CHAPTER 43

THE PRE-MODERN SINS OF INTELLIGENT DESIGN

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“To make methodological materialism a defining feature of science commits the premodern sin of forcing nature into a priori categories rather than allowing nature to speak for itself.” Do you consider this statement right or wrong? If wrong, why?

Dembski, “The Vise Strategy”

ACTS OF GOD

In October 2004 a group of civic leaders in Dover, Pennsylvania, put in a bid to make it the next Dayton, Tennessee, the town made famous by the Scopes trial. The Dover school board voted to include intelligent design (ID) in its biology classes, and put sixty copies of the ID textbook *Of Pandas and People* (1993) in the library as instructional material. Eleven concerned parents sued the district, charging that it was unconstitutional to include creationism in the public schools. Through the month of October 2005, the Kitzmiller v. Dover case, regularly described as ‘Scopes
Redux’, was heard in the US District Court in Harrisburg. By happenstance, just days after the court portion of the trial ended, Dover residents went to the polls for a school board election. Eight of the incumbents were up for re-election, and every one lost to pro-science candidates. The next day televangelist Pat Robertson had a message for Dover. By voting to remove the ID supporters, the town had rejected God, he warned: ‘I’d like to say to the good citizens of Dover. If there is a disaster in your area, don’t turn to God, you just rejected Him from your city’ (Associated Press 2005).

Robertson’s comment was striking for two reasons. The first was his clear identification of intelligent design with God, something that the Thomas More Law Center attorneys defending the school board had tried to deny. The second was his suggestion, easily understood, given the recent devastation from Hurricane Katrina, that God might just send in a whirlwind. Hurricanes, tornadoes, and the like are indeed referred to as ‘Acts of God’. But could it still be that people seriously propose that God might manipulate the world for such ends? Is it really possible to detect God’s hand in the operations of the world?

That is the religious question that is at issue in the ID debate. ID theorists believe that they can do this, and claim to do it scientifically. ID creationists (IDCs) usually point to biology, but the patterns that they believe are signs of intelligence are also found in physics, chemistry, and meteorology. They point to the complexities of the eye, the immune system, and the bacterial flagellum, but for every system that serves a benign purpose, one finds those designed to cause suffering and devastation. No less intricate than the bacterial flagellum are the finely tuned parts of parasites that make them so effective in sucking the life from their hosts.

Such issues, known as the problem of evil, are made particularly poignant by the ID analysis of divine design. I will examine these and other theological problems shortly. But we should also face squarely the challenge posed in the epigraph. Are scientists really committing some pre-modern sin? Or might it be that IDCs should consider the beam in their own eye?

**Before the Rooster Crows**

But wait. Why this talk of sin? Don’t ID advocates object that ID is scientific, not religious? They say only that the complexities of the world are intelligently designed, but not that the designer is God. They claim ignorance of the designer’s identity. In other, familiar, words: ‘I don’t know that man.’ Before the rooster crows on any given morning, ID creationists will deny God in the public square more often than Peter. One could cite dozens of examples, but I’ll mention just three general sorts of denials.
‘ID is not Religion’

In a recent opinion editorial, Michael Behe, who was the main ID witness in the Kitzmiller trial, claimed: ‘[T]he theory of intelligent design is not a religiously based idea… Intelligent design itself says nothing about the religious concept of a creator’ (Behe 2005). Behe’s denials are hard to swallow, especially since just two paragraphs later he compares the ID argument to that of William Paley, whose watchmaker analogy is the most famous version of the design argument for the existence of God. Nor does ID stop with indirect philosophical arguments. In less guarded moments proponents of ID are more forthright that this is not just some generic higher power, but the God of the Bible.

Stephen Meyer, director of the Center for Science and Culture at the ID think tank Discovery Institute, speaks of ID as confirming ‘the God Hypothesis’. Also citing Paley, he argues that the functional complexity of the world ‘could not originate strictly through the blind forces of nature’ (Meyer 1999: 3–4), and claims that ID theory supports ‘a Judeo-Christian understanding of Creation’ (Meyer 1999: 26) over all other metaphysical views.

For IDCs it is not Genesis that is the key, but the Gospel of John. As William Dembski, a Discovery Institute Senior Fellow also on the faculty at Southern Baptist Theological Seminary, explains, ‘Intelligent design is the Logos of John’s Gospel restated in the idiom of information theory’ (Dembski 1999b: 84). And Phillip Johnson, godfather of the ID group, explains: ‘Our strategy has been to change the subject a bit so that we can get the issue of intelligent design, which really means the reality of God, before the academic world and into the schools’ (American Family Radio, 10 January 2003).

