.
11. Considering the many critiques coming from the ID movement, an historical analysis of the rhetoric surrounding the Dover trial and decision would have been fascinating. Just to cite an example, an analysis released by the Discovery Institute pointed out that the judge copied the ACLU position precisely: 'In fact, 90.9% (or 5,458 words) of Judge Jones' 6,004-word section on intelligent design as science was taken virtually verbatim from the ACLU's proposed "Findings of Fact and Conclusions of Law" submitted to Judge Jones nearly a month before his ruling. Judge Jones even copied several clearly erroneous factual claims made by the ACLU. The finding that most of Judge Jones' analysis of intelligent design was apparently not the product of his own original deliberative activity seriously undercuts the credibility of Judge Jones' examination of the scientific validity of intelligent design.' West, J.G. and DeWolf, D.K., A Comparison of Judge Jones' Opinion in *Kitzmiller v. Dover with Plaintiffs' Proposed 'Findings of Fact and Conclusions of Law'*, Discovery Institute, 2006, <www.discovery.org/scripts/viewDB/filesDB-download.php?command=download&id=1186>, 19 February 2007.