Protestations to the contrary notwithstanding, ID is religious to its core. The movement’s goals, as adumbrated in ‘The Wedge Strategy’, a leaked internal manifesto from the Discovery Institute, are ‘nothing less than the overthrow of materialism and its cultural legacies’, and to re-establish ‘a broadly theistic understanding of nature’ and the proposition ‘that human beings are created in the image of God’ (Discovery Institute 1999).

In my own expert witness report for the Kitzmiller case, I documented ID’s sectarian nature, further showing that it is religious simply by virtue of its essential appeal to an immaterial, supernatural designer (Pennock 2005). The definition of religion I assumed was the same as was critical in the ruling of the US Supreme Court in the 1987 Edwards v. Aquillard case, which found that creationism unconstitutionally endorsed religion ‘by advancing the religious belief that a supernatural being created humankind’.

‘ID is not Creationism’

Although they used the term in early writings, ID proponents today regularly deny that they are creationists. What exactly are they denying, and why? There are many different forms of creationism, but the generic notion is the rejection of the scientific account of evolution in favour of creation by some supernatural power or being. I have documented in detail elsewhere how ID is connected to creation science and
other forms creationism in its roots, strategies, and arguments (Pennock 1999), so here I will just let one ID proponent briefly tell the story. Nancy Pearcey, one of the authors of *Of Pandas and People*, describes how Johnson formulated ID as a strategy to unite various creationist factions.

Instead of joining together to oppose the hegemony of the naturalistic worldview, Christians often got caught up in fighting each other. The bitterest debates were often not with atheistic evolutionists but among believers with conflicting scientific views: young-earth creationists, old-earth creationists, flood geologists, progressive creationists, ‘gap’ theorists, and theistic evolutionists. There were endless arguments over theological questions like the length of the creation ‘days’ and the extent of the Genesis flood. . . . It was Johnson himself, more than anyone else, who refocused the debate and brought about a rapprochement of the warring camps under the umbrella of the Intelligent Design movement. (Pearcey 2004: 173)

Pearcey herself was instrumental in helping to bring about this alliance, as were other authors of *Pandas*, including Meyer and Behe. Their negotiations were made easier by one important external factor.

Among the revelations of the *Kitzmiller* trial were details of the switch from the language of creation science to that of ID. The plaintiffs subpoenaed draft manuscripts of *Pandas*. In a series of drafts that changed titles from ‘Creation Biology’ (1983), to ‘Biology and Creation’ (1986), to ‘Biology and Origins’ (1987), and then several versions under the final title *Of Pandas and People* (1987), one could observe the terminological shift. Here is one example: ‘Creation means that the various forms of life began abruptly through the agency of an intelligent creator with their distinctive features already intact—fish with fins and scales, birds with feathers, beaks, and wings, etc.’ (quoted in Matzke 2005a). This sentence appears in the first four drafts through one version in 1987, but then in a fifth draft later in 1987 the wording changed abruptly: ‘Intelligent design means that various forms of life began abruptly through an intelligent agency, with their distinctive features already intact—fish with fins and scales, birds with feathers, beaks, and wings, etc.’ (quoted in Matzke 2005a).

What happened in 1987 that occasioned this linguistic fig leaf? That is when the *Edwards* case was decided, finding it unconstitutional to teach creation science in the public schools. In subsequent drafts leading up to the published text, ‘creation science’ became ‘design theory’, and ‘creationists’ became ‘design proponents’. The new terms were substituted in an almost search-and-replace manner.

Barbara Forrest, an expert witness for the plaintiffs who examined the manuscripts, even turned up what is now humorously referred to as the ‘Missing Link’ between creationism and intelligent design—a sentence in the second 1987 draft that includes an accidental transitional form ‘cdesign proponentsists’ (Matzke 2005b).

‘We’re not saying it was God . . . could be extraterrestrials’

Despite the long paper trail demonstrating otherwise, creation scientists—that is, design proponents—still often deny God as the designer, claiming that it could have
been extraterrestrial beings. If this is what they really hold, perhaps Robertson misspoke; were the voters of Dover rejecting not God, but ET?

However, if natural intelligent beings existed elsewhere in the universe, one would need to inquire about their origin as well. It will do no good to simply posit a priori that natural designer. This tells us that ID proponents must assume that at least at one point in the chain the designer was supernatural. Thus, their public appeals to extraterrestrials are simply disingenuous.

### Foolish, Wicked Idolaters

In seeking to detect divine action in the world, creationists are inspired by the words of Romans 1: 20: ‘Ever since the creation of the world, his invisible attributes of eternal power and divinity have been able to be understood and perceived in what he has made’ (New American Bible). Creationists of all stripes regularly cite this passage to justify their belief that God may be detected in creation. But this also reflects what can only be seen as a deep ambivalence towards science and scientists. They claim that ID scientifically demonstrates the glory of God, but they also believe that scientists are refusing, either through self-deception or wickedness, to recognize their discovery, and so they also cite Romans 1 to lay blame on those who claim not to see such design. Such unbelievers, as the continuation of the passage says, are ‘without excuse’.

Johnson cited Romans when describing the success of ID in demonstrating what he took to be the essential Christian view regarding human origins:

I would say that the theistic and Biblical worldview has been tremendously validated. That is to say it’s been validated in the sense that you do need a creator after all, but even more, what’s been validated is the biblical view that it’s a major part of the human project to get rid of the creator; because their deeds were evil, they did not want to honor god as God, and so instead they imagined various forms of idolatry and nature worship of which Darwinian evolution is just the most prevalent modern form. So, at this point, you say that not only has it been revealed that science points to the reality of a creator after all, but the enormously bad and self-deceptive thinking of the Darwinian evolutionist is something straight out of Romans 1. (Lawrence 1999)

Besides noting this as one more example of how ID is not just a religious but a biblical view, it is important to recognize what Johnson is implying here. Romans 1 says not only that unbelievers are without excuse, but that they are foolish and wicked haters of God—idolaters who ‘deserve death’ (Romans 1: 29–32). If one believes that these passages apply to ‘the Darwinian evolutionist’ in the way that Johnson implies, then it is but a small step to the views expressed by Robertson (Romans 1: 18).

Given that ID proponents think of scientists as foolish, wicked idolaters, it is ironic that they wish to have their own beliefs validated by science.
The Imprimatur of Science

IDCs regularly complain that their critics label ID as religious to discredit it. This may be true for William Provine and Richard Dawkins, the two atheist scientists who serve as the regular foils for ID, but they are hardly representative; the most consistent critics of ID value religion. The creationists’ complaint thus reveals an interesting irony. Scientists may or may not be wicked fools, but creationists recognize that calling something ‘scientific’ carries a seal of trustworthiness by virtue of the unquestionable success of science. By comparison, claims of religious knowledge are not felt to carry the same weight; creationists are diffident about their faith. What is really going on is that ID proponents, in the same way as creation scientists before them, hope to have their particular religious beliefs legitimated by science. They value the imprimatur of science for its potential apologetic utility.

In a recent paper posted on the Internet, Dembski writes that ID ‘is ultimately a scientific controversy within the scientific community. To be sure, there are educational, political, religious, and philosophical aspects to this controversy, but if there were no scientific controversy here, these other aspects would never have gotten off the ground’ (Dembski 2005b). In fact, the opposite is true. I spent many years warning scientists about the ID movement, but the common reaction was to dismiss ID arguments as ignorant and unscientific. Few took IDCs seriously. If ID had not become a political and educational threat, scientists would have continued to ignore it.

For ID proponents to say that their view is a live controversy within science is self-deception of the first order. The ID leadership consists of a handful of individuals who have simply repeated old challenges to evolution and have failed to offer any positive evidence for their own view. IDCs often quote Charles Darwin’s comment that ‘A fair result can be obtained only by fully stating and balancing the facts and arguments on both sides of each question’ (Darwin 1859, and 1871: 12). Americans are always sympathetic to appeals to fairness, but here the appeal is bogus. It is no more ‘fair’ to include arguments about whether evolution is true than to continue to consider whether the Earth revolves around the Sun. The scientific community has thoroughly examined ID and found it wanting. Dozens of recent statements from scientific organizations ranging from the American Association for the Advancement of Science to groups of Nobel laureates attest to this, but I’ll mention just one representative example from the American Society of Agronomy:

Intelligent design is not a scientific discipline and should not be taught as part of the K–12 science curriculum. Intelligent design has neither the substantial research base nor the testable hypotheses as a scientific discipline. There are at least 70 resolutions from a broad array of scientific societies and institutions that are united on this matter.

Such unity is not significant just because of the sheer numbers; science is not, after all, decided by a vote, but by assessment of the evidence. What is significant is the common conclusion that ID has no evidence for its grand conclusions, and that it is not science. For ID proponents to pretend otherwise is certainly foolish. Theologically, one might also say that their programme is idolatrous, elevating science above faith. Others must judge whether it is also wicked.
Queen of the Sciences?

As revealed in the Wedge document, the ID movement aims to overturn the secular, scientific world-view. It hopes for a renewal of what is really the old medieval view of theology as queen of the sciences. ID proponents admit that for their view to prevail requires a change of ‘the ground rules by which the natural sciences are conducted’ (Dembski 2004b: 19). Their primary goal is to appeal to immaterial, transcendent causes, but to still call it ‘science’. In my Kitzmiller report, I objected to this:

A famous philosopher posed the following question: If you call a tail a leg, how many legs does a dog have? The answer, he said, is Four; calling a tail a leg doesn’t make it one. Calling intelligent design creationism an ‘alternative scientific theory’ and using scientific-sounding terminology does not make it a science now any more than it did for creation science. ID theory rejects both fundamental conclusions and basic methodological constraints of science. It posits an unnamed and undescribed supernatural designer as its sole explanatory principle. It provides no positive evidence for its extraordinary claims. And because it cannot stand on the evidential ground that science requires it tries to change the ground rules of science. Even by its own lights, ID theory is not science. (Pennock 2005)

Dembski was initially listed as an expert witness for the case, and so received my report. He has since taken my argument (and indeed my very phrasing, though usually without attribution) and tried to turn it around. In one instance he wrote that ‘calling a tail a leg doesn’t change that fact that a dog still only has four legs. Likewise, backing away from standard terminology and assigning to themselves other labels doesn’t change the fact that most evolutionists are indeed Darwinists’. Why? Because, that supposedly is appropriate for anyone ‘who holds that teleology ought to play no substantive role in evolutionary theory’ (Dembski 2005a).

This is misleading in several ways. Contrary to Dembski’s claim, evolutionary theory does include a substantive role for teleology; indeed, it is at the core of Darwin’s law—namely, in the way in which adaptations are explained by natural selection. But this is a perfectly scientific notion of teleology, which is not what Dembski and company are speaking of. They have in mind a more cosmic teleology; they want to wedge supernatural purposes substantively into science. It is IDCs who define Darwinism in a non-standard, non-scientific way, by improperly building atheism into the very concept. Johnson even speaks of this strategically, as he did at D. James Kennedy’s Coral Ridge Ministries: ‘The objective, he said, is to convince people that Darwinism is inherently atheistic, thus shifting the debate from creationism vs. evolution to the existence of God vs. the non-existence of God. From there people are introduced to “the truth” of the Bible and then “the question of sin” and finally “introduced to Jesus”’ (Boston 1999).

The question of sin and salvation is important to IDCs, as it was to creation scientists; they hold that if evolution is true, then there is no God, no basis for morality, and no purpose to life. Creationists even take the possibility of a metaphysical afterlife to be at
stake. Johnson gave the ID answer when he was asked why he focused his attention upon Darwinism: 'I wanted to know whether the fundamentals of the Christian worldview were fact or fantasy. Darwinism is a logical place to begin because, if Darwinism is true, Christian metaphysics is fantasy' (quoted in 'Berkeley’s Radical: An Interview with Phillip E. Johnson', 2002). In other words, should one take seriously the promise of a real life after death, or is this just fantasy? Without the hope or fear of an afterlife, people will behave, they seem to think, as if nothing really matters. I have previously addressed the issue of what creationists take to be at stake in the debate, and why their concerns are misplaced, and I will not rehearse those arguments again here (Pennock 1999: ch. 7). Suffice it to note that evolutionary biologists use exactly the same method as any other scientists, so to call Darwinism ‘inherently atheistic’ is a deceptive redefinition of terms. I will return to this issue in a moment, but let me first note another way in which Dembski attempts to turn the tables.

In Dembski’s confidential briefing paper for the Thomas More Law Center attorneys, which he released after the trial, he suggested that they turn my point around in a slightly different way, and ask the following questions of me and the other expert witnesses during cross-examination:

Consider the following riddle (posed by Robert Pennock): if you call a tail a leg, how many legs does a dog have? Wouldn’t you agree that the answer is four: calling a tail a leg doesn’t make it one. Accordingly, wouldn’t it be prejudicial to define nature as a closed system of material entities in which everything happens by material causation? Wouldn’t you agree that nature is what nature is, and it is not the business of scientists to prescribe what nature is like in advance of actually investigating nature? (Dembski 2005c)

It is at this point that Dembski recommends that the attorneys pose his question about the supposed ‘premodern sin of methodological materialism’ quoted in the epigraph. No vise to the head is needed to make us forthrightly answer Dembski’s question. Am I and are other scientists pre-modern sinners in his sense of the term?

Certainly not. Methodological naturalism does not define away any metaphysical possibilities or constrain the world; rather, it constrains science. Methodological naturalism is neutral with regard to supernatural possibilities. It takes a more humble view of what can be known. Science admits that it may miss true metaphysical facts about the world. Methodological naturalism does not claim access to all possible truths. Indeed, it expressly limits the purview of what can be known scientifically. If there are metaphysical truths beyond empirical test, then they are beyond science. While a few scientists may stake out a stronger metaphysical position, arguing that science provides an ultimate theory of everything, such scientistic (as opposed to scientific) views go beyond the evidence. Dembski’s challenge improperly conflates methodological with metaphysical naturalism, and thereby equates science (not just evolution) with atheism.

Before continuing, this is a good place to dismiss a common red herring. Contrary to IDCs’ assertions, science does not ‘rule out all design’; in fact, science regularly allows us to draw inferences that, for instance, something was man-made. The
constraints of methodological naturalism together with background knowledge allow archaeologists to draw all sorts of conclusions about peoples of the past. Forensic scientists may similarly find clues (e.g. fingerprints) that allow them to tell who pulled the trigger of the gun. It is telling that IDCs always crib from ordinary natural cases of agency when trying to motivate their inference to a transcendent world-maker. We see this too in the following common IDC argument, here made by Discovery Institute Fellow David DeWolf: ‘[W]hen we go to Mt. Rushmore we immediately recognise that what appear to be the faces of the Presidents are not the product of the random forces of erosion and rockslide’ (DeWolf 1999). However, it is not science but ID that is caught in this landslide. This is a faulty analogy, for it is missing the key (non-random) process of natural selection. Moreover, the positive inference that we make that someone carved the faces on the mountain is a perfectly natural one. The Mount Rushmore case is a particularly poor example for ID, if only because it is so unlike cases of biological complexity.

Behe’s notion of irreducible complexity and Dembski’s account of specified complexity, upon which their design argument purportedly rests, have both been thoroughly critiqued and rebutted, and there is not space here to review the many problems with these general notions (see Pennock 2003). Instead, let us look at one of the few examples—a chessboard analogy—that Dembski offers to illustrate their supposed application (Dembski 2005b).

He shows a chessboard with all the pieces in standard starting positions, except that White’s right four pawns (e2, f2, g2, and h2) are situated directly in front of the left four (at positions a3, b3, c3, and d3). He points out that one cannot get to this position from the standard starting position by the rules of chess. The purported lesson is that there may be material configurations that are not explainable in material terms (i.e. initial conditions and law-governed processes). Dembski concludes by once again trying to turn my argument around (again without attribution):

It follows that the charge of supernaturalism against intelligent design cannot be sustained. Indeed, to say that rejecting naturalism entails accepting supernaturalism holds only if nature is defined as a closed system of material entities ruled by unbroken laws of material interaction. But this definition of nature begs the question. Nature is what nature is and not what we define it to be. To see this, consider the following riddle: how many legs does a dog have if one calls a tail a leg? The correct answer is four. Calling one thing another thing doesn’t make it something else. (Dembski 2005b)

This is one of the most astonishing of many instances of creationists’ creative redefinition. IDCs have insisted for years that no natural processes can produce biological complexity, and that design must therefore come from outside the system of nature; but they now want to say that they are not appealing to the supernatural by redefining the supernatural as part of nature. This is either a blatant self-contradiction, or else it is reconceiving God as a natural being. The former is a logical sin, and some would judge the latter a theological sin. We have already seen why methodological naturalism is not guilty. In fact, it is Dembski’s argument that begs the question in at least four significant ways.
First, his chess analogy portrays the world as a game, which subtly presumes that there is a player who set the rules. The world does appear to be governed by rules, but these may or may not have been designed. Theologically we may hold that they are, but scientifically we are in no position to say either way; such possible transcendent purposes cannot just be read off the world. As I have argued before, this is a fundamental problem for the IDCs’ supposed design inference (Pennock 1999: ch. 5).

Second, Dembski takes the canonical chess rules for granted, but there are any number of non-standard chess rules and non-standard starting positions that gamers and puzzlers also play which he fails to consider. How could Dembski know just by looking at the board that canonical chess rules were governing the pieces? Did the rule designer tell him? Instead of concluding that this is an inexplicable chess pattern, why not infer that another game is being played?

Third, nothing in the example demonstrates any need for a designer or a telic process, or even that these would be relevant. Why should we think that the pattern is purposeful at all? Did the designer say so? If the given pattern is supposed to be seen as a target, it is only because Dembski has drawn a circle around it himself. Again, he assumes what is at issue.

Fourth, Dembski’s example assumes a hypothetical epistemological state that is completely at odds with our real one. Scientists start with knowledge neither of the rules (that is, the complete laws of nature) nor the starting position (that is, the initial conditions of the universe). These are what the scientist seeks to discover, to the degree that they are discoverable. Dembski’s illustration assumes what is impossible for mere human beings—prior omniscience about the game and the board. But by this time, it should come as no surprise that IDCs presume such a God’s-eye view.

I will make one final remark about Dembski’s general challenge regarding the purported sin of science, which is to note how he misdefines methodological naturalism as a ‘pre-modern’ sin, no doubt for rhetorical purposes. If methodological naturalism is a sin at all, it is a modern sin, for it is the adoption of this methodology of science—of natural philosophy—that initiates and most characterizes the modern era. (IDCs do recognize this elsewhere, which is why the Wedge document speaks of their ultimate target as not just evolution or even just science, but ‘modernism’ itself.) The pre-modern sins are different; they are the sins of appeal to the occult and of claims to know the ways of the gods. As we have seen, these pre-modern sins are at the core of the ID argument.

Thunderbolts and Lightning

This takes us back to the meteorological cases with which we began and to the issue of divine action and responsibility. Can we really look up at the skies and see God’s actions? Robertson seems to think that Dover citizens would be to blame for spitting in God’s eye, but it would ultimately be God who is responsible for directing the
winds. If we are to take ID programme seriously, we cannot stop with happy examples of benign designs; we must also confront the all-too-common cases where the complex designs of the world conspire, whether by pestilence or by storm, to inflict suffering. If a designer is to get the credit for the good, it also deserves the blame for the bad.

Dembksi may be concerned about this possibility, for he tries to limit the scope of divine action:

A worry now arises whether effect-to-cause reasoning leads to many absurd design hypotheses. Consider the 'Zeus Hypothesis' in which lightning strikes are attributed to the divine intervention of the god Zeus (I'm indebted to Robert Pennock for this example). Such a hypothesis, though an example of effect-to-cause reasoning, would not be the conclusion of a design inference based on specified complexity. (Dembski 2005b)

Dembksi fails to provide a reference (this passage, too, was taken from my expert report), so readers are not able to check and see that my point was somewhat different from the one he takes on. However, Dembski's passage usefully reveals some of the problems with his ID inference, so let us stick with it. Dembski continues his explanation:

Individual lightning strikes are readily explained in terms of the laws of physics, with no need to invoke a designer. The only way lightning strikes might require an ID hypothesis is if jointly they exhibit some particularly salient pattern. Consider, for instance, the possibility that on a given day all, and only, those people in the United States who had uttered snide remarks about Zeus were hit by lightning and died. In that case, the joint pattern of lightning strikes would exhibit specified complexity, and the Zeus Hypothesis might no longer seem altogether absurd. (Dembski 2005b).

IDCs regularly cite Dembski’s specified complexity method of design detection as though it were a matter of mathematics or information theory, but in fact his design inference is a flawed and empty formalism (Pennock 2003). In the few cases when he gives a specific example of its supposed application, one quickly sees how substantive knowledge gets smuggled in. Invariably the examples trade on tacit natural assumptions; this case involves presuming that Zeus is peevish and vindictive, and treating him in human terms. Here, as elsewhere, to make his inference appear plausible, Dembski illicitly uses naturalized concepts. But how does Dembski know what a god takes to be snide, or that he would care, or that he would not be forgiving, and so on?

Robertson also believes that he can identify such a relevant specified pattern. The patterns he sees are no less precise than Dembski’s speculations about what Zeus would take to be snide. But once one opens the door to the mysterious designs of an untestable supernatural being—be it Zeus, Yahweh, Allah, or Beelzebub—it is all too easy to read in a meaningful pattern. And what if there are apparent exceptions to some possible specification? Why was Mary struck even though no one heard her say anything snide about Zeus? She must have kept her snide thoughts to herself, or perhaps she did something else that rubbed Zeus the wrong way. Why wasn’t John swept away with the others sinners in New Orleans? Perhaps he had done some
good deed that deserved reward, or perhaps God simply had other plans for him. Dembski’s supposed inference relies upon presuming that we can know the mind of God.

Another revealing point in this example is how Dembski conveniently speaks with hindsight, long after Benjamin Franklin’s discoveries about the nature of lightning. But consider the situation beforehand. Specified patterns of lightning bolts equivalent to Dembski’s example were readily apparent. Ironically, lightning seemed to be aimed rather pointedly at churches. Even individual bolts may exhibit a striking pattern; one eyewitness described how ‘A bolt of lightning had struck the tower, partly melting the bell and electrocuting the priest; afterwards, continuing, it had shattered a great part of the ceiling, had passed behind the mistress, whom it deprived of sensibility, and after destroying a picture of the Savior hanging upon the wall, had disappeared through the floor’ (quoted in Seckel and Edwards 1984). Or one might look to a broader pattern and note how it seemed that all church bell-ringers were being picked off one by one. In one thirty-three-year period in Germany, nearly 400 church towers were damaged by lightning, and 120 bell-ringers were killed (Seckel and Edwards 1984). Did God have designs on steeples and bell-ringers? Dembski apparently would have attributed this to Zeus.

Franklin’s scientific work provided a natural explanation of lightning in terms of electrostatic discharge and also why it was likely to hit steeples, usually the tallest structures in a town. But Dembski cannot appeal retrospectively to Franklin’s theory to save his design inference from absurdity. Indeed, he says that once one concludes design by identifying specified complexity, the inference can never be reversed. Incredibly, Dembski claims that his design inference gives no false positives. He adds that it would be worthless if it did (Dembski 1999a: 141).

The example illustrates the faulty reasoning of the ID approach: it tries to get a substantive conclusion—and not just a mundane one, but one about the designs of immaterial, transcendent powers—from gaps in scientific understanding. Behe (2005) summarizes the logic of their argument: ‘in the absence of any convincing non-design explanation, we are justified in thinking that real intelligent design was involved in life’. Dembski simply hides this naïve negative argument within a formalism. Creationists have always proposed exactly the same fallacious argument, hoping to win by default without having to provide any positive evidence for a creator. Once one understands this, it is clear why the ‘content’ of ‘ID theory’, like that of creation science, is at base no more than a litany of supposed ‘gaps’, ‘weaknesses’, or ‘problems’ with evolution. ID is thus no more than what philosophers call an argument from ignorance.

Of course there are gaps in our understanding of evolution. There are any number of things that science cannot explain, and scientists are not shy about highlighting unanswered questions for which further research is needed. And there may be questions that science might never be in a position to answer; methodological naturalism is humble. Evolution is completely typical in not having all the answers; the same can be said for any theory in science. Meteorologists do not have a complete explanation of the incredible complexity of the weather system.
Should they therefore include ID as an alternative theory? Must we once again teach that God has a hand in thunderstorms and hurricanes, shooting arrows of lightning and directing the destructive wind any way it blows? Such an idea is very, very frightening.

**Built on Sand**

The observation that ID is no more than an argument from ignorance brings us to a parallel theological problem. Theologians have long held that it is a serious mistake to posit God as plugging the holes in scientific knowledge, given that science regularly closes what might seem to be unfillable gaps. Nearly everyone who has looked closely at the ID arguments has criticized them on this ground. I discuss these issues in detail, especially regarding to how they relate to methodological naturalism in Pennock (2006).

I have already highlighted another major theological problem with ID: namely, the problem of evil. How can God be both omnipotent and omni-benevolent given such obvious suffering in the world? Blame for the cruelty and wastefulness of the biological world is laid much more directly upon a designer who, on the ID view, fashions each deadly ‘irreducibly complex’ pathogen and each ‘finely tuned’ debilitating parasite.

A third problem with ID that troubles theologians is its rejection of the view—theistic evolution—that evolution and faith are compatible. This mainstream Christian position makes it clear that IDCs are off base theologically in equating evolution and atheism. Indeed, some argue that Darwinism is a ‘disguised friend’ of Christian theism in that it highlights the sacramentality of nature and God’s immi-nence in the world (Peacocke 2001). This view goes back to Darwin’s own time, when Christians were early defenders of evolution (Livingstone 1987). But IDCs will have none of this. Johnson says that theistic evolution is a ‘disastrous accommodation’ to Darwinism which provides ‘a veneer of biblical and Christian interpretation . . . to camouflage a fundamentally naturalistic creation story’ (Johnson 2002b: 137). Theistic evolutionary views, he writes elsewhere, are ‘bogus intellectual systems’ that read the Bible ‘figuratively rather than literally’ (Johnson 1997: 111). Dembski is equally adamant, writing that ‘Design theorists are no friends of theistic evolution’ (Dembski 1995: 3; emphasis original).

That the scientific community rejects ID is well known; what is less appreciated is that religious leaders are also dismissive, for reasons such as those noted above and more. Dembski admitted this years ago, writing: ‘It is ironic that the design theorists have received an even cooler reception from the theological community than from the Darwinist establishment’ (Dembski 1995: 1). Even evangelicals have not been as welcoming as one might have expected; Johnson says that he encounters ‘bitter
opposition’ from professors at evangelical Christian schools (Christianbook.com. 2000). If anything, theologians have become even more critical of ID over the years. Dembski recently noted that ‘The president of the Institute for Religion in an Age of Science, Michael Cavanaugh, has now issued a formal warning about intelligent design, the Wedge, and Seattle’s Discovery Institute, urging that people take seriously the threat to education and democracy that these pose’ (Dembski 2004a). Cavanaugh (2004) minces no words: ID is ‘totalitarian religious thought’.

Onward Christian Soldiers

Such quotations highlight one more sin of ID: namely, how it is reigniting old animosities between science and religion. This is the kind of view that led to the persecution of Galileo. Galileo himself thought that revealed truths in Scripture should not be interpreted to contradict the truths discovered by science, but ID proponents believe that one should start with ‘what Christians know’ (Plantinga 1997). IDCs regularly describe their movement as being in the front line of a ‘culture war’. In their writings against evolution, they regularly use the metaphors of violence, war, and torture.

Dembski (2002) says that the ‘Darwinian stranglehold’ on public education will suffer a ‘Taliban-style collapse’, that his opponents have ‘met their Waterloo’ (Kern 2000), and so on. He recently recommended that biologists be subjected to what he called ‘the Vise Strategy’, to squeeze the truth out of them under oath, depicting this notion with ‘humorous’ images of people or, in one case, a stuffed Charles Darwin doll, with their heads being squashed in a vise. Johnson wonders whether atheists like Dawkins believe as strongly in their cause as religious believers, and whether he would have the requisite courage of his convictions comparable to that of the fundamentalists who blew up the World Trade Center.

A man who believes in something that is more important to him than life itself is potentially a dangerous man. He may do things that a person with more mundane purposes would never think of doing. This is true of secular as well as religious faiths. Consider, for example, the American Revolutionary War patriot Nathan Hale, who famously regretted that he had but one life to give for his country. Such a person might be capable of a suicide attack, given a sufficiently worthy end. (I would like to ask Dawkins if he might be capable of sacrificing his own life in an act of murderous violence if he were convinced that such an extreme measure was necessary to save science from being taken over by religious fundamentalists.) (Johnson 2002a)

Some ID leaders do claim something close to this level of zeal. In an unapologetic call to martyrdom, Dembski and Jay Wesley Richards, another Discovery Institute Fellow, write: ‘this is our calling as Christian apologists, to bear witness to the truth, even to the point of death (be it the death of our bodies or the death of our careers)’. To be worthy apologists and to never give in to the ground rules set by the secular academy, they explain, is ‘perhaps not a martyrdom where we spill our blood (although this too may be required)’ (Dembski and Richards 2001: 15).
This brings me to a few final considerations. IDCs want to find a special sort of purpose in the world. They claim to detect not just the natural kind of teleology found throughout evolutionary biology, but final causes of a more cosmic variety. They have confirmed ‘the God hypothesis’. However, at the same time they claim that ID is not religion but science. In the Kitzmiller trial, defence attorneys tried to argue that ID was not inherently religious, but merely had religious ‘implications’. But, as we have seen, much as its proponents deny God in the public square, ID is religious through and through. The ‘implications’ they take from their arguments emerge only because the religious elements are already part of their premisses.

Those of us who have been critics of the movement might have viewed the ID proponents differently had they entered honestly into the long and honourable philosophical debate about the teleological argument. But ID is really a political movement that sees itself on the front line of the culture wars, and so is strategically deceptive, claiming to fight not in the name of God, but perhaps in the name of the Martians.

In the end, this debate between methodological naturalism and ID comes down to whether science should discuss plagues and hurricanes as natural disasters or as acts of God. I have argued that science is, and properly should remain, neutral with regard to divine possibilities. IDCs insist that their science can detect the workings of a transcendent mind in such complexities. But we have seen a few of the sins of their view. They are disturbing a delicate cessation of hostilities between science and religion. The lesson from one dramatic retelling of the Scopes trial might well be applied here: those who are tempted by the pre-modern sins of the ID movement shall inherit the wind.

References and Suggested Reading


Matzke, N. (2005a). 'I guess ID really was "Creationism's Trojan Horse" after all', Web posting.